

**A Better Deal Elsewhere? The Role of Organisational Support for  
Development in Retaining Employees**

**Hilde Bøyum**

**Master of Philosophy in Psychology**



**Department of Psychology  
University of Oslo**

May 2012

### **Acknowledgements**

First and foremost, I would like to express my deepest gratitude to my supervisor, Sabine Raeder, Associate Professor at the Department of Psychology at the University of Oslo. Raeder has been an invaluable resource throughout the process of writing my thesis. She has been an excellent supervisor and I am especially thankful for the support and constructive feedback she gave me.

I would also like to thank the HR Department in the participating organisation. They provided me with valuable information and resources, and access to all the respondents. Thus, their support was essential in order to conduct this thesis. Also, I would also like to thank the employees who were interviewed prior to the data collection and the participants for taking the time to complete the questionnaire. I hope this thesis is a positive contribution in the organisation's retention management.

Finally, I would like to thank my loved ones and classmates for social support, encouragement, and advice regarding during this process. Thank you Anita Andersen and Karoline Etholm for proofreading my thesis.

Hilde Bøyum,  
May 2012

## Table of Contents

Abstract .....	1
A Better Deal Elsewhere? The Role of Organisational Support for Development in Retaining Employees .....	2
Organisational Support for Development and Intentions to Turnover .....	3
Organisational Support for Development and Affective Commitment .....	9
Method .....	15
Sample.....	15
Procedure .....	15
Measures .....	15
Data Analysis .....	17
Results.....	21
Descriptive Statistics.....	21
Moderated Mediation Analysis.....	23
Bootstrap Analysis .....	27
Multiple Mediation Analysis .....	28
Bootstrap Analysis .....	30
Discussion.....	31
Organisational Support for Development and Intentions to Turnover .....	31
Organisational Support for Development and Affective Commitment .....	34
Limitations and Suggestions for Future Research .....	36
Practical Implications.....	39
Conclusion .....	39
References.....	41

### **Abstract**

Employees are increasingly concerned of managing their own career and are thus becoming less loyal. However, to stay competitive organisations need to retain their best talents. The present study examined the relationship between organisational support for development and intentions to turnover, as well as affective commitment. Previous research has indicated inconsistent results between employee development and turnover, suggesting that organisational support for development might increase or decrease intentions to turnover. In addition, studies have implied that it is required to include mediating factors to explain the relationship. The relationship between organisational support for development and intention to turnover was assumed to be mediated by employability and moderated by perceived career opportunities. Psychological contract breach and career success were tested as mediators in the relationship between organisational support for development and affective commitment. The hypotheses were investigated in a sample of 961 managerial and non-managerial employees in an engineering company in Norway. A moderated mediation model and multiple mediation model were applied to analyse the data. Results indicated that organisational support for development is essential in promoting intentions to stay and affective commitment. A partial moderated mediation of perceived career opportunities (moderator) and employability (mediator) was established. Unexpectedly, perceived career opportunities increased intentions to turnover. Career success and psychological contract breach partially mediated the relationship between organisational support for development and organisational commitment. These results contribute to extend knowledge about how organisational support for development improves retention and should be considered an important strategy in the organisation's retention management.

## **A Better Deal Elsewhere? The Role of Organisational Support for Development in Retaining Employees**

Over the last decades the employment relationship has shifted from lifelong employment security to employees increasingly managing their own careers to stay employable in a competitive market (Direnco & Greenhaus, 2011; Eby, Butts, & Lockwood, 2003; Forrier & Sels, 2003). To a greater extent employees seek new challenges and change jobs in order to manage their future career (D'Amato & Herzfeldt, 2008). Especially knowledge intensive organisations need to retain the best talents to stay competitive, as the organisations' assets are tied up in the employees.

These trends are also evident in Norway. According to the results of the European Employee Index (Ennova & HR Norge, 2012) conducted in Norwegian organisations during 2011, employees are becoming less loyal and are increasingly searching for new jobs to improve their work satisfaction. Moreover, employees report that organisations' efforts towards technical and personal development are declining. This might have damaging consequences for organisations since competence development is fundamental in attracting and retaining employees and a prerequisite to develop competitive advantage.

Retention management comprises HR practices organisations implement to reduce their turnover rate. For several reasons, retention is critical for knowledge intensive organisations. First, they depend on retaining employees with the highest intellectual capital. However, a tight labour market in some segments imply difficulties in finding talents (D'Amato & Herzfeldt, 2008). Second, employee turnover entail considerable tangible and intangible costs for organisations (Tanova & Holtom, 2008). The tangible costs are related to recruitment, training, quality issues, and costs of temporary staff. The intangible costs are associated with consequences for organisational culture, employee morale, social capital, and knowledge in organisations (Morrell, Clarke-Loan, & Wilkinson, 2004; Newman, Thanacoody, & Hui, 2011). Finally, management is concerned that a high turnover rate implies losing key employees and knowledge (Tanova & Holtom, 2008). Work attitudes such as intentions to turnover and affective commitment provide valuable information about organisations' retention efforts. Intentions to turnover reflects the employees' desire to continue the employment relationship, and affective commitment is linked to the employees' sense of attachment to the organisation (N. J. Allen & Meyer, 1990).

Organisational support for development is a key factor to retain employees and reflects the employees' perceptions of the extent the organisation provides opportunities and programs that support the employees' development (Kraimer, Seibert, Wayne, Liden, & Bravo, 2011). Developmental support is considered to be beneficial to the organisation and the employee. Consequently, employees improve their competence and the organisation develops a skilled workforce. However, research has indicated inconsistent results regarding the relationship between organisational support for development and retention (Kraimer et al., 2011). These inconsistencies revealed that support for organisational development might increase (Ito & Brotheridge, 2005) or decrease turnover intentions (Kuvaas & Dysvik, 2010). In addition, studies have indicated that it is required to include mediating factors to explain the relationship between organisational support for development and intentions to turnover (Lee & Bruvold, 2003).

The objective of the present study is to investigate the relationship between organisational support for development and retention. Retention is measured with intentions to turnover and affective commitment. First, the study will investigate whether organisational support for development reduces intentions to turnover. Employability and perceived career opportunities will be tested as factors that affect this relationship. Second, the study will analyse if organisational support for development increase affective commitment. Psychological contract breach and career success will be examined as factors that influence this relationship. The purpose of the present study is to contribute to an enhanced understanding of the relationship between organisational support for development and retention and factors related to these relationships.

### **Organisational Support for Development and Intentions to Turnover**

The present study suggests that intention to turnover is an important retention factor to be examined in relations to organisational support for development. This section will discuss the relationship between organisational support for development and intentions to turnover and present employability and perceived career opportunities as a potential mediator and a potential moderator of this relationship.

Organisational training and development opportunities are essential for individuals based on the necessity to remain employable in a competitive market. In

addition, these opportunities increase feelings of self worth and importance to the organisation since the organisation wants to invest in their employees (Döckel, Basson, & Coetzee, 2006). Development refers to activities in which employees acquire new knowledge or skills for personal growth (Aguinis & Kraiger, 2009). Examples of development programs are job rotation, high-potential programs, training classes and workshops, tuition reimbursement programs, career development and planning, and mentoring (Kraimer et al., 2011). Perceived organisational support has been identified as a strong predictor of intentions to turnover (Guzzo, Noonan, & Elron, 1994). Consequently, providing organisational support and opportunities to participate in the abovementioned development programs should be considered an important strategy to increase retention. Moreover, effective retention strategies such as opportunities for growth, a conducive work environment, and transparent compensation require top management support (Horwitz, Heng, & Quazi, 2003). These arguments suggest development and organisational support are important strategies to improve retention. Thus, the concept of organisational support for development and its relationship to intentions to turnover will be discussed in the next section.

Organisational support for development is defined as the employees' perceptions of whether the organisation provides programs and opportunities to develop the employees' functional and managerial skills (Kraimer et al., 2011). This definition takes into consideration that the presence of development programs does not necessarily imply that employees receive support for competence development or access to the programs. Contextual variables such the communication of development programs in the organisation, high work demands, and relationship with the nearest leader can influence perceptions of support. Thus, organisational support for development recognises that the interaction between the employees' perceptions and the organisational context (Kraimer et al., 2011) influences the employees' work attitudes.

Research on the relationship between employee development as well as support for development and retention has reported inconsistent results (Kraimer et al., 2011). For instance, employees who participated in tuition-reimbursement programs reported higher turnover intentions compared to those who did not participate or took fewer classes (Benson, 2006). Perceptions of supervisor support for development directly decreased turnover intentions, but indirectly increased

turnover intentions through career adaptability (Ito & Brotheridge, 2005). A direct relationship could, however, neither be established between perceived organisational support and turnover intentions (D. G. Allen, Shore, & Griffeth, 2003) nor between perceptions of organisational investment in employee development and intent to leave (Lee & Bruvold, 2003). Finally, a negative relationship between perceived investment in employee development and intentions to turnover was reported (Kuvaas & Dysvik, 2010). In summary, these studies illustrate the inconsistent results of the relationship between organisational support for development and intentions to turnover. Organisational support for development might increase or decrease intentions to turnover. In addition, studies have implied that it is required to include mediating factors to explain this relationship.

The abovementioned results did not succeed in establishing an unambiguous relationship between organisational support for development and intentions to turnover. However, research related to organisational support suggests that employees will be motivated to contribute to an extent that benefits the organisation if the organisation offers development opportunities, (Kuvaas & Dysvik, 2010). Supporting employee development induces feelings of being a valued member of the organisation, which should reduce the employee's intent to leave the organisation. Thus, consistent with research that has established a negative relationship between perceived organisational support (Guzzo et al., 1994) as well as perceived investment in employee development (Kuvaas & Dysvik, 2010) and intentions to turnover, the present study expects to find support for the following hypothesis:

*Hypothesis 1: Organisational support for development is negatively related to intentions to turnover.*

In relation to the focus on employee development and the changing employment relationship, employability has received substantial attention (Van der Heijde & Van der Heijden, 2006). Employability is understood as taking control and realising one's present and future career potential (Berntson, Näswall, & Sverke, 2010; Direnco & Greenhaus, 2011), and is defined as the individual's probability to get a job on the internal and external labour market (Berntson et al., 2010; Forrier & Sels, 2003). Employees with relevant competence are considered attractive on the internal and external labour market and therefore report high levels of employability.

These competences refer to the knowledge, skills and abilities an individual acquires, which are appropriately transferred to respond to changes in the labour market (De Cuyper, Mauno, Kinnunen, & Mäkikangas, 2011; Van der Heijde & Van der Heijden, 2006). Thus, the definition of employability suggests competence development is critical for employees to remain employable in a competitive and dynamic market (Direnco & Greenhaus, 2011; Wittekind, Raeder, & Grote, 2009). Consequently, improving the individual's employability is favourable for the employer and the employee (Van der Heijde & Van der Heijden, 2006).

Several studies have indicated a positive relationship between the employer's support for competence development and employability (De Vos, De Hauw, & Van der Heijden, 2011; Wittekind et al., 2009). This suggests that organisational support for development contributes in fostering employability. Since participation in development programs usually extends over a longer period, organisational support for development gives employees the impression that the organisation wants to invest in their present and future career development. Moreover, organisations that provide support for developing managerial and functional skills will increase the employees' career potential and they will be able to respond to changing work demands. Based on these arguments, the present study states the following hypothesis:

*Hypothesis 2: Organisational support for development is positively related to employability.*

Some scholars have discussed whether employability might increase intentions to turnover. This discussion is based on the assumption that enhanced employability and the changing employment situation might have an affect on intentions to turnover (De Cuyper et al., 2011). Especially since employees in some sectors are increasingly changing job (De Cuyper et al., 2011). On the other hand, Wittekind et al. (2009) recommended that organisational consequences of employability should be examined to determine whether investing in employability pays off for the organisation.

A recent longitudinal study established a negative and a non-significant relationship between employability and intentions to turnover. The same results occurred when support from the supervisor and social support from colleagues were included (De Cuyper et al., 2011). Employability was found to act as a moderator

between job insecurity and intentions to quit (Berntson et al., 2010). Employees who assumed they would easily find a new job reported stronger intentions to quit in a situation with higher job insecurity (Berntson et al., 2010). The relationship between employability and intentions to turnover was, however, not significant. Altogether, these results indicate that further research is needed to understand the relationship between employability and intentions to turnover.

Leaving an organisation might entail substantial losses to the individual (De Cuyper et al., 2011), which implies that employability does not necessarily increase intentions to turnover. Acquiring relevant competence is a critical part of employability, suggesting that employees who report higher levels of employability are more resilient regarding changing work demands (Van der Heijde & Van der Heijden, 2006). Moreover, even though greater employability enhances the probability of getting a new job, changing jobs do not imply that employees will improve their competence development. Consequently, it is assumed that employees want to remain in an organisation in which they experience greater employability. Consistent with a recent study that found a negative relationship between employability and intentions to turnover (De Cuyper et al., 2011), the present study postulates the following hypothesis:

*Hypothesis 3: Employability is negatively related to intentions to turnover.*

As described earlier, several studies have not established a direct relationship between organisational support for development and intentions to turnover (e.g., D. G. Allen et al., 2003; Ito & Brotheridge, 2005; Lee & Bruvold, 2003). For instance, affective commitment has been shown to be an important mediator of the relationship between organisational support for development and intention to turnover (Lee & Bruvold, 2003), suggesting that other factors explain this relationship. Accordingly, an earlier study found that employability played a significant role in the relationship between job insecurity and intentions to turnover (Berntson et al., 2010). Specifically, employability improved the strength of the relationship when it was included. This finding contributes to the idea that employability could have an affect in other relationships in which intention to turnover is the outcome variable. Therefore, the present study suggests that employability could act as a mediator in the relationship between organisational support for development and intentions to turnover.

To further increase the understanding of how employability is related to intentions to turnover, De Cuyper et al. (2011) proposed including moderators in this relationship. The increased focus on continuous career and competence development to remain employable and achieve personal career goals, suggests employees pay attention to internal and external career opportunities. A recent study found that perceived career opportunities moderated the relationship between organisational support for development and voluntary turnover, such that the relationship was negative when career opportunities were high but positive when career opportunities were low (Kraimer et al., 2011). Perceived career opportunities are defined as employees' perceptions of available work assignments and job opportunities within the current organisation that correspond with their career goals (Kraimer et al., 2011). The definition of perceived career opportunities acknowledges that individuals might have diverse goals and career interests. Thus, the perceptions of the availability of career opportunities in the organisation might vary. Moreover, the individual's career development is receiving increased attention, suggesting that career opportunities might be a significant factor in today's employment situation (Kraimer et al., 2011).

A similar study found that high performers and employees at a higher job level who were promoted were more likely to report intentions to stay in the organisation compared to low performers (Hausknecht, Rodda, & Howard, 2009). Moreover, receiving promotions moderated the relationship between earning a degree through tuition reimbursement and voluntary turnover, indicating that employees who get promoted after earning their degrees were less likely to quit than those who were not promoted (Benson, Finegold, & Mohrman, 2004). In summary, these findings reflect the importance of available career opportunities and promotions in relation to turnover. Moreover, it emphasises that employees who participate in development programs tend to search for career opportunities that correspond with their increased competence development.

Consistent with Kraimer et al. (2011) who argued that promotion is not the only way to retain employees who have received developmental support, the present study suggests that employability acts as a mediator and perceived career opportunities as a moderator in the negative relation between organisational support for development and intentions to turnover. Specifically, it is expected that the relationship is stronger when career opportunities are high. Including perceived career opportunities as a moderator might provide insights into the inconsistent findings

between organisational support for development and intentions to turnover (Kraimer et al., 2011). Thus, the following hypothesis is tested:

*Hypothesis 4:* The negative relationship between organisational support for development and intentions to turnover is mediated by employability, and this mediation is moderated by perceived career opportunities. Specifically, the relationship is stronger when career opportunities are high compared to when career opportunities are low.

### **Organisational Support for Development and Affective Commitment**

This study has presented affective commitment as an important retention factor to be investigated in the context of organisational support for development. The following sections will discuss the relationship between organisational support for development and affective commitment and present psychological contract breach and career success as two potential mediators of this relationship.

Affective commitment reflects a preference to stay with the company that arises out of a sense of emotional attachment (N. J. Allen & Meyer, 1990). This attachment is different from mere feelings of what employees should do or the perceived costs of leaving the organisation, and rather implies a deeper feeling of belonging to the organisation (N. J. Allen & Meyer, 1990). Affective commitment was found to be related to favourable attitudes and behaviours such as increased organisational citizenship behaviour and performance (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). Therefore, affective commitment is assumed to be strongly related to the employees' desire to contribute to the organisation's effectiveness, however, it might be difficult improving affective commitment (Döckel et al., 2006).

D'Amato and Herzfeldt (2008) argued in favour of facilitating opportunities for development since it will likely increase organisational commitment. Although work inducements such as organisational support have been identified as important antecedents to affective commitment (D. G. Allen et al., 2003; Wayne, Shore, & Liden, 1997), additional research regarding how support in organisations can foster commitment among employees is required (Meyer et al., 2002). Earlier research has indicated that organisational support for development (Lee & Bruvold, 2003), perceived investment in employee development (Kuvaas & Dysvik, 2010), perceived

availability of training, and perceived supervisor support for training (Newman et al., 2011) were positively related to affective commitment. These findings suggest that employees who receive organisational support for development increase their affective commitment to the organisation. Consistent with the emphasis on competence development to respond to changing demands, receiving organisational support for development suggests the organisation values the individual's employment in the organisation. Accordingly, increased developmental support might promote the employees' feelings of belonging to the organisation, and thus their affective commitment. Based on the findings relating organisational support for development to affective commitment, the present study expects to find support for the following hypothesis:

*Hypothesis 5: Organisational support for development is positively related to affective commitment.*

A growing body of research has applied the psychological contract to understand today's changing employment relationship (Zhao, Wayne, Glibkowski, & Bravo, 2007). It specifically contributes to understanding the employees' perceptions of organisational support (Tekleab, Takeuchi, & Taylor, 2005). The psychological contract is defined as the set of mutual expectations, promises, and obligations that exist between the employee and the organisation, binding the parties to some set of reciprocal obligations (Conway & Briner, 2005; Rousseau, 1989; Rousseau & Tijoriwala, 1998). Thus, it implies promises of committing oneself to a future exchange (Robinson & Rousseau, 1994; Rousseau, 1989). The subjective perceptions of what is implied in the contract are created during the recruitment process and are revised throughout the employment relationship (Rousseau, 1990). Examples of the content of the psychological contract are inducements such as job security, training and development, support to learn new skills, autonomy, bonus, and meaningful work (Coyle-Shapiro & Kessler, 2000; Rousseau, 1990). Inducements relating to career development are important elements in the psychological contract (De Vos & Meganck, 2009). However, since the individual perceptions are subjective, the parties do not necessarily agree on what the psychological contract consists of.

To date, many studies have examined psychological contract breach, which arises when one party perceives the other party has failed to fulfil promised

obligations (Morrison & Robinson, 1997). Thus, breach results in an imbalanced relationship and promotes a sense of discrepancy between what was promised and what was fulfilled (Coyle-Shapiro, 2002). Consistent with other research, the present study applies psychological contract breach to reflect when employees' perceive the organisation has not delivered expected inducements. A negative correlation was found between perceived organisational support and psychological contract breach (Dulac, Coyle-Shapiro, Henderson, & Wayne, 2008). This suggests that employees perceive the psychological contract as breached if the organisation does not respond to the employees' expectations regarding career development. Thus, providing organisational support for development influences the employees' perceptions regarding the psychological contract. Moreover, employees are more inclined to perceive a psychological contract breach in a situation in which the organisation fails in delivering organisational support for development. Therefore, the present study postulates the following hypothesis:

*Hypothesis 6:* Organisational support for development is negatively related to psychological contract breach.

Psychological contract breach is considered vital in understanding why the psychological contract might negatively impact the employees' feelings, attitudes, and behaviours (Conway & Briner, 2005). Meta-analytic results suggest psychological contract breach was negatively related to affective commitment (Zhao et al., 2007). Specifically, when employees perceived a breach they were inclined to either blame it on a misunderstanding regarding what had been promised or they assumed the organisation had intentionally disregarded its commitments (Lester, Turnley, Bloodgood, & Bolino, 2002). Consequently, when employees perceive a breach, the employee is likely to reduce his or her own contributions to the employer in order to restore balance in the relationship (Coyle-Shapiro & Kessler, 2000). Declining contributions might seriously damage the quality and existence of the psychological contract (Tekleab & Taylor, 2003). Consistent with these findings, employees feel less attached and reduce their affective commitment to the organisation when they perceive a psychological contract breach. Therefore, the present study expects support for the following hypothesis:

*Hypothesis 7:* Psychological contract breach is negatively related to affective commitment.

Studies have indicated that the psychological contract is mediating the relationship between employee development, organisational support and affective commitment (e.g., Sturges, Conway, Guest, & Liefoghe, 2005). Specifically, the psychological contract mediated the relationship between informal organisational career management interventions such as receiving career advice and affective commitment (Sturges et al., 2005). Psychological contract breach was an important mediator of the relationship between perceived organisational support and affective commitment (Dulac et al., 2008). It is, hence, assumed that the relationship between organisational support for development and affective commitment is influenced by the employees' perceptions of whether their psychological contract has been breached. Consistently, the present study postulates the following hypothesis:

*Hypothesis 8:* Psychological contract breach mediates the relationship between organisational support for development and affective commitment.

Together with psychological contract breach, the present study has suggested that career success is an important factor to investigate in the relationship between organisational support for development and affective commitment. Continuous development of knowledge, abilities and skills are becoming increasingly important to achieve personal career goals (Eby et al., 2003). Therefore, consistent with greater emphasis on competence and career development, career success has emerged as an important concept. Career success is defined as the individual's accomplishments of desirable work-related outcomes (Arthur, Khapova, & Wilderom, 2005; Judge & Bretz, 1994). These accomplishments are based on the result of one's accumulated work experiences (Judge & Bretz, 1994).

Today, researchers are increasingly adopting subjective career success (Heslin, 2005), which is commonly operationalised as career satisfaction (Heslin, 2005; Judge, Cable, Boudreau, & Bretz, 1995; Ng, Eby, Sorensen, & Feldman, 2005). Meta-analytic results suggest supervisory support as well as training and skill development opportunities were positively related to career satisfaction (Ng et al., 2005). Another study identified a positive relationship between perceived support for

competency development and career satisfaction (De Vos et al., 2011). Thus, the present study will investigate career success operationalised as career satisfaction.

Career satisfaction is defined as the satisfaction individuals experience from intrinsic and extrinsic features of their careers, such as pay and development opportunities (Greenhaus, Parasuraman, & Wormley, 1990). Moreover, it refers to the subjective evaluation of the job itself and this evaluation is related to the employee's expectations, goals, and achievements (Feldman & Ng, 2007; Ng et al., 2005; Seibert & Kraimer, 2001). Individual differences can influence perceptions of career satisfaction. For instance individuals have different career aspirations and place different values on factors such as income, access to learning, job progression, and employment security (Arthur et al., 2005). Thus, people might expect more from their careers than just salary and promotions (Heslin, 2005). In summary, career satisfaction is related to feelings of contentment and accomplishment regarding one's career and is partially based on objective indicators (Judge et al., 1995).

Organisations form the context in which career development takes place. Due to the demands of the labour market organisations should therefore be involved in the employees' career development (De Vos, Dewettinck, & Buyens, 2009; Kuijpers, Schyns, & Scheerens, 2006). Consistent with this argument, De Vos and Soens (2008) recommended to include the organisational component of career management as an antecedent of career success, since support from the organisation would likely affect career outcomes. The assumption is that if employees receive support for development they may be more likely to perceive they can achieve personal career goals, regardless of whether these goals are related to pay or job progression. Consistent with these findings, the present study states the following hypothesis:

*Hypothesis 9:* Organisational support for development is positively related to career success.

To date, research concerning career success has primarily investigated career success as an outcome variable (e.g., Colakoglu, 2011; De Vos et al., 2009; De Vos & Soens, 2008; Eby et al., 2003; Feldman & Ng, 2007; Greenhaus et al., 1990; Heslin, 2005; Judge & Bretz, 1994; Judge et al., 1995; Kuijpers et al., 2006; Ng et al., 2005; Seibert & Kraimer, 2001; Seibert, M., & Kraimer, 1999; Wayne, Liden, Kraimer, & Graf, 1999). To my knowledge, the relationship between career success and affective

commitment has not been empirically investigated. The abovementioned definition of career success posits that career success is the satisfaction individuals experience from their careers and the evaluation of the job itself (Feldman & Ng, 2007; Greenhaus et al., 1990). Since individuals' perceptions of career success are directly influenced by their jobs, they might also perceive that employment in the organisation is important in facilitating career success. Consequently, career success might reflect individual's evaluation of their career achievements in the organisation. The result of this evaluation suggests that when employees experience greater career success, they want to continue the employment relationship and feelings of attachment and belonging to the organisation will increase. Thus, employees feel more committed to the organisation in which they achieve career success. Therefore based on these arguments, the following hypothesis is tested:

*Hypothesis 10: Career success is positively related to affective commitment.*

The present study suggests that organisational support for development is related to career success and that career success is related to affective commitment. Specifically, studies have found a positive relationship between organisational support for development and career success (e.g., Ng et al., 2005). However, to my knowledge, the relationship between career success and affective commitment has not been empirically investigated. In summary, the arguments that have been presented assume that employees who receive developmental support perceive they can achieve personal career goals. Thus, organisational support will positively influence career success. Additionally, employees who perceive they are achieving their personal career goals tend to feel more attached to the organisation and want to continue the employment relationship. Consistent with these arguments, the present study postulates the following hypothesis:

*Hypothesis 11: Career success mediates the relationship between organisational support for development and affective commitment.*

## Method

### *Sample*

Data were collected in a large Norwegian engineering company that provides services to the oil and gas industry. In total, 1785 employees were invited to participate in the study. Out of this initial sample, 961 employees responded, which yielded a response rate of 53.84%. Within the sample, 80.65% ( $N = 775$ ) employees were male and 19.36% ( $N = 186$ ) were female ( $M = 1.19$ ,  $SD = .40$ ) (1 = male, 2 = female). The age ranged from 20 to 67 years ( $M = 38.61$ ,  $SD = 9.87$ ). Among the participants 31.01% ( $N = 298$ ) held a managerial position, whereas the majority 68.99% ( $N = 663$ ) held a non-managerial position ( $M = 1.69$ ,  $SD = .46$ ) (1 = managerial, 2 = non-managerial).

### *Procedure*

All employees within the organisation were invited to participate in the survey. The data were collected by the use of an online questionnaire. A link to the questionnaire was distributed per email to all employees in the company by the Human Resource Department. The participants were assured that all survey responses would be treated confidentially, and that the data would not point out any individual respondent. The questionnaires were returned electronically after completion. Emails reminding participants were sent out seven and fifteen days after the questionnaire initially was distributed.

### *Measures*

The questionnaire contained scales measuring organisational support for development, psychological contract breach, career success, affective organisational commitment, employability, perceived career opportunities, and intentions to turnover. Respondents indicated the extent to which they agreed with each statement on a 5-point Likert-scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. The survey was administered in English, which is the official working language in the organisation.

*Organisational support for development.* Employee development has differed in terms of how it has been measured. For instance, it has been measured in types of

development programs employees have been participating in (Birdi, Allan, & Warr, 1997; Kraimer et al., 2011), how effective different development programs are (Birdi et al., 1997), and whether employees have received support for development (Lee & Bruvold, 2003). The present study chose to measure the employees' perception of organisational support for development based on two arguments. First, development programs differ across organisations and can hardly be compared. Second, measuring organisational support for development does not assume a specific type of development program applied in the organisation. Six items developed by Kraimer et al. (2011) together with six items developed by De Vos et al. (2011) were applied to measure organisational support for development. An example item is "My organisation provides opportunities for employees to develop their specialised functional skills" (Kraimer et al., 2011). Items from De Vos et al. (2011) were reworded into statements, which were consistent with the other items in the questionnaire. An example item is "My organisation provides a more experienced colleague as a mentor who guides me in my job and from whose experience I can learn". Cronbach's alpha of the scale was .90.

*Psychological contract breach.* The employees' perspective on psychological contract breach was measured using three items developed by Tekleab and Taylor (2003). In Norwegian work life "obligations" are associated with the employment contract. Thus, the word "obligations" was replaced with the word "expectations" to reflect what creates psychological contact breach. An example item is "(Company) has done a good job of meeting its expectations to me". An explanatory text was included where respondents were asked to consider (1) the expectations they formed during recruitment and the start of their employment, if employed less than five years, or (2) the expectations they formed during the last five years, if employed more than five years. In the present study, the Cronbach's alpha of the scale was .79.

*Career success.* The employees' perceived career success was assessed with a 5-item scale developed by Greenhaus et al. (1990). An example item is "I am satisfied with the progress I have made toward meeting my overall career goals". Cronbach's alpha of the scale was .86.

*Affective commitment.* The employees' affective commitment was measured using six items developed by Meyer, Allen, and Smith (1993). An example item is "I would be very happy to spend the rest of my career with this organisation". Cronbach's alpha of the scale was .84.

*Employability.* Consistent with De Cuyper et al. (2011) employability was assessed using two items developed by Griffeth, Steel, Allen, and Bryan (2005), one item developed by Berntson and Marklund (2007), and one item developed by Berntson, Näswall, and Sverke (2008). Example items are “Given my qualifications and experience, getting a new job would not be very hard at all” (Griffeth et al., 2005), “My experience is in demand on the labour market” (Berntson & Marklund, 2007), and “It would not be very difficult for me to get an equivalent job in a different organisation” (Berntson et al., 2008). Cronbach’s alpha of the scale was .84.

*Perceived career opportunities.* The employees’ perceived career opportunities were measured using three items from Kraimer et al. (2011). An example item is “(Company) offers many job opportunity that match my career goals”. Cronbach’s alpha of the scale was .82.

*Intentions to turnover.* The construct was assessed using four items from Kelloway, Gottlieb, and Barham (1999). An example item is “I am thinking about leaving this organisation”. Cronbach’s alpha of the scale was .90.

*Control variables.* Participants were asked to enter their age, gender, and position. For instance, studies have indicated that age was correlated with employability such that perceptions of employability decrease with age (Van der Heijden, 2002; Wittekind et al., 2009). Also, employees at higher levels of the organisational hierarchy might perceive more career options than employees at lower levels (Kuijpers et al., 2006).

### *Data Analysis*

The analysis was performed with SPSS 19.0. Means, correlations and standard deviations were calculated for the study variables. Missing Value Analysis indicated that only the variable Age had missing values (.94%). These missing values were replaced by the expectation maximum (EM) procedure. To ensure no assumptions regarding normal distribution were violated, the data were visually inspected and statistically analysed for skewness. Analysis revealed positive and negative skewness for affective commitment, intentions to turnover and employability, and these scales were transformed to fit the assumption of normal distribution (Tabachnick & Fidell, 2007).

To test the hypotheses, two different models were chosen as the appropriate method of data analysis: (1) a moderated mediation model and (2) a multiple mediation model. The moderated mediation model was chosen since it has the capacity to test the conditional indirect effect of a mediator contingent on the level of the moderator (Edwards & Lambert, 2007; Preacher, Rucker, & Hayes, 2007). As defined by Preacher et al. (2007), a conditional indirect effect is understood as the size of an indirect effect at a specific value of one or several moderators. Thus, the conditional indirect effect on *Y* is dependent on the value of the moderator. The multiple mediation model was chosen because it has the ability of testing multiple indirect effects simultaneously. As described by Preacher and Hayes (2008) the multiple mediation model has several benefits. First, it is possible to test the total indirect effect of a set of mediators to determine whether an overall effect exists. Second, it is possible to determine each specific mediator's mediating effect conditional on the presence of other mediators in the model. Third, the probability of parameter bias caused by omitted variables is reduced. Fourth, competing theories can be tested since the relative magnitude of each specific indirect effect is compared and assessed.

Both models were conducted with Hayes and Preacher's (2012) SPSS PROCESS macro for testing moderation and mediation analysis. This macro uses bootstrap technique to test both the moderated mediation hypotheses and multiple mediation hypotheses. Bootstrap analysis is a nonparametric procedure; therefore it makes no assumptions about the sampling distribution of the variables or of the indirect effects (Hayes, 2009; Mackinnon, Lockwood, & Williams, 2004; Preacher & Hayes, 2008). According to Mackinnon et al. (2004), bootstrap technique has shown to have great statistical power and low Type 1 error rates. Bootstrapping involves generating sequences of unique data sets, called bootstrap samples, by repeatedly resampling from the original data set and estimating the indirect effect in each bootstrap sample (Edwards & Lambert, 2007; Preacher & Hayes, 2008; Shrout & Bolger, 2002). This resampling procedure is done with replacement, which means each case is returned and has an equal chance of being redrawn while the new sample is constructed (Hayes, 2009). By repeating this procedure thousands of times, it is possible to build an empirical estimation of the sampling distribution of the indirect effects as the new sample is treated as a small-scale representation of the population (Hayes, 2009). This sampling distribution is then used to derive bootstrap confidence

intervals to test the statistical significance of the total and specific indirect effects (Preacher & Hayes, 2008). An effect is considered significant when the confidence interval does not contain zero (Hayes, 2009; Preacher & Hayes, 2008).

*The moderated mediation model.* The present study used a moderated mediation model to determine whether organisational support for development influence intentions to turnover through one mediator: employability, and one moderator: perceived career opportunities. Figure 1 displays the hypothesised moderated mediation model. The  $a1$  coefficient represents the effect of organisational support for development on employability (the mediator), and the  $b1$  and  $bM$  coefficients represent the effect of the mediator and moderated mediation on intentions to turnover. The path  $c1$  is the total effect of organisational support for development on intentions to turnover. The path  $c'1$  is the direct effect of organisational support for development on intentions to turnover. As suggested by Edwards and Lambert (2007), perceived career opportunities (the moderator) was included and tested for all paths to avoid making incorrect inferences of the effect of the moderator.

*The multiple mediation model.* The multiple mediation model was used to determine whether organisational support for development influences affective commitment through two mediators: psychological contract breach and career success. Figure 1 displays the hypothesised multiple mediation model. The  $a2$  and  $a3$  coefficients represent the effects of organisational support for development on the mediators, and the  $b2$  and  $b3$  coefficients represent the effects of the mediators on affective commitment. The path  $c2$  is the total effect of organisational support for development on affective commitment. The path  $c'2$  is the direct effect of organisational support for development when controlled for the effect of the set of mediators. The specific indirect effect is the mediating effect of each proposed mediator, and is represented by  $a2b2$  (psychological contract breach) and  $a3b3$  (career success). Finally, the total indirect effect is the sum ( $a2b2 + a3b3$ ) of the two mediators' specific indirect effects. According to Preacher and Hayes (2008) testing a multiple mediation model should involve (1) an analysis of the total indirect effects, in other words, the overall effect of the set of mediators combined, and (2) an analysis of the specific indirect effect of each mediator. Thus, the multiple mediation model test the total and the specific indirect effect of psychological contract breach and career success.

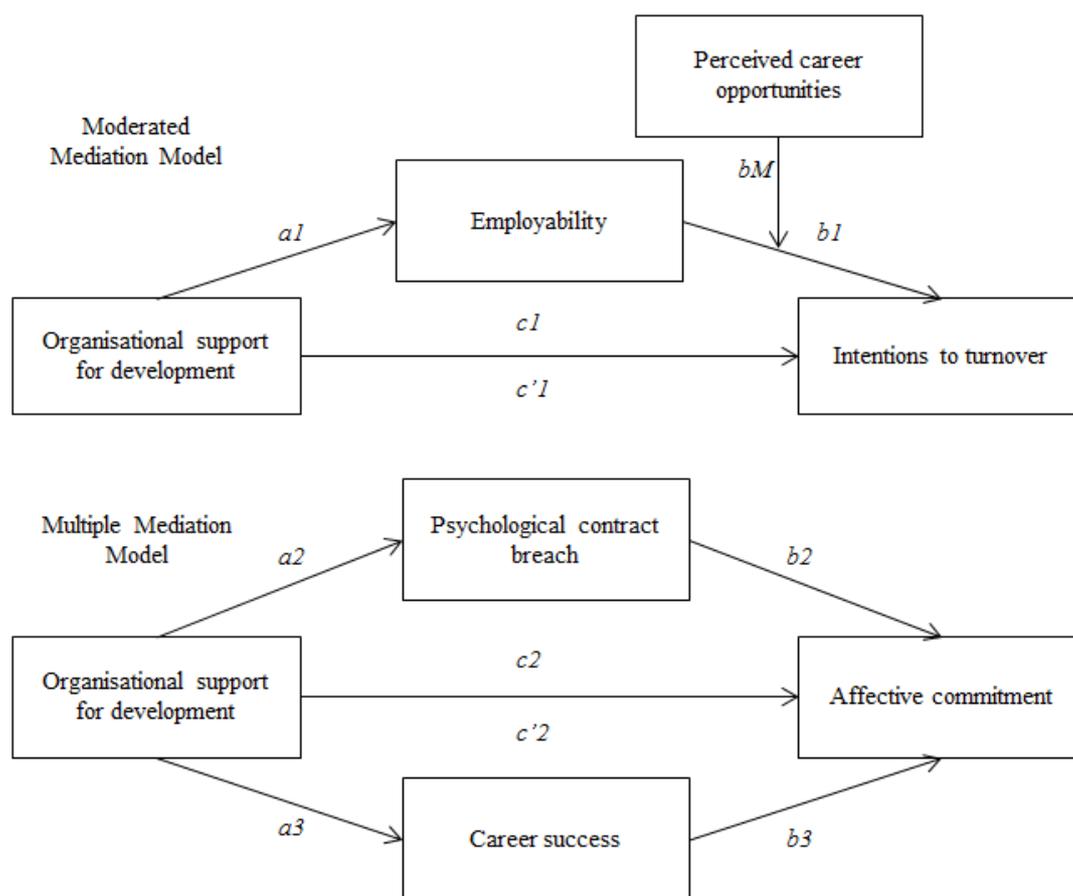


Figure 1. The Hypothesised Moderated Mediation Model and Multiple Mediation Model

The analysis and parameter estimates for both models were based on 5000 bootstrap samples drawn with replacement from the original sample of 961 respondents. This is consistent with Hayes (2009) recommendations. To test the significance of the total, indirect and conditional effects, 95% bias-corrected confidence intervals (BC CI) were used as this have been shown to be performing best in terms of power and Type 1 error rates (Mackinnon et al., 2004; Preacher & Hayes, 2008). If the BC CIs were different from zero, the indirect effect was statistically significant and mediation and moderated mediation were demonstrated (Hayes, 2009; Preacher & Hayes, 2008). The quantile option in PROCESS was applied for the moderated mediation model since it produces the conditional indirect effect for the 10<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup>, and 90<sup>th</sup> percentiles of perceived career opportunities.

## Results

### *Descriptive Statistics*

Table 1 presents the means, standard deviations, bivariate correlations and reliabilities of all study variables. To test the presence of multicollinearity due to a significant correlation between (1) career opportunities and employability, and (2) career success and psychological contract breach, collinearity diagnostics in linear regression analysis were performed. The analysis showed that the Tolerance-level (.98) was high and VIF-values (1.03) were low for perceived career opportunities and employability, and the Tolerance-level (.63) and VIF-values (1.58) were low for career success and psychological contract breach. These results indicated that multicollinearity was not an issue (Tabachnick & Fidell, 2007).

Table 1. Means, Standard Deviations, Correlations, and Reliabilities

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Age	38.61	9.87	-									
2. Gender (1 = male, 2 = female)	1.19	.40	-.08*	-								
3. Position (1 = managerial, 2 = non-managerial)	1.69	.46	-.19**	.03	-							
4. Organisational support for development	3.40	.72	-.00	-.04	-.14**	(.90)						
5. Career success	3.55	.80	.05	-.02	-.20**	.59**	(.86)					
6. Psychological contract breach	2.40	.84	.00	.04	.11**	-.63**	-.61**	(.79)				
7. Affective commitment	3.51	.55	.14**	-.03	-.11**	.46**	.39**	-.39**	(.84)			
8. Employability	1.96	.80	.03	.10**	.18**	.04	-.02	-.03	-.02	(.84)		
9. Perceived career opportunities	3.86	.80	-.17**	.01	-.11**	.30**	.25**	-.29**	.30**	-.16**	(.82)	
10. Intentions to turnover	2.15	1.05	-.04	.02	.10	-.52**	-.50**	.57**	-.54**	-.17**	-.24**	(.90)

Note. *N* = 961. Cronbach's alpha reported in parenthesis.

\*  $p < .05$ . \*\*  $p < .01$ .

Prior to the analysis using PROCESS, a hierarchical regression analysis was performed to estimate the amount of variance in intentions to turnover and affective commitment that was explained by the control variables age, gender, and position. The control variables explained in total .02% of the variance in intentions to turnover ( $F = .53$ ,  $R^2 = .002$ ), and 3% of the variance in affective commitment ( $F = 9.25$ ,  $R^2 = .03$ ). This is within the acceptable limits. Table 2 presents the estimated regression coefficients from the moderated mediation analysis, and Table 4 from the multiple mediation analysis. Only age had a very small significant effect on intentions to turnover and affective commitment. To a very small degree are older employees less likely to quit and more committed to their organisation.

#### *Moderated Mediation Analysis*

Hypothesis 1 predicted that organisational support for development is negatively correlated with intentions to turnover. As seen in Table 2 (path *c1*), organisational support for development was significantly related to intentions to turnover ( $b = -.86$ ,  $p < .001$ ), supporting Hypothesis 1. This finding suggests that organisational support reduces the employees' intentions to leave their current organisation.

In Hypothesis 2 the present study tested whether organisational support for development is positively associated with employability. The results in Table 2 (path *a1*) reveal that organisational support for development was significantly related to employability ( $b = .40$ ,  $p < .01$ ). Hypothesis 3 predicted employability is negatively correlated with intentions to turnover. As seen in Table 2 (path *b1*), employability was significantly related to intentions to turnover ( $b = -.55$ ,  $p < .001$ ). Thus Hypothesis 2 and 3 were supported. These results suggest that organisational support for development has a positive impact on employability, and employees who perceive they are easily employable are less likely to leave the organisation.

Table 2. *Regression Coefficients from the Moderated Mediation Analysis Predicting Intentions to Turnover.*

	<i>b</i>	<i>SE</i>	<i>R</i> <sup>2</sup>	<i>F</i>
<b>Control variables</b>			.002	.53
Age	-.01**	.00		
Gender	.04	.07		
Position	-.11	.06		
<b>Regression coefficients</b>				
Organisational support for development to employability (path <i>a1</i> )	.40***	.15		
Interaction: organisational support for development * perceived career opportunities	-.07*	.04		
Perceived career opportunities to employability	.06	.13		
Employability to intentions to turnover (path <i>b1</i> )	-.55****	.16		
Perceived career opportunities to intentions to turnover	-.51***	.17		
Interaction: employability * perceived career opportunities	.09**	.04		
Interaction: organisational support for development * perceived career opportunities	.04	.04		
<b>Total effect of organisational support for development (path <i>c1</i>)</b>	-.86****	.17		
<b>Conditional direct effects of organisational support for development (path <i>c'1</i>):</b>				
10 <sup>th</sup> percentile	-.73****	.05		
25 <sup>th</sup> percentile	-.72****	.05		
50 <sup>th</sup> percentile	-.69****	.04		
75 <sup>th</sup> percentile	-.67****	.05		
90 <sup>th</sup> percentile	-.64****	.07		
<b>Model summary</b>			.32***	54.89***

Note. *N* = 961. *b* = unstandardised regression coefficient.

\* *p* < .10. \*\* *p* < .05. \*\*\* *p* < .01. \*\*\*\* *p* < .001.

Hypothesis 4 stated that employability is a mediator between organisational support for development and intentions to turnover, and that this mediation is moderated by perceived career opportunities. Specifically, that the relationship is stronger when perceived career opportunities are high compared to when perceived career opportunities are low. Hence, the hypothesis was tested with a moderated mediation. Table 2 displays the results for the interaction of perceived career opportunities (the moderator) when tested for all paths, which is consistent with the recommendations of Edwards and Lambert (2007). The interaction of organisational support for development and perceived career opportunities on employability was only significant at the 10% level ( $b = -.07, p > .10$ ). The interaction of employability and perceived career opportunities on intentions to turnover was significant ( $b = .09, p < .05$ ). Finally, the interaction of organisational support for development and perceived career opportunities on intentions to turnover was not significant ( $b = .04, p > .05$ ). Thus, the only significant interactions were those of perceived career opportunities and organisational support for development as well as employability on intentions to turnover. The significant interaction between employability and perceived career opportunities was stronger when perceived career opportunities were low compared to high, which is opposite from what was hypothesised. Bootstrap analysis was conducted to test the conditional indirect and direct effects of the moderated mediation in the relationship between organisational support for development and intentions to turnover.

Table 3. *Conditional Indirect Effects and their Corresponding Bootstrap Confidence Intervals of Organisational Support for Development on Intentions to Turnover at values of Perceived Career Opportunities*

	Perceived career opportunities	Parameter estimate	SE	95% BC CI	
				Lower	Upper
Employability	10 <sup>th</sup> percentile	-.0527	.0166	-.0896	-.0249
Employability	25 <sup>th</sup> percentile	-.0413	.0126	-.0700	-.0199
Employability	50 <sup>th</sup> percentile	-.0226	.0087	-.0430	-.0084
Employability	75 <sup>th</sup> percentile	-.0154	.0080	-.0356	-.0026
Employability	90 <sup>th</sup> percentile	-.0050	.0073	-.0270	.0053

*Note.* BC CI = bias-corrected confidence intervals. Based on 5000 bootstrap samples.

### *Bootstrap Analysis*

Table 3 displays the parameter estimates and the bias-corrected confidence intervals (BC CIs) for the conditional indirect effects obtained from the bootstrap analysis for the moderated mediation analysis. Consistent with the results in Table 2, perceived career opportunities significantly moderated the effect of employability on intentions to turnover in the relationship between organisational support for development and intentions to turnover (Table 3). However, with a parameter estimate of .0050 and a BC 95% CI of -.0270 to .0053, moderated mediation did not exist for the 90<sup>th</sup> percentile of the moderator. Perceived career opportunities significantly moderated employability except for those who perceived the highest level of career opportunities. The values of the parameter estimates from the 10<sup>th</sup> to the 90<sup>th</sup> percentile were declining suggesting that lower levels of perceived career opportunities increase intentions to turnover.

The conditional direct effects of organisational support for development and perceived career opportunities (moderator) on intentions to turnover (path *c'1*) are displayed in Table 2. The direct effect of organisational support for development, when controlled for the indirect effect of the moderated mediation, was significant. Specifically, the relationship was stronger with lower levels of perceived career opportunities. Thus, organisational support for development reduces intentions to turnover, and this relationship was stronger when employees perceive there were fewer compared to several career opportunities in the organisation.

Together these results indicate that perceived career opportunities significantly moderated employability in the relationship of organisational support for development and intentions to turnover. Thus, the relationship was stronger when perceived career opportunities were included. When controlling for the moderated mediation effect, the relationship between organisational support for development and intentions to turnover remained significant. Therefore, the moderated mediation partially accounted for the relationship between organisational support for development and intentions to turnover. Furthermore, the strength of perceived career opportunities influenced intentions to turnover in the opposite direction as hypothesised. Consequently, Hypothesis 4 was partially supported. Employees perceive they are more employable when they receive organisational support for development. Also, when employees perceive they are employable and have several career opportunities

in the organisation they will more likely have intentions to turnover. Finally, the moderated mediation model explained 32% of the variance in intentions to turnover (Table 2).

### *Multiple Mediation Analysis*

In Hypothesis 5 the study tested whether organisational support for development is positively correlated with affective commitment. Consistent with the hypothesis, Table 4 demonstrates that organisational support for development was positively related to affective commitment ( $b = .35, p < .001$ ). Thus, Hypothesis 5 was supported. In addition, the direct effect (path  $c'$ ) of organisational support for development on affective commitment ( $b = -.24, p < .001$ ) remained significant when controlling for psychological contract breach and career success (the mediators). It seems that psychological contract breach and career success partially mediate the relationship between organisational support for development and affective commitment. Therefore, the employees' feelings of commitment to the organisation will increase when the organisation provides support for development,

Hypothesis 6 stated that organisational support for development is negatively related to psychological contract breach. As seen in Table 4 (path  $a2$ ) organisational support for development was significantly correlated with psychological contract breach ( $b = -.74, p < .001$ ). In Hypothesis 9 it was predicted that organisational support for development is positively associated with career success. Organisational support for development was significantly related to career success ( $b = .64, p < .001$ ) (Table 4, path  $a3$ ). Therefore, Hypothesis 6 and 9 were supported. When the employees' receive support for development from the organisation, they perceive the organisation is fulfilling the psychological contract. Also, employees perceive they have a successful career when they receive support for development from the organisation.

Table 4. *Regression Coefficients from the Multiple Meditation Analysis Predicting Affective Commitment.*

	<i>b</i>	<i>SE</i>	<i>R</i> <sup>2</sup>	<i>F</i>
<b>Control variables</b>			.03	9.25
Age	.01***	.00		
Gender	-.01	.04		
Position	-.03	.03		
<b>Path <i>a</i>2 and <i>a</i>3</b>				
Organisational support for development to the psychological contract breach (path <i>a</i> 2)	-.74***	.03		
Organisational support for development to career success (path <i>a</i> 3)	.64***	.03		
<b>Path <i>b</i>2 and <i>b</i>3</b>				
Psychological contract breach to affective commitment (path <i>b</i> 2)	-.08**	.03		
Career success for affective commitment (path <i>b</i> 3)	.09**	.03		
<b>Total effect of organisational support for development (path <i>c</i>2)</b>	.35***	.02		
<b>Direct effect of organisational support for development (path <i>c</i>'2)</b>	.24***	.03		
<b>Model summary</b>			.23***	71.99***

Note. *N* = 961. *b* = unstandardised regression coefficient.

\*\* *p* < .01. \*\*\* *p* < .001.

Table 5. *Specific Indirect Effects, Total Indirect Effect, and their Corresponding Bootstrap Confidence Intervals of the Relationship Between Organisational Support for Development and Affective Commitment.*

<b>Mediator</b>	Parameter estimate	<i>SE</i>	95% BC CI	
			Lower	Upper
Psychological contract breach	.0586	.0196	.0205	.0962
Career success	.0543	.0173	.0203	.0889
Total indirect effect	.1130	.0197	.0748	.1516

Note. BC CI = bias-corrected confidence intervals. Based on 5000 bootstrap samples.

In Hypothesis 7 it was tested whether psychological contract breach is negatively correlated with affective commitment. Consistent with the hypothesis (Table 4, path *b1*), psychological contract breach was significantly related to affective commitment ( $b = -.08, p < .01$ ). Thus, Hypothesis 7 was supported. Hypothesis 10 predicted that career success was positively associated with affective commitment. A significant correlation between career success and affective commitment ( $b = .09, p < .01$ ) is reported in Table 4 (path *b3*), supporting Hypothesis 10. Employees who perceive a psychological contract breach feel less committed to the organisation. Furthermore, when the employees' perceive they have a successful career they feel more committed to the organisation.

#### *Bootstrap Analysis*

Table 5 displays the parameter estimates and the bias-corrected confidence intervals (BC CIs) for the total and specific indirect effects obtained from the bootstrap analysis for the multiple mediation analysis. With a parameter estimate of .1130 and a BC 95% CI of .0748 to .1516, the total indirect effect of the mediators was statistically significant. Thus, the confidence interval did not contain zero. The set of mediators mediate the relationship between organisational support for development and affective commitment.

Hypothesis 8 stated that psychological contract breach is a mediator between the relationship of organisational support for development and affective commitment. The specific indirect of psychological contract breach was significant (Table 3). The parameter estimate was .0586 and a BC 95% CI of .0205 to .0962, thus the confidence interval was different from zero. In Hypothesis 11 it was tested whether career success was a mediator of the relationship between organisational support for development and affective commitment. As reported in Table 3 the specific indirect effect of career success was significant. The parameter estimate was .0543 and a BC 95% CI of .0203 to .0889, thus the confidence interval did not contain zero. The total effect of organisational support for development on affective commitment (path *c'2*) was still significant when controlling for the specific indirect effect of the set of mediators. The significant direct effect of organisational support for development on affective commitment ( $b = .24, p < .001$ ) indicates that psychological contract breach and career success partially mediated the relationship. Therefore, Hypothesis 8 and 11

were partially supported. When employees receive organisational support for development, they will more likely perceive the psychological contracts are fulfilled and that they have career success. Further, these perceptions will promote feelings of commitment to the organisation. Specifically, organisational support for development will directly increase affective commitment. Finally, the multiple mediation model explained 23% of the variance in affective commitment (Table 4).

## **Discussion**

The present study aimed to examine the role of organisational support for development in promoting a successful retention effort. Specifically, a successful retention effort was assessed by intentions to turnover and affective commitment. Employability was investigated as a mediator and perceived career opportunities as a moderator in the relationship between organisational support for development and intentions to turnover. Perceived career opportunities were assumed to strengthen the negative relationship to intentions to turnover, such that when perceptions of internal career opportunities were high employees were less likely to quit. Psychological contract breach and career success were investigated as mediators in the relationship between organisational support for development and affective commitment. The present study makes four contributions to the organisational support for development and retention literature. These contributions consist of showing a strong relationship between organisational support for development and intentions to turnover as well as affective commitment. In addition, employability, perceived career opportunities, psychological contract breach, and career success are important factors in explaining the abovementioned relationships. A discussion of these contributions will be presented the next section, followed by limitations and suggestions for future research, practical implications, and conclusion.

### *Organisational Support for Development and Intentions to Turnover*

Despite increased attention towards organisational support for development in order to boost retention efforts, research has not successfully established a clear relationship between organisational support for development and intentions to turnover (Kraimer et al., 2011). Development opportunities are considered

fundamental for organisations and employees to respond to a competitive market and increased work demands. Moreover, they are important factors to retain key employees. The first contribution of this study is to show a strong negative relationship between organisational support for development and intentions to turnover. Second contribution is to demonstrate that employability and perceived career opportunities are factors that have an impact on this relationship.

The first finding in the present study was that organisational support for development was positively related to intentions to turnover (Hypothesis 1), indicating that organisational support for development plays an important part in reducing intentions to turnover. In addition, the relationship between organisational support for development and intentions to turnover was significant when other variables were controlled for, establishing a direct relationship. This result could be understood in the context of the increased work demands on organisations and employees. Organisations need to develop the employees' competence to respond to a competitive market and employees demand development opportunities to increase job variety. Employees who receive organisational support for development perceive the organisation cares for them and they are more inclined to remain in the organisation (e.g., Kuvaas & Dysvik, 2010). However, the direct relationship between organisational support for development and intentions to turnover contradicts research that has found mediating factors to explain the relationship (e.g., D. G. Allen et al., 2003; Lee & Bruvold, 2003), and research that has found a positive relationship (Ito & Brotheridge, 2005). Altogether, organisational support for development influences the decision to remain in the organisation and should be considered an important strategy in organisation's retention efforts.

The second contribution demonstrates that employability and perceived career opportunities are important factors that influence the relationship between organisational support for development and intentions to turnover. Specifically, a significant relationship was established between organisational support development and employability (Hypothesis 2), and between employability and intentions to turnover (Hypothesis 3). It seems that support for development is important for improving employability, which is critical for increasing the probability of getting a new job and the employees' career potential. This discovery is consistent with previous research (e.g., De Vos et al., 2011; Van der Heijde & Van der Heijden, 2006). Moreover, employability was negatively associated with intentions to turnover,

which contradicts a previous study (e.g., De Cuyper et al., 2011). Employability might have gained importance in Norway after the financial crisis was evident in fall of 2008. During this period several organisations in Norway needed to downsize, especially those who were dependent on the international market to sell their products. The adverse effects of the crisis are still evident today, as especially southern parts of Europe are experiencing a high unemployment rate and extensive cuts in public spending. Despite that Norway was only to a small degree affected by the financial crisis compared to the rest of the world, its consequences might affect the employees' commitment and sense of employment security. Therefore, developing competences such that individuals have several job alternatives might increase retention, since employees regard development as an investment in their future career potential. Thus, employees can gain most if they remain in the organisation that provides support for development.

As predicted, the interaction between employability and perceived career opportunities on intentions to turnover and the moderated mediation in the relationship between organisational support for development and intentions to turnover were significant (Hypothesis 4). This indicates that perceptions of career opportunities in the organisation play a central role in strengthening the relationship between employability and intentions to turnover. In addition, perceived career opportunities are important in the relationship between organisational support for development and intentions to turnover when employability is included as a mediator.

Unexpectedly, the results for the interaction and moderated mediation appeared in opposite direction of what was expected, indicating that higher levels of perceived career opportunities were associated with increased intentions to turnover. Moreover, the relationship was not significant for employees who perceived most career opportunities. A possible explanation is that other factors more importantly influence these employees' intentions to turnover rather than perceptions of career opportunities. For instance, work-life balance might influence intentions to turnover to a greater extent for employees who already perceive they have several career opportunities. Furthermore, it seems that employees are more inclined to stay in the organisation when they perceive lower compared to higher levels of career opportunities, which is inconsistent with previous research (e.g., Kraimer et al., 2011). In summary, organisational support for development influenced employability,

which in turn reduced intentions to turnover. However, intentions to turnover increased when perceptions of career opportunities were included in the relationship.

A possible explanation for the unexpected influence of perceived career opportunities could be that employees who are informed about internal career opportunities have this knowledge since they are already searching for a new job. As a result, those who are searching for a new job might be looking for opportunities in the current organisation as well as in other organisations. This implies that employees who are aware of career opportunities in the organisation are already contemplating about leaving the organisation and therefore report increased intentions to turnover. A second explanation is that perceptions of career opportunities do not imply actual promotion. Thus, consistent with previous research (e.g., Benson et al., 2004; Hausknecht et al., 2009) it seems that being promoted after receiving organisational support for development might be more critical to reduce intentions to turnover compared to perceptions of career opportunities.

#### *Organisational Support for Development and Affective Commitment*

Organisations that provide employees with developmental support are expected to have committed employees, and such organisational support for development is critical to establish a successful retention effort. The third contribution of the present study is to show a strong positive relationship between organisational support for development and affective commitment. Fourth contribution is to demonstrate that psychological contract breach and career success as mediators that have an impact on this relationship. In general, the present study contributes to research on career success and affective commitment since, to my knowledge, prior research has not tested this relationship.

The hypothesis predicting that organisational support for development is positively related to affective commitment was supported (Hypothesis 5). Thus, the third contribution of the present study demonstrates that organisational support for development is important in enhancing the employees' feelings of commitment to the organisation. Specifically, this relationship was significant when career success and the psychological contract were controlled for. Thus, despite the effect of psychological contract breach and career success, supporting development is critical in promoting feelings of attachment to the organisation. It seems that employees

perceive that the organisation values and cares for them when it provides support for development. Employees will respond to this support with increased commitment to the organisation. This finding supports earlier research (e.g., Newman et al., 2011; Wayne et al., 1997), which has established that support for development is critical in promoting affective commitment. Increasing the employees' feelings of being committed are important to the organisation since it enhances organisational citizenship behaviour and performance (Meyer et al., 2002). Altogether, organisational support for development is associated with affective commitment and is therefore a critical retention strategy.

The fourth contribution is to show that psychological contract breach and career success have an impact on the relationship between organisational support for development and affective commitment. As predicted, organisational support for development was negatively related to psychological contract breach (Hypothesis 6), and psychological contract breach was negatively associated with affective commitment (Hypothesis 7). Providing organisational support for development is critical to lower the employees' perceptions on whether it has been psychological contract breach, which is consistent with earlier research (e.g., Dulac et al., 2008). Furthermore, De Vos and Meganck (2009) argued that it is important to pay attention to the employees' psychological contract concerning their expectations for continuous development. This importance is strengthened by results indicating that employees tend to perceive there has been psychological contract breach (Robinson & Rousseau, 1994). Consistent with prior research (e.g., Zhao et al., 2007), these findings indicate that it is essential for the organisation to fulfil the psychological contract in order to promote feelings of commitment.

The hypotheses predicting that organisational support for development is related to career success (Hypothesis 9), and that career success is associated with affective commitment (Hypothesis 10) were supported. These findings suggest that organisational support for development is important to increase the employees' career success. Employees are increasingly seeking new challenges and opportunities to develop their competence are critical to achieve what the individual considers to be a successful career. These findings support earlier research in which support for development was an important factor in promoting feelings of career success (De Vos et al., 2011). Moreover, the positive relationship between career success and affective commitment is a noteworthy contribution since this relationship has not been

investigated before. It seems that employees who perceive they have a successful career will more likely feel committed to the organisation, since employment in the organisation is connected to their achievements of career success.

Psychological contract breach (Hypothesis 8) and career success (Hypothesis 11) partially mediated the relationship between organisational support for development and affective commitment. These findings suggest that even though psychological contract breach and career success are important components in the relationship between support for development and affective commitment, they are not the cause of the relationship. One possible explanation for this partial mediation might be based on the importance employees place on support for development. Organisations that provide support and opportunities for development communicate that they value the individual's present and future employment in the organisation and cares for their well-being. In summary, the results indicate that organisational support for development plays an important role in organisation's retention management.

#### *Limitations and Suggestions for Future Research*

The results of the present study should be interpreted in terms of its limitations. First, the study was done with a cross-sectional research design. This implies the reported results are correlational in nature, and therefore the study cannot determine causality between the variables. For instance it cannot be concluded that employees who report they receive organisational support for development will actually reduce intentions to turnover. To establish in-depth knowledge about the causal relationship, a longitudinal research design should be applied. For instance the questionnaire could be administered twice, and a measure of turnover a year after the last administration should be included in the study. The time frame between the first and second administration could be six months to examine the consistency between the results. Collecting turnover data a year after the last administration would provide information regarding actual turnover in addition to employees who are contemplating on leaving.

Second, the data were collected in an organisational context that is thought to be fairly concerned with development and career opportunities. The results might have been different in an organisational context that place less importance on development and career opportunities (Kraimer et al., 2011). Data were collected in a

Norwegian engineering company that provides services to the oil and gas industry, which suggests that these findings might not be representative for other sectors and cultural contexts. However, generalisability of the results might not always be the primary goal in research. Collecting data in one organisation provides valuable insights into that particular organisation, which might otherwise have been overlooked or disregarded. For instance, many of the respondents were engineers who are highly sought after in the employment market, which imply they are frequently exposed to external career opportunities. Consequently, the present study provided insights into how support for development promotes retention for employees who are important for the organisations' competitive advantage and that are extremely attractive on the labour market.

Third, the results might have been less conservative in an organisation with a higher turnover rate. There might have been more differentiated findings regarding employability, psychological contract breach, perceived career opportunities, and career success in an organisation with a higher turnover rate. The present study did not measure actual turnover, which implies that one cannot assume consistency between how many thinking of leaving and the number of employees who actually decide to leave. Research has shown that intentions to turnover are moderately related to actual turnover (Griffeth, Hom, & Gaertner, 2000), indicating that there are other important factors such as work-life balance and leadership that should be considered within the field of retention. However, intentions to turnover provide valuable information regarding employees who are thinking of quitting in the nearest future. Especially since these employees might not be performing at their top level and therefore have a negative effect on the organisations' competitiveness.

Finally, data were collected using a self-report questionnaire, which is consistent with how most studies have measured work attitudes such as affective commitment and intentions to turnover. However, the relationships that were found in the present study could have been affected by common method bias overestimating the relationships (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Future research should therefore use data from multiple resources. For instance, managers could assess how much and what types of development support are provided for their employees. These measures could be compared to the employees' perceptions of organisational support for development.

Additional suggestions for future research are related to employability, perceived career opportunities, career success, and social exchange theory. First, with respect to the discussion assuming employability should increase intentions to turnover (e.g., De Cuyper et al., 2011), our results indicate that additional research is necessary to understand the relationship between employability and intentions to turnover. For instance, job transition could be included as a moderator between employability and intentions to turnover to investigate whether changes in job content affect this relationship. Furthermore, future research could investigate employability in connection to other work attitudes that are related to a successful retention effort, such as affective commitment and job engagement.

Second, the unexpected positive effect of perceived career opportunities to intentions to turnover implies future research is needed to understand how career opportunities influence intention to turnover. Given the negative association between actual promotion and intentions to turnover (Benson et al., 2004; Hausknecht et al., 2009), promotion could be investigated in conjunction with perceived career opportunities. Thus, increasing our understanding of their specific effects on intentions to turnover. Third, although research has generally investigated career success as an outcome variable, the positive relationship between career success and affective commitment suggests future research should investigate additional outcomes that are related to career success. For instance, job engagement could be tested with respect to increased knowledge about the organisations' retention efforts. Also, performance could be tested to understand whether employees who perceive they have career success have an impact on the organisations' effectiveness.

Finally, according to Kraimer et al. (2011) relating social exchange theory to organisational support for development could provide insights into why employees might be motivated to stay in organisations that provide developmental support. Social exchange theory reflects a reciprocal exchange relationship in which trust for future exchange is a central tenet (Blau, 1964). Thus, social exchange theory suggests that employees perceive they are a valued resource to the organisation when it provides developmental opportunities (Lee & Bruvold, 2003). These perceptions promote commitment to the organisation and intentions to stay. Consistent with today's changing employment relationship and employees increased focus on career development, future research could investigate how social exchange theory is related to employability and career success.

### *Practical Implications*

Reliable knowledge about factors that promote retention is particularly valuable to organisations with employees who are highly sought after. The present study revealed that organisational support for development is of great importance when it comes to intentions to turnover and affective commitment. Although companies provide extensive development programs to facilitate the employees' diverse career aspirations, employees need to perceive that these development opportunities are available to them. Therefore, organisations need to take care that support for development is evident and communicated at all levels of the organisation to enhance a learning environment for all employees (De Vos et al., 2011). Thus, it should be considered a critical element of organisation's retention management.

Additionally, organisations need to provide developmental support if they want to retain employees who are concerned with their career potential and career goals, and even more so with respect to the tight labour market in the oil and gas industry. Thus, organisations should be aware of the employees' career objectives and competence levels, and accordingly provide developmental support in order for them to achieve a successful career.

In order to make sure employees do not perceive psychological contract breach, organisations need to be aware of what they communicate both during and after the recruitment period regarding expectations of future inducements. Employees who receive developmental support from the organisation will less likely perceive psychological contract breach and will instead continue developing a mutual exchange relationship with the organisation. Thus, providing organisational support for development should be considered a win-win situation. Employees experience increased competence development, career success, and strong psychological contracts (e.g., Janssens, Sels, & Van Den Brande, 2003) with the organisation, and organisations develop a competent workforce who are committed and wants to remain in the organisation.

### **Conclusion**

With respect to the changing employment relationship and competitive work environment, retaining the best talents is of high importance. Based on the findings, organisational support for development leads to more committed employees and it

increases intentions to stay. Moreover, the present study indicates that organisations need to pay attention to employability, career success, and psychological contract breach if they wish to retain key employees. Unexpectedly, perceived career opportunities led to increased intentions to turnover, suggesting further research is needed. Altogether, the present study contributes to a better understanding of how organisational support for development encourages retention and should be considered an important strategy in organisation's retention efforts.

## References

- Aguinis, H., & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organizations, and society. *Annual Review of Psychology, 60*, 451-474. doi: 10.1146/annurev.psych.60.110707.163505
- Allen, D. G., Shore, L. M., & Griffeth, R. W. (2003). The role of perceived organizational support and supportive human resource practices in the turnover process *Journal of Management, 2003*, 99-118.
- 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.
- Arthur, M. B., Khapova, S. N., & Wilderom, C. P. M. (2005). Career success in a boundaryless career world. *Journal of Organizational Behavior, 26*, 177-202. doi: 10.1002/job.290
- Benson, G. S. (2006). Employee development, commitment and intentions to turnover: a test of "employability" policies in action. *Human Resource Management Journal, 16*, 173-192.
- Benson, G. S., Finegold, D., & Mohrman, S. A. (2004). You paid for the skills, now keep them: Tuition reimbursement and voluntary turnover. *Academy of Management Journal, 47*, 315-331.
- Berntson, E., & Marklund, S. (2007). The relationship between perceived employability and subsequent health. *Work & Stress, 21*, 279-292. doi: 10.1080/02678370701659215
- Berntson, E., Näswall, K., & Sverke, M. (2008). Investigating the relationship between employability and self-efficacy: A cross-lagged analysis. *European Journal of Work and Organizational Psychology, 17*, 413-425. doi: 10.1080/13594320801969699
- Berntson, E., Näswall, K., & Sverke, M. (2010). The moderating role of employability in the association between job insecurity and exit, voice, loyalty and neglect. *Economic and Industrial Democracy, 31*, 215-230. doi: 10.1177/0143831x09358374
- Birdi, K., Allan, C., & Warr, P. (1997). Correlates and perceived outcomes of four types of employee development activity. *Journal of Applied Psychology, 82*, 845-857.
- Blau, P. (1964). *Exchange and power in social life*. New York: Wiley.
- Colakoglu, S. N. (2011). The impact of career boundarylessness on subjective career success: The role of career competencies, career autonomy, and career insecurity. *Journal of Vocational Behavior, 79*, 47-59. doi: 10.1016/j.jvb.2010.09.011
- Conway, J. M., & Briner, R. B. (2005). *Understanding psychological contracts at work: A critical evaluation of theory and research*. Oxford, U.K: Oxford University Press.
- Coyle-Shapiro, J. (2002). A psychological contract perspective on organizational citizenship behavior. *Journal of Organizational Behavior, 23*, 927-946.
- Coyle-Shapiro, J., & Kessler, I. (2000). Consequences of the psychological contract for the employment relationship. *Journal of Organizational Behavior, 23*, 927-946.
- D'Amato, A., & Herzfeldt, R. (2008). Learning orientation, organizational commitment and talent retention across generations: A study of European managers. *Journal of Managerial Psychology, 23*, 929-953. doi: 10.1108/02683940810904402

- De Cuyper, N., Mauno, S., Kinnunen, U., & Mäkikangas, A. (2011). The role of job resources in the relation between perceived employability and turnover intention: A prospective two-sample study. *Journal of Vocational Behavior*, *78*, 253-263.
- De Vos, A., De Hauw, S., & Van der Heijden, B. I. J. M. (2011). Competency development and career success: The mediating role of employability. *Journal of Vocational Behavior*, *79*, 438-447. doi: 10.1016/j.jvb.2011.05.010
- De Vos, A., Dewettinck, K., & Buyens, D. (2009). The professional career on the right track: A study on the interaction between career self-management and organizational career management in explaining employee outcomes. *European Journal of Work and Organizational Psychology*, *18*, 55-80. doi: 10.1080/13594320801966257
- De Vos, A., & Meganck, A. (2009). What HR managers do versus what employees value: Exploring both parties' views on retention management from a psychological contract perspective. *Personnel Review*, *38*, 45-60. doi: 10.1108/00483480910920705
- De Vos, A., & Soens, N. (2008). Protean attitude and career success: The mediating role of self-management. *Journal of Vocational Behavior*, *73*, 449-456. doi: 10.1016/j.jvb.2008.08.007
- Direnco, M. S., & Greenhaus, J. H. (2011). Job search and voluntary turnover in a boundaryless world: A control theory perspective. *Academy of Management Review*, *36*, 567-589.
- Dulac, T., Coyle-Shapiro, J., Henderson, D. J., & Wayne, S. J. (2008). Not all responses to breach are the same: The interconnection of social exchange and psychological contracts processes in organizations. *Academy of Management Journal*, *51*, 1079-1098.
- Döckel, A., Basson, J. S., & Coetzee, M. (2006). The effect of retention factors on organizational commitment: An investigation of high technology employees. *SA Journal of Human Resource Management*, *4*(2), 20-28.
- Eby, L. T., Butts, M., & Lockwood, A. (2003). Predictors of success in the era of the boundaryless career. *Journal of Organizational Behavior*, *24*, 689-708. doi: 10.1002/job.214
- Edwards, J. R., & Lambert, L. S. (2007). Supplemental material for methods for Integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychological Methods*, *12*, 1-22. doi: 10.1037/1082-989X.12.1.1.supp
- Ennova, & HR Norge. (2012). European employee index Norge 2011. *European employee index*, *12*, 1-19.
- Feldman, D. C., & Ng, T. W. H. (2007). Careers: Mobility, embeddedness, and success. *Journal of Management*, *33*, 350-377. doi: 10.1177/0149206307300815
- Forrier, A., & Sels, L. (2003). The concept employability: A complex mosaic. *International Journal of Human Resources Development and Management*, *3*, 102-124.
- Greenhaus, J. H., Parasuraman, S., & Wormley, W. M. (1990). Effects of race on organizational experiences, job performance evaluations, and career outcomes. *Academy of Management Journal*, *33*, 64-86.
- Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management*, *26*, 335-349.

- Griffeth, R. W., Steel, R. P., Allen, D. G., & Bryan, N. (2005). The development of a multidimensional measure of job market cognitions: The employment opportunity index (EOI). *Journal of Applied Psychology, 90*, 335-349. doi: 10.1037/0021-9010.90.2.335
- Guzzo, R. A., Noonan, K. A., & Elron, E. (1994). Expatriate managers and the psychological contract. *Journal of Applied Psychology, 79*, 617-626.
- Hausknecht, J. P., Rodda, J., & Howard, M. J. (2009). Targeted employee retention: Performance-based and job-related differences in reported reasons for staying. *Human Resource Management, 48*, 269-288. doi: 10.1002/hrm.20279
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs, 76*, 408-420. doi: 10.1080/03637750903310360
- Hayes, A. F., & Preacher, K. J. (2012). <http://www.afhayes.com/spss-sas-and-mplus-macros-and-code.html> Retrieved 06.02.2012
- Heslin, P. A. (2005). Conceptualizing and evaluating career success. *Journal of Organizational Behavior, 26*, 113-136. doi: 10.1002/job.270
- Horwitz, F. M., Heng, C. T., & Quazi, H. A. (2003). Finders, keepers? Attracting, motivating and retaining knowledge workers. *Human Resource Management Journal, 13*, 23-44.
- Ito, J. K., & Brotheridge, C. M. (2005). Does supporting employees' career adaptability lead to commitment, turnover, or both? *Human Resource Management, 44*, 5-19. doi: 10.1002/hrm.20037
- Janssens, M., Sels, L., & Van Den Brande, I. (2003). Multiple types of psychological contracts: A six-cluster solution. *Human Relations, 56*, 1349-1378. doi: 10.1177/00187267035611004
- Judge, T. A., & Bretz, R. D. (1994). Political influence behavior and career success. *Journal of Management, 20*, 43-65. doi: 10.1177/014920639402000103
- Judge, T. A., Cable, D. M., Boudreau, J. W., & Bretz, R. D. (1995). An empirical investigation of the predictors of executive career success. *Personnel Psychology, 48*, 485-519.
- Kelloway, E. K., Gottlieb, B. H., & Barham, L. (1999). The source, nature, and direction of work and family conflict: A longitudinal investigation. *Journal of Occupational Health Psychology, 4*, 337-346.
- Kraimer, M. L., Seibert, S. E., Wayne, A. J., Liden, R. C., & Bravo, J. (2011). Antecedents and outcomes of organizational support for development: The critical role of career opportunities. *Journal of Applied Psychology, 96*, 485-500.
- Kuijpers, M. A. C. T., Schyns, B., & Scheerens, J. (2006). Career competencies for career success. *The Career Development Quarterly, 55*, 168-178.
- Kuvaas, B., & Dysvik, A. (2010). Exploring alternative relationships between perceived investment in employee development, perceived supervisor support and employee outcomes. *Human Resource Management Journal, 20*, 138-156. doi: 10.1111/j.1748-8583.2009.00120.x
- Lee, C. H., & Bruvold, N. T. (2003). Creating value for employees: Investment in employee development. *The International Journal of Human Resource Management, 14*, 981-1000. doi: 10.1080/0958519032000106173
- Lester, S. W., Turnley, W. H., Bloodgood, J. M., & Bolino, M. C. (2002). Not seeing eye to eye: Differences in supervisor and subordinate perceptions of and attributions for psychological contract breach. *Journal of Organizational Behavior, 23*, 39-56. doi: 10.1002/job

- Mackinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research, 39*, 99. doi: 10.1207/s15327906mbr3901\_4
- Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology, 78*, 538-551.
- 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. doi: 10.1006/jvbe.2001.1842
- Morrell, K., Clarke-Loan, J., & Wilkinson, A. (2004). The role of shocks in employee turnover. *British Journal of Management, 15*, 335-349.
- Morrison, E. W., & Robinson, S. L. (1997). When employees feel betrayed: A model of how psychological violation develops. *Academy of Management Review, 22*, 226-256.
- Newman, A., Thanacoody, R., & Hui, W. (2011). The impact of employee perceptions of training on organizational commitment and turnover intentions: A study of multinationals in the Chinese service sector. *The International Journal of Human Resource Management, 22*, 1765-1787. doi: 10.1080/09585192.2011.565667
- Ng, T. W. H., Eby, L. T., Sorensen, K. L., & Feldman, D. C. (2005). Predictors of objective and subjective career success: A meta- Analysis. *Personnel Psychology, 58*, 367-408.
- 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*, 879-903. doi: 10.1037/0021-9010.88.5.879
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*, 879-891. doi: 10.3758/brm.40.3.879
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research, 42*, 185-227. doi: 10.1080/00273170701341316
- Robinson, S. L., & Rousseau, D. M. (1994). Violating the psychological contract: Not the exception but the norm. *Journal of Organizational Behavior, 15*, 245-259.
- Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee Responsibilities and Rights Journal, 2*, 121-139. doi: 10.1007/BF01384942
- Rousseau, D. M. (1990). New hires perceptions of their own and their employer's obligations: A study of psychological contracts. *Journal of Organizational Behavior, 11*, 389-400.
- Rousseau, D. M., & Tijoriwala, S. A. (1998). Assessing psychological contracts: Issues, alternatives and measures. *Journal of Organizational Behavior, 19*, 679-695.
- Seibert, S. E., & Kraimer, M. L. (2001). The five-factor model of personality and career success. *Journal of Vocational Behavior, 58*, 1-21. doi: 10.1006/jvbe.2000.1757
- Seibert, S. E., M., C. J., & Kraimer, M. L. (1999). Proactive personality and career success. *Journal of Applied Psychology, 84*, 416-427.

- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods, 7*, 422-445. doi: 10.1037//1082-989x.7.4.422
- Sturges, J., Conway, N., Guest, D., & Liefoghe, A. (2005). Managing the career deal: The psychological contract as a framework for understanding career management, organizational commitment and work behavior. *Journal of Organizational Behavior, 26*, 821-838. doi: 10.1002/job.341
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using Multivariate Statistics* (Fifth Edition ed.). Boston: Pearson Education, Inc.
- Tanova, C., & Holtom, B. C. (2008). Using job embeddedness factors to explain voluntary turnover in four European countries. *The International Journal of Human Resource Management, 19*, 1553-1568. doi: 10.1080/09585190802294820
- Tekleab, A. G., Takeuchi, R., & Taylor, S. (2005). Extending the chain of relationships among organizational justice, social exchange, and employee reactions: The role of contract violations. *Academy of Management Journal, 48*, 146-157.
- Tekleab, A. G., & Taylor, M. S. (2003). Aren't there two parties in an employment relationship? Antecedents and consequences of organization-employee agreement on contract obligations and violations. *Journal of Organizational Behavior, 24*, 585-608. doi: 10.1002/job.204
- Van der Heijde, C. M., & Van der Heijden, B. I. J. M. (2006). A competence-based and multidimensional operationalization and measurement of employability. *Human Resource Management, 45*, 449-476. doi: 10.1002/hrm.20119
- Van der Heijden, B. (2002). Prerequisites to guarantee life-long employability. *Personnel Review, 31*, 44-61. doi: 10.1108/00483480210412418
- Wayne, S. J., Liden, R. C., Kraimer, M. L., & Graf, I. K. (1999). The role of human capital, motivation and supervisor sponsorship in predicting career success. *Journal of Organizational Behavior, 20*, 577-595.
- Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organisational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal, 40*, 82-111.
- Wittekind, A., Raeder, S., & Grote, G. (2009). A longitudinal study of determinants of perceived employability. *Journal of Organizational Behavior, 31*, 566-586. doi: 10.1002/job.646
- Zhao, H., Wayne, S. J., Glibkowski, B. C., & Bravo, J. (2007). The impact of psychological contract breach on work-related outcomes: A meta-analysis. *Personnel Psychology, 60*, 647-680.