

Master Thesis:

Employability Paradox – An Academic Debate Reconsidered

The relationship between multiple competences of employability and
multiple targets of commitment

Radboud University Nijmegen

Nathalie L. Schiffer

Dr. Yvonne van Rossenberg & Prof. Dr. Alain De Beuckelaer

Personal Information:

Nathalie L. Schiffer, s4293533

Supervisors:

First supervisor: Dr. Yvonne van Rossenberg

Second supervisor: Prof. Dr. Alain De Beuckelaer

Nijmegen School of Management

Master Thesis, Business Administration: Strategic Human Resources

Leadership Thesis Circle 5: Employability and Commitment

Acknowledgements

Foremost, I would like to express my sincere gratitude to my first supervisor Dr. Yvonne van Rossenberg for her continuous support, her immense knowledge about the commitment literature, and her guidance in the right direction whenever I ran into trouble. Without her passionate input my thesis would not have turned out like this.

I would also like to thank Prof. Dr. Beatrice van der Heijden for her support during the thesis circle meetings: especially in the beginning she helped me to frame the topic of my study with her extensive knowledge about employability. I would also like to acknowledge Prof. Dr. Alain De Beuckelaer as the second reader of this thesis for his valuable feedback on my research proposal.

I am gratefully indebted to my fellow students and indispensable friends Maximilian Müller von Baczko and Anna Bunse in particular. Thank you for your critical feedback on the innumerable versions of my thesis, your – most of the time – effective efforts to keep me away from procrastinating, and your helpful ideas and reflections concerning the content of my thesis. Finally, I must express my profound gratitude to my family and to my partner for distracting me from thoughts about my thesis during my free time.

Thank you!

Nathalie Schiffer

Abstract

The employability paradox has gained scientific as well as practical attention, by stating that employability offers several benefits, such as job performance and flexibility, but at the same time is accompanied by the risk of increased turnover intention. However, no concordance has been achieved on whether the paradox is true or not. The main objective of this master thesis' study was to illuminate the paradox by investigating the relationship between multiple competences of employability and internal as well as external targets of commitment.

Whereas the organization, as an internal target of commitment, has already been investigated in research on employability, external targets of commitment, such as the career and the profession, were not studied before in this context. Survey data of 666 respondents employed at organizations in the Netherlands was collected and analyzed. The results of the study revealed that three of the five employability competences were positively related to the internal target of commitment, and two employability competences were positively related to the external targets of commitment. This study contributed to the scientific literature on outcomes of employability and multiple targets of commitment and provided a first theoretical framework to investigate multiple targets in the context of employability.

Keywords: employability paradox, employability, commitment, multiple targets

Table of Contents

Introduction	7
Theoretical Background	11
Employability – Current State of the Scientific Literature.....	11
Commitment and Multiple Targets – Current State of the Scientific Literature	12
Internal targets of commitment.....	14
External targets of commitment.....	14
Interplay of internal and external targets of commitment.....	15
Employability and Commitment – An Academic Debate Reconsidered	16
Social exchange theory.....	18
Investment model of commitment.....	22
Methods.....	23
Approach, Methodology, and Design.....	23
Sampling Procedure.....	24
Measurement Instruments.....	26
Employability.....	26
Commitment.....	27
Control variables.....	27
Data Analyses	29
Preliminary analyses.....	29
Hypotheses testing.....	30
Research Ethics.....	30
Results	31
Preliminary Analyses.....	31
Descriptive statistics.....	31
Test for outliers.....	33
Test for normality.....	34
Psychometric analyses.....	34
Hypotheses Testing.....	36
Testing assumptions.....	36
Regression analyses.....	37
Discussion.....	41
Scientific Contributions.....	41
Outcomes of employability.....	41

Multiple targets of commitment.....	43
Theoretical framework.....	44
Methodological contribution.....	44
Limitations and Directions for Future Research.....	45
Practical Implications	47
References	49
Appendixes.....	57
Appendix 1: Outliers	57
Appendix 2: Normality.....	59
Appendix 3: Psychometric Analyses – Commitment.....	61
Appendix 4: Psychometric Analyses – Employability.....	64
Appendix 5: Regression Analyses.....	73

Introduction

In recent years, an academic debate around the benefits and risks of employability became salient, which is called management paradox (De Cuyper & De Witte, 2011; Van der Heijde & Van der Heijden, 2006) or employability paradox (De Cuyper, Van der Heijden, & De Witte, 2011; Nelissen, Forrier, & Verbruggen, 2017). The idea of the employability paradox is that employability, which is defined as “the continuous fulfilling, acquiring or creating of work through the optimal use of competences” (Van der Heijde & Van der Heijden, 2006, p. 453), on the one hand, offers several benefits, such as job performance (De Cuyper & De Witte, 2011) and flexibility (McAulay, Zeitz, & Blau, 2006), but on the other hand, is accompanied by the risk of increased turnover intention (Benson, 2006; Philippaers, De Cuyper, Forrier, Vander Elst, & De Witte, 2016). A proposed explanation for this paradox is that, due to employability, the marketability of employees increases, wherefore they can easily switch the organization at which they are employed (Benson, 2006; Nelissen et al., 2017). To date, there has been insufficient agreement on whether the paradox is true or not.

Within research on the employability paradox, one stream focusses on the relationship between employability and workplace commitment, since commitment to the organization is known to be the most important correlate of turnover intention: the more committed an employee is to the organization, the less likely he is to leave the organization (Johnson, Groff, & Taing, 2009). In the study at hand, commitment is defined as “a volitional psychological bond reflecting dedication to and responsibility for a particular target” (Klein, Molloy, & Brinsfield, 2012, p. 137). Within this stream of research on the employability paradox results are likewise inconsistent: researchers arguing from social exchange theory (SET) claim that commitment to the organization increases, if the organization invests in the employee’s employability, because the employee feels the obligation to reciprocate (De Cuyper & De Witte, 2011). Contradictory, researchers applying human capital theory or conservation of resources theory highlight that employability intends to make the employee suitable for the external labor market, therefore decreasing commitment to the organization (Benson, 2006; Philippaers et al., 2016). Whereas the former adopts a more psychological point of view (Cropanzano & Mitchell, 2005; De Cuyper & De Witte, 2011), the latter refers to labor economics and stress theory (Benson, 2006; Philippaers et al., 2016). Findings as well as theoretical arguments around this debate are not only inconsistent, but also scarce, increasing the necessity to acquire more clarity on the relationship between employability and workplace commitments. Consequently, the main objective of this master thesis’ study is to illuminate the employability paradox by means of investigating the following research question:

What is the relationship between multiple competences of employability and internal as well as external targets of commitment?

In order to answer this question, the scientific literature concerning employability, specifically outcomes of employability, as well as the scientific literature on multiple workplace commitments is consulted.

Employability became particularly salient due to the emergence of boundaryless careers (Thijssen, Van der Heijden, & Rocco, 2008; Van der Heijden et al., 2018). Boundaryless careers are characterized by crossing internal as well as external boundaries (e.g. Spreitzer, Cameron, & Garrett, 2017; Thijssen et al., 2008; Van der Heijde & Van der Heijden, 2006), which implies that employees are less likely to stay at one organization during their whole working-life (Arthur & Rousseau, 1996). For boundaryless careers to be successful employability is crucial, since it betokens that one has acquired sufficient competences, such as occupational expertise, personal flexibility, anticipation and optimization, balance, and corporate sense (Van der Heijde & Van der Heijden, 2006; Van der Heijden et al., 2018), to draw validation on marketability inside and outside one's boundaries (Arthur & Rousseau, 1996). Next to its usefulness for feasible boundaryless careers, employability is related to several workplace outcomes, which are beneficial for the organization as well as for the employee (Peters & Lam, 2015; Van der Heijde & Van der Heijden, 2006): by occupying highly employable employees, organizations can be flexible in numerical and functional ways, and thereby adapt to the increasingly dynamic external environment (McAulay et al., 2006). From an employee-perspective employability offers employees increased internal performance, employment security, as well as more external career opportunities (Clarke & Patrickson, 2008; Peters & Lam, 2015; Van der Heijde & Van der Heijden, 2006), which are especially valued by younger generations (Festing & Schäfer, 2014). Nevertheless, as the employability paradox shows, scientific literature on the relationship between employability and commitment - as a crucial workplace outcome - is scarce and inconsistent. Therefore, the first contribution of this study is to add to the scientific literature concerning the outcomes of employability.

Investigating workplace commitment is a continuing concern in scientific research, due to its various antecedents and outcomes for employees as well as organizations (Meyer, 2016). The organization is the primary target of commitment in academic research, but researchers progressively acknowledge multiple targets of workplace commitment (Becker, 1992, 2016), which can be divided in internal and external targets. Internal targets refer to commitments related to the organization an employee works for, such as co-workers,

supervisors, or the organization itself, while external targets include commitments outside, and hence unrelated, to the organization an employee works for, such as careers, and professions (Siders, George, & Dharwadkar, 2001). Due to boundaryless careers and the need for flexibility, targets external to the organization gain importance (Meyer, 2009): in line with the employability focus on marketability, Spreitzer et al. (2017) found that boundaryless career holders are more dedicated to their career, and more eager to make investments outside the organization, than bounded career holders. Accordingly, it is salient to study external targets of commitment, next to the organization as an internal target of commitment, in the context of employability (Siders et al., 2001). Resultantly, the second contribution of this study is to add to the scientific literature on multiple targets of commitment.

This investigation of employability and multiple targets of commitment is achieved by merging the academic field of employability with the one of commitment by means of a new theoretical framework. Theories so far consulted in research on the employability paradox are not sufficiently applicable to multiple targets of commitment, since only the organization as an internal target of commitment has been considered. Therefore, this study first follows the approach of De Cuyper and De Witte (2011) and makes use of SET to investigate the relationship between employability and commitment to the organization as an internal target of commitment. However, SET is not applicable to the career and the profession as external targets of commitment, because neither the career nor the profession is a social entity with which an employee can build up a reciprocal relationship. Hence, the theoretical framework is expanded with the investment model of commitment (Rusbult, 1980), which is applicable to non-social targets. Resultantly, as a third contribution of this study, a new theoretical framework concerning the employability paradox is established.

Several problems around the portrayed academic debate make this research scientifically relevant. First, and most important, there is still no consensus on whether employability is positively related to commitment to the organization (De Cuyper & De Witte, 2011) or not (Benson, 2006; Philippaers et al., 2016). Second, the definitions of employability and how it is operationalized differ: in many studies, such as Benson (2006), employability is measured by assessing the number, the kind, and the durability of training opportunities the organization offers. In more recent definitions, employability enhancement is not only the responsibility of the organization, but also of the employee himself (Clarke & Patrickson, 2008; Van der Heijde & Van der Heijden, 2006), and is grounded on an input-based approach (Van der Heijde & Van der Heijden, 2006; Van der Heijden et al., 2018). Third, the relationship between employability and commitment is only investigated for the

organization, an internal target of commitment, but it is argued that in the context of employability external targets are crucial as well (Carson & Bedeian, 1994; McAulay et al., 2006; Spreitzer et al., 2017). Fourth, targets of commitment are usually studied in isolation, which is why Becker (1992), Van der Heijden, De Lange, Demerouti, and Van der Heijde (2009), as well as Johnson et al. (2009) appeal that more research on multiple targets of commitment is needed. Fifth and last, SET is applicable for the organization, but not for external targets of commitment, wherefore the theoretical framework behind the relationship between employability and commitment needs to be reconsidered.

Next to this scientific relevance of the study at hand, an investigation of the relationship between employability and multiple targets of workplace commitment is of practical relevance for employees, organizations, and the society. As highlighted earlier in this chapter, employability offers several advantages for the employee and for the organization (Peters & Lam, 2015; Van der Heijde & Van der Heijden, 2006). Therefore, it is important to identify whether employability leads to a win-win situation for the employee and for the organization in terms of commitment as well: according to Baruch (2001), employability could, on the one hand, result in a win-lose situation for the benefit of the organization, since employees become more productive due to the fear of being fired, though without commitment. On the other hand, a lose-win situation could evolve, where employable employees leave the organization, because they are uncommitted to the organization, but highly employable (Baruch, 2001; Benson, 2006; McAulay et al., 2006). Moreover, society is progressively dependent on flexibility, due to the dynamic nature of environmental conditions (Kornelakis, 2014; Peters & Lam, 2015). In order to maintain an operative workforce, employability needs to be fostered to increase the flexibility of organizations and likewise reduce employees fear of job insecurity (Clarke & Patrickson, 2008).

The remaining part of this study proceeds as follows: the second chapter examines employability and commitment in more detail and relates them to each other by means of a theoretical framework combining SET with the investment model of commitment. The third chapter is concerned with the methods of this study, consisting of data collection through a survey and corresponding data analyses. Chapter four presents the results of the study. In the last chapter an answer to the research question is presented by means of restating the results and interpreting the same in the light of the applied theories. Limitations and suggestions for further research are presented, and scientific as well as practical contributions are highlighted.

Theoretical Background

Employability – Current State of the Scientific Literature

The operationalization and conceptualization of employability has changed substantially since its introduction in 1955 (Thijssen et al., 2008). In the 1970s, employability was seen as a societal issue, merely concerned with the employment rate (Thijssen et al., 2008; Van der Heijde & Van der Heijden, 2006). During the 1980s, the focus shifted towards organizations, since the increasingly dynamic market and its developments demanded more flexibility. The human resources (HR) department was required to be flexible in staffing in a numerical and functional way (Van der Heijde & Van der Heijden, 2006). Since the 1990s until today, the individual perspective is more prominent. Here employability is described as the flexibility of the employee to have the opportunity to find a job internally as well as externally to the current organization, which is crucial due to the dynamic and short-lived nature of job qualifications nowadays (Thijssen et al., 2008). Following employability, the employee shapes his career with a great sense of individual agency, but is supported by the organization, and especially the HR department, in his self-management (Thijssen et al., 2008; Van der Heijde & Van der Heijden, 2006). According to Thijssen et al. (2008), organizations can follow three employability strategies: broadening, selling, and consuming. The broadening strategy implies that organizations provide conditions to increase the employability of their employees, such as training activities, workplace support, and learning (Thijssen et al., 2008). In this study organizations' efforts are considered from this strategy, since the broadening strategy fits best with the chosen conceptualization of employability based on an input-based approach (Van der Heijde & Van der Heijden, 2006).

In this study, the most recent conceptualization of employability as a competence-based and multidimensional construct by Van der Heijde and Van der Heijden (2006) is adopted. This definition considers employability from an input-based approach by portraying it as a combination of one specific and four generic competences (Van der Heijde & Van der Heijden, 2006; Van der Heijden et al., 2018). The specific competence is occupational expertise, while the four generic competences are labeled personal flexibility, anticipation and optimization, balance, and corporate sense. Occupational expertise represents knowledge and skills of an employee. Personal flexibility is defined as an employees' competence to adapt quickly to changes in the labor market. Anticipation and optimization refers to an employees' active preparation for future employment improvement, making use of labor market knowledge. Personal flexibility as well as anticipation and optimization both deal with adaptation, but the latter is more proactive than the former. Balance deals with finding the

right proportion of private, career as well as work interests. Corporate sense refers to an employees' integration in an extensive number of teams with multiple shared responsibilities (Van der Heijde & Van der Heijden, 2006; Van der Heijden et al., 2018). Accordingly, earlier competences for the purpose of the organization are replaced by broad competences that make an employee suitable for the internal as well as external labor market (Kornelakis, 2014).

The reasons to utilize the employability approach by Van der Heijde and Van der Heijden (2006) in this research are threefold. First, to the best of my knowledge, it is the most recent definition of employability taking into account earlier research. Second, it considers internal as well as external employability (see for example De Cuyper & De Witte, 2011), by being neutral about the labor market to which it refers. Third and last, it is an input-based approach, measuring multiple competences, instead of only referring to occupational expertise, rendering the possibility to account for interrelatedness (Van der Heijden et al., 2018).

Commitment and Multiple Targets – Current State of the Scientific Literature

Commitment in the context of work has been of interest for academics since the 1960s (Meyer, 2016), especially because of its implications for different kinds of organizational behavior, such as turnover (intention), job satisfaction, and organizational citizenship behavior (Johnson et al., 2009). Despite the tremendous amount of scientific literature on the topic of commitment, there is still no consensus on its exact definition and operationalization (Meyer, 2016). Several multidimensional (Allen & Meyer, 1990) as well as unidimensional frameworks (Klein et al., 2012) emerged around its construct. The best-known multidimensional framework is the three-component model introduced by Meyer and Allen (as cited in Klein & Man Park, 2016). According to this model, commitment consists of an affective, a normative and a continuance mindset:

Affective organizational commitment (AOC) is an emotional attachment to, involvement in, and identification with one's organization, all of which are based on a desire to belong. Normative organizational commitment (NOC) derives from a perceived obligation to maintain membership, one grounded in a sense of morality. Lastly, continuance organizational commitment (COC) is derived from the perceived costs of leaving, including the loss of desired investments and few job alternatives. (Johnson et al., 2009, p. 432)

Together, these mindsets are expected to construct commitment, which is defined as an internal force binding a person to a specific target (Meyer, as cited in Klein & Man Park,

2016). Nevertheless, Klein and Man Park (2016) argue that this conceptualization of commitment is facing several problems, such as an overlap of the normative and affective mindset, as well as different perceptions of the normative mindset. Participants in studies using this multidimensional framework often have not distinguished between affective, normative, and continuance mindsets (Klein & Man Park, 2016). Therefore, Klein and Man Park (2016) claim that an alternative, unidimensional framework is more valid in conceptualizing commitment. This framework is supported by Cooper-Hakim and Viswesvaran (2005) who argue, after conducting a meta-analysis on multiple forms of commitment, that there is only one psychological construct underlying commitment.

According to Klein et al. (2012), commitment can rather be regarded as a type of bond, which range on a continuum from acquiescence, via instrumental, to commitment, and lastly to identification. Resultantly, commitment is merely one part of this continuum of bonds, in which the person experiences high volition, dedication and responsibility to a target (Klein et al., 2012). What makes this conceptualization unique is that it can be applied to any target within the workplace, for example the organization itself, the career, or the profession (Klein et al., 2012). Since this study wants to assess multiple targets of commitment the conceptualization of commitment as an unidimensional construct by Klein et al. (2012) is adopted. This definition reflects the idea of multiple targets of commitment more accurate, than multidimensional frameworks, which rather reflect multiple bases of commitment (Vandenberghe, 2009). The conceptualization of Klein et al. (2012) strictly differentiates between the actual content of commitment, its antecedents, and outcomes (Vandenberghe, 2009). In addition, this measure has to date shown strong content, convergent, discriminant, and predictive validity (Klein & Man Park, 2016).

The organization is the most frequently studied target of commitment (Cooper-Hakim & Viswesvaran, 2005), but also other targets of commitment in the workplace have been recognized (Meyer, 2016), after Becker (1992) demonstrated that these make a difference in work-related outcome variables, such as job satisfaction, intention to quit and prosocial behavior. In the area of boundaryless careers, employees work across as well as within organizational boundaries, highlighting the necessity to study multiple targets of commitment to understand employee behavior (Kinnie & Swart, 2012; Siders et al., 2001; Spreitzer et al., 2017). Targets of commitment are the particular entities to which an employee feels attached (Becker, 1992), and can be divided in internal and external targets of commitment (Siders et al., 2001). Internal targets refer to commitments related to the organization an employee works for, while external targets include commitments outside, and hence unrelated, to the

organization an employee works for (Siders et al., 2001). In this study, the organization, as an internal target of commitment, is compared to two external targets of commitment, the career and the profession.

Internal targets of commitment. The organization, as an internal target of commitment, is the primary subject of most commitment studies (Cooper-Hakim & Viswesvaran, 2005), leading to manifold definitions of its construct, such as “a psychological force that binds employees to their organization and makes turnover less likely” (Allen & Meyer, as cited in Johnson et al., 2009, p. 432), or “the extent to which the employee identifies with the organisation’s goals, values, and objectives” (Kinnie & Swart, 2012, p. 24). The main outcomes of commitment to the organization are turnover intention and actual turnover (Johnson et al., 2009), but also other outcomes such as organizational citizenship behavior and orientation towards the values of the organization are predicted by commitment to the organization (Cooper-Hakim & Viswesvaran, 2005).

In terms of the definition given by Klein et al. (2012), which is adopted in this research, commitment to the organization is “a volitional psychological bond reflecting dedication to and responsibility for [one’s organization]” (p. 137). Choosing the organization as a target of commitment in this study appears valuable, since a lot of contradictory findings exist regarding its relationship with employability (see for example Baruch, 2001; Benson, 2006; Clarke & Patrickson, 2008; De Cuyper & De Witte, 2011; Philippaers et al., 2016).

External targets of commitment. In the present study the career and the profession are used as external targets of commitment. Although the career and the profession have a high degree of concordance, because they both refer to a particular line of work outside the organization (Vandenberghe, 2009), they are distinct concepts.

Commitment to the career, as defined by Blau (1985), describes an employee’s attitude towards his or her vocations. The profession is merely one of these vocations (Carson & Bedeian, 1994). Contrary to commitment to the profession, commitment to the career covers the entire career domain (Aryee & Tan, 1992), which is a “predictable series of related jobs arranged in a hierarchical status in a particular occupation” (Aryee & Tan, 1992, p. 289). Commitment to the career is important for employees and organizations, since it is related to crucial work outcomes, such as job performance, skill enhancement, and intention to stay in the job and career (Fu, 2011). In the study at hand, commitment to the career is defined as “a volitional psychological bond reflecting dedication to and responsibility for [one’s career]” (Klein et al., 2012, p. 137).

According to the definition of Yalabik, Swart, Kinnie, and Van Rossenberg (2016) commitment to the profession is the attachment an employee experiences towards his occupation or profession. Professions are a specific form of occupation, in which the requirements for entry are tighter, formal standards are present, and identity is shared (Aryee & Tan, 1992; Meyer & Espinoza, 2016). The profession is a more stable target of commitment than the organization (Blau & Lunz, 1998), and is related to an employee's agreement with the values, goals, and objectives of the profession (Kinnie & Swart, 2012) as well as his desire to be employed in his profession today and in the future (Aryee & Tan, 1992; Cooper-Hakim & Viswesvaran, 2005). Main outcomes of commitment to the profession are the diminished likelihood of changing the profession (Meyer & Espinoza, 2016), and the increased likelihood of participating in occupation-related activities (Meyer, 2009). In this study, commitment to the profession is defined as “a volitional psychological bond reflecting dedication to and responsibility for [one's profession]” (Klein et al., 2012, p. 137).

The career and the profession are chosen as external targets of commitment in this study, because they seem to be highly applicable to the context of employability and boundaryless careers. Several scholars have claimed that employees, who want to maintain employable, express particularly high commitment to these external targets (Carson & Bedeian, 1994; McAulay et al., 2006; Meyer, Allen, & Topolnytsky, 1998). Especially the career offers occupational meaning to these employees in times of decreased job security (Carson & Bedeian, 1994). Moreover, rising educational levels and the complexity of work highlight the importance of the career and the profession (Carson & Bedeian, 1994; Vandenberghe, 2009). Researchers assume that, due to the zeitgeist of employability, the profession and the career are perceived more proximal to the employee than the organization, since it creates psychological closeness with the employees' career and profession (Carson & Bedeian, 1994; Meyer, 2009; Meyer et al., 1998). Previous research has shown that proximity to a target makes commitment more likely (Klein et al., 2012).

Interplay of internal and external targets of commitment. Although internal and external targets of commitment are treated distinctively, they are also related to each other. Early research on multiple targets of commitment claimed that these are conflicting, implying a zero-sum game: if one target of commitment increases, the other decreases (Kalleberg & Berg, as cited in Wallace, 1993). This assumption has especially been applied to the organization and the profession as targets of commitment, due to the work of Gouldner (1957). Gouldner (1957) differentiated between locals, professionals that are strongly

committed to the organization, and cosmopolitans, professionals that are strongly committed to the profession. According to him, it is impossible to be committed to the organization as well as the profession (Gouldner, 1957).

In contemporary research, this assumption has been revised, by highlighting that it is also possible to be committed to both, or to none of these targets (Meyer & Espinoza, 2016). Wallace (1993, 1995) has shown that commitment to the organization and commitment to the profession need to be viewed distinctively, since professionals can be committed to both. Recent research has even found a positive correlation between commitment to the organization and commitment to the profession (Vandenberghe, 2009). Similarly, for commitment to the organization and commitment to the career positive correlations have been detected (Blau, 1989; Wallace, 1993). Therefore, different targets of commitment are often used as moderators in current scientific research (Aryee & Tan, 1992; Klein et al., 2012). For example, Aryee and Tan (1992) have found that organizational development opportunities, which resemble employability, are not only directly related to commitment to the career, but also indirectly through commitment to the organization.

Employability and Commitment – An Academic Debate Reconsidered

As already described in the introduction, the academic debate encompassing the employability paradox, and correspondingly the relationship between employability and commitment, persists: researchers that follow human capital theory or conservation of resources theory argue that employability is a treat to commitment to the organization (Benson, 2006; Philippaers et al., 2016), while the proponents of SET claim that employability increases commitment to the organization (De Cuyper & De Witte, 2011). Since the overall aim of employability is to foster the marketability of employees (Arthur & Rousseau, 1996) and likewise, their general skills, Benson (2006) draws on human capital theory, which suggests that “developing general skills that are useful across a wide range of firms increases external job opportunities and the likelihood that employees will market their skills elsewhere” (p. 177). In line with that, he has not found a relationship between general skill enhancement and commitment to the organization (Benson, 2006). This finding is supported by the study of Olsen, Sverdrup, Nesheim, and Kalleberg (2016), who have found that transferability of skills is not related to commitment to the organization, but instead to commitment to the profession. Philippaers et al. (2016) even found that employability is negatively related to commitment to the organization. This finding has been explained by conservation of resources theory (Hobfoll, 1989), which assumes that willingness as well as

ability to invest resources in the organization form the basis for commitment to this target (Philippaers et al., 2016). Employability is regarded to be such a resource (Philippaers et al., 2016). According to Philippaers et al. (2016), employability reduces employees commitment to the organization, because employees want to be marketable for the external labor market and be able to spend their resources there. This implies that employability, as an employees' resource, would get lost, if the employee is committed to the organization (Philippaers et al., 2016; Wright & Hobfoll, 2004).

Despite these arguments against a positive relationship between employability and commitment, this study starts from SET, which has been used in earlier research on employability and commitment to the organization (De Cuyper & De Witte, 2011). De Cuyper and De Witte (2011) argue that commitment to the organization is increased by employability, because employees want to reciprocate employability enhancing activities of the organization, for example development opportunities (De Cuyper & De Witte, 2011). The reason for starting from SET is that the present study considers employability to a great extent from a broadening strategy, which implies that the organization offers activities to enhance the employability of its employees (Thijssen et al., 2008). This perception of employability is in line with the argumentation of De Cuyper and De Witte (2011). Therefore, this study focuses on SET and psychological contracts as well as organizational support, which are based on SET, to develop a hypothesis for employability and commitment to the organization.

Nevertheless, SET is insufficient to explain the whole spectrum of multiple targets of commitment. Until now, the academic debate is restricted by its scope on the organization, as the only target of commitment. Nevertheless, it has been argued that in the context of employability external targets of commitment are crucial as well (McAulay et al., 2006; Meyer, 2009; Meyer et al., 1998; Siders et al., 2001). Neither the career nor the profession, as external targets of commitment, is a social entity with which an employee can build up a reciprocal relationship. Therefore, SET cannot be applied to these targets. Next to this, SET operates from an organizational perspective (Cropanzano & Mitchell, 2005). I argue that in the context of employability an individual perspective is crucial as well, because employability is not only perceived from a broadening strategy, but also from an individual agency perspective (Thijssen et al., 2008; Van der Heijde & Van der Heijden, 2006). Therefore, the theoretical framework is extended with the investment model of commitment (Rusbult, 1980), which can be applied to external targets from an individual perspective. In this way, it is even referred to the other side of the paradox, by using a transactional model that considers the loss or gain of employability, which is in line with the basic idea of the

earlier described conservation of resources theory (Farrell & Rusbult, 1981; Hobfoll, 1989; Wright & Hobfoll, 2004). The crucial difference between the two theories in the context of this study is their perception of employability. The investment model of commitment is more input-based, meaning that employability is regarded as an end in itself, in which an employee invests (Farrell & Rusbult, 1981). The conservation of resources theory perceives employability more as output-based, meaning that it is regarded as a resource an employee can use for other aims such as marketability (Philippaers et al., 2016). Since the study at hand follows the employability definition of Van der Heijde and Van der Heijden (2006) as an input-based concept, the investment model of commitment is more applicable.

The following section elaborates in more detail on the established theoretical framework in order to develop hypotheses regarding the relationship between employability and commitment to the organization, the career, and the profession. An overview of the established theoretical framework can be found in table 1.

Table 1
Theoretical Framework

Theory	Scientific Literature	Explanation for
Social exchange theory	Blau (1964) Cropanzano and Mitchell (2005) Gould-Williams and Davies (2005)	Commitment to the organization
- Psychological contracts	Baruch (2001) Benson (2006) De Cuyper et al. (2011) Hansen and Griep (2016) Rousseau (1989) Thijssen et al. (2008)	Commitment to the organization
- Organizational support	Kinnie, Hutchinson, Purcell, Rayton, and Swart (2005) Rhoades and Eisenberger (2002) Thijssen et al. (2008) Wayne et al. (2009)	Commitment to the organization
<i>Contribution</i>		
Investment model of commitment	Farrell and Rusbult (1981) Fu (2011) Oliver (1990) Le and Agnew (2003) Rusbult (1980) Van Dam (2005)	Commitment to the career; commitment to the profession

Social exchange theory. In the workplace, exchange does not only take place on an economic basis, which implies bargaining in contractual, legal arrangements, but also on a social basis (Gould-Williams & Davies, 2005). Social exchange includes voluntary,

interdependent interactions between at least two parties, such as the organization and the employee, that bring about mutually rewarding obligations (Blau, 1964; Cropanzano & Mitchell, 2005): if one party conducts a favor for the other party, the other party reacts with a beneficial return, resulting in a circle of contingent interactions (Blau, 1964). An exchange relationship emerges, in which a bidirectional transaction is adopted, where interdependency regarding the efforts and accompanying outcomes is hegemonic (Cropanzano & Mitchell, 2005).

A variety of conditions affect processes of social exchange: the stage in the development and the character of the relationship between exchange partners, the nature of the benefits that enter into the transactions and the costs incurred in providing them, and the social context in which the exchanges take place.

(Blau, 1964, pp. 97-98)

This implies that the actual content of the obligations is decided by the parties subjectively and is not negotiated (Blau, 1964; Gould-Williams & Davies, 2005). Due to this subjectivity, trust and loyalty are needed to build up a long-term relationship between parties, in which the returns are perceived appropriate and provided reliably (Blau, 1964; Cropanzano & Mitchell, 2005; Gould-Williams & Davies, 2005). The obligations and investments made in the relationship ultimately constitute commitments to the other party (Blau, 1964).

In the context of work, organizations usually adopt the role of care-takers, by providing benefits and support to employees, and employees react to it with favorable returns that go beyond contractual arrangements, such as commitment (Cropanzano & Mitchell, 2005; Gould-Williams & Davies, 2005). But in order to accomplish this reciprocal relationship, and to reach the ultimate goal of commitment to the organization, the expectations of employees must be met, and the provided support must be perceived beneficial by the employees (Blau, 1964). Two additional mechanisms, psychological contracts and organizational support, are discussed in the context of social exchanges, to shed more light on mutual expectations and perceived organizational support.

Psychological contracts. SET composes the basis for psychological contracts (Wayne et al., 2009), which refer to “an individual’s beliefs regarding the terms and conditions of a reciprocal exchange agreement between that focal person and another party” (Rousseau, 1989, p. 123). This implies that one of the basic tenets in psychological contracts is that promises of one party have to be reciprocated with exchanges by another party (De Cuyper et al., 2011; Rousseau, 1989). A relationship with mutual obligations emerges, which focusses on trust and fairness (Hansen & Griep, 2016; Rousseau, 1989). In comparison to implied contracts, which

are enforced by law, psychological contracts are unwritten, subjective perceptions that are part of an organization's culture (Rousseau, 1989). In the context of work, the parties involved in the psychological contract are the organization and the employee (Rousseau, 1989).

In the traditional concept of psychological contracts, organizations promised their employees job security and development in return for employment, commitment, and motivation from the side of the employee (Baruch, 2001; Benson, 2006; Kornelakis, 2014). Employability is part of the new psychological contract, which resulted from the flexibility issue (Thijssen et al., 2008). In the new psychological contract, organizations offer their employees employability in the form of training and development opportunities that will make them suitable for the labor market, in case the organization's interest in the employee diminishes (Baruch, 2001; Benson, 2006). Hence, employment security instead of job security is provided to the employees (Baruch, 2001; Benson, 2006; Thijssen et al., 2008). This altered psychological contract implies new expectations and responsibilities from both sides regarding career management: organizations are expected to provide training and development opportunities to enhance employees' employability, and to disclose internal career opportunities, while employees are supposed to take these opportunities proactively to become capable of finding a job on the external labor market, if they become dispensable in the current organization (Baruch, 2001; Clarke & Patrickson, 2008). If the organization fosters the employability of the employee, for example by offering training opportunities, the employee receives something of value, which triggers his obligation to give something back in return, such as commitment to the organization (Benson, 2006; De Cuyper et al., 2011). Next, with regards to forward-looking exchange, the employee is enabled to develop a sense of reduced uncertainty for finding another job in the future, again increasing the likelihood of reciprocity via commitment to the organization (Philippaers, De Cuyper, & Forrier, 2017).

On the one hand, according to SET, fulfillment of the psychological contract leads to positive feelings from the side of the employee, making him reciprocate with emotional engagement as well as commitment to the organization (Cropanzano & Mitchell, 2005). On the other hand, psychological contract breach can lead to feelings of violation and damaged relationships (Rousseau, 1989), and therefore decreased commitment to the organization (Conway & Briner, 2002; Hansen & Griep, 2016; Olsen et al., 2016). Concordantly, it is crucial that organizations keep their unwritten promises regarding employability enhancement to fulfill the psychological contract and to trigger reciprocal exchanges of employees.

Organizational support. Similar to psychological contracts, SET is also the underlying mechanism for the relationship between perceived organizational support and commitment to the organization (Cropanzano & Mitchell, 2005). Organizational support theories focus on the antecedents, mechanisms, and outcomes of perceived organizational support (Wayne et al., 2009). Previous research has shown that, if the employee perceives the actions of the organization to have benevolent intentions (Wayne et al., 2009), and to be supportive, the employee is prone to exchange these with commitment to the organization to fulfill the norm of reciprocity (Cropanzano & Mitchell, 2005; Rhoades & Eisenberger, 2002). According to Cropanzano and Mitchell (2005) organizational support is key in building commitment to the organization (Rhoades & Eisenberger, 2002; Wayne et al., 2009).

Earlier in this study, it has been argued that employability from the side of the organization resembles a broadening strategy, implying that the organization provides training activities, workplace support, and learning opportunities to the employee to increase its employability (Thijssen et al., 2008). These promised employability enhancement practices are not only part of the psychological contract, but also create the main source of organizational support (Baruch, 2001; Clarke & Patrickson, 2008; Kinnie et al., 2005). HR practices, such as rewards, socialization efforts, mentoring, flexible work hours, and training opportunities are reciprocated with commitment to the organization (Kinnie et al., 2005; Klein et al., 2012). In the context of employability especially the practices mentoring and training opportunities seem to be important, since they have been found to be significantly related to commitment to the organization in several studies (Becker, 2016; Meyer & Espinoza, 2016; Wright & Kehoe, 2009), particularly if the employee is satisfied with them (Benson, 2006; Kinnie et al., 2005).

Based on these elaborations, it can be claimed that employability is very likely to increase commitment to the organization, due to the activation of social exchange processes by psychological contract fulfillment and organizational support enactment. Therefore, the first hypothesis that is tested in this study is:

Hypothesis 1: Employability is positively related to commitment to the organization.

So far, the relationship between employability and commitment has been explained by SET and corresponding mechanisms. However, as described earlier in this study, SET is limited in its applicability to the chosen external targets of commitment. Hence, the theoretical framework is expanded by the investment model of commitment to make

propositions about the relationships between employability and external targets of commitment.

Investment model of commitment. The investment model of commitment follows the general exchange theory by claiming that commitment evolves from the assessment of satisfaction, alternatives, and investment size (Farrell & Rusbult, 1981). Satisfaction is assessed by subtracting costs from rewards, alternatives by rating the quality of the best available alternative, and investment size by weighing the implemented resources (Farrell & Rusbult, 1981). “Invested resources may be material or psychological, intrinsic or extrinsic” (Farrell & Rusbult, 1981, p. 82). In the context of the study at hand, investment size seems to be most important, because engaging in employability enhancement is regarded to be an investment, since it costs time, money, energy, and cognitive efforts (Fu, 2011). The idea of investments as predictors of commitment is based on the work of Becker (as cited in Oliver, 1990), who claimed that people stay committed to a particular course of action or target, because of the side-bets the loss of the investments would bring.

In the last decades, academic research has detected that the investment model of commitment, which was originally developed for romantic relationships, is generalizable to several other social and non-social targets of commitment (Fu, 2011; Le & Agnew, 2003). Already in 1981, Farrell and Rusbult confirmed its usage for the workplace context, by successfully applying it to commitment to the job. Oliver (1990) as well as Van Dam (2005) have expanded the described research, by showing that investments not only predict commitment to the job, but also commitment to the organization. Recently, the investment model of commitment has been tested for commitment to the career in the context of IT professionals (Fu, 2011). The results of the study of Fu (2011) have shown that career investments predict commitment to the career. I argue that engaging in employability enhancement activities, such as development programs or mentoring activities, provided by the organization, resemble the career investments described by Fu (2011) and, depending on the content of the development program, also represent investments in the profession. For example, following training opportunities an organization offers to enhance occupational expertise, which is related to the profession, is an investment, since it costs time and energy.

Under consideration of the investment model of commitment, I perceive active engagement in employability enhancing activities as investments in the career and the profession. Therefore, the following hypotheses regarding the relationship between employability and the external targets of commitment are raised:

Hypothesis 2: Employability is positively related to commitment to the career.

Hypothesis 3: Employability is positively related to commitment to the profession.

The hypotheses provided by means of the theoretical framework, considering SET (psychological contracts, organizational support) and the investment model of commitment, are displayed in a conceptual model (figure 1). The elaboration on the framework shows that separately neither SET nor the investment model of commitment is enough to understand the mechanisms between employability and multiple targets of commitment. However, in combination SET and the investment model of commitment offer sufficient arguments to propose positive relationships between employability and multiple targets of commitment.

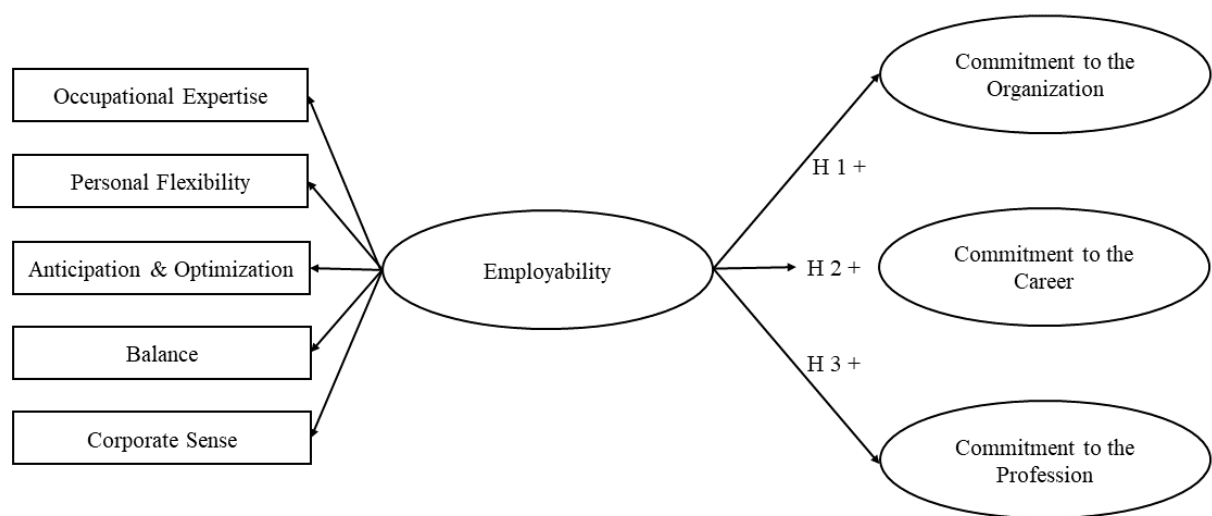


Figure 1. Conceptual model

Methods

Approach, Methodology, and Design

This study adopted the philosophical approach of positivism, combining an objectivist epistemology and an objectivist ontology. “Epistemology is the study of the criteria by which we can know what does and does not constitute warranted, or scientific, knowledge” (Duberley, Johnson, & Cassell, 2012, p. 16). It answers the questions of what is true and what is not true (Duberley et al., 2012). Ontology, on the other hand, deals with the nature of the existence of phenomena, answering the question of whether phenomena exist in reality or are merely subjectively constructed (Duberley et al., 2012). With regards to ontology, it is assumed that an objective world exists, independent of subjective perceptions. From an epistemological perspective, it is expected that this objective world can likewise be measured

objectively without being influenced by the researcher. The combination of these two objectivist stances leads to the philosophical approach of positivism (Duberley et al., 2012).

The underlying assumptions of positivism include the belief that the social world can be studied in the same way as the natural world, that there is a method for studying the social world that is value-free, and that explanations of a causal nature can be provided. (Mertens, 2015, p. 11)

The ultimate goal of positivist research is to discover causal relationships (Mertens, 2015). Applied to the research at hand, positivism infers that the concepts employability and commitment were treated as objectively existing phenomena that were measured neutrally by means of testing theory-based hypotheses. Hence, in line with the positivist perspective, a hypothetico-deductive method was applied (Duberley et al., 2012).

Reflective of this positivist approach is quantitative research, which gathers numerical data that is processed as well as analyzed by means of statistics and provides explanations of how variables are interrelated. The aim of quantitative research is to generalize the results to a wider population (Justesen & Mik-Meyer, 2012). Therefore, this approach was adopted in this study, since the studies' aim was to identify the relationship between employability and commitment and to generalize the results to the Dutch workforce directly employed at an organization. The instrument that was chosen within quantitative research is the survey, advantaging the possibility to collect data about different variables from a large sample (Mertens, 2015). In specific, a survey with a cross-sectional design was used that offers the possibility to survey several groups, here groups with different amount of employability, at one point in time (Mertens, 2015). The constellation of positivism, quantitative research, and the survey as an instrument is highly aligned and well-suited to make statements about the relationship between employability and commitment to multiple targets as well as to generalize these findings to the Dutch workforce directly employed at an organization.

Sampling Procedure

For the study at hand, a previously collected data set was enriched with additional data. In 2018, data has been collected in a collaborative research project consisting of bachelor and master students under supervision of Dr. Yvonne van Rossenberg and Dr. Michel van Berkel. The aim of the former study was to test the cross-cultural and cross-language equivalence of the Klein Unitary Target (KUT) measure of workplace commitment. The study at hand expanded the dataset, since six additional master students collected more data, by distributing the same questionnaire as the former study did.

The survey data was collected in April to May 2018 as well as in April 2019 through an online survey tool (Qualtrics). The sampling aim was to reach a diverse set of employees from a variety of organizations and industries to achieve a representative sample of the Dutch workforce. Hence, only Dutch speaking employees, who live in the Netherlands, were included in the sample. The students made use of non-probability sampling, convenience sampling in specific, followed by snowball sampling to reach this target-group (Fricker, 2008). The students posted the anonymous weblink to the survey on several social media platforms and sent it to their acquaintances. The advantage of convenience sampling is that it requires little time and effort and therefore is less costly (Fricker, 2008), herewith suiting the time frame as well as the budget of a master thesis. Next, the students requested the respondents to share the survey with their network, which is called snowball sampling (Fricker, 2008). This sampling procedure was adopted in order to increase the sample size and to reach respondents outside of the network of the students (Heckathorn, 2011). The 2018 data set did not accurately represent the Dutch workforce, therefore, the 2019 data collection focused on collecting data from male respondents, with lower levels of education, between the age of 30 and 50, and/ or working as a freelancer, in order to reduce bias in the sample. For this purpose, the survey was additionally posted in specifically targeted groups on Facebook and LinkedIn, for example groups for freelancers.

The final sample incorporating data of the years 2018 and 2019 consists of $N = 1209$ respondents. Only data of respondents who took more than 10 minutes to fill in the questionnaire completely were kept, reducing the sample to $N = 871$ respondents. These criteria were used in order to ensure that respondents made enough effort to fill in all relevant scales. Moreover, respondents had to be directly employed at an organization in order to be suited for the study at hand ($N = 676$), due to the assumption that employability is shaped by the broadening strategy of the organization (Thijssen et al., 2008). Still ten respondents did not fill in whole scales of the main variables, wherefore they were deleted as well (Widaman, 2006), leading to a final sample size of $N = 666$. With regards to demographics the utilized sample consisted mainly of females (65 %), highly educated people (HBO or higher, 71 %), with a mean age of 36.48 years ($SD = 14.45$). Regarding work-related factors, most respondents worked permanently (62 %), for an organization with more than 1000 employees (35 %), in the health-care sector (22 %). The average respondent worked for 8.19 years ($SD = 9.57$) for the organization, mainly as an executive (42 %) or as a professional (26 %), on a full-time basis (44 %).

This description of the sample shows that, despite our efforts to reduce bias in the data set, the sample was not yet entirely representative of the Dutch workforce directly employed at an organization to which this study wanted to generalize. According to the latest information of the Centraal Bureau voor de Statistiek (CBS, 2019a), the Dutch workforce consists to 46 % of females, meaning that in the sample at hand females (65 %) were overrepresented. Moreover, the distribution of age in the Dutch workforce is almost normal, which is not the case in the sample at hand, which showed skewness of 0.51 ($SE = .095$) and kurtosis of -1.33 ($SE = .189$). With regards to education, highly educated employees (71 %) were overrepresented in the current sample, since the Dutch workforce constitutes to only 37 % of highly educated employees. Concerning work conditions (CBS, 2019b), employees working full-time (51 %) were slightly underrepresented in the utilized sample (44 %). The proportion of employees working permanently in the sample at hand (62 %) resembled the one of the Dutch workforce (62 %). Healthcare formed the sector with the greatest proportion of employees in the current sample (22 %) as well as in the Dutch workforce (15 %).

This elaboration shows that the sample did not constitute an one-to-one replication of the Dutch workforce directly employed at an organization. Specifically, the sample was biased with regards to the demographics age, gender, and education. The differences concerning the work conditions were less conspicuous: the proportions might not be equal, but the order of the group sizes is the same. The misrepresentation of the demographics was taken into account when interpreting the findings of the study and generalizing these to the wider population of Dutch workforce directly employed at an organization.

Measurement Instruments

The survey measured the independent variable employability, as well as the three dependent variables commitment to the organization, commitment to the profession, and commitment to the career. Additionally, other variables were assessed in the survey, for example job satisfaction, turnover intention, stress, and entrenchment, leading to a total amount of 148 questions. These variables were not discussed, since they were not part of the study at hand. Previously validated measurement scales, such as the one's for employability and commitment, were translated into Dutch by Dr. Yvonne van Rossenberg by means of the translation-back-translation method. A further elaboration on the variables and their measurement follows.

Employability. In order to measure the independent variable employability, the short-form employability five-factor instrument by Van der Heijden et al. (2018) was used, which is

in line with the chosen definition of employability by Van der Heijde and Van der Heijden (2006). The measurement instrument consists of 22 items. All items were measured on Likert-scales ranging from 1 to 7. The labels of the values were adjusted to the content of the items, meaning that depending on the question a value of 1 represents *very bad, very low, very hard, very slow, very negative, very little, not at all, or never*, while a value of 7 represents *very good, very high, very easy, very fast, very positive, to a great extent, or always*. The competence occupational expertise was measured with five items. An example of an item measuring occupational expertise is “During the past year, I was, in general, competent to perform my work accurately and with few mistakes”. The competence personal flexibility was measured with five items. “I adapt to developments within my organization” is an example item of personal flexibility. Anticipation and optimization was measured with four items. An example item for anticipation and optimization is “During the past year, I associated myself with the latest developments in my job domain”. Balance was measured with four items. An example item measuring this competence is “My work and private life are evenly balanced”. Lastly, the competence corporate sense was measured with four items. An example item for corporate sense is: “I share my experience and knowledge with others”. The reliabilities of the employability competences have shown to be acceptable with Cronbach’s $\alpha \geq .70$ in previous research (Van der Heijden et al., 2018). For each competence a summated scale was created in SPSS, by calculating the mean score for each competence, which undermines measurement error and provides the benefit of a single measure that incorporates multiple aspects of the concept (Hair, Black, Babin, & Anderson, 2010). These summated scale scores were used for hypotheses testing.

Commitment. In order to assess the dependent variable commitment, the Klein, Cooper, Molloy, and Swanson (2014) unidimensional, target-free measure (KUT) was used, which is in line with the commitment definition of Klein et al. (2012). This measurement instrument consists of four items that were assessed on a Likert scale, ranging from 1 = *by no means* to 7 = *extremely*. Each question was asked three times, each time for a different target (organization, career, profession). An example question is “How committed are you to your career?”. In previous research, the KUT has shown high reliability, with Cronbach’s α ranging from .86 to .97 depending on the target of commitment (Klein et al., 2014). Summated scales, representing the mean score of the scale, were calculated for each target and utilized in hypotheses testing (Hair et al., 2010).

Control variables. This study statistically controlled for several variables, in order to diminish error terms, increase power, and exclude alternative explanations (Becker, 2005). It

was controlled for demographic variables, age, gender, and education in particular. With regards to age, previous research has found that older employees are more committed to the organization than younger employees (Becker, 2009). One reason for this could be generation effects: older employees (baby boomers) focus on lifetime employment, are loyal to the organization and do not place a lot of value on development opportunities. Younger employees (generation X, generation Y), in comparison, are much more focused on training and development opportunities and more likely to change jobs (Festing & Schäfer, 2014). These characteristics increase the chance that younger employees are more employable, which has been confirmed in previous research (De Cuyper, Notelaers, & De Witte, 2009), and less committed to the organization. Moreover, middle-aged and old employees to a huge extent still have the old psychological contract in mind and rely on it (Clarke & Patrickson, 2008), meaning that they probably put less effort in employability issues. This is in line with the results of the study of Van Veldhoven, Van der Heijden, and Dorenbosch (2008) who found that older employees are less proactive in their professional development. Since previous research displayed diverging results for various age groups and offers validated explanations, this study controlled for age. Age was operationalized by one item, where respondents had to mention their year of birth. These scores were transformed to the corresponding age of the respondent and utilized in the analyses.

With regards to additional demographics, it was controlled for gender, because previous research has shown that gender significantly correlates with the competences occupational expertise, anticipation and optimization, and corporate sense, in the way that women score lower on these competences (Van der Heijden et al., 2009). Conjointly, with regards to commitment, significant correlations have been found: female employees tend to be more committed to the organization than males (Becker, 2009). Gender was assessed with one item in which respondents could indicate whether they are male, female, or transgender. Dummy variables were computed in order to make this categorically variable suitable for regression analyses (Field, 2009; Hair et al., 2010). Females were chosen as the baseline, because they represented the largest group in this data set, meaning that one dummy variable for males and one for transgenders was computed respectively.

Education was used as a control variable, because previous research has found that it correlates significantly with anticipation and optimization, as well as personal flexibility: higher educated employees report higher on these competences (Van der Heijden et al., 2009). This has been confirmed by De Cuyper et al. (2009) who found significantly positively correlations between education and employability. Significant correlations between education

and commitment were detected as well: higher educated employees tend to be less committed to the organization (Becker, 2009). In order to assess education, respondents had to indicate their highest level of education from a list of eight degrees. Seven dummy variables were created, with HBO/ WO bachelor graduates as the baseline, since they composed the largest group in the sample (Field, 2009; Hair et al., 2010).

Apart from demographics, it was controlled for two work-related variables: contract type and contract time. With regards to contract type, respondents could indicate whether they currently have a temporary or permanent contract. The main reason for taking this variable into account, is the result of the study of De Cuyper et al. (2009), who found that employability and affective commitment to the organization, were significantly negatively related in temporary employees, but unrelated in permanent employees. Since this variable is binary scaled, it was immediately suited for data analyses.

The control variable contract time indicates whether respondents work full-time, part-time, or fulfill a side job. It was controlled for contract time, because previous research has found that full-time employees are more committed to the organization than part-time employees (Conway & Briner, 2002). The research of Conway and Briner (2002) is of particular interest for this study, because psychological contracts, of which employability is regarded to be one (Baruch, 2001; Benson, 2006), have been used as an explanation for the described results: the psychological contract of part-time employees is less often fulfilled than the one of full-time employees, leading to a decrease in commitment to the organization (Conway & Briner, 2002). In the study at hand, contract time was operationalized with one question, where respondents could indicate whether they work full-time, part-time, or fulfill a side job. Again, two dummy variables were computed with full-time as the baseline, since full-time employees constituted the largest group in the sample.

Data Analyses

Preliminary analyses. Prior to hypotheses testing, the data set was cleaned and analyzed with regards to descriptive statistics by using the statistic program IBM SPSS. First, the data set was adapted by only including respondents, who filled in all scales of the questionnaire in more than 10 minutes, and which are directly employed at an organization, leading to a final sample size of $N = 666$. Still, some respondents had missing values on the metrically scaled control variable age ($n = 9$). These values were replaced by the series mean of the variable age (Field, 2009). Due to the novelty of the short form employability five-factor instrument, and in order to check whether the three targets of commitment indeed form

three factors, factor analyses were conducted for the main variables. Afterwards, reliability analyses were executed for all scales by following the procedure of Hair et al. (2010). Summated scales and dummy variables were calculated as described in the earlier sections (Hair et al., 2010), and a first overview of the data was derived from descriptive statistics, such as frequencies, means, standard deviations, skewness and kurtosis, as well as correlations. Moreover, outliers were detected by checking the boxplots of the main variables and normality was explored by displaying histograms and conducting normality tests.

Hypotheses testing. Before and during the main analyses, the assumptions of multiple regression analysis were checked, which are normality of the error terms, linearity, homoscedasticity, multicollinearity, and independence of the error terms (Field, 2009; Hair et al., 2010). In order to test these statistical assumptions, partial regression plots, normal probability plots, tolerance, the variance inflation factor, as well as the Durbin Watson test were checked (Field, 2009; Hair et al., 2010).

For hypotheses testing multiple hierarchical regression analyses were conducted for each of the three hypotheses respectively, meaning that the dependent variable for the first hypothesis was commitment to the organization, commitment to the career for the second, and commitment to the profession for the third. The five competences constituting employability occupational expertise, personal flexibility, anticipation and optimization, balance, and corporate sense, as well as the control variables age, gender, education, contract type, and contract time, stayed the same for each of the three analyses. The control variables were inserted in Model 1 of the hierarchical regression analyses, and the standardized employability competences in Model 2. Moreover, as some respondents still had missing values on some of the categorically scaled control variables, cases were deleted pairwise instead of listwise, in order to keep these respondents in the sample. Finally, post hoc power analyses were conducted for each of the three regression analyses respectively, in order to test whether the sample size was adequately high to test the regression model, by using the program G * Power 3.1 (Faul, Erdfelder, Buchner, & Lang, 2009).

Research Ethics

Prior to the execution of the described methods, I considered research ethical consideration in data collection. According to Smith (2003), ethical research follows five principles, which are only partly applicable due to the scope of a master thesis study here at hand. For example, multiple roles of the researchers should be consciously assessed (Smith, 2003). Due to the anonymous nature of the online data collection process, my role as a

researcher in this study was of limited interaction with the respondents. Therefore, my role was considered to have very limited ethical implications. In addition, a complete informed consent needs to be provided to the respondents (Smith, 2003), which was adequately done here: the informed consent explained respondents that participation takes place on a voluntary basis and that they can withdraw from the study at any time without mentioning any reasons. Moreover, the aim of the study as well as information about data processing were provided to the respondents here, and anonymity as well as confidentiality of data processing were assured. The last points directly lead to the principle of confidentiality and privacy (Smith, 2003). Due to the online nature of the survey, this point deserves special attention (Buchanan & Hvizdak, 2009): since the survey was hosted on an internet platform the security of the data was not in the hands of the researcher. For this reason, the survey provider Qualtrics was chosen, which achieved the Information Security Management certification, assuring that the data is secured multiple times. Still, respondents had the option to not disclose answers to questions concerning personal information. Lastly, researchers should consult ethics resources more specific to the design of their study (Smith, 2003). This was done appropriately by consulting The Belmont Report's three principles regarding positivist research: beneficence, respect, and justice (as cited in Mertens, 2015). Beneficence means that the intentions behind the research aim at good outcomes for science as well as the respondent (Mertens, 2015). I argue that this principle is met, since the study neither harmed the participants nor science in any way. With regards to respect, respondents in the study were treated respectfully by providing an informed consent. Lastly, the principle of justice claims that participants who are at risk in the study need to benefit from it (Mertens, 2015). This principle is not applicable here since the respondents at no time were at risk. Based on this elaboration, I claim that this study appropriately met ethical research requirements.

Results

Preliminary Analyses

Descriptive statistics. In the study at hand, all main variables were measured on scale level. The control variable age was measured continuously, contract type was measured binary, and gender, education, as well as contract time were measured nominal (Field, 2009). Therefore, dummy variables were computed for the nominal scaled variables as described earlier in this study (Field, 2009). The frequencies of the categorical control variables are presented in table 2, while table 3 summarizes descriptive statistics of the main variables, as well as the continuously scaled control variable age. Concerning the means, the respondents

were on average committed to all three targets of commitment, with commitment to the career rated highest ($M = 5.11$, $SD = 0.97$) and commitment to the profession lowest ($M = 4.87$, $SD = 1.13$). With regards to the employability competences, respondents scored highest on occupational expertise ($M = 5.64$, $SD = 0.66$) and lowest on anticipation and optimization ($M = 4.41$, $SD = 0.94$).

Table 2
Control Variables, Frequencies, and Reference Groups

Control variable		Frequency	Percentage	Label
Gender	Female	434	65.3	Baseline
	Male	226	34.0	Dummy
	Transgender	2	0.3	Dummy
		662		
Education	No education	2	0.3	Dummy
	LBO/VBO/VMBO	4	0.6	Dummy
	MAVO	14	2.1	Dummy
	MBO	104	15.7	Dummy
	HAVO (+VWO)	66	10.0	Dummy
	HBO/WO bachelor	308	46.5	Baseline
	WO master	155	23.4	Dummy
	PhD	9	1.4	Dummy
		662		
Contract Type	Permanent	413	62.0	1
	Temporary	253	38.0	2
		666		
Contract Time	Full-time	292	43.8	Baseline
	Part-time	232	34.8	Dummy
	Side job	141	21.2	Dummy
		665		

Table 3
Means, Standard Deviations, and Range for all metrically scaled Variables (N = 666)

Measure	Mean	SD	Min	Max
Commitment				
- Organization	4.91	0.87	1.00	7.00
- Career	5.11	0.97	1.00	7.00
- Profession	4.87	1.13	1.00	7.00
Employability				
- Occupational Expertise	5.64	0.69	2.40	7.00
- Personal Flexibility	5.41	0.72	2.00	7.00
- Balance	4.81	0.89	1.00	7.00
- Anticipation & Optimization	4.41	0.94	1.00	7.00
- Corporate Sense	4.82	0.86	1.00	7.00
Control				
- Age (Years)	36.48	14.45	18.00	66.00

In table 4, the correlations between the metrically scaled main variables as well as the control variable age are presented. Age correlated significantly with most of the main variables (despite with personal flexibility), legitimizing its use as a control variable. The employability competences were all significantly related to each other: particularly large effects were found for personal flexibility and occupational expertise ($r = .516, p < .001$) and for corporate sense and anticipation and optimization ($r = .622, p < .001$). The three targets of commitment were also significantly correlated with each other: especially commitment to the profession and commitment to the organization were highly related to each other ($r = .518, p < .001$). The correlations between the employability subscales and the three targets of commitment were all significant and positive, ranging between a low correlation of $r = .146$ ($p < .001$) for balance and commitment to the career, to a medium correlation of $r = .436$ ($p < .001$) for anticipation and optimization and commitment to the profession.

Table 4
Pearson Correlations for all metrically scaled Variables (N ≤ 666)

Variable	1	2	3	4	5	6	7	8	9
1. Commitment Organization	-								
2. Commitment Career	.182 **	-							
3. Commitment Profession	.518 **	.178 **	-						
4. Employability Occupational Expertise	.263 **	.204 **	.161 **	-					
5. Employability Personal Flexibility	.259 **	.267 **	.228 **	.516 **	-				
6. Employability Balance	.243 **	.146 **	.158 **	.367 **	.310 **	-			
7. Employability Anticipation & Optimization	.353 **	.339 **	.436 **	.333 **	.463 **	.160 **	-		
8. Employability Corporate Sense	.433 **	.226 **	.303 **	.387 **	.462 **	.139 **	.622 **	-	
9. Age (in years)	.225 **	-.331 **	.269 **	.114 *	-.013	.093 *	.077 *	.155 **	-

Note. * $p < .05$, ** $p < .001$

Test for outliers. In order to detect outliers - cases that differ substantially from the rest and therefore could bias the regression model (Field, 2009) - boxplots were created for all metrically scaled variables, including the five independent variables, the three dependent variables, and the control variable age (see appendix 1). No outliers were identified for commitment to the profession, for the employability competences balance and anticipation

and optimization, and for age. One outlier was detected for commitment to the organization (case 112) and three for commitment to the career (cases 154, 185, and 533), as well as two for occupational expertise (cases 82 and 205), and one for corporate sense (case 207). The scores of the outliers were reasonable, since they were within the range of 1 to 7 of the scale. Therefore, I decided to keep the outliers and not make any adaptations.

Test for normality. In order to test whether the metrically scaled variables were normally distributed, several statistics were taken into consideration. First, the Shapiro-Wilk test as well as the Kolmogorov-Smirnov test were executed. These tests were significant for all main variables, as well as for the control variable age, indicating that the variables were not normally distributed (see appendix 2). In order to detect to what extent normality is impaired, skewness as well as kurtosis, which are presented in table 5, were evaluated: the negative z-values of skewness indicated that all main variables were skewed to the right, while the positive z-values of kurtosis indicated that the same variables were distributed steeply. Histograms (see appendix 2) of all metrically scaled variables were considered, which confirmed the described pattern.

Table 5
Skewness and Kurtosis for all metrically scaled Variables (N ≤ 666)

Measure	Skewness			Kurtosis		
	Estimate	SE	Z	Estimate	SE	Z
Commitment						
- Organization	-.745	.095	-7.84	1.866	.189	9.87
- Career	-.457	.095	-4.81	1.305	.189	6.91
- Profession	-.934	.095	-9.83	1.508	.189	7.99
Employability						
- Occupational Expertise	-.814	.095	-8.57	1.735	.189	9.18
- Personal Flexibility	-.673	.095	-7.08	1.328	.189	7.03
- Balance	-.622	.095	-6.55	.827	.189	4.38
- Anticipation & Optimization	-.311	.095	-3.27	.509	.189	2.69
- Corporate Sense	-.245	.095	-2.58	1.068	.189	5.65
Control						
- Age (in years)	.508	.095	5.35	-1.333	.189	-7.05

Psychometric analyses. In order to test whether the three targets of commitment were distinctive, a factor analysis was conducted, in which 12 items (four for each target) were inserted. The exploratory factor analysis, with principal component factoring and varimax rotation, revealed a Kaiser-Meyer-Olkin measure of sampling adequacy of .872, which was above the required level of .50, implying that there is enough variance in the data (Hair et al., 2010). Bartlett's test of sphericity - testing whether correlations are sufficiently high (Hair et

al., 2010) - was significant ($\chi^2 = 6370.01, p < .001$). Based on eigenvalue greater than 1, total variance explained greater than 60%, and the scree plot (Hair et al., 2010), three factors were extracted. This was in line with the number of expected factors. The communalities derived from the rotated component matrix showed that the items load highly (no communality lower than .796) on the expected factors. These findings provided enough legitimization to use the three targets of commitment as distinctive variables.

Reliability analyses were conducted for the three targets of commitment. The analyses revealed Cronbach's alphas of $\alpha = .893$ for commitment to the organization (4 items), $\alpha = .914$ for commitment to the career (4 items), and $\alpha = .944$ for commitment to the profession (4 items). Cronbach's alpha of commitment to the career could have been increased to $\alpha = .921$, if the first item was deleted. I decided to keep the item for two reasons. First, deletion would have only led to a minor increase of reliability, which was not worth decreasing the number of items from four to three. Second, the KUT has been validated several times and continually applied in scientific research, insisting high reliability when used with four items (Klein et al., 2014). All relevant tables of the factor analysis as well as the reliability analyses of commitment can be found in appendix 3.

Due to the novelty of the short form employability five-factor instrument (Van der Heijden et al., 2018) a factor analysis was conducted to identify the number of factors that account for maximum variance. An exploratory factor analysis, with principal component factoring and varimax rotation was executed for all 22 items of the scale. A Kaiser-Meyer-Olkin measure of sampling adequacy of .897 was extracted, showing that enough variance existed in the data (Hair et al., 2010). Also, Bartlett's test of sphericity was significant ($\chi^2 = 5566.03, p < .001$). Based on eigenvalue greater than 1 only four factors were extracted, which was not in line with the expected five-factor solution. The eigenvalue of the fifth factor was .973, which was just below the desired mark of 1 (Hair et al., 2010). Nevertheless, total variance explained, another indicator of underlying factors (Hair et al., 2010), crossed the desired 60% mark with a five-factor solution. Also, the scree plot was ambiguous about the number of factors to extract.

Due to these reasons a confirmatory factor analysis with five factors to extract was legitimate. Moreover, oblique rotation seemed appropriate for the short form employability five-factor instrument, since Van der Heijde and Van der Heijden (2006) have stated that, despite the multidimensionality of the concept, the five competences form correlated aspects of employability. Therefore, another factor analysis with principal axis factoring and promax rotation was executed, which provided a new pattern matrix, due to the extraction of five

factors. The provided solution was in line with the expectations: all items loaded on the factors, on which they were expected to load. The communalities of the two items “how would you rate the quality of your skills overall” and “how much variation is there in the range of duties you aim to achieve in your work?”, which belong to occupational expertise or personal flexibility respectively, just crossed the .300 mark, but, using the five factors was, nevertheless, legitimate.

Reliability analyses of the five competences of employability revealed the following Cronbach’s alphas: $\alpha = .812$ for occupational expertise (5 items), $\alpha = .784$ for personal flexibility (5 items), $\alpha = .790$ for anticipation and optimization (4 items), $\alpha = .743$ for balance (4 items), and lastly $\alpha = .783$ for corporate sense (4 items). Cronbach’s alpha of occupational expertise could have been increased to $\alpha = .812$ by deleting one item. Also, Cronbach’s alpha of personal flexibility could have been increased by .002 by deleting one item. I decided that these small increases in reliability did not sufficiently counterbalanced the loss of items to justify deletion. Resultantly, it can be stated that the used scales were all highly reliable, since general agreement considers Cronbach’s alpha greater than .7 acceptable (Field, 2009). Tables of all psychometric analyses for employability can be found in appendix 4.

Hypotheses Testing

Testing assumptions. Five assumptions had to be met in order for the results of the regression analyses to be generalizable to the Dutch workforce directly employed at an organization. First, multicollinearity, which incorporates that the independent variables are highly correlated with each other (Field, 2009), had to be avoided. As already shown in table 4, the highest significant correlation among these was $r = .622$ for corporate sense and anticipation and optimization, which was high, but also not too high. According to Field (2009), only correlations greater than .800 are alarming. Still, the variance inflation factor (VIF) was taken into consideration, which indicates whether an independent variable is strongly related to the other independent variables (Field, 2009). A value of 4 is indicated to be problematic. Moreover, tolerance, which is the reciprocal of the VIF, can be used. The tolerance value should be greater than .20 (Field, 2009). In the study at hand no VIF greater than 1.88 (age, anticipation and optimization, corporate sense) was detected in the three regressions. The lowest detected tolerance value in the three regressions was .53 for the same variables. Therefore, the assumption regarding multicollinearity was met. All VIF and tolerance values can be found in the coefficients tables in appendix 5.

Second, the residuals needed to be independent. The Durbin-Watson test was executed during the regression analyses, which “tests for serial correlations between errors” (Field, p. 252). A value greater than 2 generally indicates a negative correlation between the residuals, while a value lower than 2 indicates a positive correlation, implying that the value should lie around 2 to meet this assumption (Field, 2009). For the first analysis with commitment to the organization as the independent variable, the Durbin-Watson revealed a value of 1.89. A value of 2.03 was detected for the second analysis regarding commitment to the career, and the analysis regarding commitment to the profession revealed a value of 1.84. Resultantly, the assumption of independent residuals was met.

Third, the residuals of the independent variables needed to have the same variance, which is called homoscedasticity, and fourth a linear relationship needed to be modelled (Field, 2009). These two assumptions were tested simultaneously by computing scatterplots of the residuals. The assumptions of homoscedasticity and linearity are met, if the dots in the scatterplot are spread randomly and are evenly dispersed around zero (Field, 2009). which was the case for all three analyses (see appendix 5), wherefore these assumptions were met.

Fifth, and last, the residuals needed to be normally distributed, which was tested with the Kolmogorov-Smirnov as well as the Shapiro-Wilk test. If these tests are significant, it means that the residuals are not normally distributed (Field, 2009). Unfortunately, this was the case for all three analyses. Nevertheless, Field (2009) argues that these tests are not perfectly suited for large sample sizes, such as the one in the study at hand. Therefore, normal probability plots as well as histograms were taken into consideration to check whether the residuals were normally distributed. The normal probability plots as well as the histograms seemed to be slightly skewed for all three analyses (see appendix 5). According to Maas and Hox (2004) regression analyses are relatively robust to violations of the assumption of normality, which is why I decided to not make any adaptations to the variables, but to take this violation into account when interpreting the findings.

Regression analyses. In order to test the hypotheses three hierarchical multiple regression analyses were conducted for each target of commitment respectively. All coefficients including corresponding standard error, as well as R^2 of the three analyses are displayed in table 6.

The first hypothesis of the study at hand assumed that employability is positively related to commitment to the organization. The hierarchical multiple regression revealed that Model 1, ($F(13, 647) = 7.01, p < .001, R^2 = .123$), as well as Model 2, ($F(18, 642) = 14.80, p < .001, R^2 = .273$), were significant. The addition of the main variables in Model 2

significantly increased the explanatory power of the model with $\Delta R^2 = .170$ ($p < .001$). The unstandardized coefficients showed that several control variables contributed significantly to the model. The significant negative effects of the dummy transgender in Model 1 as well as in Model 2 were not interpreted, because this variable only contained two respondents, which was not sufficient to conclude any statements. The dummy variable HAVO/VWO was negatively significant for Model 1 ($b = -.282$, $p = .015$), but not for Model 2 ($b = -.170$, $p = .109$): compared to respondents with a HBO/ WO bachelor certificate, respondents with a HAVO/ VWO certificate are less committed to the organization. The non-significant effect in Model 2 showed that the insertion of the employability competences negated this effect. Next, contract type (Model 2: $b = -.352$, $p < .001$) as well as the dummy side-job (Model 2: $b = -.289$, $p = .003$) were significantly related to commitment to the organization in Model 1 as well as in Model 2: temporary employees are less committed to the organization than permanent employees, and employees fulfilling a side-job are less committed to the organization than employees working full-time. Three of the five employability variables contributed significantly to Model 2, namely balance ($b = .152$, $p < .001$), anticipation and optimization ($b = .081$, $p = .042$), and corporate sense ($b = .249$, $p < .001$). Respondents that reported more balance, more anticipation and optimization, and/or more corporate sense, also reported more commitment to the organization.

A post hoc power analysis (see appendix 5) was conducted with a sample size of 660 and an 18-predictor variable equation as the baseline. An effect size of .41 was utilized, which was determined from the correlation coefficient by inserting R^2 of Model 2. The alpha level used for this analysis was $p < .05$. The post hoc power analysis revealed a power of 1 for this effect size, meaning that the power of the regression analysis was more than adequate. Hypothesis 1 is therefore verified for three of the five employability competences.

Hypothesis 2 of the study at hand assumed that employability is positively related to commitment to the career. The hierarchical multiple regression revealed that Model 1, ($F(13, 647) = 9.19$, $p < .001$, $R^2 = .156$), as well as Model 2, ($F(18, 642) = 14.53$, $p < .001$, $R^2 = .290$), were significant. The addition of the main variables in Model 2 significantly increased the explanatory power of the model with $\Delta R^2 = .134$ ($p < .001$). The coefficients table revealed that the control variable age was negatively and significantly related to commitment to the career in Model 1 ($b = -.248$, $p < .001$) as well as in Model 2 ($b = -.260$, $p < .001$): the older the respondent, the less committed the respondent is to the career. Moreover, in Model 1 three education dummies (MAVO: $b = -.671$, $p = .008$; MBO: $b = -.224$, $p = .034$; HAVO/ VWO: $b = -.420$, $p < .001$) were negatively and significantly related to commitment to the

career: compared to respondents holding a HBO/ WO bachelor degree, respondents with a MAVO, MBO, or HAVO/ VWO degree are less committed to the career. This effect was reset in Model 2 for MAVO and MBO graduates, while the effect was still significant for HAVO/ VWO respondents ($b = -.331, p = .005$), despite the competences of employability entered. Of the five employability variables two contributed positively and significantly to the model, namely balance ($b = .093, p = .012$) and anticipation and optimization ($b = .257, p < .001$). Respondents that reported more balance and/or more anticipation and optimization, also reported more commitment to the career.

In the same way as for the first regression analysis, a post-hoc power analysis was conducted. An effect size of .41 was used. Again, a power of 1 was revealed (see appendix 5). Therefore, hypothesis 2 is verified for two of the five employability competences.

Lastly, hypothesis 3 predicted that employability is positively related to commitment to the profession. The hierarchical multiple regression revealed that Model 1, ($F(13, 647) = 10.04, p < .001, R^2 = .168$), as well as Model 2, ($F(18, 642) = 15.84, p < .001, R^2 = .308$), were significant. The addition of the main variables in Model 2 significantly increased the explanatory power of the model with $\Delta R^2 = .140 (p < .001)$. According to the unstandardized coefficients the dummy variables transgender and no education contributed significantly to Model 1, no education even to Model 2. As already mentioned, the effects of transgender were not interpreted due to the small sample of this variable. The same held for the variable no education. Nevertheless, the control variables contract type (Model2: $b = -.218, p = .018$) as well as the dummy side-job (Model 2: $b = -.520, p < .001$) were negatively and significantly related to commitment to the profession in both models: temporary employees are less committed to the profession than permanent employees, and employees fulfilling a side-job are less committed to the profession than employees working full-time. Strikingly, the control variable age was significantly related to commitment to the profession in Model 2 ($b = .109, p = .031$), but not in Model 1, which means that its effect was shaped by the insertion of the employability competences: the older the respondent gets, the more he is committed to the profession. The unstandardized coefficients of Model 2 showed that two of the five employability variables contributed significantly to the model, namely balance ($b = .131, p = .002$) and anticipation and optimization ($b = .396, p < .001$). Respondents that reported more balance and/or more anticipation and optimization, also reported more commitment to the profession.

Again, the post-hoc power analysis, executed with an effect size of .45, revealed a power of 1 (see appendix 5), implying that the sample size was more than adequate to

interpret the findings. Therefore, hypothesis 3 is verified for two of the five employability competences.

Table 6

Hierarchical Multiple Regression Analyses Predicting three Commitment Targets from Employability

	Commitment Organization		Commitment Career		Commitment Profession	
	b	SE	b	SE	b	SE
<i>Model 1</i>						
Age	.050	.043	-.248**	.047	.106	.055
Male	.046	.073	.106	.080	-.110	.092
Transgender	-1.381*	.598	-.295	.648	-1.541*	.750
No Education	-.730	.591	-.944	.641	-1.542*	.742
LBO/VBO/VMBO	.298	.420	.251	.456	.423	.527
MAVO	.102	.234	-.671*	.254	.048	.294
MBO	-.063	.097	-.224*	.105	.003	.122
HAVO/VWO	-.282*	.116	-.420**	.126	-.255	.146
WO master	-.057	.083	.112	.090	-.001	.104
PhD	-.182	.282	.445	.305	.476	.354
Contract Type	-.352**	.079	-.013	.086	-.276*	.099
Part-time	.001	.081	-.158	.088	-.032	.102
Side-job	-.289*	.098	-.086	.106	-.734**	.123
<i>R</i> ²	.123**		.156**		.168**	
<i>Model 2</i>						
Age	.017	.040	-.260**	.044	.109*	.051
Male	.037	.067	.085	.074	-.129	.085
Transgender	-1.087*	.545	.064	.604	-1.259	.695
No Education	-.806	.535	-.992	.593	-1.482*	.682
LBO/VBO/VMBO	.144	.379	.153	.420	.318	.484
MAVO	.318	.215	-.460	.238	.188	.274
MBO	-.042	.089	-.170	.098	.059	.113
HAVO/VWO	-.170	.106	-.331*	.117	-.215	.135
WO master	-.048	.075	.107	.083	-.008	.096
PhD	-.251	.255	.323	.283	.351	.325
Contract Type	-.233**	.072	.072	.080	-.218*	.092
Part-time	.034	.074	-.112	.082	.030	.094
Side-job	-.238*	.094	.049	.104	-.520**	.120
Occupational Expertise	.020	.037	.054	.041	-.059	.047
Personal Flexibility	.000	.038	.034	.043	.048	.049
Balance	.152**	.033	.093*	.037	.131*	.042
Anticipation & Optimization	.081*	.040	.257**	.044	.396**	.051
Corporate Sense	.249**	.040	.048	.044	-.012	.051
<i>R</i> ²	.293**		.290**		.308**	
ΔR^2	.170**		.134**		.140**	

Note. * $p < .05$, ** $p < .001$

Discussion

The present study was designed to contribute to the employability paradox by means of an investigation of the following research question: what is the relationship between multiple competences of employability and internal as well as external targets of commitment? For this purpose, three hypotheses were raised after establishing a theoretical framework combining SET with the investment model of commitment. These hypotheses, proposing that employability is positively related to commitment to the organization, the career, and the profession respectively, were (partially) verified. Employability seems to explain commitment to the organization best, followed by the profession, and the career. Nevertheless, the differences were minor. More specific, the employability competences anticipation and optimization as well as balance appear to enhance commitment to all three targets. Additionally, the observed increase in commitment to the organization is attributed to corporate sense. Neither occupational expertise, nor personal flexibility seem to be related to the investigated commitment targets. With regards to the control variables, the analyses revealed that side-jobs and temporary contracts are accompanied by decreases in commitment to the organization and the profession. Moreover, age was related significantly to the external targets of commitment: the older the employee, the less committed he is to the career, whereas commitment to the profession appears to increase with age.

Scientific Contributions

Several theoretical as well as methodological contributions can be devoted to the main objective of this study to illuminate the employability paradox. First, this study contributes to the employability literature by gathering evidence about the outcomes of employability. Second, the present study contributes to the commitment literature concerning multiple targets of commitment. Third, this study established the first theoretical framework to assess these multiple targets of commitment in the context of employability. Fourth and last, the present study validated the relatively new short form employability five-factor instrument and thereby makes a methodological contribution to the employability literature.

Outcomes of employability. The results of this study showed that employability predicts internal as well as external targets of commitment. In specific, it was found that increases in the employability competences balance, anticipation and optimization, and corporate sense are accompanied by enhanced commitment to the organization. The regression analysis showed that the increase in commitment to the organization was primarily due to the competence corporate sense. According to Van der Heijden et al. (2018) corporate

sense refers to social competences that can be exerted within an organization. It is very likely that employees make use of these competences in their daily interactions with colleagues or supervisors. A possible explanation is that this opportunity to exert competences is reciprocated with commitment to the organization. After corporate sense, the increase in commitment to the organization can also be a result of the competence balance. Referring to Van der Heijden et al. (2018), balance describes the effective combination of current job and career goals, as well as work and private interests (work-life balance). Especially with regards to work-life balance an organization can offer a lot of policies to enhance it, such as alternative work arrangements, including flexibility in where and when work is accomplished (Spreitzer et al., 2017). Again, the employee is very likely to react to this organizational support by means of commitment to the organization, which has even been supported by previous research (Eaton, 2003). The last employability competence, for which significant support was found, is anticipation and optimization. Van der Heijde and Van der Heijden (2006) describe anticipation and optimization as an employee's self-initiative, proactive adaptability to changes and developments at a job content or career level. With regards to changes at a job content level the organization can enhance and foster this competence by means of providing autonomy: if the employee gets a new task, which is not part of his usual set of tasks, he is exposed to changes in the job content. But if he gets enough autonomy, he can proactively adapt to these changes. Commitment to the organization is likely to be a reaction to this provision of autonomy (Bergman, Benzer, & Henning, 2009; Wallace, 1995).

Next to commitment to the organization, commitments to external targets, the career and the profession, seem to be an outcome of employability. The employability competences balance as well as anticipation and optimization appear to enhance commitment to the career and the profession. For both commitment targets the competence anticipation and optimization seems to have the most impact. Proactively adapting to changes and developments at a job-content or career level (Van der Heijde & Van der Heijden, 2006), and concordantly making use of the by the organization provided autonomy, asks a lot of time and energy of an employee for his profession and career. The same counts for balance, which is the second antecedent of commitment to both external targets: finding the right balance between job and career goals as well as private interests (Van der Heijden et al., 2018) can also be regarded as an investment in an employee's career and profession, because again a lot of time and energy is invested in the career and profession, at the expense of private interests (Farrell & Rusbult, 1981), even if the organization offers alternative work arrangements. It is

very likely that the employee does not want to lose these investments, and therefore commits to the profession and the career (Farrell & Rusbult, 1981).

Summarizing, this study contributes to the scientific literature on employability outcomes, since new information was gathered regarding the outcomes of the distinct employability competences. Moreover, the profession and the career, as external targets of commitment, were not investigated before as possible outcomes of employability.

Multiple targets of commitment. Comparison of the findings regarding internal and external targets of commitment shows that these appear to be caused by the same employability competences, despite of corporate sense, which only seems to be beneficial for commitment to the organization. Moreover, anticipation and optimization appears to have a stronger effect on external targets of commitment, while balance seems to be stronger related to the internal target of commitment. Based on that, it can be concluded that some employability competences are more related to internal targets of commitment, while others are stronger related to external targets of commitment. An explanation of this finding might be that the competences by themselves are more related to some targets than to others, for example corporate sense, which even incorporates the organization in its definition (Van der Heijden et al., 2018).

Since the respondents were committed to all three targets of commitment, and two of the three significant employability competences were related to all three targets, it may be the case that commitment to an internal target does not suspend commitments to external targets and vice versa, as Gouldner (1957) claimed by making a distinction in cosmopolitans and locals. This is in line with the findings of Aryee and Tan (1992), Vandenberghe (2009), and Wallace (1993, 1995). Moreover, it is not likely that employability pushes the organization away and pulls employees towards more external targets of commitment, which is conform to the findings of McAulay et al. (2006). Rather, it seems to be the case that employees have dual commitments to internal as well as external targets (Meyer & Espinoza, 2016). An explanation for dual commitments to the organization as well as the profession might be that a lot of professions are executed within the organization. This makes professional employees feel loyal towards the organization, since this is the place where their profession is situated (McAulay et al., 2006).

A note of caution is here since the interplay of the commitment targets was not explicitly tested in the present study. Nevertheless, this study contributes to the scientific literature on multiple targets of commitment, due to its finding that the same employability

competences are related to internal as well as external targets of commitment and commitment to these targets seems to be evenly distributed.

Theoretical framework. Comparison of the findings with those of other studies confirms the use of SET to explain the relationship between employability and commitment to the organization (De Cuyper & De Witte, 2011). Employability is to a great extent perceived from a broadening strategy in the study at hand (Thijssen et al., 2008), which implies that the organization offers ways, for example training opportunities or mentoring (Becker, 2016; Meyer & Espinoza, 2016; Wright & Kehoe, 2009), but also work-life balance (Eaton, 2003) and autonomy (Bergman et al., 2009; Wallace, 1995), to enhance the employability of its employees. As described in the section dealing with outcomes of employability, the latter refer more to the specific competences of employability, and not to employability in general as the former do. SET, and organizational support theory in specific, suggests that these activities are reciprocated by employees with high commitment to the organization (Cropanzano & Mitchell, 2005; Thijssen et al., 2008).

The novelty of the present study grounds in its investigation of external targets of commitment in the context of employability. Since neither the profession nor the career is a social target, an employee cannot build up reciprocal relationships with it, like SET would suggest. Therefore, SET is not applicable to external targets of commitment. Next to the perception of employability from a broadening strategy (Thijssen et al., 2008), it is also perceived from an individual agency perspective (Van der Heijde & Van der Heijden, 2006), again highlighting the need for a different theory, because SET focusses on an organizational level (Cropanzano & Mitchell, 2005). Hence, the theoretical framework of this study has been expanded by the investment model of commitment (Rusbult, 1980) to explain employability's relationship with external targets from an individual perspective. Comparison of the findings with those of other studies confirms the use of the investment model of commitment: Fu (2011) found that career investments, which resemble the investments in employability, are positively related to commitment to the career. I argue that this is applicable for the profession as well. Moreover, as described in the section concerning outcomes of employability, it may be the case that employees also need to make investments in the organizational support activities, by proactively making use of it. Herewith, the two main theories of the framework seem to be interrelated. Concluding, this study contributes to the mechanisms of commitment enhancement, in specific with regards to external and internal targets of commitment.

Methodological contribution. Due to the novelty of the short form employability five-factor instrument its use was validated in the present study by means of factor analyses

and reliability tests. Despite the four-factor solution the exploratory factor analysis provided, the confirmatory factor analysis supported the factor structure of the scale and corresponding items. Still, the communalities of two items “how would you rate the quality of your skills overall” and “how much variation is there in the range of duties you aim to achieve in your work?”, which belong to the competences occupational expertise and personal flexibility respectively, just crossed the .300 mark, indicating that these items are not very strong (Hair et al., 2010). According to Van der Heijden et al. (2018), the five competences should be treated distinctively, but the present study revealed a relatively high correlation between anticipation and optimization and corporate sense. Nevertheless, according to Field (2009), this is not alarming. Moreover, reliabilities of the scales were all high (Field, 2009). By means of these psychometric analyses, this study contributes to the validation of the short form employability five-factor instrument.

Summarizing these contributions, this study was able to achieve its main objective to illuminate the employability paradox (Clarke & Patrickson, 2008; De Cuyper et al., 2011). The findings of this study suggest that employability enhances commitment to the organization, which is in line with proponents of employability (De Cuyper & De Witte, 2011), and contradicts the findings of the antagonists (Benson, 2006; Philippaers et al., 2016). Accordingly, it can be concluded that employability is probably not the reason for the trend in the direction of lower commitment to the organization as stated by Hansen and Griep (2016) and McAulay et al. (2006). Moreover, this study adds to the academic debate by considering multiple targets of workplace commitment, internal and external in specific, and offers a first theoretical framework to investigate these.

Limitations and Directions for Future Research

Despite the interesting contributions of this study to the scientific literature, the findings need to be considered with caution, due to methodological, data, and sample limitations. With regards to methods, the study was limited by three circumstances. First, since this study was restricted to cross-sectional data, no causality can be inferred (Field, 2009; Mertens, 2015), meaning that it is also possible that commitment affects employability. Therefore, I advise upcoming research to also investigate this causal order and to find theoretical support for it. Also, a longitudinal design is needed to get more clarity about the causal order (Hair et al., 2010). Second, the data collection of this study was restricted by a pre-defined questionnaire, because data of two collection phases was combined. This means that the questionnaire was not explicitly designed for the aim of this study, wherefore some

variables that could be of particular interest in this study were omitted. HR activities are regarded as such: based on the theoretical framework of this study it was expected that HR activities, such as development opportunities, are reciprocated with commitment.

Unfortunately, the findings cannot certainly be drawn back to this, because it was not controlled for the presence of HR activities. This might also be a possible explanation for the non-significant finding of occupational expertise, which is explicitly linked to development opportunities. Further research should be undertaken to control for the activities that trigger social exchange as well as investments, such as development opportunities, mentoring, and flexibility in time and space. Third, initial interpretations of the interplay between multiple workplace commitments were presented, despite no explicit statistical tests regarding these were executed. To develop a full picture of the interplay of multiple workplace commitments, additional studies are needed that test their interactions explicitly. These studies could make use of a person-centered approach like Hofmans, Vantilborgh, and Solinger (2018) have suggested in order to cluster employees with different workplace commitments.

Next to these methodological limitations, the generalizability of the results is subject to certain sample and data limitations. First, as already described in the third chapter of this thesis, the sample is not completely representative of the Dutch workforce directly employed at an organization. Nevertheless, this limitation was considered when interpreting the findings. The described bias in the sample might stem from the limitations of the applied research methods: first, surveys itself are dependent on self-reports of respondents, meaning that the information is only valid, if respondents answer the questions honestly (Mertens, 2015). Next, due to the non-probable nature of the sampling procedure the likelihood of a biased sample is high, because the approached respondents are acquaintances of the researchers, meaning that they share a certain amount of similarities. This is even enhanced by the snowball sampling principle (Fricker, 2008). The provided explanation seems very applicable to the study at hand: a lot of respondents are in the same age as the students who collected the data, or their parents. Moreover, higher educated employees are overrepresented in the sample, which is in line with the academic degree of the students. These sampling limitations might also have led to the non-normal distribution of the main variables, as well as control variables (Field, 2009), which is another limitation of the data. Resultantly, the findings cannot be generalized to the Dutch workforce directly employed at an organization for certain and therefore have to be used with caution. A further study with more focus on population representativeness is therefore suggested.

Besides these advises for future research provided by the limitations of this study, there are still many unanswered questions about the relationship between employability and commitment. Within the theoretical framework of this study, different theories were used to explain the relationship between employability and internal as well as external targets of commitment. Further research needs to examine the links between employability and multiple targets of commitment in light of SET and the investment model of commitment more closely. Qualitative research could offer worthwhile findings regarding the role of the three components of the investment model of commitment as the expected mechanism behind employability and external targets of commitment, and the sources of social exchange for commitment to the organization. Moreover, this study revealed interesting findings regarding the control variables contract time and contract type. Further studies regarding the role of these variables would be worthwhile. For example, the present study could be adapted by using contract time and contract type as moderators.

Practical Implications

The findings of the present study supported the idea of several scholars that employability leads to a win-win situation for employees and organizations (Baruch, 2001; Peters & Lam, 2015; Van der Heijde & Van der Heijden, 2006). Organizations do not need to be afraid to invest in the employability of their employees, because employable employees seem to be highly committed to the organization as well, and therefore turnover intention is less likely (Johnson et al., 2009). Likewise, employees seem to be able to have dual commitments, which in turn can have synergistic effects on other workplace outcomes, such as job satisfaction and performance (Meyer & Espinoza, 2016). Therefore, I would advise organizations to invest in the employability of their employees, for example by means of a specific policy regarding employability. Organizations, specifically the HR department, could implement a voucher system, which employees can use in order to take part in development activities that increase employees' employability awareness (Gerards, De Grip, & Witlox, 2014). Enhanced employability awareness in turn might increase employees' intrinsic motivation to pro-actively pursue investments in their employability. Accordingly, such a system is probably not only seen as organizational support an employee reciprocates with commitment, but also as an investment an employee makes. I argue that interest in investments as well as organizational support regarding employability will probably rise in the upcoming decades, due to the high career ambitions of younger generations (Festing & Schäfer, 2014) and the increasingly boundaryless careers (Arthur & Rousseau, 1996).

Moreover, society at large can benefit from employability enhancement, because it offers organizations as well as employees flexibility (McAulay et al., 2006; Thijssen et al., 2008; Van der Heijden et al., 2009) and promotes employment security (Clarke & Patrickson, 2008; Van der Heijden et al., 2018).

References

- 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. doi:10.1111/j.2044-8325.1990.tb00506.x
- Arthur, M. B., & Rousseau, D. M. (1996). Introduction: The boundaryless career as a new employment principle. In M. B. Arthur & D. M. Rousseau (Eds.), *The boundaryless career: a new employment principle for a new organizational era* (pp. 3-20). New York: Oxford University Press.
- Aryee, S., & Tan, K. (1992). Antecedents and outcomes of career commitment. *Journal of Vocational Behavior*, *40*, 288-305. doi:10.1016/0001-8791(92)90052-2
- Baruch, Y. (2001). Employability: A substitute for loyalty? *Human Resource Development International*, *4*(4), 543-566. doi:10.1080/13678860010024518
- Becker, T. E. (1992). Foci and bases of commitment: Are they distinctions worth making? *The Academy of Management Journal*, *35*(1), 232-244. doi:10.2307/256481
- Becker, T. E. (2005). Potential problems in the statistical control of variables in organizational research: A qualitative analysis with recommendations. *Organizational Research Methods*, *8*(3), 274-289. doi:10.1177/1094428105278021
- Becker, T. E. (2009). Interpersonal commitments. In H. J. Klein, T. E. Becker, & J. P. Meyer (Eds.), *Commitment in organizations: Accumulated wisdom and new directions* (pp. 137-178). New York: Routledge.
- Becker, T. E. (2016). Multiple foci of workplace commitments. In J. P. Meyer (Ed.), *Handbook of employee commitment* (pp. 43-55). Cheltenham: Edward Elgar Publishing Limited.
- Benson, G. S. (2006). Employee development, commitment and intention to turnover: A test of "employability" policies in action. *Human Resource Management Journal*, *16*(2), 173-192. doi:10.1111/j.1748-8583.2006.00011.x
- Bergman, M. E., Benzer, J. K., & Henning, J. B. (2009). The role of individual differences as contributors to the development of commitment. In H. J. Klein, T. E. Becker, & J. P. Meyer (Eds.), *Commitment in organizations: Accumulated wisdom and new directions* (pp. 217-252). New York: Routledge.
- Blau, G. (1989). Testing the generalizability of a career commitment measure and its impact on employee turnover. *Journal of Vocational Behavior*, *35*, 88-103. doi:10.1016/0001-8791(89)90050-X

- Blau, G. J. (1985). The measurement and prediction of career commitment. *Journal of Occupational Psychology*, 58(4), 277-288. doi:10.1111/j.2044-8325.1985.tb00201.x
- Blau, G. J., & Lunz, M. (1998). Testing the incremental effect of professional commitment on intent to leave one's profession beyond the effects of external, personal, and work-related variables. *Journal of Vocational Behavior*, 52, 260-269. doi:10.1006/jvbe.1997.1601
- Blau, P. M. (1964). *Exchange and power in social life*. New York: John Wiley & Sons, Inc.
- Buchanan, E. A., & Hvizdak, E. E. (2009). Online survey tools: Ethical and methodological concerns of human research ethics committees. *Journal of Empirical Research on Human Research Ethics*, 4(2), 37-48. doi:10.1525/jer.2009.4.2.37
- Carson, K. D., & Bedeian, A. G. (1994). Career commitment: Construction of a measure and examination of its psychometric properties. *Journal of Vocational Behavior*, 44, 237-262. doi:10.1006/jvbe.1994.1017
- CBS. (2019a). Werkzame beroepsbevolking. Retrieved from <https://www.cbs.nl/nl-nl/achtergrond/2018/07/werkzame-beroepsbevolking>
- CBS. (2019b). Overzicht werkzame beroepsbevolking. Retrieved from <https://opendata.cbs.nl/statline/#/CBS/nl/navigatieScherm/thema?themaNr=82997>
- Clarke, M., & Patrickson, M. (2008). The new covenant of employability. *Employee Relations*, 30(2), 121-141. doi:10.1108/01425450810843320
- Conway, N., & Briner, R. B. (2002). Full-time versus part-time employees: Understanding the links between work status, the psychological contract, and attitudes. *Journal of Vocational Behavior*, 61(2), 279-301. doi:10.1006/jvbe.2001.1857
- Cooper-Hakim, A., & Viswesvaran, C. (2005). The construct of work commitment: Testing an integrative framework. *Psychological Bulletin*, 131(2), 241-259. doi:10.1037/0033-2909.131.2.241
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874-900. doi:10.1177/0149206305279602
- De Cuyper, N., & De Witte, H. (2011). The management paradox. *Personnel Review*, 40(2), 152-172. doi:10.1108/00483481111106057
- De Cuyper, N., Notelaers, G., & De Witte, H. (2009). Job insecurity and employability in fixed-term contractors, agency workers, and permanent workers: Associations with job satisfaction and affective organizational commitment. *Journal of Occupational Health Psychology*, 14(2), 193-205. doi:10.1037/a0014603

- De Cuyper, N., Van der Heijden, B. I. J. M., & De Witte, H. (2011). Associations between perceived employability, employee well-being, and its contribution to organizational success: A matter of psychological contracts? *The International Journal of Human Resource Management*, 22(7), 1486-1503. doi:10.1080/09585192.2011.561962
- Duberley, J., Johnson, P., & Cassell, C. (2012). Philosophies underpinning qualitative research. In G. Symon & C. Cassell (Eds.), *Qualitative organizational research: Core methods and current challenges* (pp. 15-34). London: Sage Publications.
- Eaton, S. C. (2003). If you can use them: Flexibility policies, organizational commitment, and perceived performance. *Industrial Relations: A Journal of Economy and Society*, 42(2), 145-167. doi:10.1111/1468-232X.00285
- Farrell, D., & Rusbult, C. E. (1981). Exchange variables as predictors of job satisfaction, job commitment, and turnover: The impact of rewards, costs, alternatives, and investments. *Organizational Behavior and Human Performance*, 27(28), 78-95. doi:10.1016/0030-5073(81)90016-7
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149-1160. doi:10.3758/BRM.41.4.1149
- Festing, M., & Schäfer, L. (2014). Generational challenges to talent management: A framework for talent retention based on the psychological-contract perspective. *Journal of World Business*, 49(2), 262-271. doi:10.1016/j.jwb.2013.11.010
- Field, A. (2009). *Discovering statistics using IBM SPSS Statistics: And sex and drugs and rock 'n' roll*. London: Sage Publications.
- Fricker, R. D. (2008). Sampling methods for web and e-mail surveys. In N. Fielding, R. M. Lee, & G. Blank (Eds.), *The SAGE handbook of online research methods* (pp. 195-217). London: Sage Publications.
- Fu, J.-R. (2011). Understanding career commitment of IT professionals: Perspectives of push-pull-mooring framework and investment model. *International Journal of Information Management*, 31(3), 279-293. doi:10.1016/j.ijinfomgt.2010.08.008
- Gerards, R., De Grip, A., & Witlox, M. (2014). 'Employability-miles' and worker employability awareness. *Applied Economics*, 46(9), 952-965. doi:10.1080/00036846.2013.864036
- Gould-Williams, J., & Davies, F. (2005). Using social exchange theory to predict the effects of HRM practice on employee outcomes. *Public Management Review*, 7(1), 1-24. doi:10.1080/1471903042000339392

- Gouldner, A. W. (1957). Cosmopolitans and locals: Toward an analysis of latent social roles. *Administrative Science Quarterly*, 2(3), 281-306. doi:10.2307/2391000
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (Vol. 7). Essex: Pearson.
- Hansen, S. D., & Griep, Y. (2016). Psychological contracts. In J. P. Meyer (Ed.), *Handbook of employee commitment* (pp. 119-131). Cheltenham: Edward Elgar Publishing Limited.
- Heckathorn, D. D. (2011). Comment: Snowball versus respondent-driven sampling. *Sociological methodology*, 41, 355-366. doi:10.1111/j.1467-9531.2011.01244.x
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513-524. doi:10.1037//0003-066x.44.3.513
- Hofmans, J., Vantilborgh, T., & Solinger, O. N. (2018). k-centres functional clustering: A person-centered approach to modeling complex nonlinear growth trajectories. *Organizational Research Methods*, 21(4), 905-930. doi:10.1177/1094428117725793
- Johnson, R. E., Groff, K. W., & Taing, M. U. (2009). Nature of the interactions among organizational commitments: Complementary, competitive or synergistic? *British Journal of Management*, 20, 431-447. doi:10.1111/j.1467-8551.2008.00592.x
- Justesen, L., & Mik-Meyer, N. (2012). *Qualitative research methods in organization studies*. Copenhagen: Hans Reitzels Forlag.
- Kinnie, N., Hutchinson, S., Purcell, J., Rayton, B., & Swart, J. (2005). Satisfaction with HR practices and commitment to the organisation: why one size does not fit all. *Human Resource Management Journal*, 15(4), 9-29. doi:10.1111/j.1748-8583.2005.tb00293.x
- Kinnie, N., & Swart, J. (2012). Committed to whom? Professional knowledge worker commitment in cross-boundary organisations. *Human Resource Management Journal*, 22(1), 21-38. doi:10.1111/j.1748-8583.2011.00172.x
- Klein, H. J., Cooper, J. T., Molloy, J. C., & Swanson, J. A. (2014). The assessment of commitment: Advantages of a unidimensional, target-free approach. *Journal of Applied Psychology*, 99(2), 222-238. doi:10.1037/a0034751
- Klein, H. J., & Man Park, H. (2016). Commitment as a unidimensional construct. In J. P. Meyer (Ed.), *Handbook of employee commitment* (pp. 15-27). Cheltenham: Edward Elgar Publishing Limited.
- Klein, H. J., Molloy, J. C., & Brinsfield, C. T. (2012). Reconceptualizing workplace commitment to redress a stretched construct: Revisiting assumptions and removing

- confounds. *Academy of Management Review*, 37(1), 130-151.
doi:10.5465/amr.2010.0018
- Kornelakis, A. (2014). Balancing flexibility with security in organizations? Exploring the links between flexicurity and human resource development. *Human Resource Development Review*, 13(4), 398-412. doi:10.1177/1534484314543013
- Le, B., & Agnew, C. R. (2003). Commitment and its theorized determinants: A meta-analysis of the investment model. *Personal Relationships*, 10, 37-57. doi:10.1111/1475-6811.00035
- Maas, C. J. M., & Hox, J. J. (2004). The influence of violations of assumptions on multilevel parameter estimates and their standard errors. *Computational Statistics & Data Analysis*, 46(3), 427-440. doi:10.1016/j.csda.2003.08.006
- McAulay, B. J., Zeitz, G., & Blau, G. (2006). Testing a “Push–Pull” theory of work commitment among organizational professionals. *The Social Science Journal*, 43(4), 571-596. doi:10.1016/j.soscij.2006.08.005
- Mertens, D. M. (2015). *Research and evaluation in education and psychology* (Vol. 4). Los Angeles: Sage Publications.
- Meyer, J. P. (2009). Commitment in a changing world of work. In H. J. Klein, T. E. Becker, & J. P. Meyer (Eds.), *Commitment in organizations: Accumulated wisdom and new directions* (pp. 37-68). New York: Routledge.
- Meyer, J. P. (2016). Employee commitment: An introduction and roadmap. In J. P. Meyer (Ed.), *Handbook of employee commitment* (pp. 3-13). Cheltenham: Edward Elgar Publishing Limited.
- Meyer, J. P., Allen, N. J., & Topolnytsky, L. (1998). Commitment in a changing world of work. *Canadian Psychological Review*, 39, 83-93. doi:10.1037/h0086797
- Meyer, J. P., & Espinoza, J. A. (2016). Occupational commitment. In J. P. Meyer (Ed.), *Handbook of employee commitment* (pp. 135-149). Cheltenham: Edward Elgar Publishing Limited.
- Nelissen, J., Forrier, A., & Verbruggen, M. (2017). Employee development and voluntary turnover: Testing the employability paradox. *Human Resource Management Journal*, 27(1), 152-168. doi:10.1111/1748-8583.12136
- Oliver, N. (1990). Rewards, investments, alternatives and organizational commitment: Empirical evidence and theoretical development. *Journal of Occupational Psychology*, 63, 19-31. doi:10.1111/j.2044-8325.1990.tb00507.x

- Olsen, K. M., Sverdrup, T., Nesheim, T., & Kalleberg, A. L. (2016). Multiple foci of commitment in a professional service firm: Balancing complex employment relations. *Human Resource Management Journal*, 26(4), 390-407. doi:10.1111/1748-8583.12109
- Peters, P., & Lam, W. (2015). Can employability do the trick? Revealing paradoxical tensions and responses in the process of adopting innovative employability enhancing policies and practices in organizations. *Zeitschrift für Personalforschung*, 29(3-4), 235-258. doi:10.1688/ZfP-2015-03-Peters
- Philippaers, K., De Cuyper, N., & Forrier, A. (2017). Employable, committed, and thus well-performing: A matter of interdependent forward-looking social exchange. *European Journal of Work and Organizational Psychology*, 26(5), 755-767. doi:10.1080/1359432x.2017.1351950
- Philippaers, K., De Cuyper, N., Forrier, A., Vander Elst, T., & De Witte, H. (2016). Perceived employability in relation to job performance: A cross-lagged study accounting for a negative path via reduced commitment. *Scandinavian Journal of Work and Organizational Psychology*, 1(1), 1-15. doi:10.16993/sjwop.2
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4), 698-714. doi:10.1037/0021-9010.87.4.698
- Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee Responsibilities and Rights Journal*, 2(2), 121-139. doi:10.1007/BF01384942
- Rusbult, C. E. (1980). Commitment and satisfaction in romantic associations: A test of the investment model. *Journal of Experimental Social Psychology*, 16(2), 172-186. doi:10.1016/0022-1031(80)90007-4
- Siders, M. A., George, G., & Dharwadkar, R. (2001). The relationship of internal and external commitment foci to objective job performance measures. *The Academy of Management Journal*, 44(3), 570-579. doi:10.2307/3069371
- Smith, D. (2003). Five principles for research ethics. *Monitor on Psychology*, 34, 56.
- Spreitzer, G. M., Cameron, L., & Garrett, L. (2017). Alternative work arrangements: Two images of the new world of work. *Annual Review of Organizational Psychology and Organizational Behavior*, 4(1), 473-499. doi:10.1146/annurev-orgpsych-032516-113332
- Thijssen, J. G. L., Van der Heijden, B. I. J. M., & Rocco, T. S. (2008). Toward the employability-link model: Current employment transition to future employment

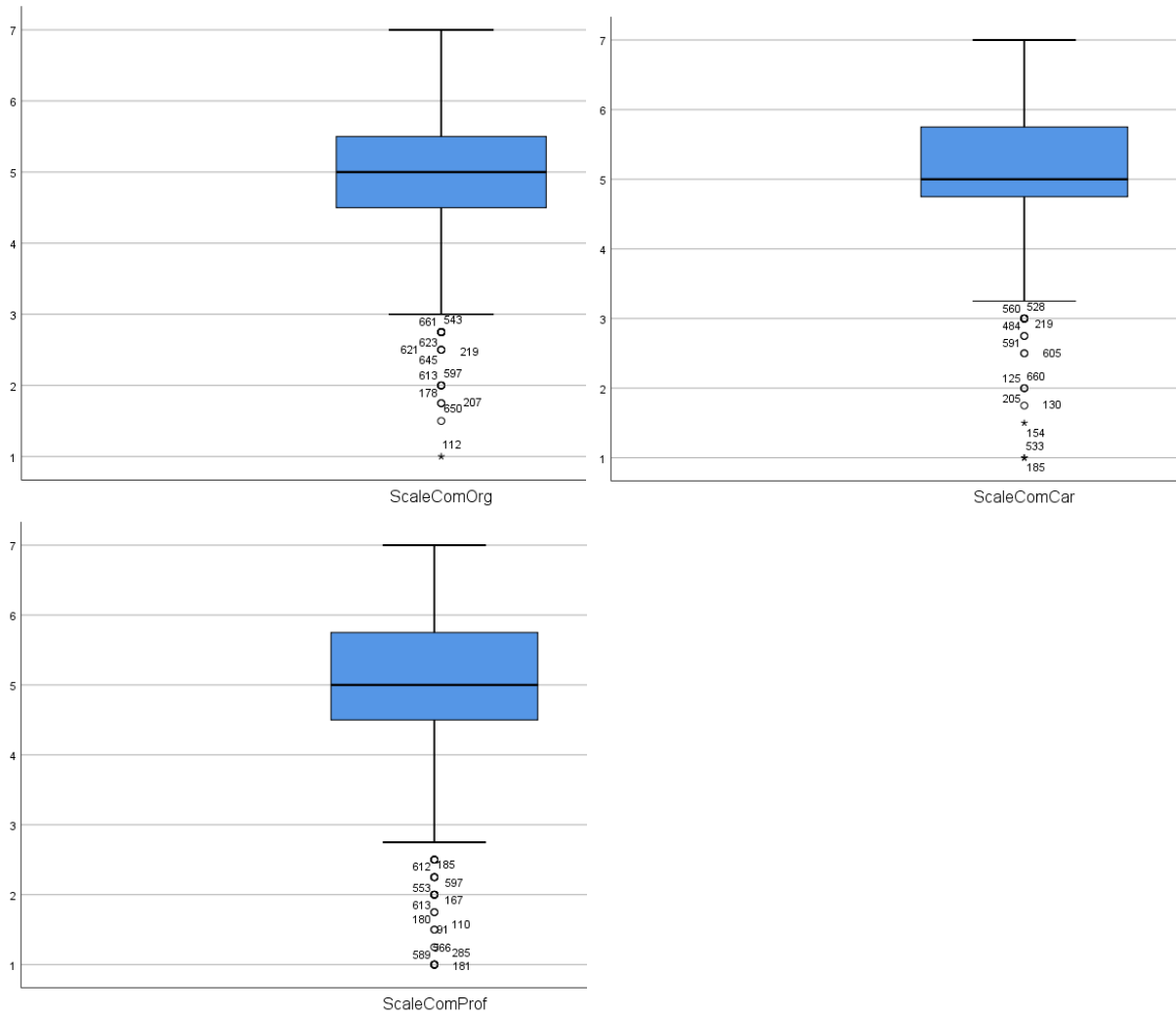
- perspectives. *Human Resource Development Review*, 7(2), 165-183.
doi:10.1177/1534484308314955
- Van Dam, K. (2005). Employee attitudes toward job changes: An application and extension of Rusbult and Farrell's investment model. *Journal of Occupational and Organizational Psychology*, 78(2), 253-272. doi:10.1348/096317904x23745
- 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(3), 449-476. doi:10.1002/hrm.20119
- Van der Heijden, B. I. J. M., De Lange, A. H., Demerouti, E., & Van der Heijde, C. M. (2009). Age effects on the employability–career success relationship. *Journal of Vocational Behavior*, 74(2), 156-164. doi:10.1016/j.jvb.2008.12.009
- Van der Heijden, B. I. J. M., Notelaers, G., Peters, P., Stoffers, J. M. M., De Lange, A. H., Froehlich, D. E., & Van der Heijde, C. M. (2018). Development and validation of the short-form employability five-factor instrument. *Journal of Vocational Behavior*, 106, 236-248. doi:10.1016/j.jvb.2018.02.003
- Van Veldhoven, M., Van der Heijden, B., & Dorenbosch, L. (2008). Age, proactivity and career development. *Career Development International*, 13(2), 112-131.
doi:10.1108/13620430810860530
- Vandenberghe, C. (2009). Organizational commitments. In H. J. Klein, T. E. Becker, & J. P. Meyer (Eds.), *Commitment in organizations: Accumulated wisdom and new directions* (pp. 99-136). New York: Routledge.
- Wallace, J. E. (1993). Professional and organizational commitment: Compatible or incompatible? *Journal of Vocational Behavior*, 42, 333-349.
doi:10.1006/jvbe.1993.1023
- Wallace, J. E. (1995). Organizational and professional commitment in professional and nonprofessional organizations. *Administrative Science Quarterly*, 40(2), 228-255.
- Wayne, S. J., Coyle-Shapiro, J. A.-M., Eisenberger, R., Liden, R. C., Rousseau, D. M., & Shore, L. M. (2009). Social influences. In H. J. Klein, T. E. Becker, & J. P. Meyer (Eds.), *Commitment in organizations: Accumulated wisdom and new directions* (pp. 253-284). New York: Routledge.
- Widaman, K. F. (2006). Missing data: What to do with or without them. *Monographs of the Society for Research in Child Development*, 71(3), 42-64. doi:10.1111/j.1540-5834.2006.00404.x

- Wright, P. M., & Kehoe, R. R. (2009). Organizational-level antecedents and consequences of commitment. In H. J. Klein, T. E. Becker, & J. P. Meyer (Eds.), *Commitment in organizations: Accumulated wisdom and new directions* (pp. 285-308). New York: Routledge.
- Wright, T. A., & Hobfoll, S. E. (2004). Commitment, psychological well-being and job performance: An examination of conservation of resources (COR) theory and job burnout. *Journal of Business and Management*, 9(4), 389-406.
- Yalabik, Z. Y., Swart, J., Kinnie, N., & Van Rossenberg, Y. (2016). Multiple foci of commitment and intention to quit in knowledge-intensive organizations (KIOs): What makes professionals leave? *The International Journal of Human Resource Management*, 28(2), 417-447. doi:10.1080/09585192.2016.1244918

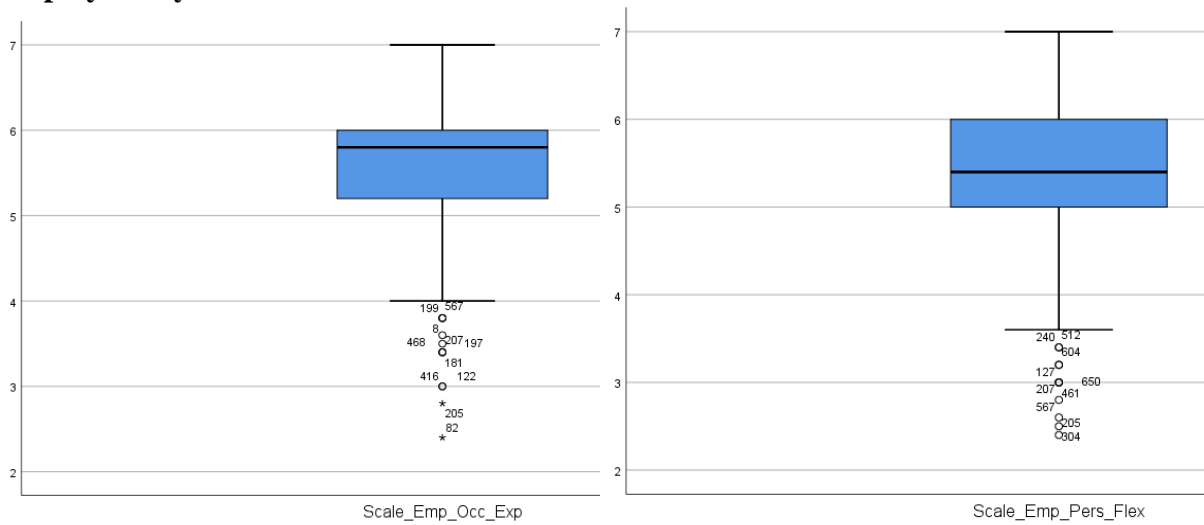
Appendixes

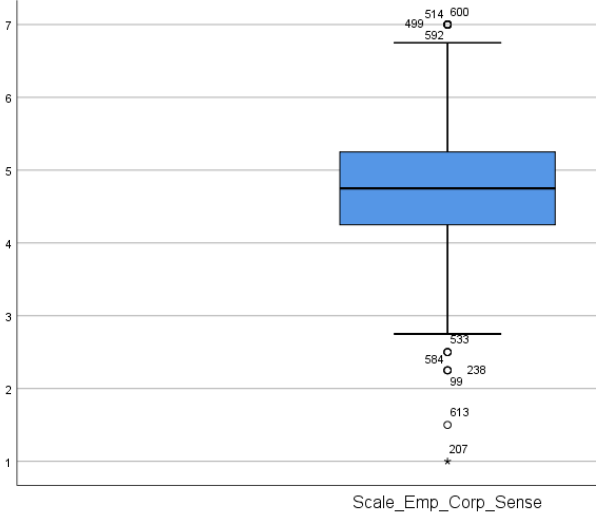
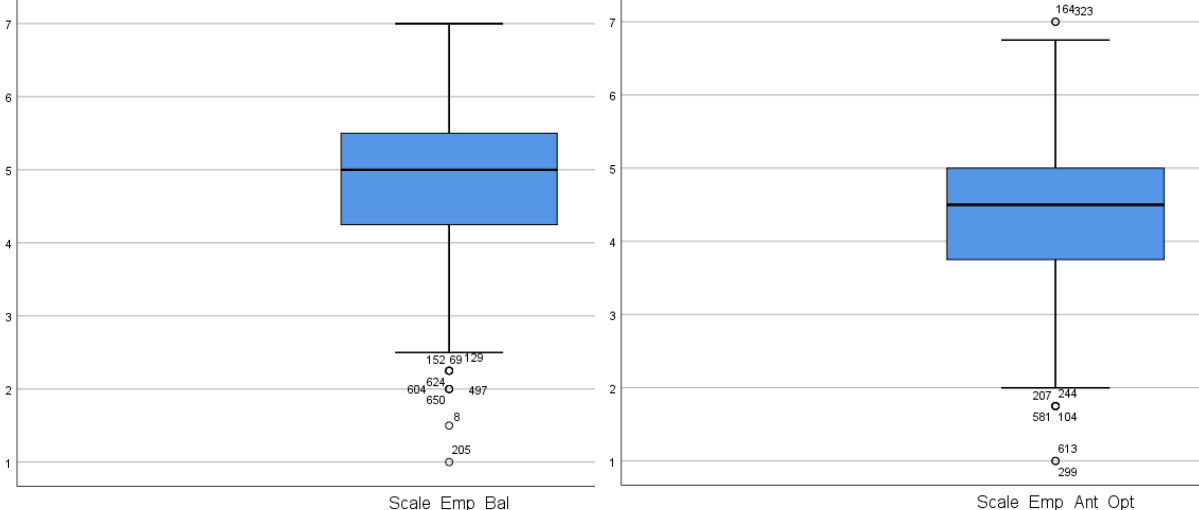
Appendix 1: Outliers

Commitment

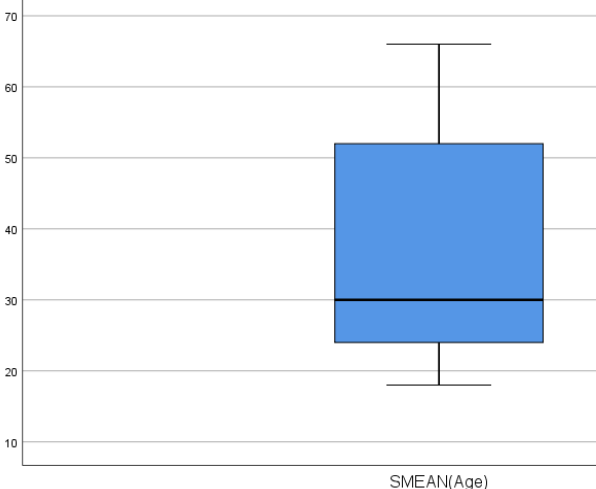


Employability





Control Variable



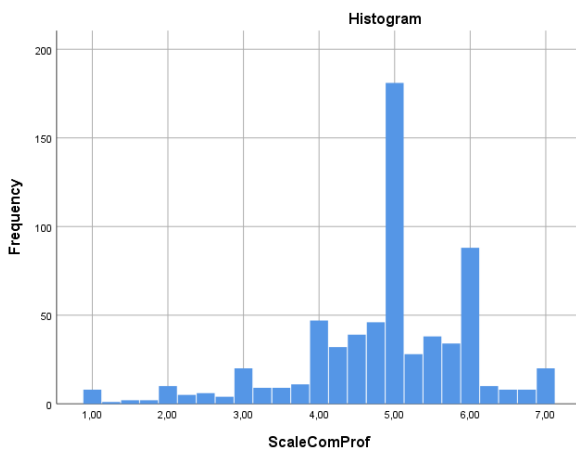
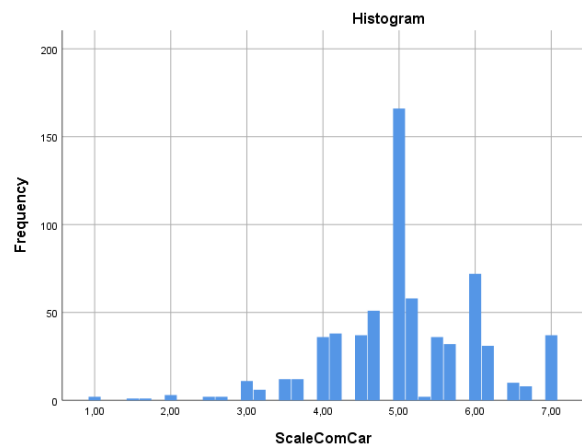
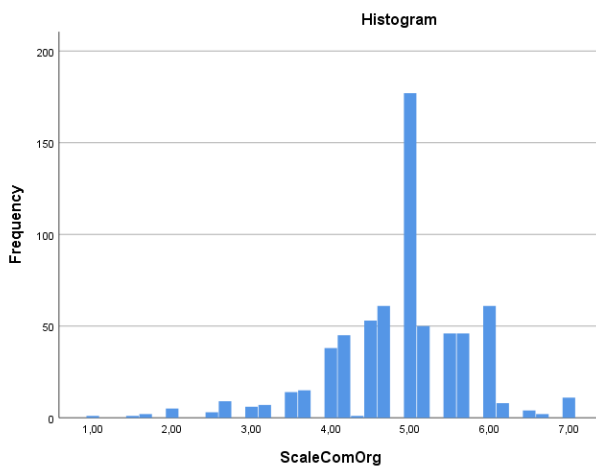
Appendix 2: Normality

Tests of Normality

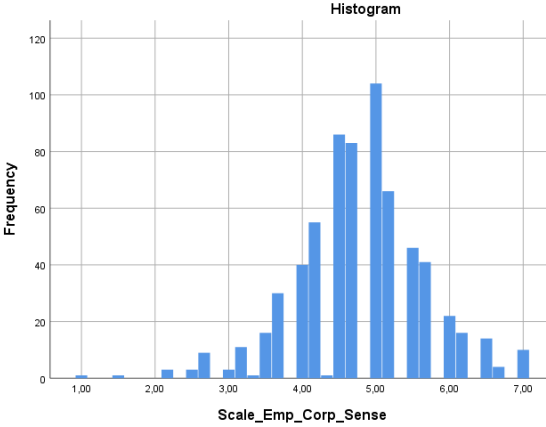
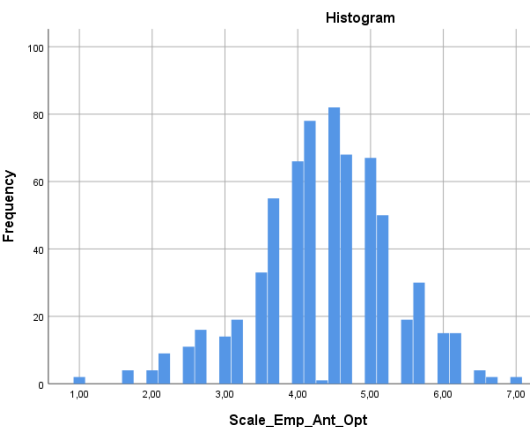
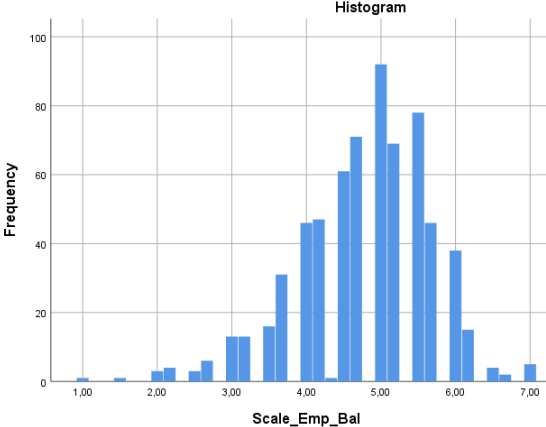
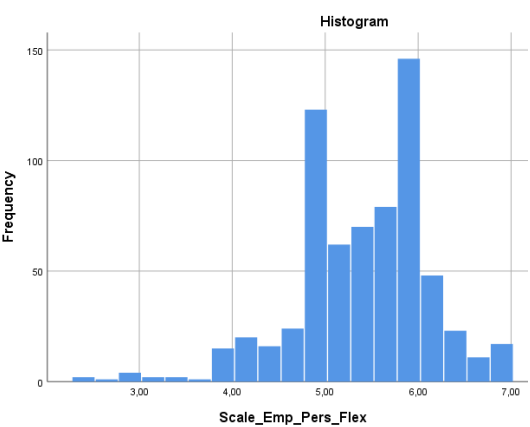
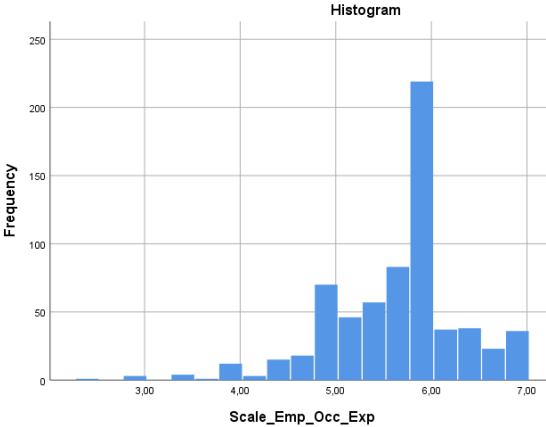
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Scale_Emp_Occ_Exp	,130	666	,000	,954	666	,000
Scale_Emp_Pers_Flex	,091	666	,000	,967	666	,000
Scale_Emp_Bal	,106	666	,000	,971	666	,000
Scale_Emp_Ant_Opt	,083	666	,000	,984	666	,000
Scale_Emp_Corp_Sense	,092	666	,000	,979	666	,000
ComOrg	,151	666	,000	,947	666	,000
ComCar	,131	666	,000	,959	666	,000
ComProf	,168	666	,000	,929	666	,000
SMEAN(Age)	,200	666	,000	,858	666	,000

a. Lilliefors Significance Correction

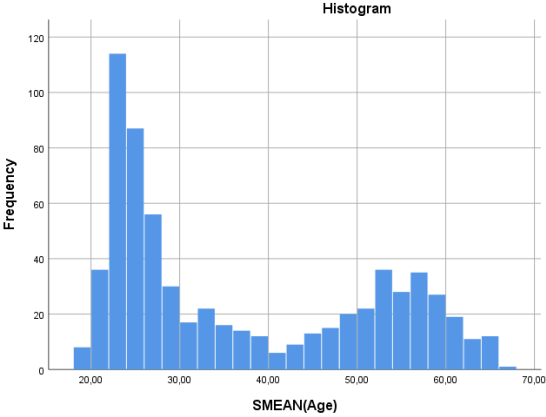
Commitment



Employability



Control Variable



Appendix 3: Psychometric Analyses – Commitment

Explorative Factor Analysis (orthogonal rotation): Commitment to Three Targets

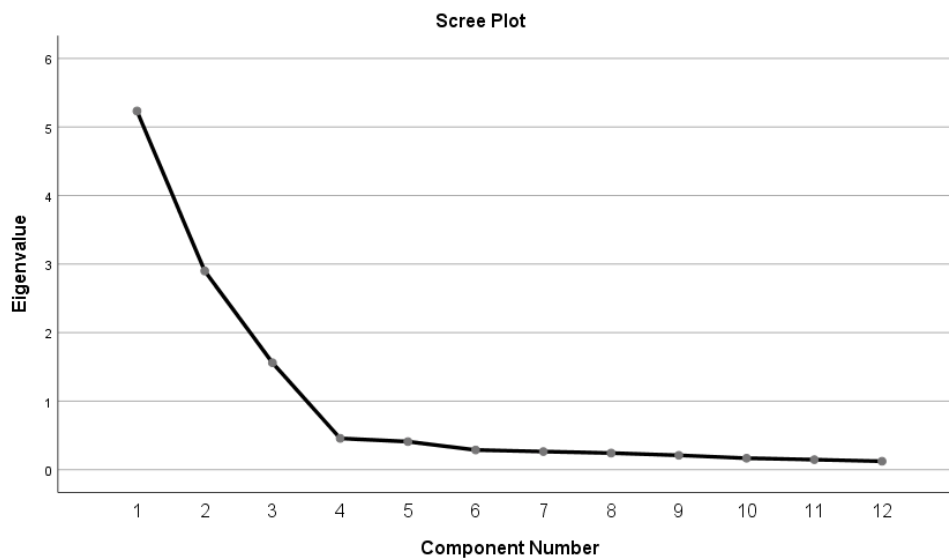
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,872
Bartlett's Test of Sphericity	Approx. Chi-Square	6370,008
	df	66
	Sig.	,000

Total Variance Explained

Component	Total	Initial Eigenvalues		Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
		% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5,233	43,609	43,609	5,233	43,609	43,609	3,415	28,461	28,461
2	2,900	24,163	67,772	2,900	24,163	67,772	3,191	26,590	55,051
3	1,560	13,001	80,772	1,560	13,001	80,772	3,087	25,722	80,772
4	,457	3,809	84,582						
5	,410	3,414	87,995						
6	,287	2,396	90,391						
7	,265	2,205	92,596						
8	,242	2,018	94,613						
9	,210	1,750	96,363						
10	,167	1,393	97,756						
11	,146	1,221	98,977						
12	,123	1,023	100,000						

Extraction Method: Principal Component Analysis.



Rotated Component Matrix^a

	Component		
	1	2	3
1. In hoeverre voelt u zich verantwoordelijk voor deze organisatie?			,796
2. In hoeverre hecht u belang aan deze organisatie?			,844
3. In hoeverre heeft u toewijding naar uw organisatie?			,866
4. In hoeverre voelt u zich verbonden met uw organisatie?			,849
1. In hoeverre voelt u zich verantwoordelijk naar uw carrière?		,809	
2. In hoeverre hecht u belang aan uw carrière?		,914	
3. In hoeverre heeft u toewijding naar uw carrière?		,921	
4. In hoeverre voelt u zich verbonden met uw carrière?		,896	
1. In hoeverre voelt u zich verantwoordelijk voor dit beroep / vakgebied?	,869		
2. In hoeverre hecht u belang aan dit beroep / vakgebied?	,905		
3. In hoeverre heeft u toewijding naar dit beroep / vakgebied?	,897		
4. In hoeverre voelt u zich verbonden met dit beroep / vakgebied?	,895		

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 4 iterations.

Reliability Analysis: Commitment to the Organization**Reliability Statistics**

Cronbach's Alpha	N of Items
,893	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. In hoeverre voelt u zich verantwoordelijk voor deze organisatie?	14,94	6,794	,707	,891
2. In hoeverre hecht u belang aan deze organisatie?	14,68	7,385	,789	,855
3. In hoeverre heeft u toewijding naar uw organisatie?	14,54	7,401	,806	,850
4. In hoeverre voelt u zich verbonden met uw organisatie?	14,72	7,020	,780	,856

Reliability Analysis: Commitment to the Career**Reliability Statistics**

Cronbach's Alpha	N of Items
,914	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. In hoeverre voelt u zich verantwoordelijk naar uw carrière?	15,15	9,231	,704	,921
2. In hoeverre hecht u belang aan uw carrière?	15,44	8,110	,833	,878
3. In hoeverre heeft u toewijding naar uw carrière?	15,36	8,436	,856	,871
4. In hoeverre voelt u zich verbonden met uw carrière?	15,40	8,398	,827	,880

Reliability Analysis: Commitment to the Profession**Reliability Statistics**

Cronbach's Alpha	N of Items
,944	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. In hoeverre voelt u zich verantwoordelijk voor dit beroep / vakgebied?	14,83	11,390	,820	,942
2. In hoeverre hecht u belang aan dit beroep / vakgebied?	14,60	11,289	,880	,922
3. In hoeverre heeft u toewijding naar dit beroep / vakgebied?	14,55	11,738	,881	,923
4. In hoeverre voelt u zich verbonden met dit beroep / vakgebied?	14,59	11,559	,888	,920

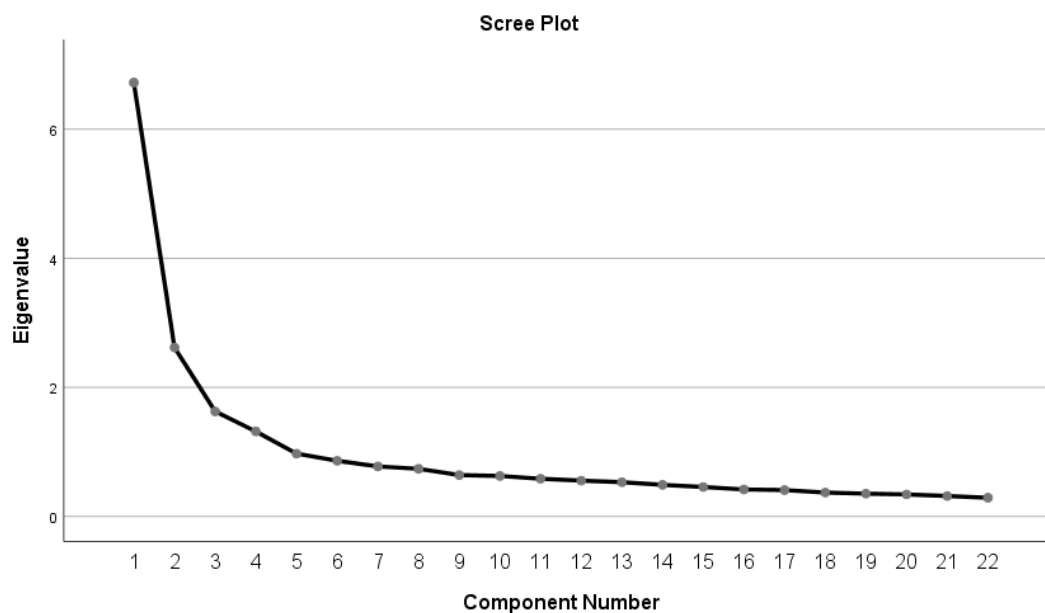
Appendix 4: Psychometric Analyses – Employability**Exploratory Factor Analysis (orthogonal rotation): Employability****KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,897
Bartlett's Test of Sphericity	Approx. Chi-Square	5566,029
	df	231
	Sig.	,000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared			Rotation Sums of Squared		
	Total	% of Variance	Cumulative %	Loadings			Loadings		
				Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6,722	30,555	30,555	6,722	30,555	30,555	4,129	18,768	18,768
2	2,617	11,894	42,449	2,617	11,894	42,449	3,049	13,858	32,626
3	1,627	7,395	49,844	1,627	7,395	49,844	2,729	12,403	45,028
4	1,316	5,982	55,825	1,316	5,982	55,825	2,375	10,797	55,825
5	,973	4,421	60,247						
6	,861	3,916	64,162						
7	,774	3,518	67,680						
8	,737	3,352	71,032						
9	,641	2,912	73,944						
10	,627	2,849	76,792						
11	,584	2,653	79,446						
12	,554	2,518	81,964						
13	,530	2,410	84,374						
14	,489	2,223	86,596						
15	,456	2,072	88,668						
16	,418	1,898	90,566						
17	,408	1,854	92,420						
18	,370	1,680	94,100						
19	,353	1,604	95,704						
20	,340	1,547	97,250						
21	,315	1,434	98,684						
22	,289	1,316	100,000						

Extraction Method: Principal Component Analysis.

**Rotated Component Matrix^a**

	Component			
	1	2	3	4
Ik was in het afgelopen jaar, over het algemeen, _____ in staat om mijn werkzaamheden secuur en met weinig fouten uit te voeren.		,757		
Ik was in het afgelopen jaar, over het algemeen, _____ in staat om snel bes		,760		
Ik ben over het algemeen _____ in staat om hoofd- en bijzaken te onderscheiden en prioriteiten te stellen		,759		
Ik acht mezelf _____ in staat om de ‘voors en tegens’ van bepaalde keuzes omtrent werkmethode, materialen en technieken op mijn gebied af te wegen en te beredeneren.		,719		
Mijn vaardigheden zijn kwalitatief gezien van _____ niveau.	,309	,501		
Ik pas me _____ aan veranderingen op mijn werk aan			,786	
Ik pas me _____ aan ontwikkelingen binnen mijn organisatie aan.		,318	,655	
Ik speel over het algemeen _____ in op veranderingen in mijn werk			,712	
Ik streef ernaar dat mijn taken pakket _____ gevarieerd is.			,513	
Ik sta _____ tegenover veranderingen in mijn functie.			,693	

Mijn werk en privéleven zijn _____ in balans.		,337		,619
Mijn werkinspanningen zijn _____ in verhouding met wat ik ervoor terug krijg (primaire en secundaire arbeidsvoorwaarden, werkplezier)				,745
De tijd die ik besteed aan mijn werk en loopbaanontwikkelingen enerzijds, en mijn persoonlijke ontwikkeling en ontspanning anderzijds, is _____ evenwichtig verdeeld.				,846
De mate waarin ik gericht ben op het bereiken van mijn eigen werkdoelen is _____ in balans met de mate waarin ik collega's ondersteun.				,649
Ik besteed _____ tijd aan verbetering van die kennis en vaardigheden die mijn werk ten goede komen.	,555			,310
Ik besteed _____ bewust aandacht aan het toepassen van door mij nieuw verworven kennis en vaardigheden.	,710			
Ik ben in het afgelopen jaar _____ actief bezig geweest met het verkennen van aangrenzende gebieden om te zien waar succes geboekt zou kunnen worden.	,747			
Ik heb in het afgelopen jaar _____ met mijn werk aangesloten bij de nieuwste ontwikkelingen op mijn gebied.	,714			
Ik ondersteun _____ de bedrijfsprocessen	,557			
In mijn werk neem ik _____ het initiatief om verantwoordelijkheden met mijn collega's te delen.	,703			
Ik neem _____ deel aan het vormen van een gemeenschappelijke visie met betrekking tot waarden en doelen.	,705			
Ik deel mijn ervaring en kennis _____ met anderen.	,689			

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 5 iterations.

Confirmatory Factor Analysis (oblique rotation): Employability**KMO and Bartlett's Test**

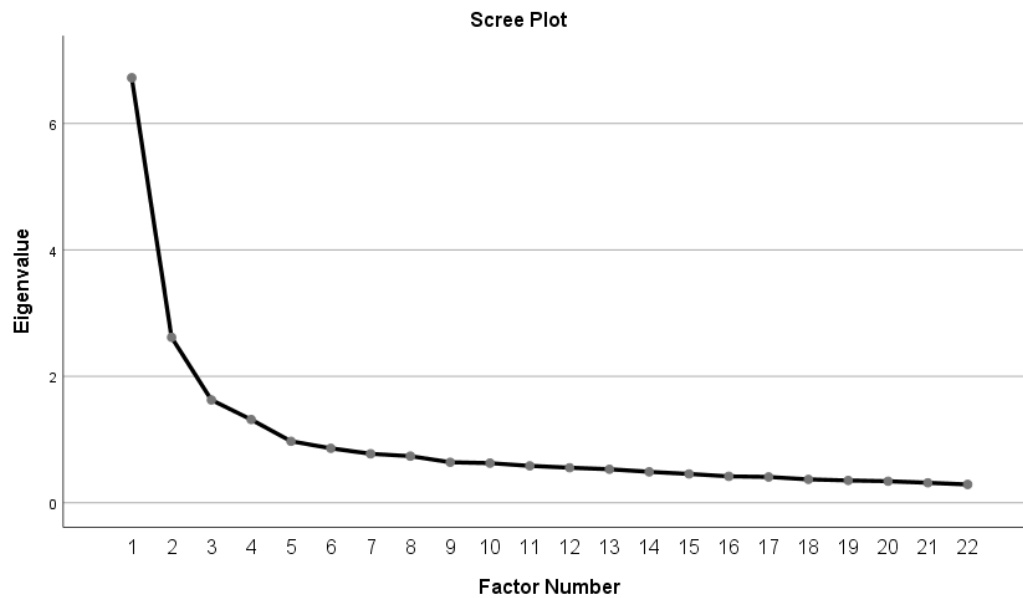
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,897
Bartlett's Test of Sphericity	Approx. Chi-Square	5566,029
	df	231
	Sig.	,000

Total Variance Explained

Factor	Total	Initial Eigenvalues		Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
		% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	6,722	30,555	30,555	6,236	28,344	28,344	4,374
2	2,617	11,894	42,449	2,138	9,719	38,063	4,496
3	1,627	7,395	49,844	1,165	5,296	43,359	4,636
4	1,316	5,982	55,825	,859	3,903	47,262	2,460
5	,973	4,421	60,247	,487	2,215	49,476	4,094
6	,861	3,916	64,162				
7	,774	3,518	67,680				
8	,737	3,352	71,032				
9	,641	2,912	73,944				
10	,627	2,849	76,792				
11	,584	2,653	79,446				
12	,554	2,518	81,964				
13	,530	2,410	84,374				
14	,489	2,223	86,596				
15	,456	2,072	88,668				
16	,418	1,898	90,566				
17	,408	1,854	92,420				
18	,370	1,680	94,100				
19	,353	1,604	95,704				
20	,340	1,547	97,250				
21	,315	1,434	98,684				
22	,289	1,316	100,000				

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

**Pattern Matrix^a**

	Factor				
	1	2	3	4	5
Ik was in het afgelopen jaar, over het algemeen, _____ in staat om mijn werkzaamheden secuur en met weinig fouten uit te voeren.	,731				
Ik was in het afgelopen jaar, over het algemeen, _____ in staat om snel bes	,764				
Ik ben over het algemeen _____ in staat om hoofd- en bijzaken te onderscheiden en prioriteiten te stellen	,784				
Ik acht mezelf _____ in staat om de 'voors en tegens' van bepaalde keuzes omtrent werkmethoden, materialen en technieken op mijn gebied af te wegen en te beredeneren.	,704				
Mijn vaardigheden zijn kwalitatief gezien van _____ niveau.	,372				
Ik pas me _____ aan veranderingen op mijn werk aan			,909		
Ik pas me _____ aan ontwikkelingen binnen mijn organisatie aan.			,633		
Ik speel over het algemeen _____ in op veranderingen in mijn werk			,712		
Ik streef ernaar dat mijn taken pakket _____ gevarieerd is.			,329		
Ik sta _____ tegenover veranderingen in mijn functie.			,583		
Mijn werk en privéleven zijn _____ in balans.				,507	

Mijn werkinspanningen zijn _____ in verhouding met wat ik ervoor terug krijg (primaire en secundaire arbeidsvoorwaarden, werkplezier)					,603
De tijd die ik besteed aan mijn werk en loopbaanontwikkelingen enerzijds, en mijn persoonlijke ontwikkeling en ontspanning anderzijds, is _____ evenwichtig verdeeld.					,885
De mate waarin ik gericht ben op het bereiken van mijn eigen werkdoelen is _____ in balans met de mate waarin ik collega's ondersteun.					,521
Ik besteed _____ tijd aan verbetering van die kennis en vaardigheden die mijn werk ten goede komen.					,764
Ik besteed _____ bewust aandacht aan het toepassen van door mij nieuw verworven kennis en vaardigheden.					,510
Ik ben in het afgelopen jaar _____ actief bezig geweest met het verkennen van aangrenzende gebieden om te zien waar succes geboekt zou kunnen worden.					,650
Ik heb in het afgelopen jaar _____ met mijn werk aangesloten bij de nieuwste ontwikkelingen op mijn gebied.					,610
Ik ondersteun _____ de bedrijfsprocessen			,502		
In mijn werk neem ik _____ het initiatief om verantwoordelijkheden met mijn collega's te delen.			,896		
Ik neem _____ deel aan het vormen van een gemeenschappelijke visie met betrekking tot waarden en doelen.			,777		
Ik deel mijn ervaring en kennis _____ met anderen.			,579		

Extraction Method: Principal Axis Factoring.

Rotation Method: Promax with Kaiser Normalization.^a

a. Rotation converged in 6 iterations.

Reliability Analysis: Employability – Occupational Expertise**Reliability Statistics**

Cronbach's Alpha	N of Items
,812	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Ik was in het afgelopen jaar, over het algemeen, _____ in staat om mijn werkzaamheden secuur en met weinig fouten uit te voeren.	22,41	7,800	,623	,769
Ik was in het afgelopen jaar, over het algemeen, _____ in staat om snel bes	22,57	7,330	,662	,756
Ik ben over het algemeen _____ in staat om hoofd- en bijzaken te onderscheiden en prioriteiten te stellen	22,53	7,254	,658	,757
Ik acht mezelf _____ in staat om de 'voors en tegens' van bepaalde keuzes omtrent werkmethode, materialen en technieken op mijn gebied af te wegen en te beredeneren.	22,51	7,811	,631	,767
Mijn vaardigheden zijn kwalitatief gezien van _____ niveau.	22,77	8,617	,433	,822

Reliability Analysis: Employability – Personal Flexibility**Reliability Statistics**

Cronbach's Alpha	N of Items
,784	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Ik pas me _____ aan veranderingen op mijn werk aan	21,58	8,130	,674	,707
Ik pas me _____ aan ontwikkelingen binnen mijn organisatie aan.	21,38	8,806	,579	,740
Ik speel over het algemeen _____ in op veranderingen in mijn werk	21,94	7,902	,653	,712
Ik streef ernaar dat mijn taken pakket _____ gevarieerd is.	21,52	9,098	,370	,810
Ik sta _____ tegenover veranderingen in mijn functie.	21,82	8,459	,563	,743

Reliability Analysis: Employability – Balance**Reliability Statistics**

Cronbach's Alpha	N of Items
,743	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Mijn werk en privéleven zijn _____ in balans.	14,16	8,116	,487	,711
Mijn werkinspanningen zijn _____ in verhouding met wat ik er voor terug krijg (primaire en secundaire arbeidsvoorwaarden, werkplezier)	14,52	7,711	,522	,692
De tijd die ik besteed aan mijn werk en loopbaanontwikkelingen enerzijds, en mijn persoonlijke ontwikkeling en ontspanning anderzijds, is _____ evenwichtig verdeeld.	14,67	6,829	,672	,601
De mate waarin ik gericht ben op het bereiken van mijn eigen werkdoelen is _____ in balans met de mate waarin ik collega's ondersteun.	14,44	8,316	,471	,719

Reliability Analysis: Employability – Anticipation and Optimization**Reliability Statistics**

Cronbach's Alpha	N of Items
,790	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Ik besteed _____ tijd aan verbetering van die kennis en vaardigheden die mijn werk ten goede komen.	13,22	9,191	,528	,772
Ik besteed _____ bewust aandacht aan het toepassen van door mij nieuw verworven kennis en vaardigheden.	12,81	9,771	,576	,756

Ik ben in het afgelopen jaar _____ actief bezig geweest met het verkennen van aangrenzende gebieden om te zien waar succes geboekt zou kunnen worden.	13,52	7,492	,663	,705
Ik heb in het afgelopen jaar _____ met mijn werk aangesloten bij de nieuwste ontwikkelingen op mijn gebied.	13,38	7,833	,654	,709

Reliability Analysis: Employability – Corporate Sense

Reliability Statistics

Cronbach's Alpha	N of Items
,783	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Ik ondersteun _____ de bedrijfsprocessen	14,45	7,388	,516	,766
In mijn werk neem ik _____ het initiatief om verantwoordelijkheden met mijn collega's te delen.	14,50	6,946	,664	,692
Ik neem _____ deel aan het vormen van een gemeenschappelijke visie met betrekking tot waarden en doelen.	14,77	6,267	,623	,715
Ik deel mijn ervaring en kennis _____ met anderen.	14,20	7,817	,573	,741

Appendix 5: Regression Analyses

Commitment to the Organization

Model Summary^c

Model	R	Adjusted R Square	Std. Error of the Estimate	Change Statistics			Sig. F Change	Durbin-Watson
				R Square Change	F Change	df1		
1	,351 ^a	,123	,82581	,123	7,007	13	647	,000
2	,541 ^b	,293	,74441	,170	30,846	5	642	,000

a. Predictors: (Constant), DummySideJob, DummyWOMas, DummyNoEd, DummyTransgender, DummyLBO_VBO_VMBO, DummyPhD, DummyMAVO, DummyMales, DummyHAVO_VWO, DummyMBO, Mijn contract bij deze organisatie is, DummyParttime, Zscore: SMEAN(Age)

b. Predictors: (Constant), DummySideJob, DummyWOMas, DummyNoEd, DummyTransgender, DummyLBO_VBO_VMBO, DummyPhD, DummyMAVO, DummyMales, DummyHAVO_VWO, DummyMBO, Mijn contract bij deze organisatie is, DummyParttime, Zscore: SMEAN(Age), Zscore(Scale_Emp_Pers_Flex), Zscore(Scale_Emp_Bal), Zscore(Scale_Emp_Corp_Sense), Zscore(Scale_Emp_Occ_Exp), Zscore(Scale_Emp_Ant_Opt)

c. Dependent Variable: ComOrg

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	62,119	13	4,778	7,007	,000 ^b
	Residual	441,225	647	,682		
	Total	503,344	660			
2	Regression	147,584	18	8,199	14,796	,000 ^c
	Residual	355,760	642	,554		
	Total	503,344	660			

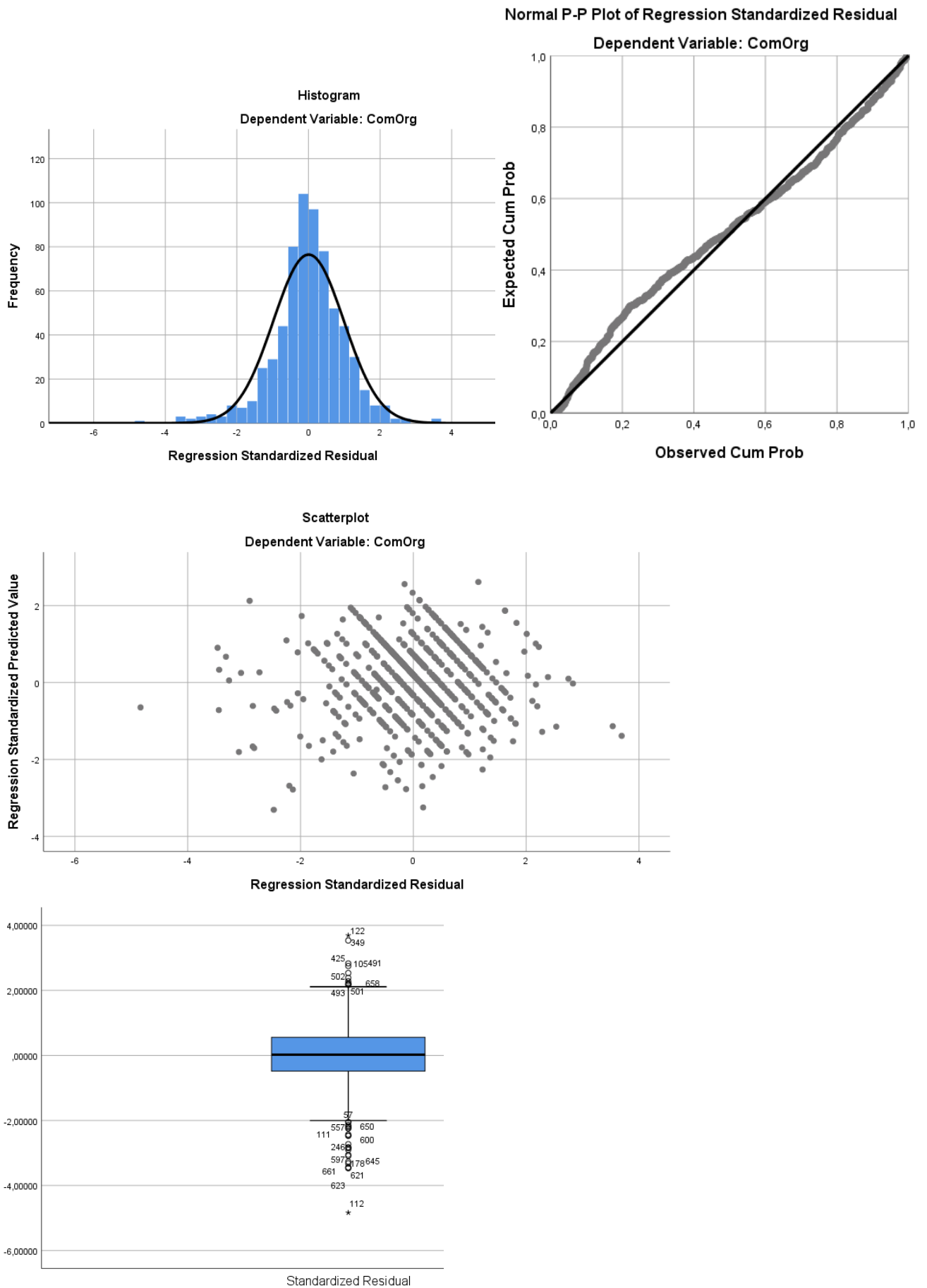
a. Dependent Variable: ComOrg

b. Predictors: (Constant), DummySideJob, DummyWOMas, DummyNoEd, DummyTransgender, DummyLBO_VBO_VMBO, DummyPhD, DummyMAVO, DummyMales, DummyHAVO_VWO, DummyMBO, Mijn contract bij deze organisatie is, DummyParttime, Zscore: SMEAN(Age)

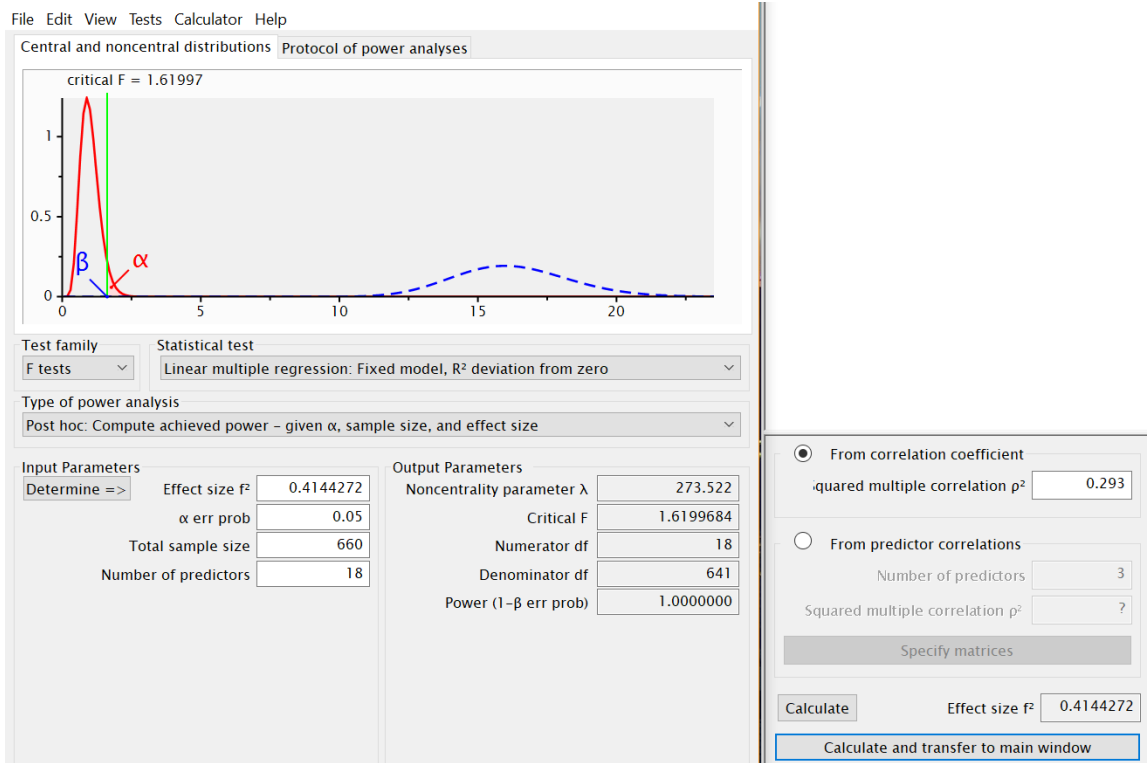
c. Predictors: (Constant), DummySideJob, DummyWOMas, DummyNoEd, DummyTransgender, DummyLBO_VBO_VMBO, DummyPhD, DummyMAVO, DummyMales, DummyHAVO_VWO, DummyMBO, Mijn contract bij deze organisatie is, DummyParttime, Zscore: SMEAN(Age), Zscore(Scale_Emp_Pers_Flex), Zscore(Scale_Emp_Bal), Zscore(Scale_Emp_Corp_Sense), Zscore(Scale_Emp_Occ_Exp), Zscore(Scale_Emp_Ant_Opt)

		Coefficients ^a					Collinearity Statistics	
		Unstandardized Coefficients		Standardized Coefficients				
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	5,494	,130		42,361	,000		
	Zscore: SMEAN(Age)	,050	,043	,057	1,145	,253	,547	1,827
	DummyMales	,046	,073	,025	,620	,536	,851	1,176
	DummyTransgender	-1,381	,598	-,087	-2,310	,021	,959	1,043
	DummyNoEd	-,730	,591	-,046	-1,234	,218	,985	1,015
	DummyLBO_VBO_VMBO	,298	,420	,026	,709	,479	,979	1,022
	DummyMAVO	,102	,234	,017	,435	,664	,916	1,092
	DummyMBO	-,063	,097	-,026	-,647	,518	,829	1,206
	DummyHAVO_VWO	-,282	,116	-,097	-2,430	,015	,859	1,164
	DummyWomas	-,057	,083	-,028	-,688	,492	,834	1,199
	DummyPhD	-,182	,282	-,024	-,647	,518	,976	1,025
	Contract	-,352	,079	-,196	-4,457	,000	,701	1,427
	DummyParttime	,001	,081	,001	,018	,985	,693	1,443
	DummySideJob	-,289	,098	-,135	-2,950	,003	,644	1,553
2	(Constant)	5,289	,120		44,137	,000		
	Zscore: SMEAN(Age)	,017	,040	,020	,429	,668	,531	1,882
	DummyMales	,037	,067	,020	,561	,575	,835	1,198
	DummyTransgender	-1,087	,545	-,068	-1,995	,047	,938	1,066
	DummyNoEd	-,806	,535	-,051	-1,506	,132	,979	1,022
	DummyLBO_VBO_VMBO	,144	,379	,013	,379	,705	,976	1,025
	DummyMAVO	,318	,215	,052	1,480	,139	,884	1,131
	DummyMBO	-,042	,089	-,017	-,469	,639	,811	1,233
	DummyHAVO_VWO	-,170	,106	-,058	-1,605	,109	,838	1,193
	DummyWomas	-,048	,075	-,023	-,636	,525	,830	1,204
	DummyPhD	-,251	,255	-,033	-,982	,326	,967	1,034
	Contract	-,233	,072	-,129	-3,215	,001	,679	1,473
	DummyParttime	,034	,074	,018	,457	,648	,680	1,471
	DummySideJob	-,238	,094	-,112	-2,530	,012	,565	1,768
	Zscore(Emp_Occ_Exp)	,020	,037	,023	,559	,577	,628	1,592
	Zscore(Emp_Pers_Flex)	5,902E-6	,038	,000	,000	1,000	,567	1,762
	Zscore(Emp_Bal)	,152	,033	,175	4,609	,000	,767	1,304
	Zscore(Emp_Ant_Opt)	,081	,040	,093	2,036	,042	,531	1,881
Zscore(Emp_Corp_Sense)	,249	,040	,286	6,280	,000	,532	1,880	

a. Dependent Variable: ComOrg



Power Analysis



Commitment to the Career**Model Summary^c**

Model	R	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change	Durbin-Watson
					F Change	df1	df2		
1	,395 ^a	,156	,89570	,156	9,194	13	647	,000	
2	,538 ^b	,290	,82497	,134	24,140	5	642	,000	2,027

a. Predictors: (Constant), DummySideJob, DummyWOMas, DummyNoEd, DummyTransgender, DummyLBO_VBO_VMBO, DummyPhD, DummyMAVO, DummyMales, DummyHAVO_VWO, DummyMBO, Mijn contract bij deze organisatie is, DummyParttime, Zscore: SMEAN(Age)

b. Predictors: (Constant), DummySideJob, DummyWOMas, DummyNoEd, DummyTransgender, DummyLBO_VBO_VMBO, DummyPhD, DummyMAVO, DummyMales, DummyHAVO_VWO, DummyMBO, Mijn contract bij deze organisatie is, DummyParttime, Zscore: SMEAN(Age), Zscore(Scale_Emp_Pers_Flex), Zscore(Scale_Emp_Bal), Zscore(Scale_Emp_Corp_Sense), Zscore(Scale_Emp_Occ_Exp), Zscore(Scale_Emp_Ant_Opt)

c. Dependent Variable: ComCar

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	95,889	13	7,376	9,194	,000 ^b
	Residual	519,079	647	,802		
	Total	614,967	660			
2	Regression	178,035	18	9,891	14,533	,000 ^c
	Residual	436,932	642	,681		
	Total	614,967	660			

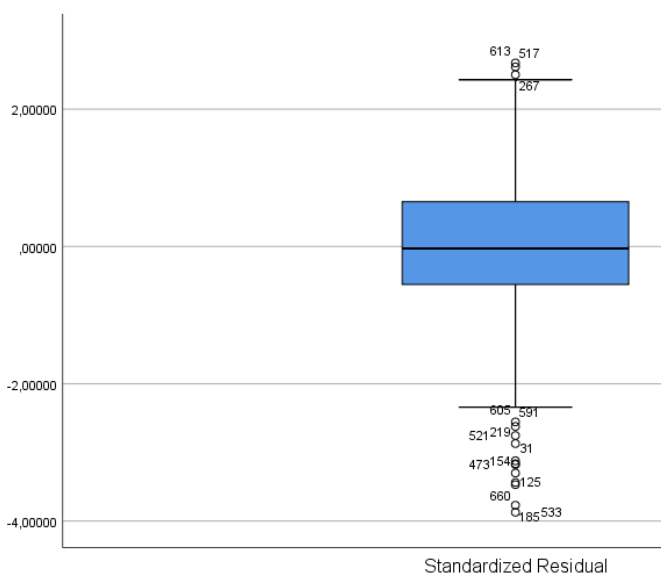
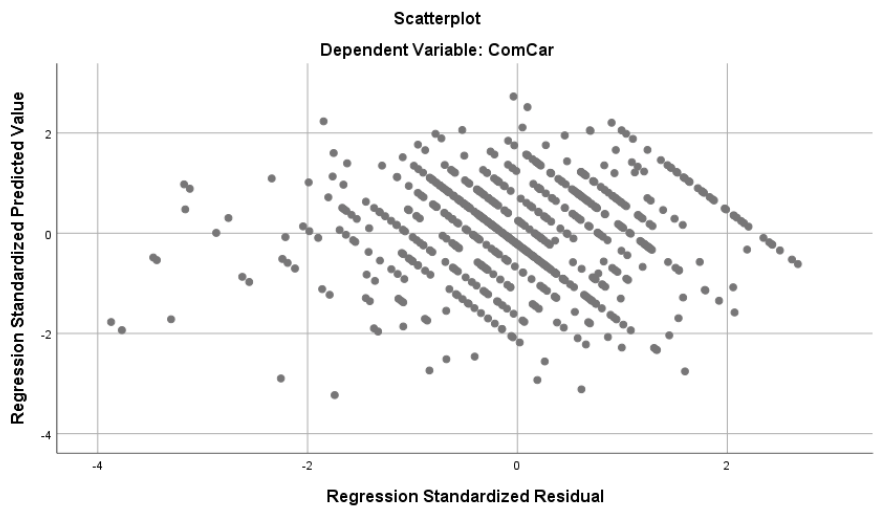
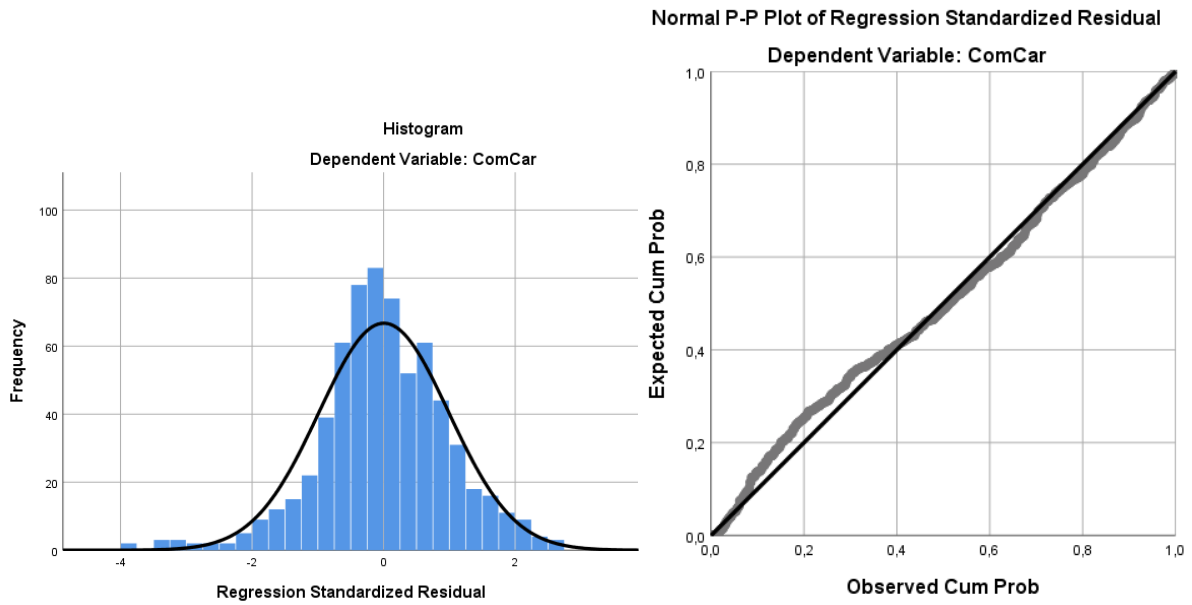
a. Dependent Variable: ComCar

b. Predictors: (Constant), DummySideJob, DummyWOMas, DummyNoEd, DummyTransgender, DummyLBO_VBO_VMBO, DummyPhD, DummyMAVO, DummyMales, DummyHAVO_VWO, DummyMBO, Mijn contract bij deze organisatie is, DummyParttime, Zscore: SMEAN(Age)

c. Predictors: (Constant), DummySideJob, DummyWOMas, DummyNoEd, DummyTransgender, DummyLBO_VBO_VMBO, DummyPhD, DummyMAVO, DummyMales, DummyHAVO_VWO, DummyMBO, Mijn contract bij deze organisatie is, DummyParttime, Zscore: SMEAN(Age), Zscore(Scale_Emp_Pers_Flex), Zscore(Scale_Emp_Bal), Zscore(Scale_Emp_Corp_Sense), Zscore(Scale_Emp_Occ_Exp), Zscore(Scale_Emp_Ant_Opt)

		Coefficients ^a					Collinearity Statistics	
Model		Unstandardized Coefficients		Standardized	t	Sig.	Tolerance	VIF
		B	Std. Error	Beta				
1	(Constant)	5,231	,141		37,188	,000		
	Zscore: SMEAN(Age)	-,248	,047	-,257	-5,269	,000	,547	1,827
	DummyMales	,106	,080	,052	1,332	,183	,851	1,176
	DummyTransgender	-,295	,648	-,017	-,456	,649	,959	1,043
	DummyNoEd	-,944	,641	-,054	-1,472	,142	,985	1,015
	DummyLBO_VBO_VMBO	,251	,456	,020	,550	,583	,979	1,022
	DummyMAVO	-,671	,254	-,100	-2,643	,008	,916	1,092
	DummyMBO	-,224	,105	-,084	-2,128	,034	,829	1,206
	DummyHAVO_VWO	-,420	,126	-,130	-3,336	,001	,859	1,164
	DummyWomas	,112	,090	,049	1,240	,215	,834	1,199
	DummyPhD	,445	,305	,053	1,456	,146	,976	1,025
	Contract	-,013	,086	-,007	-,155	,876	,701	1,427
	DummyParttime	-,158	,088	-,078	-1,803	,072	,693	1,443
	DummySideJob	-,086	,106	-,036	-,805	,421	,644	1,553
	2	(Constant)	5,056	,133		38,068	,000	
Zscore: SMEAN(Age)		-,260	,044	-,269	-5,902	,000	,531	1,882
DummyMales		,085	,074	,042	1,154	,249	,835	1,198
DummyTransgender		,064	,604	,004	,105	,916	,938	1,066
DummyNoEd		-,992	,593	-,056	-1,674	,095	,979	1,022
DummyLBO_VBO_VMBO		,153	,420	,012	,363	,717	,976	1,025
DummyMAVO		-,460	,238	-,068	-1,936	,053	,884	1,131
DummyMBO		-,170	,098	-,064	-1,736	,083	,811	1,233
DummyHAVO_VWO		-,331	,117	-,102	-2,821	,005	,838	1,193
DummyWomas		,107	,083	,047	1,282	,200	,830	1,204
DummyPhD		,323	,283	,039	1,145	,253	,967	1,034
Contract		,072	,080	,036	,901	,368	,679	1,473
DummyParttime		-,112	,082	-,055	-1,367	,172	,680	1,471
DummySideJob		,049	,104	,021	,472	,637	,565	1,768
Zscore(Emp_Occ_Exp)		,054	,041	,056	1,333	,183	,628	1,592
Zscore(Emp_Pers_Flex)		,034	,043	,035	,792	,429	,567	1,762
Zscore(Emp_Bal)		,093	,037	,096	2,525	,012	,767	1,304
Zscore(Emp_Ant_Opt)		,257	,044	,267	5,843	,000	,531	1,881
Zscore(Emp_Corp_Sense)	,048	,044	,050	1,100	,272	,532	1,880	

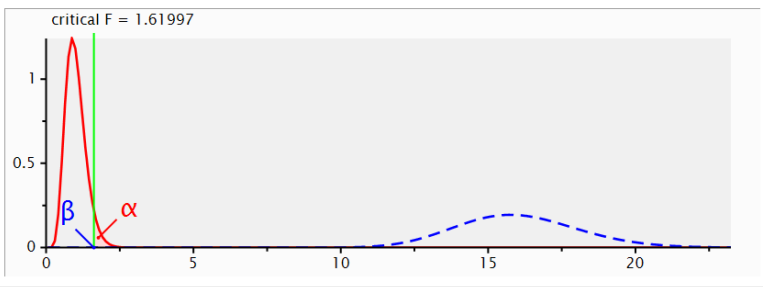
a. Dependent Variable: ComCar



Power Analysis

File Edit View Tests Calculator Help

Central and noncentral distributions Protocol of power analyses



critical F = 1.61997

Test family: F tests

Statistical test: Linear multiple regression: Fixed model, R² deviation from zero

Type of power analysis: Post hoc: Compute achieved power – given α , sample size, and effect size

Input Parameters		Output Parameters	
Determine =>	Effect size f ² : 0.4084507	Noncentrality parameter λ : 269.5775	
	α err prob: 0.05	Critical F: 1.6199684	
	Total sample size: 660	Numerator df: 18	
	Number of predictors: 18	Denominator df: 641	
		Power (1 - β err prob): 1.0000000	

From correlation coefficient
 Squared multiple correlation ρ^2 : 0.290

From predictor correlations
 Number of predictors: 3
 Squared multiple correlation ρ^2 : ?
 Specify matrices

Calculate Effect size f²: 0.4084507

Calculate and transfer to main window

Commitment to the Profession**Model Summary^c**

Model	R	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change	Durbin-Watson
					F Change	df1	df2		
1	,410 ^a	,168	,151	1,03661	,168	10,037	13	647	,000
2	,555 ^b	,308	,288	,94929	,140	25,901	5	642	,000

a. Predictors: (Constant), DummySideJob, DummyWOMas, DummyNoEd, DummyTransgender,

DummyLBO_VBO_VMBO, DummyPhD, DummyMAVO, DummyMales, DummyHAVO_VWO, DummyMBO, Mijn contract bij deze organisatie is, DummyParttime, Zscore: SMEAN(Age)

b. Predictors: (Constant), DummySideJob, DummyWOMas, DummyNoEd, DummyTransgender,

DummyLBO_VBO_VMBO, DummyPhD, DummyMAVO, DummyMales, DummyHAVO_VWO, DummyMBO, Mijn contract bij deze organisatie is, DummyParttime, Zscore: SMEAN(Age), Zscore(Scale_Emp_Pers_Flex),

Zscore(Scale_Emp_Bal), Zscore(Scale_Emp_Corp_Sense), Zscore(Scale_Emp_Occ_Exp), Zscore(Scale_Emp_Ant_Opt)

c. Dependent Variable: ComProf

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	140,213	13	10,786	10,037	,000 ^b
	Residual	695,239	647	1,075		
	Total	835,451	660			
2	Regression	256,916	18	14,273	15,839	,000 ^c
	Residual	578,535	642	,901		
	Total	835,451	660			

a. Dependent Variable: ComProf

b. Predictors: (Constant), DummySideJob, DummyWOMas, DummyNoEd, DummyTransgender,

DummyLBO_VBO_VMBO, DummyPhD, DummyMAVO, DummyMales, DummyHAVO_VWO, DummyMBO, Mijn contract bij deze organisatie is, DummyParttime, Zscore: SMEAN(Age)

c. Predictors: (Constant), DummySideJob, DummyWOMas, DummyNoEd, DummyTransgender,

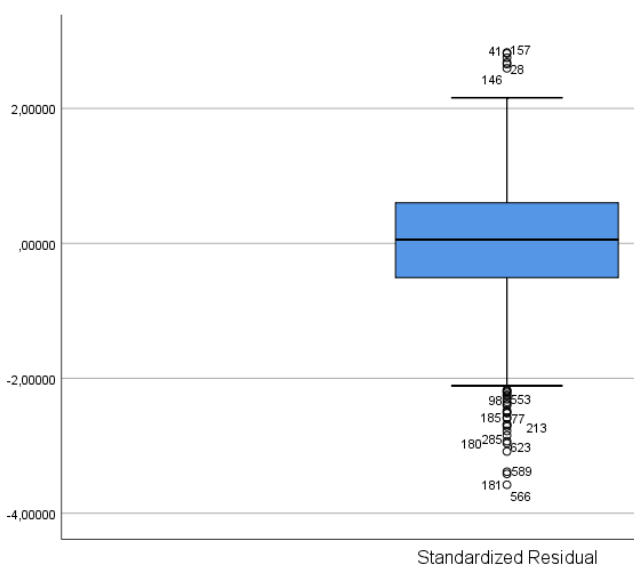
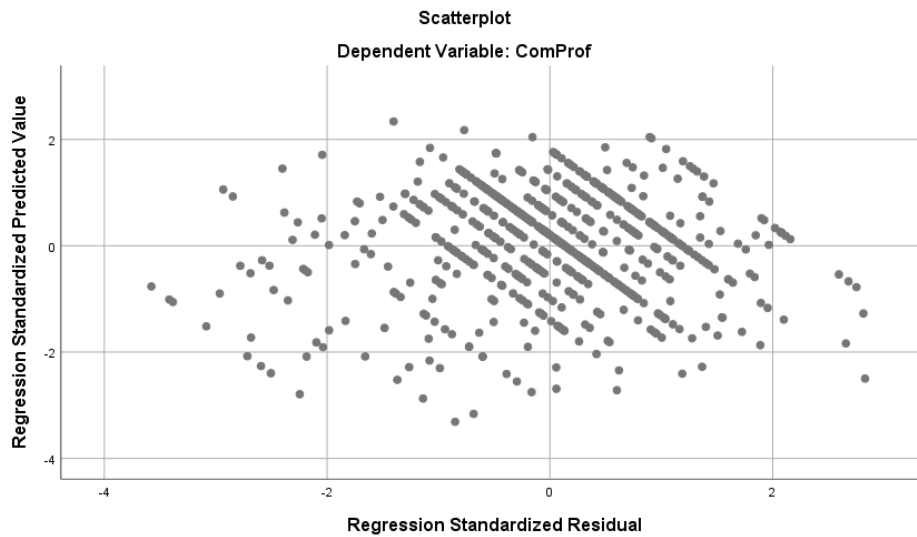
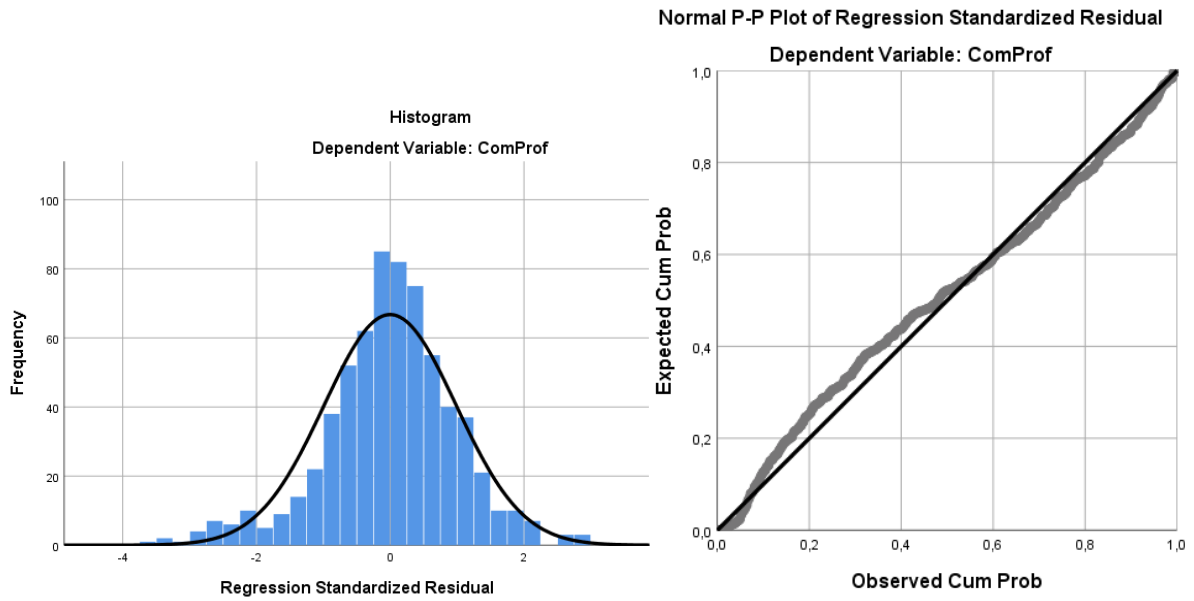
DummyLBO_VBO_VMBO, DummyPhD, DummyMAVO, DummyMales, DummyHAVO_VWO, DummyMBO, Mijn contract bij deze organisatie is, DummyParttime, Zscore: SMEAN(Age), Zscore(Scale_Emp_Pers_Flex),

Zscore(Scale_Emp_Bal), Zscore(Scale_Emp_Corp_Sense), Zscore(Scale_Emp_Occ_Exp),

Zscore(Scale_Emp_Ant_Opt)

		Coefficients ^a					Collinearity Statistics	
		Unstandardized Coefficients		Standardized Coefficients				
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	5,484	,163		33,685	,000		
	Zscore: SMEAN(Age)	,106	,055	,094	1,941	,053	,547	1,827
	DummyMales	-,110	,092	-,046	-1,188	,235	,851	1,176
	DummyTransgender	-1,541	,750	-,075	-2,054	,040	,959	1,043
	DummyNoEd	-1,542	,742	-,075	-2,077	,038	,985	1,015
	DummyLBO_VBO_VMBO	,423	,527	,029	,803	,422	,979	1,022
	DummyMAVO	,048	,294	,006	,162	,871	,916	1,092
	DummyMBO	,003	,122	,001	,021	,984	,829	1,206
	DummyHAVO_VWO	-,255	,146	-,068	-1,749	,081	,859	1,164
	DummyWomas	-,001	,104	,000	-,012	,990	,834	1,199
	DummyPhD	,476	,354	,049	1,345	,179	,976	1,025
	Contract	-,276	,099	-,119	-2,785	,006	,701	1,427
	DummyParttime	-,032	,102	-,013	-,310	,757	,693	1,443
	DummySideJob	-,734	,123	-,267	-5,969	,000	,644	1,553
	2	(Constant)	5,331	,153		34,881	,000	
Zscore: SMEAN(Age)		,109	,051	,097	2,159	,031	,531	1,882
DummyMales		-,129	,085	-,055	-1,519	,129	,835	1,198
DummyTransgender		-1,259	,695	-,061	-1,813	,070	,938	1,066
DummyNoEd		-1,482	,682	-,072	-2,172	,030	,979	1,022
DummyLBO_VBO_VMBO		,318	,484	,022	,658	,511	,976	1,025
DummyMAVO		,188	,274	,024	,686	,493	,884	1,131
DummyMBO		,059	,113	,019	,524	,600	,811	1,233
DummyHAVO_VWO		-,215	,135	-,057	-1,593	,112	,838	1,193
DummyWomas		-,008	,096	-,003	-,083	,934	,830	1,204
DummyPhD		,351	,325	,036	1,080	,280	,967	1,034
Contract		-,218	,092	-,094	-2,365	,018	,679	1,473
DummyParttime		,030	,094	,013	,320	,749	,680	1,471
DummySideJob		-,520	,120	-,189	-4,330	,000	,565	1,768
Zscore(Emp_Occ_Exp)		-,059	,047	-,053	-1,267	,206	,628	1,592
Zscore(Emp_Pers_Flex)		,048	,049	,043	,978	,328	,567	1,762
Zscore(Emp_Bal)		,131	,042	,117	3,112	,002	,767	1,304
Zscore(Emp_Ant_Opt)		,396	,051	,352	7,807	,000	,531	1,881
Zscore(Emp_Corp_Sense)		-,012	,051	-,011	-,246	,806	,532	1,880

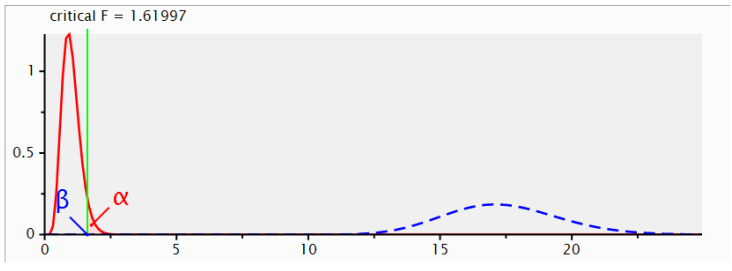
a. Dependent Variable: ComProf



Power Analysis

File Edit View Tests Calculator Help

Central and noncentral distributions Protocol of power analyses



critical F = 1.61997

Test family: F tests

Statistical test: Linear multiple regression: Fixed model, R² deviation from zero

Type of power analysis: Post hoc: Compute achieved power – given α , sample size, and effect size

Input Parameters		Output Parameters	
Determine =>	Effect size f^2	0.4450867	Noncentrality parameter λ
	α err prob	0.05	Critical F
	Total sample size	660	Numerator df
	Number of predictors	18	Denominator df
			Power (1- β err prob)
			1.0000000

From correlation coefficient
 Squared multiple correlation ρ^2 0.308

From predictor correlations
 Number of predictors 3
 Squared multiple correlation ρ^2 ?

Specify matrices

Calculate Effect size f^2 0.4450867

Calculate and transfer to main window

Close