

**The influence of organisational commitment and organisational identification on turnover intentions: integrating social exchange theory and social identity theory**

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After successfully completing my pre-master program it was finally time to focus on what it is really all about: doing a master's program. In September 2018 I started with the master's specialisation 'Strategic Human Resources Leadership' of Business Administration. After obtaining lots of knowledge in the courses, the greatest challenge of this specialisation started: writing a master thesis. I was completely inexperienced with the field of scientific research and specifically with workplace commitment. I chose a subject and research approach that I had never done before, so I did not make it an easy task for myself. I fully committed myself to this intense learning period with lots of ups and of course also some downs. However, these setbacks only made me more motivated to be the best version of myself. I am therefore very proud and slightly relieved that I can present the final version of my thesis to you: "The influence of organisational commitment and organisational identification on turnover intentions: integrating social exchange theory and social identity theory".

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## Abstract

The retention of employees has been recognized as a key concern for organisations nowadays. But there is still no complete consensus among scholars about what influences an individual's intention to leave. The goal of this study is to gain insight into how organisational commitment and organisational identification influence turnover intentions, respectively through social exchange theory and social identity theory. This research takes a different approach relative to previous scholars by conceptually integrating insights from both the social exchange framework and the social identity framework at an equivalent level in which commitment and identification are seen as two different types of workplace attachment.

Data was collected on behalf of the international research project 'Commitment in Global Context: measurement equivalence study'. Multiple regression analysis was used to test three hypotheses. The results revealed a negative relationship between organisational identification and turnover intentions as well as a negative relationship between organisational commitment and turnover intentions, both were in line with the expectations. No confirmation was however found for an interaction effect between organisational commitment and organisational identification.

Moreover, this thesis found evidence that the conceptual integration of insights from social exchange theory and social identity theory actually provides more insight into intentions to leave, than when they would have been studied in isolation. Social exchange theory and social identity theory are therefore complementary in explaining turnover intentions.

By investigating these relationships this study contributes to literature on turnover intentions, the commitment field and the identification field.

**Key words:** turnover intentions, organisational commitment, organisational identification, social exchange theory, social identity theory, workplace attachment

## Table of contents

<b>1. Introduction</b> .....	<b>6</b>
<b>2. Theoretical background</b> .....	<b>10</b>
2.1 Turnover intentions .....	10
2.2 Organisational commitment and organisational identification.....	10
2.2.1 Organisational identification and social identity theory .....	10
2.2.2 Organisational commitment and social exchange theory .....	12
2.3 Integrating social identity theory and social exchange theory .....	13
2.3.1 Difference between organisational commitment and organisational identification .....	13
2.3.2 Organisational commitment, organisational identification and turnover intentions.....	14
2.4 Conceptual model.....	17
<b>3. Methodology</b> .....	<b>18</b>
3.1 Research approach, methodology and design .....	18
3.2 Sample, procedure and representativeness .....	19
3.3 Measurement instruments and variables .....	22
3.4 Ethical considerations.....	23
<b>4. Results</b> .....	<b>25</b>
4.1 Preliminary analyses.....	25
4.1.1 Descriptive statistics.....	25
4.1.2 Tests for outliers .....	27
4.1.3 Test of assumptions regression analysis.....	27
4.1.4 Psychometric analyses.....	28
4.1.5 Means, standard deviations and correlations.....	31
4.2 Hypotheses testing.....	32
4.2.1 Hypothesis 1 .....	32
4.2.2 Hypothesis 2.....	33
4.2.3 Hypothesis 3.....	34
<b>5. Conclusion and discussion</b> .....	<b>37</b>
5.1 Conclusion.....	37
5.2 Discussion .....	38
5.3 Contributions .....	40
5.3.1 Theoretical contributions.....	40
5.3.2 Practical contributions .....	41
5.4 Limitations and directions for future research.....	41
<b>References</b> .....	<b>44</b>
<b>Appendices</b> .....	<b>48</b>
Appendix 1 Boxplots outliers.....	48

Appendix 2 Normal distribution.....	49
Appendix 3 Linearity.....	50
Appendix 4 Scatter plot homoscedasticity .....	51
Appendix 5 Factor analysis .....	52
Appendix 6 Regression analysis.....	55
Appendix 7 Two simple linear regression analyses .....	58

## 1. Introduction

The objective of this research is to investigate the relationship between organisational commitment and turnover intentions through the lens of social exchange theory and the relationship between organisational identification and turnover intentions through the lens of social identity theory. The retention of employees is an emerging key concern for organisations that want to play a competitive role in the current economic market (Stinglhamber, Marique, Caesens, Desmette, Hansez, Hanin & Bertrand, 2015). Therefore, it is important to gain more insight into why individuals would intent to leave an organisation. There are two existing perspectives that are commonly used for this: the social exchange perspective and social identity perspective (Stinglhamber et al., 2015; Van Knippenberg, Van Dick, & Tavares, 2007).

The social exchange perspective and the social identity perspective are both frameworks that explain turnover intentions and behaviour, but do so for different reasons (Tavares, Van Knippenberg, & Van Dick, 2016; Van Knippenberg et al., 2007). Remarkably, these perspectives have always been viewed in isolation. Both social exchange theory and social identity theory developed predominantly separately from each other and have rarely been studied together (Stinglhamber et al., 2015). This means that the insights from one field of study have not been drawn upon in the other field of study. More insight is need into what turnover intention is, this calls for a broader framework and multiple explanations. In other words, there is a gap in the current literature to view this concept in a broader perspective. This study uses the social exchange framework as well as the social identity framework to provide more insight into turnover intentions.

In order to gain more insight into why employees may intent to leave an organisation, this study focusses on different ways in which employees can experience attachment to a target (Klein et al., 2012). This study focusses on two out of the four types of workplace attachment, being: commitment and identification.

The two types of workplace attachment (e.g. commitment and identification) are linked to turnover intentions because there is a connection with withdrawal from the psychological relationship between employee and organisation (Van Knippenberg et al., 2007). On the one hand, commitment has been linked to turnover intentions through social exchange theory. Organisations continue to need employees that are committed to their work (Klein, Molloy, & Brinsfield, 2012). Commitment developed from social exchange theory (Blau, 1964) and is defined as: “a volitional psychological bond reflecting dedication to and responsibility for a particular target” (Klein et al., 2012, p. 137). A central notion of social exchange theory is that

the relationship between employee and employer relies on the exchange of effort and loyalty for advantages as recognition, pay and support (Blau, 1964; Van Knippenberg et al., 2007).

The target of commitment in this case is the organisation, as will also be to target of identification. Organisational commitment and organisational identification are both considered to be two concepts that show insight into the psychological attachment of an employee to an organisation (Van Knippenberg & Sleebos, 2006). Also, most of the former research on attachment concentrated on the organisation as its focus (Riketta & Van Dick, 2005) and some other scholars argue that the organisation is one of the most pertinent targets of identification for an individual (Bergami & Bagozzi, 2010; Hogg & Terry, 2000).

On the other hand, identification has been linked to turnover intentions through social identity theory. Organisational identification has its roots in social identity theory (Tajfel & Turner, 1979) and can be defined as “the perception of oneness with or belongingness to an organisation, where the individual defines him or herself in terms of the organisation(s) in which he or she is a member” (Mael & Ashforth, 1992, p.104). Identification is a process through which people define themselves (Ashforth, Harrison, & Corley, 2008) and part of the identity of people and sense of self is derived from the organisations they work for (Hogg & Terry, 2000). Organisational identification for employees adds to the feeling of connectedness and being part of something bigger than yourself (Ashforth et al., 2008). The social identity approach provides a useful theoretical background in making a conceptualisation of organisational identification (Van Dick, 2016).

Organisational identification and organisational commitment reflect different aspects of the relationship between the individual and the organisation (Van Dick, 2016; Meyer, Becker & Van Dick, 2006; Van Knippenberg & Sleebos, 2006). Previous empirical research often included only commitment or only identification, but rarely both concepts at the same time (among others: Yalabik, Swart, Kinnie & Van Rossenberg, 2017; Riketta, 2005; Meyer, Becker, & Vandenberghe, 2004). Nevertheless, several reasons may exist for why people have intentions to leave an organisation. Literature often focuses on only one type of workplace attachment at the time, but when they are taken together and studied simultaneously they will probably explain more of intentions to leave.

In line with this, a few scholars recently attempted to integrate the social exchange perspective and the social identity perspective and thus organisational commitment and organisational identification (Van Knippenberg et al., 2007; Tavares et al., 2016). Studies which use this integrative approach are still scarce and to the knowledge of the researcher, the study by Stinglhamber et al. (2015) was the last to integrate both identification and commitment.



Their research existed of three longitudinal studies in which the last confirmed that there is a relationship between organisational identification and actual turnover, mediated by commitment. Despite this, their study used a specific sample of respondents from the Belgian army and focussed on affective commitment coming from the Three Component Model of Meyer and Allen (1991), whereas this study uses the definition of commitment from Klein et al. (2012). Furthermore, Stinglhamber et al. (2015) concentrated on actual turnover instead of turnover intentions and used other measurement scales to test their hypotheses.

Other previous studies found that organisational identification and organisational commitment are both strongly related to turnover intentions in a negative way (Yalabik et al., 2017; Van Dick et al., 2004). Turnover intentions are related to social exchange processes as well as social identity processes and it is necessary to focus on turnover intentions and integrate insights from both the social exchange and social identity perspective because both interact in predicting turnover intentions (Van Knippenberg et al., 2007).

However, the previous studies did not take an integrative approach towards these concepts. There is a call for more research conforming this integrated approach (Stinglhamber et al., 2015). To contribute to this demand and to move forward to a more integrated understanding of the psychological relationship between individual and organisation, the present study conceptually integrates insights from both the social exchange perspective and social identity perspective. There is still limited insight in why people intent to leave an organisation, because one perspective is followed or the other but not both at the same time. Therefore, two types of workplace attachment (e.g. commitment and identification) are important in this research. In order to gain insight into how organisational identification and organisational commitment influence turnover intentions, respectively through social identity theory and social exchange theory, the following research question is formulated:

*What is the effect of organisational identification and organisational commitment on turnover intentions?"*

This study has both scientific and practical contributions. The scientific contributions are threefold. First of all, this study contributes to deepen the debate and the theoretical integration of social identity and social exchange perspectives on the understanding of the psychological relationship established between an individual and organisation. By integrating theories of identification and commitment, a better understanding is gained of the two processes themselves and of workplace behaviour. This study sees commitment and identification as two different types of workplace bonds that are equivalent to each other. Therefore, the results of

this study contribute to the field of identification and the field of commitment. In fact, it is trying to integrate these two related areas of research.

Second, this study contributes to the turnover literature by adopting a broader view on intentions to leave. Previous scholars mostly focused on only commitment or only identification as antecedents of turnover intentions and therefore actually missed the opportunity to gain more insight into turnover intentions. This research brings two perspectives together in a conceptual integration which creates the opportunity to find multiple explanations for why employees intent to leave an organisation. Insights from both frameworks will now be shared between them and since social exchange theory and social identity theory both propose something different with regard to turnover intentions, this research sheds some new light on the fact that various theories are needed to gain a good understanding of intentions to leave. So, by investigating both at the same time much more of turnover intentions can be explained. This is something that has never been done before to the researcher's knowledge.

Third, this study answers the call for more research on the distinctiveness of the concept's organisational commitment and organisational identification. These concepts are mainly tested separately from each other, but this research integrates them. By showing that both concepts each has their own contribution in explaining more of turnover intentions the uniqueness of commitment and identification is emphasized. It does so by testing a moderation model with these concepts as antecedents of turnover intentions.

This study also has practical contributions. The retention of workers is very important in the current labour market. Organisations and managers need to gain insight into how to keep turnover rates as low as possible and avoid unwanted outflow of valued employees (Chen, Ployhart, Thomas, Anderson, & Bliese, 2011). When organisations and managers have more insight into how commitment and identification influence the turnover intentions of their workers, it gives them the chance to manage these factors in the best possible way. It is helpful for them to know how both organisational commitment and organisational identification have their contribution in the intentions to leave of an employee.

This thesis consists of five chapters. This first chapter introduced the topic of this research after which theory will be outlined in chapter two. This second chapter describes a review of the existing literature and the important key concepts of this research, after which hypotheses and a conceptual model are developed. The third chapter explains the methodology of this. The fourth chapter shows the results of this study after which the fifth chapter makes conclusions discusses the results of the research. The last chapter also includes limitations and directions for future research.

## 2. Theoretical background

This chapter outlines a review of existing literature of the key concepts of this research. Relationships between these concepts are explained and hypotheses are formulated. At last, a conceptual model is developed.

### 2.1 Turnover intentions

Turnover intention is the likeliness that an employee will leave its employing organisation in the near future (Yalabik et al., 2017; Mobley, 1982; Mowday, Porter, & Steers 1982). Turnover intention is accepted as being a powerful predictor of actual turnover (Hom, Mitchell, & Griffeth, 2012; Griffeth, Hom, & Gaertner, 2000; Steel & Lounsbury, 2009). Even though, some forms of turnover are desirable (e.g. eliminate poor performers), generally turnover has substantial consequences for the organisation for example because of the loss human capital and disruptions in operations (Bentein, Vandenberg, Vandenberghe, & Stinglhamber, 2005; Yalabik et al., 2017).

A distinction between voluntary and involuntary turnover intentions can be made, in which most studies are concerned with researching voluntary turnover (Hom et al., 2012). Voluntary turnover is employee-initiated whereas involuntary turnover is employer-initiated (Gellatly & Hedberg, 2016). Voluntary turnover is defined as: “voluntary cessation of membership in an organisation by an individual who receives monetary compensation for participation in that organisation” (Hom & Griffeth, 1995, p. 5)

Turnover theory has recently been moving towards a broader perception with regard to individuals’ withdrawal from the job instead of having a very narrow definition of the concept (Hom et al., 2012; Gellatly & Hedberg, 2016). It is then at last emphasized by Hom et al. (2012) that turnover intentions should be treated as a direct antecedent of turnover instead of a surrogate measure.

### 2.2 Organisational commitment and organisational identification

As introduced, two theoretical frameworks are used to gain insight into the relationships between the two types of workplace attachment: organisational identification and organisational commitment, namely social identity theory and social exchange theory.

#### 2.2.1 Organisational identification and social identity theory

Mael and Ashforth (1992) defined organisational identification: as “the perception of oneness with or belongingness to an organisation, where the individual defines himself or herself in terms of the organisation which he or she is a member” (p. 104). Organisational identification

has been developed from a distinctive and powerful theoretical framework established by Tajfel and Turner (1979) being, social identity theory (Van Dick, 2016). Current research on organisational identification builds upon social identity theory (Jones & Volpe, 2011) by which people are classified in different social categories (Tajfel & Turner, 1979).

Social identity theory is used to understand the behaviour of individuals. It is believed that people act for the sake of the social group they belong to and this group membership contributes to one's social identity (Van Dick, Christ, Stellmacher, Wagner, Ahlswede, Grubba, Hauptmeier, Höhfeld, Moltzen, & Tissington, 2004). Individuals strive to put themselves in a positive light and this is one of the basic motives of why someone wants to identify with a group, according to social identity theory (Ashforth et al., 2008).

The fundamental predictions of social identity theory can be summarised into three assumptions. The first assumption is that people desire a positive self-esteem (Tajfel & Turner, 1979). Second, the social identity of an individual rests on their membership to a group (Tajfel & Turner, 1979). Third and last, it is assumed that people want to maintain a positive social identity and therefore make a differentiation between their 'in-group' and 'out-groups' (Tajfel & Turner, 1979).

Work by Ashforth et al. (2008) showed that it is crucial for organisations as well as employees that employees identify themselves with the organisation they work for. This contributes to positive feelings about that organisation (Ashforth et al., 2008). As explained by Hogg & Terry (2000) individuals develop parts of their identity and self-esteem based on the organisations they are involved in. Identification with an organisation thus suggests a psychological unification of the self with the collective (Tajfel & Turner, 1979). This in turn leads to thinking in terms of 'we' instead of 'I' (Tajfel & Turner, 1979). As described by Van Knippenberg et al. (2007) an individual is more likely to act with the organisation's best interest in mind when he or she identifies with that organisation, because the organisation's interests are incorporated in the self-concept. Moreover, organisational identification suggests that the individual and the organisation are one (Van Knippenberg et al., 2007), thus the identity of a person becomes intertwined with that of the organisation (Van Knippenberg & Sleebos, 2006).

The social exchange perspective has different beliefs about turnover intentions than the social identity perspective does. This will be further clarified later on, but most important is that both perspectives should not be in contradiction. They relate to and complement each other in explaining intentions to leave.

### 2.2.2 Organisational commitment and social exchange theory

Klein et al. (2012) defined organisational commitment as “a volitional psychological bond reflecting dedication to and responsibility for a particular target” (p.137). The target in this case is the organisation, which initially also has been the main target of commitment (Meyer & Allen, 1991) and is also recognised as the most important target of commitment (Klein et al., 2012; Van Rossenberg, Klein, Asplund, Bentein, Breitsohl, Cohen, & Yalabik, 2018). Despite the organisation being the main target of commitment a wide variety of foci of commitment has been studied. Commitment can take various forms including commitment to organisations, occupations and professions, teams and leaders, goals, and personal careers (Meyer & Herscovitch, 2001). This research focuses on ‘organisational’ commitment as foci of attachment to stay in line with the focus on ‘organisational’ identification.

Organisational commitment comes from one of the most influential conceptual paradigms in organisational behaviour, namely social exchange theory (Cropanzano & Mitchell, 2005). A central essence of social exchange theory is the assumption that the employment relationship depends on the exchange of effort and loyalty in order to obtain benefits such as recognition, pay and support (Blau, 1964). Social exchange theory does not only include transactional exchanges, but also emotional aspects and attachments. It is believed that when an organisation cares about its employees, the employees will in turn feel as they have reciprocal obligations in this exchange relationship, possibly in the form of commitment (Van Knippenberg et al., 2007).

Although the conceptualisation of organisational commitment by Klein et al. (2012) is used in this research, literature was previously dominated by the Three Component Model (TCM) for decades (Van Rossenberg et al., 2018). Meyer and Allen (1991) developed the TCM of organisational commitment in order to define and operationalise this concept. The TCM includes three dimensions: affective commitment, normative commitment and continuance commitment (Meyer & Allen, 1991). Despite the wide use of the TCM, critique has increased (Solinger, Van Olffen, & Roe, 2008). Klein et al. (2012) critique the definition, content, measurement, and practicality of the construct. As mentioned before, there is a movement towards the reconceptualization of organisational commitment in which commitment is one of the four workplace bonds that are placed on a continuum (Klein et al., 2012).

## 2.3 Integrating social identity theory and social exchange theory

Before integrating insights from organisational commitment and organisational identification, coming from social identity theory and social exchange theory, the uniqueness of both concepts needs to be clear. Thereafter, all three key concepts, organisational identification, organisational commitment and turnover intentions, are taken together and both social identity theory and social exchange theory are conceptually integrated.

### 2.3.1 Difference between organisational commitment and organisational identification

Distinguishing commitment from related constructs, as for example identification, is another challenge for academics (Meyer, 2016a). Organisational identification and organisational commitment are considered to be two concepts that show employees' psychological attachment to the organisation. Recently, there has been a movement in the commitment literature with regard to the reconceptualization of workplace commitment (Klein, Molloy, & Brinsfield, 2012). This shift created the chance to look at different ways in which an individual feels connected to the workplace, something that was not possible with the earlier mentioned definition of commitment from Meyer and Allen (1991) that previously dominated the literature. The reconceptualization by Klein et al. (2012) allows for the assessment of multiple types of workplace attachment and this is exactly what is needed when assessing identification and social identity theory and commitment and social exchange theory together.

Despite the attention organisational identification and organisational commitment have received, there is still considerable disagreement with regard to the distinctions between them and the nature of relations among them (Stinglhamber et al., 2015). Both identification and commitment reflect a psychological linkage between individual and organisation (Van Knippenberg, 2006).

A few concrete differences are found with regard to the uniqueness of organisational identification and organisational commitment. The first important aspect that makes these concepts distinctive is the perceptions they are built upon. Organisational commitment develops out of perceptions that the organisation provides benefits for the employee, whereas organisational identification develops out of perceptions that person and organisation share the same characteristics (Van Dick, 2016). Putting it differently, organisational identification is based on mutual destiny and alleged resemblance with the organisation (Mael & Ashforth, 1992). In contrast, organisational commitment is based on exchange aspects between the employee and employer (Van Dick, 2016).

Another difference is that organisational identification assumes that a person and the organisation are one entity, while organisational commitment means a relationship between the employee and organisation in which they are different objects (Van Knippenberg & Sleebos, 2006). In other words, organisational identification has a self-definitional nature and can be seen as the integration of the organisation in the self (Van Dick, 2016). Unlike organisational identification, organisational commitment does not have a self-definitional characteristic because it is a different type of workplace bond (Klein et al., 2012).

Lastly, organisational identification includes the concept of salience and organisational commitment does not include this concept so much in explicit terms (Van Dick, 2016). Organisational identification is very flexible and leads to positive behaviour for the organisation if the shared identity is salient at that moment. Organisational commitment is more constant but can also change (Van Dick, 2016).

To sum up, there are multiple theoretical arguments in favour of the distinctiveness of organisational identification and organisational commitment. This study considers the two concepts as distinct, but it is important to keep this ongoing debate in mind.

### 2.3.2 Organisational commitment, organisational identification and turnover intentions

Building further on the notion that organisational identification and organisational commitment are unique concepts in which organisational identification originates from social identity theory and organisational commitment from social exchange theory, the following aims to integrate both perspectives.

The combination of both social identity theory and social exchange theory is necessary to understand how turnover intentions is influenced by both organisational identification as well as organisational commitment. On the one hand, the social identity perspective is used to shed light on the relationship between organisational identification and turnover intentions. On the other hand, the social exchange perspective is used to clarify the relationship between organisational commitment and turnover intentions. In the upcoming section the hypotheses of this study are formulated.

As mentioned before, turnover intentions are linked to organisational identification and organisational commitment for different purposes. It is expected that these concepts both explain another part of why people intent to leave an organisation. This will be further discussed later on. First, turnover intentions through the lens of social identity theory are zoomed in on.

Previous research has established that employees who strongly identify with their organisation are more attached to it which consequently leads to lower levels of turnover

intentions (Stinglhamber, 2015; Meyer, 2002). Furthermore, Van Dick et al. (2004) found that supporting identification with the organisation should lead to a reduction of turnover intentions. The performance of employees that have a high level of organisational identification is more in line with the goals of an organisation and because of this they are more willing to stay a member of the group (Van Dick et al., 2004). As previously mentioned, identification suggests that the individual and the organisation are one (Van Knippenberg et al. 2007). If an employee leaves the organisation this can cause harm to the self-concept because this would mean a loss for the 'self'. In other words, organisational identification coming from social identity theory implies a merging of the self with the organisation. Leaving the organisation would harm the self, so to avoid this the person stays with the organisation and presumably has low turnover intentions. This would mean that employees with a high degree of organisational identification have lower willingness to withdraw from the job (Van Dick et al., 2004). Employees with a strong organisational identification are associated with having lower turnover intentions (Van Dick, 2004; Riketta, 2005). This leads to the following hypothesis:

**H1.** Organisational identification is negatively related to turnover intentions.

In line with the goals of this study, it is also necessary to research turnover intentions through the lens of social exchange theory. It is now well established from a variety of studies, that organisational commitment is negatively related to turnover intentions (Yalabik et al., 2017; Vandenberghe, Bentein, & Panaccio, 2017). Interest in organisational commitment was arguably stimulated by its implications for retention. The reasoning was: employees who are committed to the organisation should be less likely to leave voluntarily (Meyer, 2016). Commitment is accepted as one of the core mechanisms that explains turnover intentions and behaviour (Yalabik et al., 2017).

Drawing upon social exchange theory, the norm of reciprocity is an often-mentioned explanation for this negative relationship between organisational commitment and turnover intentions. Reciprocity is the best-known exchange rule (Cropanzano & Mitchell, 2005). The organisation and employee must adhere to certain rules of exchange in order to have relationships evolve into trusting, loyal and mutual commitments, one of the basic tenets of social exchange theory (Cropanzano & Mitchell, 2005). When an organisation takes care of its employees the social exchange relationships evolve which thereby induces beneficial consequences (Cropanzano & Mitchell, 2005). This means when strong social relationships exist it will lead to positive employee attitudes (Cropanzano & Mitchell, 2005). When



employees feel like they are benefiting from the social relationship, they are willing to make some extra effort to reciprocate to these benefits in the form of commitment (Blau, 1964). According to Klein et al. (2012), employees who are committed to the organisation take up this bond and care about the organisation. Employees who are highly committed, feel connected to their organisation which in turn leads to willingness to continue being part of that organisation (Kohlmeyer, Parker, & Sincich, 2017). When individuals are not satisfied with the employment relationship due to discrepancies in the “give and take” in this relationship, they may want to withdraw from the relationship (Van Knippenberg et al., 2007).

Through the lens of social exchange theory, it is more likely that employees with a high level of commitment want to stay with the organisation because the belief is that commitment binds an individual to an organisation and reduces therewith the likeliness of turnover (Meyer et al., 2004). Employees who are committed to the organisation are less likely to leave on a voluntary basis (Gellatly & Hedberg, 2016). This leads to the following hypothesis:

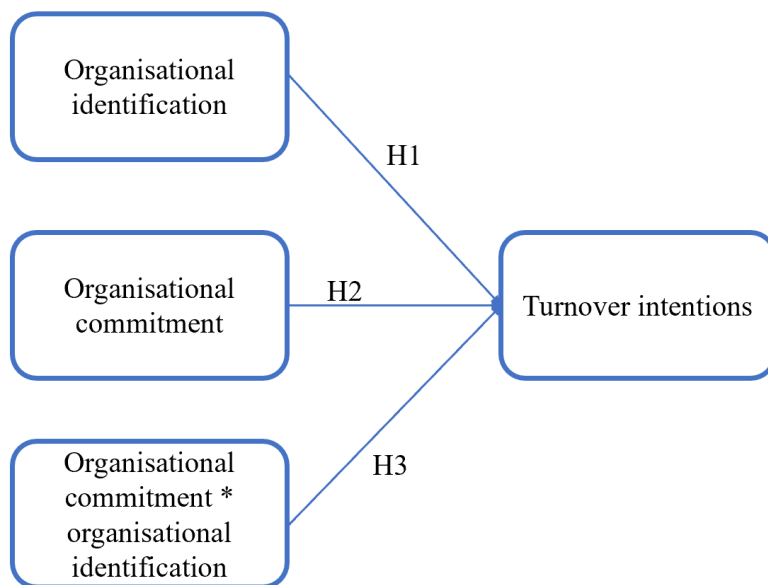
**H2.** Organisational commitment is negatively related to turnover intentions.

Despite pointing out that organisational identification and organisational commitment are two unique constructs, the meta-analysis by Riketta & Van Dick (2005) showed that they are strongly correlated. Counting for the fact that they are probably correlated but yet distinct, it is important to explore potential connections between them (Meyer et al., 2006). On top of that, Stinglhamber et al. (2015) provided empirical evidence for a positive relationship between organisational commitment and organisational identification. The present study builds further on the relationship between organisational identification, organisational commitment and turnover intentions by also using organisational identification as a moderator in the model. It would be interesting to see if adding a moderator changes the relationship and if an interaction effect between the concepts occurs. It is expected that there is a positive relationship between organisational identification and organisational commitment. This leads to the last hypothesis:

**H3.** There is a positive interaction effect between organisational commitment and organisational identification.

## 2.4 Conceptual model

This section presents the conceptual model based on the hypotheses formulated above. To reach the goal of examining the relationship between organisational identification and turnover intentions and respectively the relationship between organisational commitment and turnover intentions, a model is developed. Figure 1 shows the conceptual model of hypothesis 1 and hypothesis 2 in which the direct effects of organisational identification and organisational commitment on turnover intentions are proposed. Figure 1 also shows hypothesis 3 which contains the moderation effect of organisational identification on the relation between organisational commitment and turnover intentions.



*Figure 1 Conceptual model*

### 3. Methodology

In this section the research methodology of this thesis is described. In part 3.1 the research approach, methodology and design are explained. Whilst a positivist epistemology is used, a deductive research approach is appropriate in accordance with a survey as chosen method. Thereafter, in part 3.2 the sample of this study and procedure of data collection is outlined. Furthermore, part 3.3 describes the measurement instruments and variables used in the survey. At last, this chapter concludes with part 3.4 by paying attention to the ethical considerations of this study.

#### 3.1 Research approach, methodology and design

This section presents the quantitative nature of this study together with the epistemology, ontology, research approach and methods. A quantitative research design is most appropriate in contrast to qualitative research, because this design made it possible to test a priori theories and explain phenomena according to numerical data (Yilmaz, 2013). There were already expectations based on literature and former studies about the possible findings of this study with regard to the relationships between turnover intentions and organisational commitment and organisational identification. Quantitative research is concerned with outcomes, generalization, prediction, and cause-effect relationships (Yilmaz, 2013). This thesis is of quantitative nature because, after all, the goal of this research is to examine the relationships between numerous variables. Besides, it is possible to generalise the outcomes of this study to a broader population which requires an extensive number of participants.

In research approaches a distinction is made between inductive and deductive. The research approach that corresponds with this quantitative research design is deductive research. A deductive research approach starts with theory and goes from more general to the specific (Bradford, 2018). According to Guba & Lincoln (1994), deduction is often used to verify theories. From this theory hypotheses are formed and these are tested empirically while using data. In the case of this research, the well-established frameworks of social identity theory and social exchange theory were most important. The choice for a quantitative deductive study is in line with the philosophical position, as will be explained.

Various philosophical assumptions about ontology and epistemology can lead to some different methodological approaches, for this reason the epistemological and ontological position of this study is defined (Symon & Cassell, 2012). Epistemology is usually understood as being concerned with knowledge about knowledge (Symon & Cassell, 2012). In other words, “epistemology is the study of the criteria by which we can know what does and does not

constitute warranted, or scientific, knowledge” (Symon & Cassell, 2012, p. 16). It deals with the concept of truth and how we can know what is reality or real knowledge.

Meanwhile, ontology is “dealing with the essence of phenomena and the nature of their existence” (Symon & Cassell, 2012, p. 17). It is concerned with the nature of reality and whether something actually exists independent of one’s own interpretations (Symon & Cassell, 2012). The ontology that is present in this study is realism. Realist assumptions entail the view that there is a reality, independent of our awareness about it. The truth can be revealed and facts exist (Symon & Cassell, 2012).

The epistemological position that corresponds with a realist ontology is positivism. Characteristics of a positivist epistemology are the exclusive focus on direct observable phenomena and testing theories in a hypothetical deductive manner (Symon & Cassell, 2012). The objective is to establish generalisable knowledge (Symon & Cassell, 2012). Both positivistic epistemology and realist ontology see reality as something that can be observed objectively. This thesis tried to discover generalisable relationships between turnover intentions, organisational commitment and organisational identification, by testing social exchange theory and social identity theory, adopting a deductive approach which corresponds with a positivist epistemology (Symon & Cassell, 2012)

The measurement instrument that was used for this research is a survey. This method goes well with the positivistic epistemology because it involves objective content analysis (Symon & Cassell, 2012). Accordingly, a survey as measurement instrument was an appropriate choice because it matches the epistemology of this research. A survey reveals relationships between variables and is especially useful to describe or explain features of groups (Blackstone, 2012). Hence, the objective of this research is to examine relationships between variables and a survey contributed in achieving this goal. The survey had a cross-sectional design, which means that it was administered at just one point in time. Besides, the survey included measurements for the key concepts of this study: organisational identification, organisational commitment and turnover intentions.

### 3.2 Sample, procedure and representativeness

As previously described, this study is of quantitative nature and included a survey method. In order to collect all the necessary data, seven master students from Radboud University Nijmegen collaborated. They build further on the data that was collected by other bachelor and master students in 2018 by expanding the sample. The additional data was collected in The Netherlands throughout April and May 2019 and was ultimately put together with data of the

international research project of Prof. Howard Klein (Ohio State University), namely the ‘Commitment in Global Context: measurement equivalence study’. The aim of this international project is to explore the cross-cultural equivalence of the Klein et al., Unidimensional, Target-free (KUT) commitment measure in multiple languages and countries. The online survey tool ‘Qualtrics’ was used to collect data from the target group; the working population in The Netherlands. The survey was distributed by sharing an anonymous link to the survey on the social networks of the researchers. Examples of social networks platforms are LinkedIn, Facebook and WhatsApp. This type of sampling is called convenience sampling and is a specific type of non-probability sampling. Convenience sampling relies on data collection from the population who are “conveniently” available to take part in the research (Dudovskiy, n.d.). There were no criteria which participants had to meet before doing the survey, all of them could take part.

One of the advantages of this type of sampling was that participants were easy to reach because they were close to the researcher. Other advantages were cost effectiveness, efficient (timesaving) and simplicity of sampling (Dudovskiy, n.d.). However, an important disadvantage is also worth mentioning. This type of sampling is especially vulnerable to biases and influences beyond the control of the researcher which could have had a consequence for the credibility of this study (Dudovskiy, n.d.).

The sampling aim was to reach a diverse set of Dutch workers from a variety of organisations and industries to have a sample that is representative of the whole working population in The Netherlands. Only respondents who speak the Dutch language were able to fill in the survey which increased the likelihood that the findings are only relevant to the Dutch workforce. It was a deliberate choice to only include Dutch speaking respondents in the sample, since the data collection only focusses on The Netherlands.

In the end, the final sample incorporated 1209 respondents. 861 respondents were collected in 2018 and 348 respondents in 2019. This difference in amount of respondents between two years is presumably due to the fact that ‘only’ 7 master students collected the data from this year in contrast to 14 students in the previous year. Data from both years was used, having the assumption that both represented the population well. No radical events took place in the meantime and it is believed that both years add value in a cumulative manner. No exact response rate was determined, because it is unknown how many people were reached through the social media channels.

The sample was adjusted accordingly to the needs of this study. Only respondents that have a progress rate of 100%, or in other words finalised the survey, are part of the current

sample. This means that there were 884 respondents left, which is approximately 73% of the total sample. It was considered to apply a progress rate of 80%, but this would only have provided 22 more respondents. Moreover, only employees who work directly for an organisation were part of the sample in this study. This choice was made because the group is more homogeneous and in this research the exchange with an organisation is central. Respondents who have missing values on this variable were also left out of the sample.

Finally, only respondents who spent 600 seconds or more time on the survey were thought of as valuable. This amount of time is half of the estimated time to complete the survey and lower values on duration are considered as not taken seriously. Taking this into account, the final sample that was used in this study included 676 respondents, approximately 56% of the total sample.

Most of the respondents in the current sample were female (65%). The average age of the respondents was 36.5 year. The majority of respondents had an education level labelled as 'HBO' (bachelor's degree) and is therefore highly educated (46%). Furthermore, the respondents had a function similar to executive staff (42%) and held a contract on a permanent basis (62%). The organisations they work for are mainly large organisations with more than 1000 employees (35%). On top of that, the average tenure is approximately 8 years.

To make sure this sample was representative of the Dutch workforce, the sample was compared to the general characteristics of the Dutch working population. Statistics of the 'Centraal Bureau voor de Statistiek' (CBS), a Dutch institution that performs statistical research, was consulted. It becomes clear from the obtained information that the sample used in this thesis deviates from the general Dutch workforce. The Dutch workforce mostly consists of men (53.6%), so women are overrepresented in the current sample. Also, of the total Dutch workforce 37% is highly educated (CBS, 2019), thus the current sample is overrepresented with regard to a high education level. The average age of Dutch workers is 42 years (CBS, 2019). This means that the current sample has a younger average age compared to the whole Dutch working population. The type of contract a Dutch employee holds is representative for the sample, with 61% of the Dutch employees holding a permanent contract (CBS, 2019).

To conclude, the sample does not share the exact same characteristics with the Dutch workforce. Therefore, it is important to keep the implications for generalisation in mind. It is however still possible to reveal relevant findings.

### 3.3 Measurement instruments and variables

This study contains three variables, namely organisational commitment, organisational identification and turnover intentions. Organisational commitment and organisational identification are both independent variables, whereas turnover intentions is respectively a dependent variable. All constructs were measured with existing measurement scales.

#### **Dependent variable**

Four items from the conceptualization of turnover from Hom, Griffeth, & Sellaro (1984) were translated into Dutch in order to be able to use them. Respondents could mark their turnover intentions by answering on a 7-point Likert scale ranging from (1) completely disagree to (7) completely agree. Examples of items are: “I often think about quitting my job” and “I am planning to leave this organisation”. Item four was recoded because this item is formulated in a positive manner while the other items were negatively formulated. On top of that, the final variable for turnover intentions includes both respondents with a permanent contract and respondents with a temporary contract. Both groups answered the same questions, so data from these items is merged to measure turnover intentions.

#### **Independent variables**

The first independent variable is organisational commitment. As mentioned before, organisational commitment is defined as “a volitional psychological bond reflecting dedication to and responsibility for a particular target” (Klein et al., 2012, p. 137). To measure organisational commitment the Klein et al., Unidimensional, Target-free (KUT) commitment measure was used. Again, items were translated to Dutch and examples of items are: “To what extent do you care about the organisation” and “How dedicated are you to the organisation”. Also, a 7-point Likert scale ranging from (1) by no means to (7) extremely was used. The target of commitment in this research is the organisation as is the case for organisational identification, so both concepts have a focus on the organisation.

The second independent variable is organisational identification. As previously described, organisational identification is “the perception of oneness with or belongingness to an organisation where the individual defines him or herself in terms of the organisation(s) in which he or she is a member” (Mael & Ashforth, 1992, p. 104). Organisational identification was measured with ten items from the Mael & Tetrick (1992) scale translated to Dutch. The scale is comprised of two underlying dimensions: shared characteristics and shared experience (Mael & Tetrick, 1992). Examples of items are: “When someone criticizes this organisation, it feels like a personal insult” and “This organisation’s successes are my successes”. Item eight

was recoded because it was formulated negatively while all other items were formulated in a positive way.

### **Control variables**

This study also includes certain control variables in order to prevent the likelihood that the effects can be assigned to alternative explanations (Becker, 2005). It is important to carefully select the control variables, because inadequate control variables can lead to ambiguous findings (Becker, 2005).

Following Stinglhamber et al. (2015) the control variables chosen for this study were: age, gender, function, education level, organisation size, and tenure. Additionally, the control variable ‘contract’ is also added, because the dependent variable turnover intentions includes both respondents with a temporary contract as well as respondents with a permanent contract. These control variables were kept constant throughout the research.

Some variables were not ready to be analysed in the form of regression analysis and therefore dummy variables were created for each of them. For gender two groups were made: male and transgender, because female was the reference category with most respondents. For education level the respondents indicated what their highest level of education was and they could choose from eight categories. For each category a dummy variable was created, except for the category ‘HBO’ since this is the reference category. Moreover, the function of the employees was asked with the following possible answer categories: executive staff, technical staff, administrative staff, professional staff, line manager or top manager. The largest group was executive staff and therefore the reference category. The last variable that needed to be transformed was organisation size. Respondents could indicate how many people worked for their organisation through answer categories of: less than 25 employees, 26-100 employees, 101-500 employees, 501-1000 employees, and more than 1000 employees. The reference category is more than 1000 employees.

### **3.4 Ethical considerations**

Something that is fundamental in doing scientific research is ethics. Understanding what effects the research can have has become an increasingly explicit, even formalised concern (Symon & Cassell, 2012). It is important to be aware of what proper research conduct is. There are a number of topics specifically applicable to this study.

First and foremost, protection of identities was something to take into account. In protecting participants’ identities a researcher typically promises to maintain anonymity and/or



confidentiality of the research its subjects (Blackstone, 2012). The survey was completely anonymous which made it impossible to link participants' data to their identities. Radboud University is owner of the data and data will only be shared with other researchers' part of this study.

Informed consent is a second issue to abide by. It means that no one was forced to participate in this study without that person's knowledge or consent (Blackstone, 2012). Informed consent is defined as "a subject's voluntary agreement to participate in research based on a full understanding of the research and of the possible risks and benefits involved" (Blackstone, 2012, p. 3). Participants were informed about the goal and the intentions of this study before answering questions in the survey. On top of this, participants were also informed that the data collection is part of a broader research project by Prof. Klein and that data will be shared.

Last but not least, honesty and an acceptance of mistakes are ethical considerations that were taken into account in this research. With honesty, a willingness to disclose intentions to participants is meant (Symon & Cassell, 2012). Learning from mistakes is also integral to good research, insofar as it is coupled to a willingness to find out why the mistakes occurred (Symon & Cassell, 2012).

## 4. Results

The results chapter of this thesis consists of two sections. The first section (4.1) includes the preliminary analyses in which the descriptive statistics, tests for outliers, tests for normality, psychometric analyses and means, standard deviations and correlations are described. In the second section (4.2) the hypotheses of this research are tested through multiple regression analysis.

### 4.1 Preliminary analyses

#### 4.1.1 Descriptive statistics

Only surveys in which respondents work directly for an organisation, spend 600 or more seconds on it and have a completion percentage of 100%, are included in the results. Questions that are of importance were asked throughout the whole survey and the consideration to include surveys with a completion percentage of 80% did not deliver a substantial contribution to the data. This thesis uses nominal as well as metric variables in the analyses. Separate overviews of nominal data and metric data are provided because of the characteristics of these variables. Since nominal data is computed by categories, only frequencies are meaningful to show. In contrast, for metric variables also the mean and standard deviation are given and of importance. These statistics cannot be interpreted when used with nominal variables. The frequency statistics of the nominal variables are presented in table 4.1 and in table 4.2 the metric variables are summarised.

*Table 4.1 Descriptives of nominal variables*

Variable		Freq.	%
Gender	Female	439	65.1
	Male	230	34.1
	Transgender	2	.3
	Total valid answers	671	
Organisation size	< 25 employees	120	17.8
	26 – 100 employees	130	19.2
	101 – 500 employees	122	18.0
	501 – 1000 employees	60	8.9
	> 1000 employees	240	35.5
	Total valid answers	672	
Education level	No education	2	.3
	LBO/VBO/VMBO	5	.7
	MAVO	14	2.1
	MBO	107	15.9
	HAVO/VWO	66	9.8
	HBO	311	46.2
	WO	158	23.5
	PhD	9	1.3
	Total valid answers	672	
Function level	Executive	283	41.9
	Technical	30	4.4
	Administrative	97	14.3
	Professional	174	25.7
	Line manager	72	10.7
	Top manager	13	1.9
	Total valid answers	669	
Contract type	Permanent	421	62.3
	Temporary	255	37.7
	Total valid answers	676	

*Freq. = frequency, % = percent*

*Table 4.2 Descriptives of metric variables*

Variable	N	Min	Max	Mean	S.D.	Skewness		Kurtosis			
						Estimate	S.E.	Zscore	Estimate	S.E.	Zscore
Organisational identification	675	1	7	4.50	.86	-.66	.094	-7.02	.59	.188	3.14
Organisational commitment	675	1	7	4.90	.87	-.75	.094	-7.98	1.92	.188	10.21
Turnover intentions	673	1	7	2.96	1.54	.71	.094	7.55	-.39	.188	-2.07
Tenure (years)	624	0	45	8.23	10.02	1.50	.098	15.31	1.38	.195	7.08
Age (years)	665	18	66	36.52	14.55	.50	.095	5.26	-1.37	.189	-7.25

#### 4.1.2 Tests for outliers

According to Field (2013), outliers are “scores that are very different from the rest of the data” (p. 165). Before doing the analyses it is important to be aware of outliers because they could bias the data (Field, 2013). In this case, the tests for outliers are done by putting the data in a boxplot. The boxplots are enclosed in appendix 1 of this thesis.

No outliers have been found for the variable’s organisational identification and turnover intentions. The boxplot of the variable organisational commitment shows one outlier, namely case 178. However, after further examining this outlier there is no reason to exclude this outlier from the data because of an unusual answer pattern or mistakes. Organisational commitment is tested with a Likert scale, so it is an extreme value but not impossible or out of range of the scale. There is enough reason to believe that this outlier still provides valuable information. Concrete this means that there are no very outstanding values and there is no risk of influencing the outcomes of this study due to any outliers. Consequently, no cases were deleted.

#### 4.1.3 Test of assumptions regression analysis

Before conducting the actual regression analysis, the variables need to be checked on the basis of four statistical assumptions. These assumptions are: normal distribution, linearity, homoscedasticity and independence of the error terms (Field, 2013). All these assumptions have to be met.

First of all, the variables are checked according to the first assumption of having normally distributed data. In other words, this means that it could be assumed that the sampling distribution is normally distributed (Field, 2013). A Kolmogorov-Smirnov and Shapiro-Wilk test are performed in order to see if the distribution of the scores differ from a normal distribution. Using the guideline for the Kolmogorov-Smirnov test described by Field (2013), a non-significant value ( $p > .05$ ) means that the distribution is normal in all probability. The test results are included in appendix 2 and show that the data concerning organisational identification ( $D(673) = .073, p < .05$ ), organisational commitment ( $D(673) = .151, p < .05$ ) and turnover intentions ( $D(673) = .154, p < .05$ ) are all significantly non-normal.

The significant values for all three variables imply a deviation from normality. This may be due to the use of Likert scales for testing these variables. Nevertheless, the Kolmogorov-Smirnov test can be affected by large samples and therefore they are interpreted in conjunction with histograms and the values of skewness and kurtosis (Field, 2013). The Z scores of skewness and kurtosis in table 4.2 are used for comparison. It becomes clear that the distribution of scores of organisational identification and organisational commitment are skewed to the

right, whereas turnover intentions is more skewed to the left. This means that for turnover intentions respondents gave more low values in comparison to more positive values of organisational identification and organisational commitment.

The second check that the variables encounter is that of linearity. This becomes most evident in a residual versus predicted plot which is part of the standard regression output. The dependent variable turnover intentions should be linearly related to the independent variables (Field, 2013). This plot is enclosed in appendix 3. The data points are symmetrically distributed around the line and the variance seems constant and therefore the assumption of linearity is met.

The third assumption, that of homoscedasticity, entails that the residuals of the independent variables should be spread rather constant (Field, 2013). This is checked by using a scatter plot between residuals and the independent variables. The outcomes of this test are included in appendix 4 from which is found that the residuals are scattered and there exists no specific pattern. This means that there is homogeneity of variance and the assumption of homoscedasticity is met.

The fourth and last assumption is independence of the error terms. This is done by checking the table of ‘residuals statistics’ retrieved from the regression analysis in SPSS. The mean in the row ‘standardised predicted value’ should be 0 with a standard deviation of 1 (Field, 2013). Since the mean and standard deviation correspond with the previous mentioned values, this assumption is also met.

Besides these assumptions, multicollinearity is also checked for. Multicollinearity occurs when two or more variables are remarkably close related linearly (Field, 2013). Since a multiple regression is performed in contrast to a simple regression it is important to check this. The variance inflation factor (VIF) and tolerance statistic that is related to the VIF serve as a basis to test multicollinearity. There are no clear critical values of VIF that should cause concern (Field, 2013), but Myers (1990) suggests that there is no reason for concern up to a VIF value of 10. If multicollinearity exists, it is harder to predict the relative roles of the independent variables (Hair et al., 2014). Based on the output that can be found in the table “coefficients” in appendix 6, it can be concluded that there is no multicollinearity. The highest VIF values are namely 2.46 for age and 2.21 for tenure.

#### 4.1.4 Psychometric analyses

The psychometric analyses include both factor analysis and reliability analysis. This research uses already existing measurement scales and as a consequence it is generally not common to do factor analysis. Taking the contributions of this thesis into account, it is however important

to demonstrate with confidence that organisational commitment and organisational identification really are different constructs that measure different aspects of turnover intentions. For this reason, a factor analysis was conducted anyway. The SPSS output of this factor analysis can be found in appendix 5.

Before doing the factor analysis, two items are recoded because they were reverse phrased items. As mentioned in paragraph 3.3, it concerns item 4 of turnover intentions and item 8 of organisational identification. After this, all items are ready to be analysed.

A factor analysis is conducted on 14 items with orthogonal rotation (varimax). The Kaiser Meyer Olkin (KMO) measure of sampling adequacy is acceptable to proceed the analysis,  $KMO = .899$ , which is well above the minimum criterion of .50 (Field, 2013). Bartlett's test of sphericity tests is also significant,  $X^2(91) = 3892$ ,  $p < .001$ . Eigenvalues for each factor are obtained. Four factors had eigenvalues over Kaiser's criterion of 1 and together they explained 66.3% of the variance. The scree plot was ambiguous and showed inflexions that would justify retaining either 2 or 4 factors.

All items of organisational commitment load highly on only one factor, namely factor 2. This means that all these items actually measure this concept well which is in line with the expectations. In the case of organisational identification the items load highly on multiple factors, although typically higher for one factor than another. For example, 'This organisation's successes are my successes' loads on both factor 1 and factor 2, but the loading for factor 1 (.715) is higher than for factor 2 (.345). It makes sense to see this more as a part of factor 1 than factor 2.

There is however some output that is not in line with the expectations. A few items of organisational identification load on a third or fourth factor. As mentioned before, the measurement scale of organisational identification as developed by Mael and Tetrick (1992) consists of two underlying dimensions: shared experience and shared characteristics. This study found that item 6 and 8 of organisational identification load on factor 3 and item 9 and 10 load on factor 4. This is another structure than Mael and Tetrick (1992) found. In their study item 6 loads on one factor and item 8, 9 and 10 load on the other factor. The third factor could be labelled as 'shared behaviour' and the fourth factor could also be assigned to 'shared characteristics'. Overall, there are no cross loaders because the difference between loadings is at least 0.20 (Field, 2013). No items will be deleted, because all items represent the concept of organisational identification well.

Eventually, all 14 items are retained. Table 4.3 shows the factor loadings after rotation, in which loadings with a value less than .30 are suppressed. The items that cluster on the same

factor suggest that factor 2 represents organisational commitment and factor 1, 3 and 4 represent organisational identification.

*Table 4.3 Rotated component matrix*

Items		1	2	3	4
OrgCom 1	How committed are you to your organisation?	.357	<b>.749</b>		
OrgCom 2	To what extent do you care about your organisation?		<b>.842</b>		
OrgCom 3	How dedicated are you to your organisation?		<b>.855</b>		
OrgCom 4	To what extent have you chosen to be committed to your organisation?	.330	<b>.798</b>		
OrgIden 1	When someone criticizes this organisation, it feels like a personal insult.	<b>.760</b>			
OrgIden 2	I am very interested in what others think about this organisation.	<b>.596</b>	.343		
OrgIden 3	When I talk about this organisation, I usually say “we” rather than “they”	<b>.597</b>	.324		
OrgIden 4	This organisation’s successes are my successes.	<b>.715</b>	.345		
OrgIden 5	When someone praises this organisation, it feels like a personal compliment.	<b>.724</b>	.352		
OrgIden 6	I act like the rest of the people in my organisation to a great extent.	.371		<b>.648</b>	
OrgIden 7	If a story in the media criticized the organisation, I would feel embarrassed.	<b>.676</b>			
OrgIden 8	I don’t act like a typical member of this organisation. (r)			<b>.860</b>	
OrgIden 9	I have a number of qualities typical of the people in this organisation.			.340	<b>.700</b>
OrgIden 10	The limitations associated with people in this organisation apply to me also.				<b>.890</b>

There is also a factor analysis conducted on the 4 items of turnover intentions. The result of the KMO test is .813 and Bartlett’s test is significant again at  $p < .001$ . There is one factor that has an eigenvalue above 1 that explains 74.9% of the variance. Table 4.4 presents the results of the factor analysis and as can be seen all the items load highly on one component.

Table 4.4 Rotated component matrix turnover intentions

Items		1
TO1	I often think about quitting my job.	.856
TO1	I am looking for a new job	.843
TO3	I intend to leave this organization.	.897
TO4	If it were up to me, I would like to continue working for this organisation on a long-term.	.745

So, relying on these measurement scales for organisational commitment, organisational identification and turnover intentions the reliability or internal consistency still needs to be checked. Cronbach's alpha is the most common measure and is mostly used when having a survey with numerous Likert questions (Field, 2013). Separate reliability analyses for all applicable scales of the survey are done.

The acceptable value of Cronbach's alpha lies preferably between .70 and .80 as a general rule (Field, 2013). In the case of this research all measurements are internally consistent and have acceptable values of Cronbach's alpha. Respectively, organisational identification ( $\alpha = .791$ ), organisational commitment ( $\alpha = .893$ ) and turnover intentions ( $\alpha = .888$ ). No items are deleted in order to improve the overall reliability.

#### 4.1.5 Means, standard deviations and correlations

In table 4.5 Pearson's correlation coefficients are reported for the metric variables included in this research, as well as the control variables of metric measurement level. Pearson's correlation coefficient is a measure that is used to examine the strength of the relationship between two variables (Field, 2013). In essence, it is an effect size in which a coefficient of +1 implies a perfect positive relation and a coefficient of -1 implies a perfect negative relation (Field, 2013). Common values to label the effect size are .10 (small effect), .30 (medium effect) and .50 (large effect) (Field, 2013).

As table 4.5 shows, all correlations are significant. Organisational identification and organisational commitment have a strong positive correlation with one another ( $r = .613, p < .01$ ). Another strong positive correlation exists between tenure and age ( $r = .699, p < .01$ ). Despite these strong correlations, there is no problem in doing regression analysis because multicollinearity is also checked and accounted for.

Furthermore, organisational identification ( $r = -.365, p < .01$ ) and organisational commitment ( $r = -.431, p < .01$ ) both correlate negatively with turnover intentions and this correlation can be marked as a medium effect size. Additionally, tenure correlates positively with organisational identification ( $r = .090, p < .05$ ) and organisational commitment ( $r = .203,$



$p < .01$ ) and negatively with turnover intentions ( $r = -.178, p < .01$ ). All three are labelled as small effect sizes. Subsequently, age correlates positively with organisational identification ( $r = .115, p < .01$ ), organisational commitment ( $r = .225, p < .01$ ) and turnover intentions ( $r = -.255, p < .01$ ).

Table 4.5 Pearson's correlations

Number	Variable	1	2	3	4	5
1	Organisational identification	1				
2	Organisational commitment	.613**	1			
3	Turnover intentions	-.365**	-.431**	1		
4	Tenure (years)	.090*	.203**	-.178**	1	
5	Age (years)	.115**	.225**	-.255**	.681**	1

\* Correlation is significant at the 0.05 level (2-tailed), \*\* Correlation is significant at the 0.01 level (2-tailed)

## 4.2 Hypotheses testing

The regression results for hypothesis 1, hypothesis 2 and hypothesis 3 are all summarised in table 4.6. The SPSS output of the regression analysis is enclosed in appendix 6.

### 4.2.1 Hypothesis 1

Hypothesis 1 proposed that organisational identification is negatively related to turnover intentions. A multiple regression was used to test if organisational identification significantly predicts turnover intentions. Model 1 tests the effects of all control variables. In model 2 the main effects of organisational identification and organisational commitment are added and model 3 represents the interaction with organisational identification as a moderator. The  $R^2$  value indicates the explained variance of the dependent variable (turnover intentions) by the other variables that are included in the model. Model 1, which shows the overall effect of the control variables, is significant ( $R^2 = .134, p < .001$ ). However, model 2, which adds organisational identification and organisational commitment, significantly increases the explanatory power of the model ( $\Delta R^2 = .178, p < .001$ ).

The unstandardized regression coefficients (b) are interpreted in order to define the relationships within the models. In the case of hypothesis 1 it involves the relationship between the predictor organisational identification and the dependent variable turnover intentions. All independent variables are standardised, therefore the b-values are appropriate to work with. Positive b-values indicate a positive relationship between organisational identification and turnover intentions, whereas negative b-values represent a negative relationship. The b-values also provide information about how each independent variable (e.g. organisational

identification and organisational commitment) affect the outcome if the effects of all other predictors remain constant (Field, 2013).

As can be seen in table 4.6, a significant negative effect exists between organisational identification and turnover intentions ( $b = -.195, p < .001$ ). Thus, hypothesis 1 can be accepted. On top of that, a simple linear regression with only organisational identification as independent variable was conducted to find out how much of the variance of turnover intentions is explained by just organisational identification. The SPSS output of this simple linear regression can be found in appendix 7. Together, organisational identification and organisational commitment explain 32.6% of the variance ( $R^2 = .326, F(23, 589) = 12.41, p < .001$ ). In contrast, organisational identification alone explains 13.0% of the variance in turnover intentions ( $\Delta R^2 = .130, F(22, 590) = 9.72, p < .001$ ).

#### 4.2.2 Hypothesis 2

The regression results of hypothesis 2 are also summarised in table 4.6. Hypothesis 2 proposed that organisational commitment is negatively related to turnover intentions. Again, the b-values are interpreted but now for the relationship between the predictor organisational commitment and the dependent variable turnover intentions.

As can be seen in table 4.6, a significant negative effect exists between organisational commitment and turnover intentions ( $b = -.339, p < .001$ ). This means that hypothesis 2 is also accepted. Subsequently, a simple linear regression is repeated to find out how much of the of turnover intentions is explained by only organisational identification. It has been found that organisational commitment is accountable for 16.8% of the variance in turnover intentions ( $\Delta R^2 = .168, F(22, 590) = 11.73, p < .001$ ). This is a larger part than organisational identification which respectively explained 13.0% of the variance in turnover intentions. It is clear that both organisational identification and organisational commitment explain a different part of turnover intentions, because otherwise they would not be both significant. Finally, the effect of organisational commitment is stronger than the effect of organisational identification.

Besides the main effects, some of the control variables also have significant effects. Model 1 ( $b = -.157, p < .01$ ) and model 2 ( $b = -.118, p < .05$ ) both show a significant negative relationship between age and turnover intentions. Both models also demonstrate a significant relationship between the dummy for line manager and turnover intentions, in which model 2 ( $b = .498, p < .001$ ) has a stronger effect than model 1 ( $b = .329, p < .05$ ). With regard to gender, the dummy male is significant in model 1 ( $b = -.171, p < .05$ ) as well as model 2 ( $b = -.153, p < .05$ ). This is interpreted in comparison with the reference category female. Thus, when you

are a male, turnover intentions decrease in comparison to being female. The same applies to education level with dummy MBO, which is significant in model 1 ( $b = -.396, p < .001$ ) and model 2 ( $b = -.335, p < .01$ ). In other words, when your education level is MBO in comparison to the reference category HBO your turnover intentions decrease.

Some control variables are significant in model 2 but not in model 1, or the other way around. This presumably means that there is an interaction between those variables and the independent variable turnover intentions. For example, the dummy's for organisations with a size smaller than 25, between 26 – 100 and between 101 – 500 employees are all not significant in model 1 in contrast to all being significant in model 2. This signifies that there is an interaction between these dummy's in comparison to the reference category of organisation size larger than 1000 employees and turnover intentions.

#### 4.2.3 Hypothesis 3

Hypothesis 3 proposed that there is a positive interaction effect between organisational commitment and organisational identification. The regression results for the moderation model are also summarised in table 4.6. The coefficients for the interaction between organisational identification and organisational commitment are added in model 3. This interaction effect is not significant at  $p > .05$  ( $b = -.018$ ). The addition of this interaction term did not significantly increase the explanatory power of the model ( $\Delta R^2 = .001, p > .05$ ). Only 1% of the observed variance in turnover intentions could be accounted for by this interaction of organisational identification and organisational commitment. It can therefore be concluded that model 3, the moderation model, does not significantly predict the dependent variable turnover intentions.

Table 4.6 Results of regression analysis

Model	Variable	Dummy	Model 1		Model 2		Model 3		
			b	SE	b	SE	b	SE	
1. Control variables	Age		-.157	.060**	-.118	.053*	-.119	.053*	
	Contract		.040	.098	-.105	.088	-.109	.088	
	Function	Technical	-.010	.204	-.213	.181	-.214	.181	
	Function	Administrative	-.023	.121	-.028	.108	-.031	.109	
	Function	Professional	-.212	.106*	-.026	.095	-.029	.095	
	Function	Line manager	.329	.139*	.498	.124***	.498	.124***	
	Function	Top manager	-.229	.291	.287	.262	.308	.264	
	Gender	Male	-.171	.087*	-.153	.077*	-.150	.077	
	Gender	Transgender	.058	.728	-.408	.646	-.422	.646	
	Level of education	No education	-.299	.716	-.757	.637	-.767	.637	
	Level of education	VMBO	-.720	.463	-.562	.410	-.562	.410	
	Level of education	MAVO	-.390	.284	-.288	.252	-.280	.252	
	Level of education	MBO	-.396	.119***	-.335	.106**	-.340	.106***	
	Level of education	HAVO/VWO	-.073	.140	-.196	.125	-.191	.125	
	Level of education	WO	.164	.102	.139	.090	.139	.090	
	Level of education	PhD	-.363	.341	-.358	.301	-.338	.303	
	Organisation size	< 25	.107	.116	.380	.105***	.385	.105***	
	Organisation size	26-100	.179	.111	.383	.100***	.389	.100***	
	Organisation size	101-500	.158	.112	.243	.100*	.241	.100*	
	Organisation size	501-1000	-.199	.147	-.142	.100	-.145	.130	
	Tenure			-.002	.057	.022	.050	.023	.050
	2. Main effect	Organisational identification				-.195	.044***	-.198	.045***
Organisational commitment					-.339	.047***	-.350	.049***	
3. Interactions	Organisational identification * organisational commitment						-.018	.026	
R <sup>2</sup>				.136		.326		.327	
ΔR <sup>2</sup>				.136		.190		.001	
F-value				4.435		12.410		11.901	

\* Regression effect is significant at the 0.05 level (2-tailed), \*\* Regression effect is significant at the 0.01 level (2-tailed), \*\*\* Regression effect is significant at the .001 level (2-tailed). *b* = unstandardized regression coefficient; *SE* = standard error.

Despite the fact that the interaction effect is non-significant, it is still interesting to visualise the relationship. Figure 2 represents the relationship between organisational commitment and turnover intentions, moderated by organisational identification.

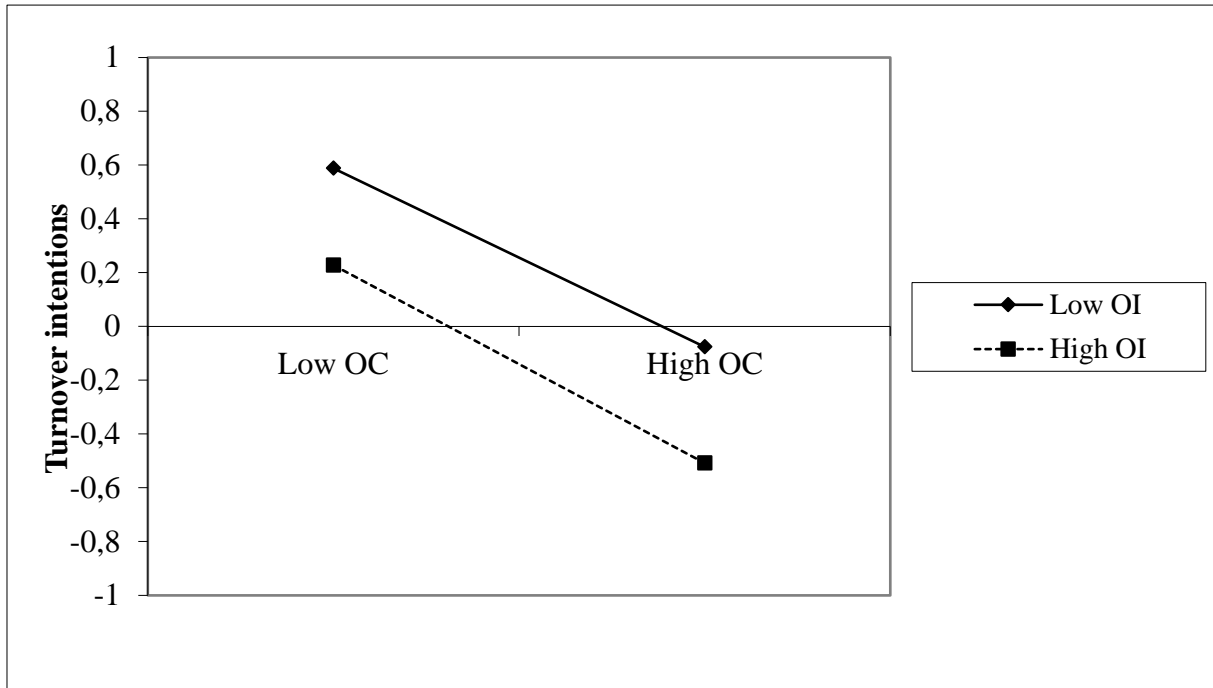


Figure 2 Interaction plot

This graph confirms that the effect of organisational commitment on turnover intentions does not depend on organisational identification. The interaction plot shows two parallel lines that do not cross. This indicates that there is no interaction effect. When you are both committed to the organisation and identify with that organisation there is no extra effect on turnover intentions. In other words, they do not interact. The relationship of organisational commitment is not stronger if employees also identify with the organisation. Organisational identification does not moderate in the relationship between organisational commitment and turnover intentions and thus hypothesis 3 is rejected.

## 5. Conclusion and discussion

The final chapter of this thesis starts with a conclusion (5.1) and discussion (5.2) about the outcomes of this study. This is done by reflecting on the theoretical background of this study. Subsequently, it is discussed on how this study has theoretical and practical contributions in the commitment and identification field (5.3). Finally, this study also has its limitations which also create interesting directions for future research (5.4).

### 5.1 Conclusion

Organisations continue to need employees who are committed to their work (Klein et al., 2012). However, the retention of employees has become an emerging key concern for employers (Stinglhamber et al., 2015). Despite the awareness about this concern, there is still limited insight in what actually drives an employee to leave its organisation. In order to gain more insight into why employees intent to leave an organisation, this study focussed specifically on two types of workplace attachment, being: commitment and identification.

Accordingly, two existing perspectives that are commonly used to study turnover intentions were applied: the social exchange perspective (Blau, 1964) and the social identity perspective (Tajfel & Turner, 1979). Commitment was linked to turnover intentions respectively through social exchange theory, whereas identification was linked to turnover intentions through social identity theory. Both perspectives were integrated to obtain more insight into turnover intentions than that they would have done if they remained separately.

This research aimed to investigate the relationship between organisational commitment and turnover intentions through the lens of social exchange theory and the relationship between organisational identification and turnover intentions through the lens of social identity theory. The following research question was formulated in order to achieve this aim:

*“What is the effect of organisational identification and organisational commitment on turnover intentions?”*

Various hypotheses were formulated to find an answer to this research question. These hypotheses were based on social identity theory (Tajfel & Turner, 1979), social exchange theory (Blau, 1964) and their conceptual integration. The hypotheses were tested based on a quantitative analysis of survey data.

The first hypothesis assumed a negative relationship between organisational identification and turnover intentions. The second hypothesis assumed a negative relationship

between organisational commitment and turnover intentions. Support was found for both hypotheses. At last, the third hypothesis assumed a positive interaction between organisational identification and organisational commitment. This hypothesis was rejected because no support was found.

It can be concluded that both organisational identification and organisational commitment have a negative relationship with turnover intentions. This answers the research question of this thesis. When someone identifies with an organisation and/or commits to an organisation, the intention to leave the organisation decreases. Moreover, the negative effect on turnover intentions is even stronger for organisational commitment than for organisational identification but no interaction between the two exists.

Last but not least, this study also found evidence in favour of integrating the social exchange framework and the social identity framework. Both perspectives in isolation have always measured only a small part of the explained variance of turnover intentions. Thus, previous scholars provided only a partial explanation of why people want to end their relationship with the organisation. This study brought both perspectives together at an equivalent level, which led to more insight into what precedes someone's intentions to leave. Social exchange theory and social identity theory are complementary and if we do not consider them both, we would miss out on having a complete explanation.

## 5.2 Discussion

To the researcher's best knowledge, this research is the first after Stinglhamber et al. (2015) to test an integrated model of the relationship between employer and employee, including both organisational identification and organisational commitment. The findings of this research suggest that organisational identification and organisational commitment are negatively associated with turnover intentions. To understand what these results mean and what they are worth, they are linked back to the theoretical framework of this study.

First, this study tested the relationship between organisational identification and turnover intentions by using the principals of social identity theory (Tajfel & Turner, 1979). The findings correspond with previous empirical research which state that organisational identification negatively affects an employee's intentions to leave the organisation (Van Dick et al., 2004; Riketta, 2005). The expectation that this relationship works through insights of social identity theory is met, because of the significant negative relationship that was found. Employees who highly identify with the organisation they work for become one with that organisation. This merge of the self with the organisation implies that leaving the organisation

harms the self. As a consequence, employees with high organisational identification have lower intentions to leave the organisation.

Second, the relationship between organisational commitment and turnover intentions was tested by using the principals of social exchange theory (Blau, 1964). This negative relationship has received a lot of attention and has been widely studied. Again, the findings correspond with a huge amount of previous empirical research (Kohlmeyer et al., 2017; Van Knippenberg et al., 2007; Meyer et al., 2004). The expectation that this relationship works through the underlying social exchange mechanism is met, because of the significant negative relationship that was found. Employees who are committed to the organisation they work for, feel connected to that organisation. When employees are satisfied with the benefits they derive from their employment relationship, they are motivated to continue this relationship. Employees feel as they have reciprocal obligations in this exchange relationship in the form of commitment. This, in turn, leads to lower turnover intentions among committed employees.

Third, in order to find out if the effect of organisational commitment on turnover intentions depends on organisational identification, the latter was used as a moderator variable. In contrast to the expectations, no interaction effect existed. So, when an employee is both committed to the organisation and identifies with that organisation at the same time, there is no stronger or extra effect on turnover intentions.

Interestingly, this study shows that organisational commitment and organisational identification do explain different parts of turnover intentions. Taking both concepts together provides more insight into turnover intentions than when they are studied in isolation. Organisational commitment and organisational identification have some overlap in explaining the same part of turnover intentions, but both also explain a unique part. This confirms that a conceptual integration of social exchange theory and social identity theory is needed.

Overall, these findings provide thus evidence that organisational commitment and organisational identification are distinct concepts. Both have a clear unique value in explaining the intentions to leave of employees. The findings indicate that employees' turnover is influenced by their identification with the organisation and their commitment towards to organisation. Focus in the analyses was on social exchange theory and social identity theory. They have been tested a lot on their own, but this study integrated them. By looking only at organisational commitment, you only explain so much of turnover intentions. When you also take organisational identification into account, you even explain a different and larger part of turnover intentions. So by looking at both concepts and thereby conceptually integrating them, you can explain much more of turnover intentions. It therefore seems that the framework of



social identity theory and social exchange theory actually are very appropriate to clarify the relationship between organisational identification, organisational commitment and turnover intentions.

## 5.3 Contributions

### 5.3.1 Theoretical contributions

This study makes three valuable contributions to theory by investigating the relationship between organisational identification and organisational commitment on turnover intentions through the integration of insights from social identity theory (Tajfel & Turner, 1979) and social exchange theory (Blau, 1964).

First of all, this study examined two types of workplace attachment (e.g. identification and commitment) in relation to each other instead of isolating them. Most previous studies focussed on either one of the two types and the influence on the relationship between employer and employee. By integrating organisational identification and organisational commitment, this study contributes to both fields of research. This study proves that the social identity framework and social exchange framework explain turnover intentions the best when both frameworks are used. More explicitly, integrating insights from both social identity theory and social exchange theory led to a more comprehensive understanding of the relationship between employer and employee .

Second, this study contributes to the turnover literature by providing a broader framework and multiple explanations for why employees intent to leave an organisation. This study brought two perspectives together in a conceptual integration in order to gain more insight into turnover intentions, something that is not yet common to do. This research sheds some new light on the fact that various theories are needed to gain a good understanding of intentions to leave. By doing this, insights are shared mutually and they can learn from each other.

As a third theoretical contribution, this study made evident that organisational commitment and organisational identification really are distinct concepts that have their own unique contribution in explaining another concept such as turnover intentions. Proof was found that organisational commitment as well as organisational identification share a common part in explaining turnover intentions, but their uniqueness manifested because they also explain a part on their own separate from each other.

### 5.3.2 Practical contributions

Besides contributions to theory, this study also makes contributions to management practice. These contributions are mostly valuable for managers of organisations. This study shows that managers should not just focus only on commitment of their employees or on the identification with their organisation, but actually on both simultaneously. Both concepts declare a separate independent part of someone's intention to leave the organisation.

The commitment field uses however different HR practices to enhance commitment than the identification field does to enhance identification. For example the commitment literature describes that organisations need talent management programs and creative and challenging tasks to increase organisational commitment of its workers (Chew & Chan, 2008). The identification field, in contrast, suggests that organisations should focus on recruitment, selection and career development to increase the organisational identification of their employees (Iles, Mabey, & Robertson, 1990).

When organisations want to prevent their employees from leaving, they have to be aware that they should pay attention to the commitment bond as well as the identification bond of workplace attachment. It may occur that some employees have a commitment bond while others have an identification bond, but this is not something that is easy to identify for managers. The best option is to select multiple HR practices that contribute to both the commitment bond and the identification bond of employees. Managers must stimulate both motives, an exchange and identification bond, if they want their employees to stay.

By combining insights from the organisational commitment field as well as the organisational identification field a more extensive set of tools is offered to managers to decrease turnover intentions of their employees.

### 5.4 Limitations and directions for future research

This research has several limitations that also create opportunities for future research directions. The first limitation is the cross-sectional research design of this study. The data is collected at a single point in time. This research design makes it possible to look at various characteristics of a population at once (Field, 2013). However, a cross-sectional study has the disadvantage that causality could be an issue. In order to draw conclusions based on causality a longitudinal research design is more appropriate. This type of research design involves repeated observations over prolonged periods of time (Field, 2013). An opportunity to replicate this study in the form of longitudinal research is therefore present. Data will be collected over longer time periods which makes it possible to measure causality.

Another limitation that this study brings is that of generalisability of the findings. The sample that was used in this study did not represent the overall Dutch workforce perfectly. Specific categories are overrepresented in the current sample. For example, respondents are higher educated than the average Dutch workforce is. An explanation for this dissimilarity could be assigned to the data collection procedure. Most researchers used their own network to attract respondents which led to a lot of sameness among the surveys. Because all respondents are from the Netherlands the results of this study are only generalisable to Dutch workers. Consequently, the findings should be interpreted with great caution with regard to generalisability.

Additionally, this study violated the assumption of normality. The regression analysis only produces reliable outcomes when there is a normal distribution of the data. This assumption has not been met which means that the findings of this study may be biased (Field, 2013). There is a slight chance that the findings are influenced due to not having normally distributed data and these should therefore be handled with carefulness. A possible reason for the violation of this assumption could be the use of Likert scales. For example, the average score of organisational commitment is quite high and this could affect the normal distribution. Almost all of the data of the variable organisational commitment is located in the upper half of the commitment scale. It is difficult to interpret the top half of the scale because there is an upper limit of 7 on a scale from 1 to 7. Within this research it is not possible to know if people with a score of 7 on organisational commitment are maybe “over committed”. Future research could make use of other analysis techniques to gain insight in this phenomenon. This is beyond of the scope of this research.

The last limitation of this research is the possible presence of common method bias. Multiple variables were measured by the same method through self-report. Difficulties could occur because of method-specific variance which can influence the observed relationships between the measured concepts (Schaller, Patil, & Malhotra, 2015). This study explained approximately 32% of the variance in turnover intentions, but it should be considered that a part of this is common method bias.

As mentioned before, this research was able to explain a bit more than 32% of the variance in turnover intentions by using organisational commitment and organisational identification as predictor variables. This amount of explained variance is a fair amount, but this leaves room for other motives apart from social exchange theory and social identity theory to gain insight into turnover intentions. On top of that, this study only measured two out of the four types of workplace attachment and their influence on intention to leave.

Therefore, a last recommendation in the form of a future research direction is that more research is needed about the different workplace bonds. This research made evident that there are clearly two ways to feel attached to work, the commitment bond and the identification bond. For future research it can be interesting to find out which outcomes are actually unique for commitment and which outcomes are unique for identification. It would be interesting to know what kind of attitude or behaviour comes specifically from committed employees, or maybe identification with an organisation leads to other specific behaviour that can only be assigned to the identification bond.

So, there are still other possible reasons for why people stay in organisations. It is an interesting research opportunity to gain more insight into different workplace bonds. There is potential in other types of workplace attachment that explain different ways of how an individual can feel connected to an organisation.

## References

- Ashforth, B. E., Harrison, S. H., & Corley, K. G. (2008). Identification in organisations: An examination of four fundamental questions. *Journal of management*, 34(3), 325-374.
- Becker, T. E. (2005). Potential Problems in the Statistical Control of Variables in Organisational Research: A Qualitative Analysis With Recommendations. *Organisational Research Methods*, 8(3), 274–289.
- Bentein, K., Vandenberg, R., Vandenberghe, C., & Stinglhamber, F. (2005). The role of change in the relationship between commitment and turnover: A latent growth modeling approach. *Journal of Applied Psychology*, 90, 468–482
- Bergami, M. and Bagozzi, R. P. (2000), Self-categorization, affective commitment and group self-esteem as distinct aspects of social identity in the organisation. *British Journal of Social Psychology*, 39: 555-577.
- Blau, P. M. (1964). *Exchange and power in social life*. Transaction Publishers.
- Blackstone, A. (2012). *Principles of Sociological Inquiry: Qualitative and Quantitative Methods*. Maine, VS: Saylor Foundation.
- Bradford, A. (2018). Deductive Reasoning vs. Inductive Reasoning. Retrieved March 28, 2019, from <https://www.livescience.com/21569-deduction-vs-induction.html>
- Centraal Bureau voor Statistiek [CBS]. (2019). Beroepsbevolking. Retrieved on 23 May 2019, via: <https://www.cbs.nl/nl-nl/achtergrond/2018/07/werkzame-beroepsbevolking>.
- Chen, G., Ployhart, R.E., Thomas, H.C., Anderson, N. & Bliese, P.D. (2011). The power of momentum: A new model of dynamic relationships between job satisfaction change and turnover intentions. *Academy of Management Journal*, 54(1), 159–181.
- Chew, J., & Chan, C. (2008) "Human resource practices, organizational commitment and intention to stay", *International Journal of Manpower*, Vol. 29 Issue: 6, pp.503-522
- Cropanzano, R., & Mitchell, M. S. (2005). Social Exchange Theory: An Interdisciplinary Review. *Journal of Management*, 31(6), 874–900.
- Dudovskiy, J. (n.d.). Convenience sampling - Research Methodology. Retrieved March 28, 2019, from <https://research-methodology.net/sampling-in-primary-data-collection/convenience-sampling/>
- Field, A. (2013) *Discovering Statistics Using IBM SPSS Statistics: And Sex and Drugs and Rock “N” Roll*, 4th Edition, Sage, Los Angeles, London, New Delhi.
- Gellatly, I.R., Hedberg, L.M. (2016). Employee turnover and absenteeism. In J.P. Meyer (Ed.), *Handbook of employee commitment* (pp. 195-205). Cheltenham: Edward Elgar Publishing Limited.

- Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A Meta-Analysis of Antecedents and Correlates of Employee Turnover: Update, Moderator Tests, and Research Implications for the Next Millennium. *Journal of Management*, 26(3), 463–488
- Hair, J. F., Black, W. C., Babin, B. J. & Anderson, R. E. (2014). *Multivariate data analysis. Pearson New International Edition*. (7th ed.). Edingburgh Gate, Essex: Pearson Education Limited.
- Hom, P. W., & Griffeth, R. W. (1995). *Employee turnover*. South-Western Pub.
- Hom, P. W., Mitchell, T. R., Lee, T. W., & Griffeth, R. W. (2012). Reviewing employee turnover: Focusing on proximal withdrawal states and an expanded criterion. *Psychological Bulletin*, 138(5), 831-858.
- Hom, P. W., Griffeth, R. W., & Sellaro, C. L. (1984). The validity of Mobley's (1977) model of employee turnover. *Organisational behavior and human performance*, 34(2), 141-174.
- Iles, P. , Mabey, C. and Robertson, I. (1990), HRM Practices and Employee Commitment: Possibilities, Pitfalls and Paradoxes. *British Journal of Management*, 1: 147-157.
- Jones, C. and Volpe, E. H. (2011), Organisational identification: Extending our understanding of social identities through social networks. *J. Organiz. Behav.*, 32: 413-434.
- Klein, H. J. (2013). Advances in workplace commitments: Introduction to the special issue. *Human Resource Management Review*, 2(23), 127-130.
- 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.
- Klein, H.J., & Linford, B. (2018, May 24). Workplace Commitment. Retrieved February 6, 2019, from <http://www.oxfordbibliographies.com/view/document/obo-9780199846740/obo-9780199846740-0142.xml>
- Kohlmeyer III, J. M., Parker, R. J., & Sincich, T. (2017). Career-Related Benefits and Turnover Intentions in Accounting Firms: The Roles of Career Growth Opportunities, Trust in Superiors, and Organisational Commitment. *Advances in Accounting Behavioral Research International*, 20(3), 79–116.
- Mael, F. and Ashforth, B. E. (1992), Alumni and their alma mater: A partial test of the reformulated model of organisational identification. *J. Organiz. Behav.*, 13: 103-123. doi:10.1002/job.4030130202
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organisational commitment. *Human resource management review* , 1 (1), 61-89.

- Meyer, J.P. (2016a). Employee commitment: an introduction and roadmap. In J.P. Meyer (Ed.), *Handbook of employee commitment* (pp. 3-11). Cheltenham: Edward Elgar Publishing Limited.
- Meyer, J.P. (2016b). Employee commitment: looking back and moving forward. In J.P. Meyer (Ed.), *Handbook of employee commitment* (pp. 511-525). Cheltenham: Edward Elgar Publishing Limited.
- Meyer, J. P., & Herscovitch, L. (2001). Commitment in the workplace Toward a general model. *Human Resource Management Review*, 3(11), 299–326.
- Meyer, J.P. & Becker, T. & Dick, R.. (2006). Social identities and commitments at work: Toward an integrative model. *Journal of Organisational Behavior*. 27. 665-683. 10.1002/job.383.
- Mobley, W. H. (1982). *Employee turnover: Causes, consequences, and control*. Reading, MA: Addison-Wesley.
- Mowday, R. T., Porter, R. W., & Steers, R. M. (1982). Employee–organisation linkages: The psychology of commitment, absenteeism and turnover. New York, NY: Academic Press.
- Riketta, M. (2005). Organisational identification: A meta-analysis. *Journal of vocational behavior*, 66 (2), 358-384.
- Riketta, M., & Van Dick, R. (2005). Foci of attachment in organisations: A meta-analytic comparison of the strength and correlates of workgroup versus organisational identification and commitment. *Journal of Vocational Behavior*, 67(3), 490-510.
- Schaller, T. K., Patil, A., & Malhotra, N. K. (2015). Alternative techniques for assessing common method variance: An analysis of the theory of planned behavior research. *Organizational Research Methods*, 18(2), 177-206.
- Solinger, O. N., van Olffen, W., & Roe, R. A. (2008). Beyond the three-component model of organizational commitment. *Journal of Applied Psychology*, 93(1), 70-83.
- Steel, R. P., & Lounsbury, J. W. (2009). Turnover process models: Review and synthesis of a conceptual literature. *Human Resource Management Review*, 19(4), 271-282.
- Stinglhamber F, Marique G, Caesens G, Desmette D, Hansez I, Hanin D, et al. (2015) Employees' Organisational Identification and Affective Organisational Commitment: An Integrative Approach. *IO*(4).
- Symon, G., & Cassell, C. (Eds.). (2012). *Qualitative organisational research: core methods and current challenges*. London: Sage Publications Ltd.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin, & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-37).

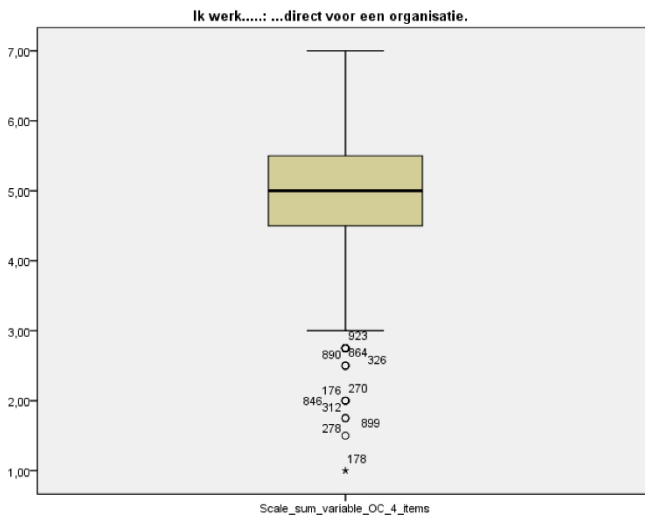
- Tavares, S. M., van Knippenberg, D., & van Dick, R. (2016). Organisational identification and “currencies of exchange”: Integrating social identity and social exchange perspectives. *Journal of Applied Social Psychology, 46*(1), 34-45.
- Vandenberghe, C., Bentein, K., & Panaccio, A. (2017). Affective Commitment to Organisations and Supervisors and Turnover: A Role Theory Perspective. *Journal of Management, 43*(7), 2090–2117.
- Van Dick, R. (2016). Organisational identification. In J.P. Meyer (Ed.), *Handbook of employee commitment* (pp. 106-116). Cheltenham: Edward Elgar Publishing Limited.
- Van Dick, R., Christ, O., Stellmacher, J., Wagner, U., Ahlswede, O., Grubba, C., & Tissington, P. A. (2004). Should I stay or should I go? Explaining turnover intentions with organisational identification and job satisfaction. *British Journal of Management, 15*(4), 351-360.
- Van Knippenberg, D., & Sleebos, E. (2006). Organisational identification versus organisational commitment: self-definition, social exchange, and job attitudes. *Journal of Organisational Behavior: The International Journal of Industrial, Occupational and Organisational Psychology and Behavior, 27*(5), 571-584.
- Van Knippenberg, D. , Van Dick, R. and Tavares, S. (2007), Social Identity and Social Exchange: Identification, Support, and Withdrawal From the Job. *Journal of Applied Social Psychology, 37*: 457-477.
- Van Rossenberg, Y. G. T., Klein, H. J., Asplund, K., Bentein, K., Breitsohl, H., Cohen, A., Yalabik, Z. Y. (2018). The future of workplace commitment: key questions and directions. *European Journal of Work and Organisational Psychology, 27*(2), 153-167.
- Yalabik, Z. Y., Swart, J., Kinnie, N., & Van Rossenberg, Y. (2017). Multiple foci of commitment and intention to quit in knowledge-intensive organisations (KIOs): what makes professionals leave?. *The International Journal of Human Resource Management, 28*(2), 417-447.
- Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. *European Journal of Education, 48*(2), 311-325.



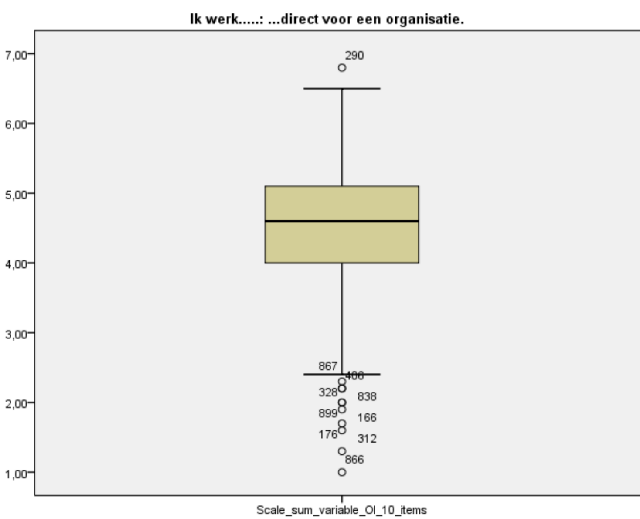
# Appendices

## Appendix 1 Boxplots outliers

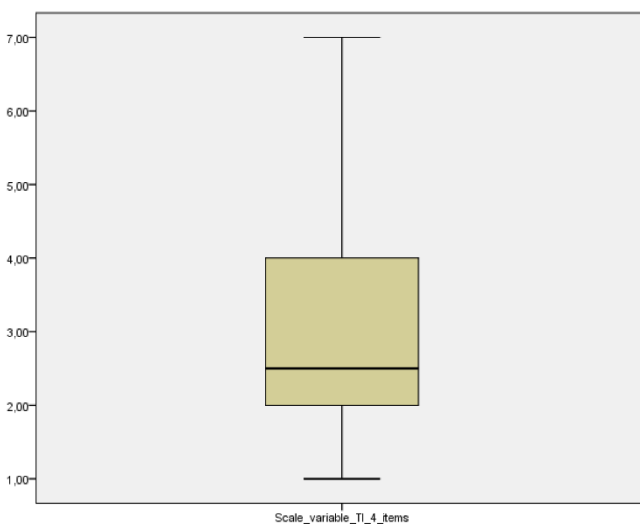
### Organisational commitment



### Organisational identification



### Turnover intentions



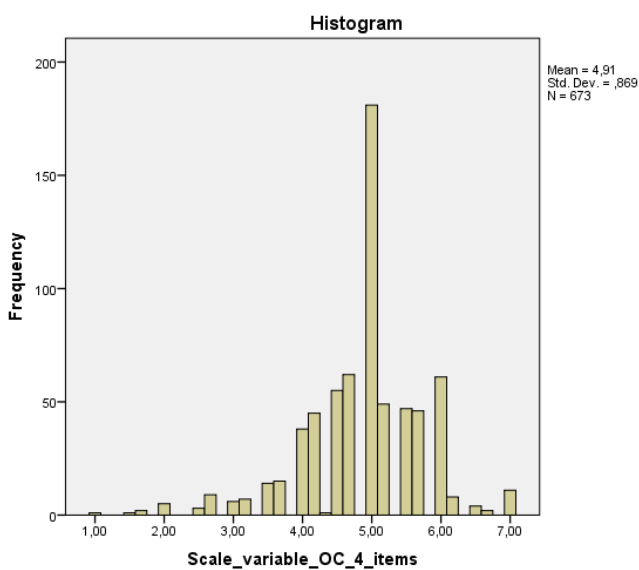
## Appendix 2 Normal distribution

### Tests of Normality

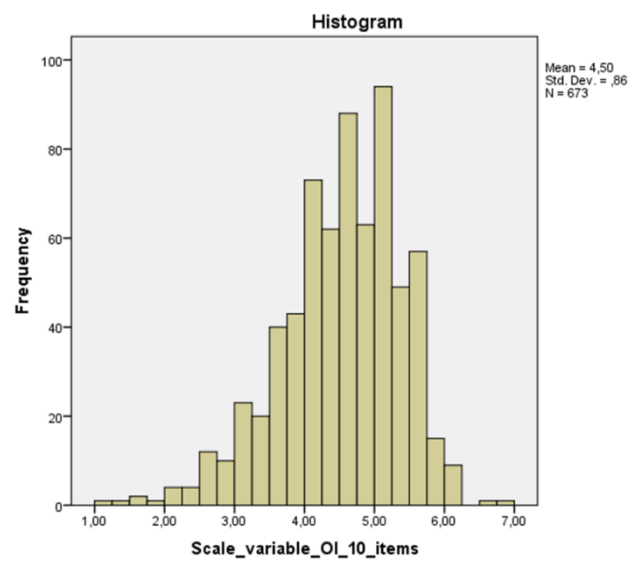
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Scale_variable_OI_10_items	,073	673	,000	,974	673	,000
Scale_variable_TI_4_items	,154	673	,000	,924	673	,000
Scale_variable_OC_4_items	,151	673	,000	,946	673	,000

a. Lilliefors Significance Correction

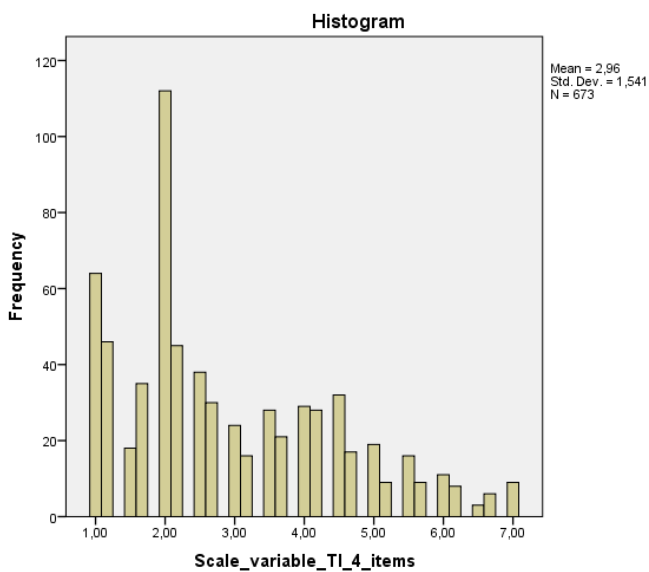
### Organisational commitment



### Organisational identification

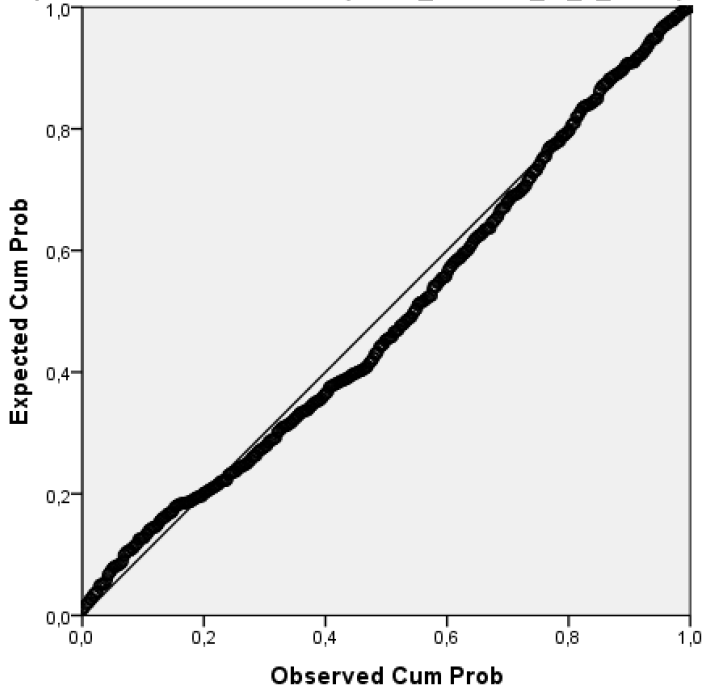


### Turnover intentions

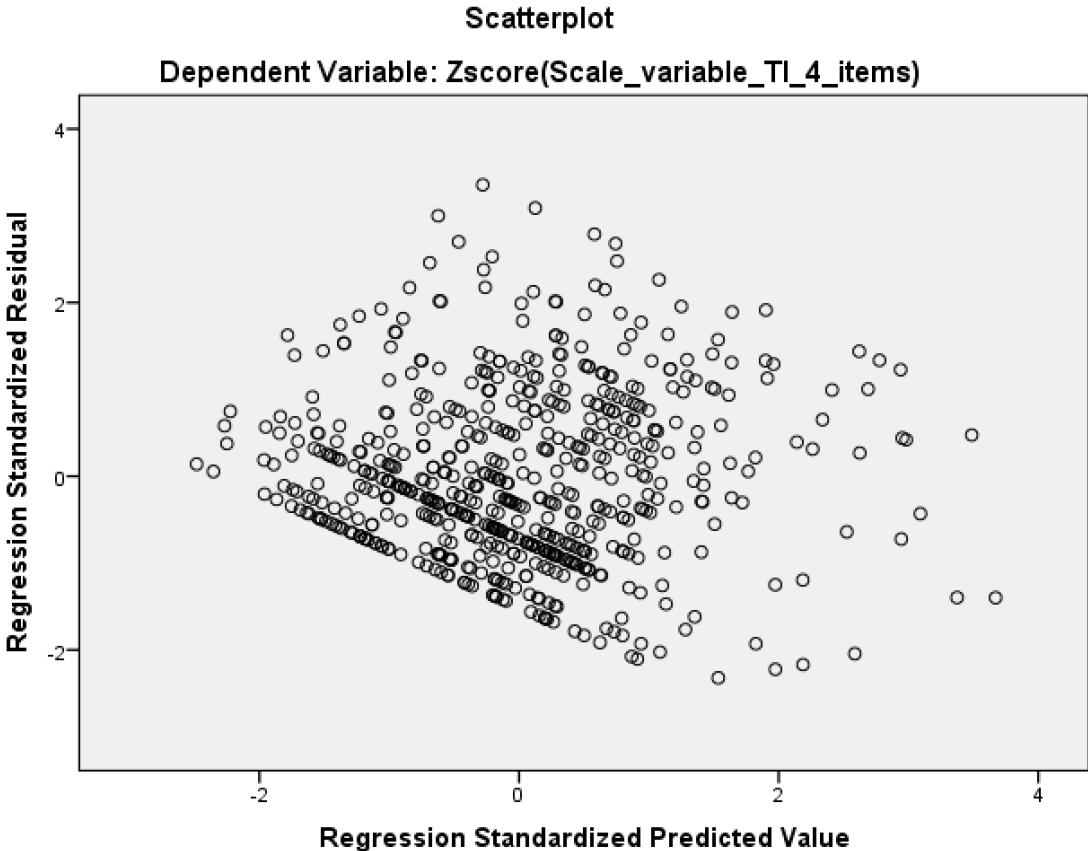


Appendix 3 Linearity

Normal P-P Plot of Regression Standardized Residual  
Dependent Variable: Zscore(Scale\_variable\_TI\_4\_items)



Appendix 4 Scatter plot homoscedasticity



## Appendix 5 Factor analysis

### Organisational commitment and organisational identification

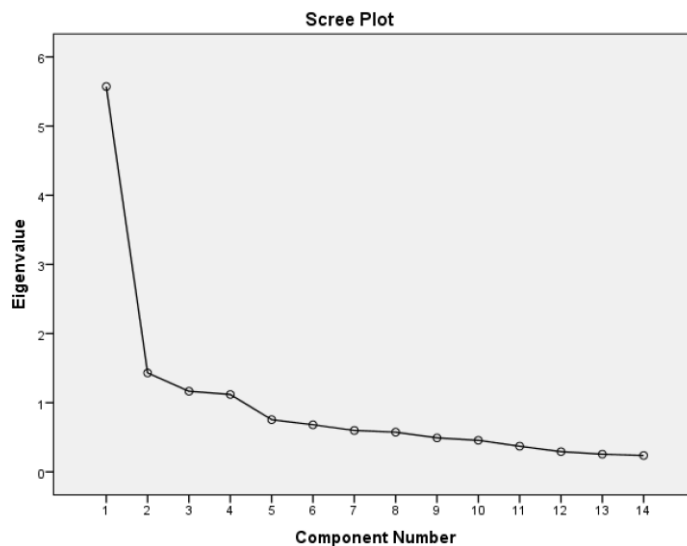
#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,899
Bartlett's Test of Sphericity	Approx. Chi-Square	3892,286
	df	91
	Sig.	,000

#### Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5,572	39,801	39,801	5,572	39,801	39,801	3,308	23,629	23,629
2	1,431	10,218	50,019	1,431	10,218	50,019	3,214	22,958	46,587
3	1,166	8,325	58,345	1,166	8,325	58,345	1,400	9,998	56,586
4	1,119	7,992	66,337	1,119	7,992	66,337	1,365	9,751	66,337
5	,755	5,392	71,729						
6	,681	4,862	76,591						
7	,599	4,278	80,869						
8	,574	4,100	84,969						
9	,491	3,511	88,480						
10	,457	3,264	91,744						
11	,371	2,650	94,394						
12	,292	2,085	96,479						
13	,256	1,826	98,305						
14	,237	1,695	100,000						

Extraction Method: Principal Component Analysis.



### Rotated Component Matrix<sup>a</sup>

	Component			
	1	2	3	4
In hoeverre bent u het eens met de volgende stellingen over werken bij deze organisatie? - 1. In hoeverre voelt u zich verantwoordelijk voor deze organisatie?	,357	,749		
In hoeverre bent u het eens met de volgende stellingen over werken bij deze organisatie? - 2. In hoeverre hecht u belang aan deze organisatie?		,842		
In hoeverre bent u het eens met de volgende stellingen over werken bij deze organisatie? - 3. In hoeverre heeft u toewijding naar uw organisatie?		,855		
In hoeverre bent u het eens met de volgende stellingen over werken bij deze organisatie? - 4. In hoeverre voelt u zich verbonden met uw organisatie?	,330	,798		
In hoeverre bent u het eens met de volgende stellingen over werken bij uw organisatie? - 1. Als iemand kritiek heeft op de organisatie waarvoor ik werk voelt dat als een persoonlijke belediging.	,760			
In hoeverre bent u het eens met de volgende stellingen over werken bij uw organisatie? - 2. Ik ben erg geïnteresseerd in wat anderen van deze organisatie vinden.	,596	,343		
In hoeverre bent u het eens met de volgende stellingen over werken bij uw organisatie? - 3. Als ik het heb over deze organisatie, zeg ik meestal "wij" in plaats van "zij".	,597	,324		
In hoeverre bent u het eens met de volgende stellingen over werken bij uw organisatie? - 4. De successen van deze organisatie zijn mijn successen.	,715	,345		

In hoeverre bent u het eens met de volgende stellingen over werken bij uw organisatie? - 5. Wanneer iemand deze organisatie prijst, voelt het als een persoonlijk compliment.	,724	,352		
In hoeverre bent u het eens met de volgende stellingen over werken bij uw organisatie? - 6. Ik gedraag me net als de rest van de mensen in mijn organisatie.	,371		,648	
In hoeverre bent u het eens met de volgende stellingen over werken bij uw organisatie? - 7. Ik zou mij schamen als er in de media een verhaal zou verschijnen dat kritiek uit op de organisatie.	,676			
In hoeverre bent u het eens met de volgende stellingen over werken bij uw organisatie? - 9. Ik heb een aantal eigenschappen die typerend zijn voor de mensen die in deze organisatie werken.			,340	,700
In hoeverre bent u het eens met de volgende stellingen over werken bij uw organisatie? - 10. De beperkingen die verbonden zijn aan mensen in deze organisatie zijn ook op mij van toepassing.				,890
OrgIdent8_recoded			,860	

Extraction Method: Principal Component Analysis.  
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

## Appendix 6 Regression analysis

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	,369 <sup>a</sup>	,136	,105	,94580695	,136	4,435	21	591	,000
2	,571 <sup>b</sup>	,326	,300	,83659507	,190	83,187	2	589	,000
3	,572 <sup>c</sup>	,327	,299	,83697531	,001	,465	1	588	,496

- a. Predictors: (Constant), Mijn contract bij deze organisatie is, DummyAdministrative, DummyVMBO\_KaderBeroeps, DummyTransgender, DummyNoEd, DummyPhD, DummyOrgSize101\_500, DummyTopmanager, DummyHavoVwo, DummyMavo\_VMBOtheoretisch, DummyMale, DummyLinemanager, DummyOrgSize500\_1000, DummyWo, DummyOrgSize26\_100, DummyTechnical, DummyMBO, DummyOrgSize\_less25, DummyProfessional, Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren, Zscore: Age
- b. Predictors: (Constant), Mijn contract bij deze organisatie is, DummyAdministrative, DummyVMBO\_KaderBeroeps, DummyTransgender, DummyNoEd, DummyPhD, DummyOrgSize101\_500, DummyTopmanager, DummyHavoVwo, DummyMavo\_VMBOtheoretisch, DummyMale, DummyLinemanager, DummyOrgSize500\_1000, DummyWo, DummyOrgSize26\_100, DummyTechnical, DummyMBO, DummyOrgSize\_less25, DummyProfessional, Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren, Zscore: Age, Zscore(Scale\_variable\_OI\_10\_items), Zscore(Scale\_variable\_OC\_4\_items)
- c. Predictors: (Constant), Mijn contract bij deze organisatie is, DummyAdministrative, DummyVMBO\_KaderBeroeps, DummyTransgender, DummyNoEd, DummyPhD, DummyOrgSize101\_500, DummyTopmanager, DummyHavoVwo, DummyMavo\_VMBOtheoretisch, DummyMale, DummyLinemanager, DummyOrgSize500\_1000, DummyWo, DummyOrgSize26\_100, DummyTechnical, DummyMBO, DummyOrgSize\_less25, DummyProfessional, Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren, Zscore: Age, Zscore(Scale\_variable\_OI\_10\_items), Zscore(Scale\_variable\_OC\_4\_items), zOCxzOI

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	83,320	21	3,968	4,435	,000 <sup>b</sup>
	Residual	528,680	591	,895		
	Total	612,000	612			
2	Regression	199,764	23	8,685	12,410	,000 <sup>c</sup>
	Residual	412,236	589	,700		
	Total	612,000	612			
3	Regression	200,090	24	8,337	11,901	,000 <sup>d</sup>
	Residual	411,910	588	,701		
	Total	612,000	612			

- a. Dependent Variable: Zscore(Scale\_variable\_TI\_4\_items)
- b. Predictors: (Constant), Mijn contract bij deze organisatie is, DummyAdministrative, DummyVMBO\_KaderBeroeps, DummyTransgender, DummyNoEd, DummyPhD, DummyOrgSize101\_500, DummyTopmanager, DummyHavoVwo, DummyMavo\_VMBOtheoretisch, DummyMale, DummyLinemanager, DummyOrgSize500\_1000, DummyWo, DummyOrgSize26\_100, DummyTechnical, DummyMBO, DummyOrgSize\_less25, DummyProfessional, Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren, Zscore: Age
- c. Predictors: (Constant), Mijn contract bij deze organisatie is, DummyAdministrative, DummyVMBO\_KaderBeroeps, DummyTransgender, DummyNoEd, DummyPhD, DummyOrgSize101\_500, DummyTopmanager, DummyHavoVwo, DummyMavo\_VMBOtheoretisch, DummyMale, DummyLinemanager, DummyOrgSize500\_1000, DummyWo, DummyOrgSize26\_100, DummyTechnical, DummyMBO, DummyOrgSize\_less25, DummyProfessional, Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren, Zscore: Age, Zscore(Scale\_variable\_OI\_10\_items), Zscore(Scale\_variable\_OC\_4\_items)
- d. Predictors: (Constant), Mijn contract bij deze organisatie is, DummyAdministrative, DummyVMBO\_KaderBeroeps, DummyTransgender, DummyNoEd, DummyPhD, DummyOrgSize101\_500, DummyTopmanager, DummyHavoVwo, DummyMavo\_VMBOtheoretisch, DummyMale, DummyLinemanager, DummyOrgSize500\_1000, DummyWo, DummyOrgSize26\_100, DummyTechnical, DummyMBO, DummyOrgSize\_less25, DummyProfessional, Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren, Zscore: Age, Zscore(Scale\_variable\_OI\_10\_items), Zscore(Scale\_variable\_OC\_4\_items), zOCxzOI



Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	,017	,169		,103	,918		
	Zscore: Age	-,157	,060	-,157	-2,628	,009	,408	2,453
	Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren	-,002	,057	-,002	-,034	,973	,452	2,210
	DummyNoEd	-,299	,716	-,016	-,417	,676	,965	1,036
	DummyVMBO_KaderBer oeps	-,720	,463	-,062	-1,554	,121	,927	1,078
	DummyMavo_VMBOtheoretisch	-,390	,284	-,056	-1,372	,171	,891	1,123
	DummyMBO	-,396	,119	-,145	-3,319	,001	,768	1,302
	DummyHavoVwo	-,073	,140	-,022	-,521	,603	,845	1,183
	DummyWo	,164	,102	,069	1,609	,108	,788	1,268
	DummyPhD	-,363	,341	-,042	-1,067	,286	,957	1,044
	DummyTechnical	-,010	,204	-,002	-,048	,962	,829	1,207
	DummyAdministrative	-,023	,121	-,008	-,188	,851	,809	1,236
	DummyProfessional	-,212	,106	-,093	-2,006	,045	,684	1,462
	DummyLinemanager	,329	,139	,102	2,368	,018	,794	1,260
	DummyTopmanager	-,229	,291	-,031	-,786	,432	,914	1,094
	DummyOrgSize_less25	,107	,116	,041	,925	,355	,748	1,337
	DummyOrgSize26_100	,179	,111	,071	1,612	,107	,762	1,313
	DummyOrgSize101_500	,158	,112	,061	1,404	,161	,781	1,280
	DummyOrgSize500_1000	-,199	,147	-,057	-1,353	,176	,837	1,195
	DummyMale	-,171	,087	-,081	-1,979	,048	,866	1,154
DummyTransgender	,058	,728	,003	,080	,937	,933	1,072	
Mijn contract bij deze organisatie is	,040	,098	,019	,406	,685	,647	1,545	
2	(Constant)	,044	,150		,292	,770		
	Zscore: Age	-,118	,053	-,118	-2,231	,026	,406	2,464
	Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren	,022	,050	,022	,446	,656	,451	2,216
	DummyNoEd	-,757	,637	-,041	-1,189	,235	,955	1,047
	DummyVMBO_KaderBer oeps	-,562	,410	-,048	-1,371	,171	,926	1,080
	DummyMavo_VMBOtheoretisch	-,288	,252	-,041	-1,142	,254	,888	1,126
	DummyMBO	-,335	,106	-,122	-3,171	,002	,766	1,305
	DummyHavoVwo	-,196	,125	-,058	-1,577	,115	,836	1,197
	DummyWo	,139	,090	,059	1,541	,124	,786	1,272
	DummyPhD	-,358	,301	-,041	-1,187	,236	,957	1,044
	DummyTechnical	-,213	,181	-,044	-1,173	,241	,819	1,220
	DummyAdministrative	-,028	,108	-,010	-,255	,799	,791	1,265
	DummyProfessional	-,026	,095	-,011	-,270	,787	,667	1,500
	DummyLinemanager	,498	,124	,154	4,016	,000	,780	1,282
	DummyTopmanager	,287	,262	,039	1,095	,274	,879	1,138
	DummyOrgSize_less25	,380	,105	,145	3,634	,000	,716	1,397
	DummyOrgSize26_100	,383	,100	,151	3,845	,000	,741	1,349
	DummyOrgSize101_500	,243	,100	,093	2,431	,015	,775	1,290
	DummyOrgSize500_1000	-,142	,130	-,041	-1,094	,274	,835	1,198
	DummyMale	-,153	,077	-,072	-1,991	,047	,863	1,159
DummyTransgender	-,408	,646	-,022	-,633	,527	,929	1,077	
Mijn contract bij deze organisatie is	-,105	,088	-,051	-1,194	,233	,630	1,586	
Zscore (Scale_variable_OI_10_items)	-,195	,044	-,195	-4,388	,000	,581	1,723	
Zscore (Scale_variable_OC_4_items)	-,339	,047	-,339	-7,262	,000	,524	1,908	
3	(Constant)	,058	,151		,383	,702		
	Zscore: Age	-,119	,053	-,119	-2,245	,025	,406	2,465
	Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren	,023	,050	,023	,451	,652	,451	2,216
	DummyNoEd	-,767	,637	-,042	-1,204	,229	,955	1,048
	DummyVMBO_KaderBer oeps	-,562	,410	-,048	-1,371	,171	,926	1,080
	DummyMavo_VMBOtheoretisch	-,280	,252	-,040	-1,109	,268	,886	1,129
	DummyMBO	-,340	,106	-,124	-3,207	,001	,763	1,310
	DummyHavoVwo	-,191	,125	-,057	-1,528	,127	,832	1,202
	DummyWo	,139	,090	,059	1,542	,124	,786	1,272
	DummyPhD	-,338	,303	-,039	-1,116	,265	,949	1,054
	DummyTechnical	-,214	,181	-,044	-1,181	,238	,819	1,221
	DummyAdministrative	-,031	,109	-,011	-,281	,779	,790	1,267
	DummyProfessional	-,029	,095	-,013	-,305	,760	,665	1,504
	DummyLinemanager	,498	,124	,154	4,013	,000	,780	1,282
	DummyTopmanager	,308	,264	,042	1,166	,244	,867	1,153
	DummyOrgSize_less25	,385	,105	,147	3,674	,000	,712	1,405
	DummyOrgSize26_100	,389	,100	,153	3,887	,000	,736	1,359
	DummyOrgSize101_500	,241	,100	,093	2,415	,016	,775	1,291
	DummyOrgSize500_1000	-,145	,130	-,041	-1,116	,265	,834	1,199
	DummyMale	-,150	,077	-,071	-1,949	,052	,860	1,163
DummyTransgender	-,422	,646	-,023	-,653	,514	,928	1,078	
Mijn contract bij deze organisatie is	-,109	,088	-,053	-1,234	,218	,628	1,593	
Zscore (Scale_variable_OI_10_items)	-,198	,045	-,198	-4,434	,000	,574	1,742	
Zscore (Scale_variable_OC_4_items)	-,350	,049	-,350	-7,110	,000	,473	2,114	
ZOCzOI	-,018	,026	-,027	-,682	,496	,755	1,325	

a. Dependent Variable: Zscore(Scale\_variable\_TL\_4\_items)



## Appendix 7 Two simple linear regression analyses

### Organisational identification and turnover intentions

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	,369 <sup>a</sup>	,136	,105	,94580695	,136	4,435	21	591	,000
2	,516 <sup>b</sup>	,266	,239	,87250888	,130	104,469	1	590	,000

a. Predictors: (Constant), Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren, DummyAdministrative, DummyTransgender, DummyPhD, DummyOrgSize101\_500, DummyNoEd, DummyTopmanager, DummyMale, DummyVMBO\_KaderBeroeps, DummyMavo\_VMBOtheoretisch, DummyHavoVwo, DummyLinemanager, DummyOrgSize500\_1000, DummyMBO, DummyOrgSize26\_100, DummyTechnical, DummyWo, DummyOrgSize\_less25, DummyProfessional, Mijn contract bij deze organisatie is, Zscore: Age

b. Predictors: (Constant), Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren, DummyAdministrative, DummyTransgender, DummyPhD, DummyOrgSize101\_500, DummyNoEd, DummyTopmanager, DummyMale, DummyVMBO\_KaderBeroeps, DummyMavo\_VMBOtheoretisch, DummyHavoVwo, DummyLinemanager, DummyOrgSize500\_1000, DummyMBO, DummyOrgSize26\_100, DummyTechnical, DummyWo, DummyOrgSize\_less25, DummyProfessional, Mijn contract bij deze organisatie is, Zscore: Age, Zscore(Scale\_variable\_OI\_10\_items)

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	83,320	21	3,968	4,435	,000 <sup>b</sup>
	Residual	528,680	591	,895		
	Total	612,000	612			
2	Regression	162,850	22	7,402	9,724	,000 <sup>c</sup>
	Residual	449,150	590	,761		
	Total	612,000	612			

a. Dependent Variable: Zscore(Scale\_variable\_TI\_4\_items)

b. Predictors: (Constant), Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren, DummyAdministrative, DummyTransgender, DummyPhD, DummyOrgSize101\_500, DummyNoEd, DummyTopmanager, DummyMale, DummyVMBO\_KaderBeroeps, DummyMavo\_VMBOtheoretisch, DummyHavoVwo, DummyLinemanager, DummyOrgSize500\_1000, DummyMBO, DummyOrgSize26\_100, DummyTechnical, DummyWo, DummyOrgSize\_less25, DummyProfessional, Mijn contract bij deze organisatie is, Zscore: Age

c. Predictors: (Constant), Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren, DummyAdministrative, DummyTransgender, DummyPhD, DummyOrgSize101\_500, DummyNoEd, DummyTopmanager, DummyMale, DummyVMBO\_KaderBeroeps, DummyMavo\_VMBOtheoretisch, DummyHavoVwo, DummyLinemanager, DummyOrgSize500\_1000, DummyMBO, DummyOrgSize26\_100, DummyTechnical, DummyWo, DummyOrgSize\_less25, DummyProfessional, Mijn contract bij deze organisatie is, Zscore: Age, Zscore(Scale\_variable\_OI\_10\_items)

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients		
1	(Constant)	,017	,169		,103	,918
	DummyNoEd	-,299	,716	-,016	-,417	,676
	DummyVMBO_KaderBer oeps	-,720	,463	-,062	-1,554	,121
	DummyMavo_VMBOtheor etisch	-,390	,284	-,056	-1,372	,171
	DummyMBO	-,396	,119	-,145	-3,319	,001
	DummyHavoVwo	-,073	,140	-,022	-,521	,603
	DummyWo	,164	,102	,069	1,609	,108
	DummyPhD	-,363	,341	-,042	-1,067	,286
	DummyTechnical	-,010	,204	-,002	-,048	,962
	DummyAdministrative	-,023	,121	-,008	-,188	,851
	DummyProfessional	-,212	,106	-,093	-2,006	,045
	DummyLinemanager	,329	,139	,102	2,368	,018
	DummyTopmanager	-,229	,291	-,031	-,786	,432
	DummyOrgSize_less25	,107	,116	,041	,925	,355
	DummyOrgSize26_100	,179	,111	,071	1,612	,107
	DummyOrgSize101_500	,158	,112	,061	1,404	,161
	DummyOrgSize500_100 0	-,199	,147	-,057	-1,353	,176
	DummyMale	-,171	,087	-,081	-1,979	,048
	DummyTransgender	,058	,728	,003	,080	,937
	Mijn contract bij deze organisatie is	,040	,098	,019	,406	,685
	Zscore: Age	-,157	,060	-,157	-2,628	,009
	Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren	-,002	,057	-,002	-,034	,973
2	(Constant)	-,023	,156		-,150	,881
	DummyNoEd	-,944	,663	-,051	-1,423	,155
	DummyVMBO_KaderBer oeps	-,662	,427	-,057	-1,551	,121
	DummyMavo_VMBOtheor etisch	-,249	,263	-,035	-,948	,344
	DummyMBO	-,347	,110	-,127	-3,150	,002
	DummyHavoVwo	-,104	,129	-,031	-,802	,423
	DummyWo	,172	,094	,073	1,829	,068
	DummyPhD	-,358	,314	-,041	-1,138	,255
	DummyTechnical	-,214	,189	-,044	-1,134	,257
	DummyAdministrative	-,124	,112	-,043	-1,102	,271
	DummyProfessional	-,110	,098	-,048	-1,119	,263
	DummyLinemanager	,387	,128	,119	3,012	,003
	DummyTopmanager	-,069	,269	-,010	-,258	,796
	DummyOrgSize_less25	,321	,109	,123	2,950	,003
	DummyOrgSize26_100	,344	,104	,136	3,318	,001
	DummyOrgSize101_500	,250	,104	,096	2,406	,016
	DummyOrgSize500_100 0	-,136	,136	-,039	-1,006	,315
	DummyMale	-,188	,080	-,089	-2,350	,019
	DummyTransgender	-,124	,672	-,007	-,184	,854
	Mijn contract bij deze organisatie is	-,007	,091	-,004	-,083	,934
	Zscore: Age	-,121	,055	-,121	-2,179	,030
	Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren	,004	,052	,004	,085	,932
Zscore (Scale_variable_OI_10_it ems)	-,384	,038	-,384	-10,221	,000	

a. Dependent Variable: Zscore(Scale\_variable\_TI\_4\_items)

## Organisational commitment and turnover intentions

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	,369 <sup>a</sup>	,136	,105	,94580695	,136	4,435	21	591	,000
2	,552 <sup>b</sup>	,304	,278	,84944047	,168	142,701	1	590	,000

a. Predictors: (Constant), Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren, DummyAdministrative, DummyTransgender, DummyPhD, DummyOrgSize101\_500, DummyNoEd, DummyTopmanager, DummyMale, DummyVMBO\_KaderBeroeps, DummyMavo\_VMBOtheoretisch, DummyHavoVwo, DummyLinemanager, DummyOrgSize500\_1000, DummyMBO, DummyOrgSize26\_100, DummyTechnical, DummyWo, DummyOrgSize\_less25, DummyProfessional, Mijn contract bij deze organisatie is, Zscore: Age

b. Predictors: (Constant), Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren, DummyAdministrative, DummyTransgender, DummyPhD, DummyOrgSize101\_500, DummyNoEd, DummyTopmanager, DummyMale, DummyVMBO\_KaderBeroeps, DummyMavo\_VMBOtheoretisch, DummyHavoVwo, DummyLinemanager, DummyOrgSize500\_1000, DummyMBO, DummyOrgSize26\_100, DummyTechnical, DummyWo, DummyOrgSize\_less25, DummyProfessional, Mijn contract bij deze organisatie is, Zscore: Age, Zscore(Scale\_variable\_OC\_4\_items)

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	83,320	21	3,968	4,435	,000 <sup>b</sup>
	Residual	528,680	591	,895		
	Total	612,000	612			
2	Regression	186,286	22	8,468	11,735	,000 <sup>c</sup>
	Residual	425,714	590	,722		
	Total	612,000	612			

a. Dependent Variable: Zscore(Scale\_variable\_TI\_4\_items)

b. Predictors: (Constant), Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren, DummyAdministrative, DummyTransgender, DummyPhD, DummyOrgSize101\_500, DummyNoEd, DummyTopmanager, DummyMale, DummyVMBO\_KaderBeroeps, DummyMavo\_VMBOtheoretisch, DummyHavoVwo, DummyLinemanager, DummyOrgSize500\_1000, DummyMBO, DummyOrgSize26\_100, DummyTechnical, DummyWo, DummyOrgSize\_less25, DummyProfessional, Mijn contract bij deze organisatie is, Zscore: Age

c. Predictors: (Constant), Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren, DummyAdministrative, DummyTransgender, DummyPhD, DummyOrgSize101\_500, DummyNoEd, DummyTopmanager, DummyMale, DummyVMBO\_KaderBeroeps, DummyMavo\_VMBOtheoretisch, DummyHavoVwo, DummyLinemanager, DummyOrgSize500\_1000, DummyMBO, DummyOrgSize26\_100, DummyTechnical, DummyWo, DummyOrgSize\_less25, DummyProfessional, Mijn contract bij deze organisatie is, Zscore: Age, Zscore(Scale\_variable\_OC\_4\_items)

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	,017	,169		,103	,918
	DummyNoEd	-,299	,716	-,016	-,417	,676
	DummyVMBO_KaderBer oepe	-,720	,463	-,062	-1,554	,121
	DummyMavo_VMBOtheor etisch	-,390	,284	-,056	-1,372	,171
	DummyMBO	-,396	,119	-,145	-3,319	,001
	DummyHavoVwo	-,073	,140	-,022	-,521	,603
	DummyWo	,164	,102	,069	1,609	,108
	DummyPhD	-,363	,341	-,042	-1,067	,286
	DummyTechnical	-,010	,204	-,002	-,048	,962
	DummyAdministrative	-,023	,121	-,008	-,188	,851
	DummyProfessional	-,212	,106	-,093	-2,006	,045
	DummyLinemanager	,329	,139	,102	2,368	,018
	DummyTopmanager	-,229	,291	-,031	-,786	,432
	DummyOrgSize_less25	,107	,116	,041	,925	,355
	DummyOrgSize26_100	,179	,111	,071	1,612	,107
	DummyOrgSize101_500	,158	,112	,061	1,404	,161
	DummyOrgSize500_100 0	-,199	,147	-,057	-1,353	,176
	DummyMale	-,171	,087	-,081	-1,979	,048
	DummyTransgender	,058	,728	,003	,080	,937
	Mijn contract bij deze organisatie is	,040	,098	,019	,406	,685
	Zscore: Age	-,157	,060	-,157	-2,628	,009
Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren	-,002	,057	-,002	-,034	,973	
2	(Constant)	,081	,152		,534	,593
	DummyNoEd	-,476	,643	-,026	-,739	,460
	DummyVMBO_KaderBer oepe	-,545	,416	-,047	-1,310	,191
	DummyMavo_VMBOtheor etisch	-,349	,255	-,050	-1,365	,173
	DummyMBO	-,347	,107	-,127	-3,237	,001
	DummyHavoVwo	-,219	,126	-,065	-1,733	,084
	DummyWo	,124	,091	,053	1,362	,174
	DummyPhD	-,360	,306	-,041	-1,175	,240
	DummyTechnical	-,144	,183	-,030	-,784	,433
	DummyAdministrative	,040	,109	,014	,367	,713
	DummyProfessional	-,030	,096	-,013	-,311	,756
	DummyLinemanager	,518	,126	,160	4,119	,000
	DummyTopmanager	,360	,266	,050	1,355	,176
	DummyOrgSize_less25	,329	,105	,126	3,124	,002
	DummyOrgSize26_100	,342	,101	,135	3,392	,001
	DummyOrgSize101_500	,209	,101	,080	2,068	,039
	DummyOrgSize500_100 0	-,165	,132	-,047	-1,252	,211
	DummyMale	-,135	,078	-,064	-1,734	,083
	DummyTransgender	-,449	,655	-,024	-,684	,494
	Mijn contract bij deze organisatie is	-,123	,089	-,060	-1,386	,166
	Zscore: Age	-,130	,054	-,130	-2,414	,016
Zscore: Hoelang bent u voor deze organisatie werkzaam? - Jaren	,027	,051	,027	,522	,602	
Zscore (Scale_variable_OC_4_it ems)	-,459	,038	-,459	-11,946	,000	

a. Dependent Variable: Zscore(Scale\_variable\_TI\_4\_items)