# (Perceived) temporality at work

A study about the impact of type of contract (permanent versus temporary) on Organizational Citizenship Behavior, with the mediating effect of Organizational Identity, and the moderating effect of Future Time Perspective in the Organization



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# **Abstract**

**Purpose** - The aim of this research is twofold. First, this research proposed a new scale called Future Time Perspective in the Organization (FTPO). It is examined whether this scale is a statistical useful new construct in measuring the perceived temporality of employees in a particular organization. Second, the aim is to examine the impact of type of contract (permanent versus temporary) on Organizational Citizenship Behavior, with the mediating effect of Organizational Identity in this direct relationship, and the moderating effect of Future Time Perspective in the Organization on these relationships.

**Design** - Two studies are used to gather empirical evidence if FTPO shows comparable results on the added value of this construct. This to increase the internal validity of the construct. Next to that, study 2 is used to test the four hypothesized relationships. Both studies had a cross-sectional design, used a self-reported questionnaire, and used a convenience sampling (snowball sampling) method. In total, study 1 had 273 respondents and study 2 190 respondents.

*Findings* - Both studies indicate added value of the new construct FTPO. It has exploratory power above other time-related variables. In study 2, the hypotheses are tested. Neither one of them showed significant results. There is no influence of type of contract on one of the relationships.

Conclusion - This research adds a new construct to the literature about perceived temporality. Furthermore, it indicates that type of contract does not have an influence on the hypothesized relationships. The research only confirms positive relations between Organizational Identity and Organizational Citizenship Behavior, Future Time Perspective in the Organization and Organizational Identity, and Future Time Perspective in the Organization and Organizational Citizenship Behavior. Finally, there are suggestions for future research (e.g. longitudinal research design, larger sample size, involving other influences of factors).

*Keywords:* Future Time Perspective in the Organization – Organizational Identity – Organizational Citizenship Behavior – Temporary employment – Permanent employment – Type of contract

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In February 2020, I started with the final six months of the Master Business Administration with the specialisation Strategic Human Resources Leadership. The last and biggest challenges, to me, was writing the Master thesis during this half-year. The topic of my thesis focuses on the temporality at

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Organizational Citizenship Behavior. I was very nervous and insecure about writing this thesis but it

went very well! Looking back on this period, it was a very intense period in which learned a lot about

the topics of my thesis (Future Time Perspective in the Organization, Organizational Identity,

Organizational Citizenship Behavior, and the differences between temporary and permanent

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# 1- Introduction

Since the late 1970s and early 1980s temporary employment is an important and popular evolution in the Western working life, organizations choose more and more for flexible work arrangements (De Cuyper et al., 2008). Temporary employment is defined by De Cuyper et al. (2008) as follows: "dependent employment of limited duration" (p.27). Temporary work is one of the dimensions of nonstandard work arrangement and it differs from standard work arrangements (Kalleberg, Reskin & Hudson, 2000). Temporary employment differs from standard work for example in the formal duration of the contract because temporary contracts have a fixed term with a specific end date. Standard work arrangements are based on permanent contracts, which do not have a fixed end term. The share of temporary employment has almost doubled in the European countries between 1980 and 2018, from 8.16% to 14.17% (OECD, 2020). This growth could be explained by the benefits that the use of temporary employment has for organizations. Firms use temporary contracts to enhance flexibility within the organization and to reduce costs, in this way they could respond easily to peaks and drops in demand. As a result of this increase in temporary contract, researchers have some underlying concerns about how temporary work arrangements affect employees' psychological job outcomes (De Cuyper et al., 2008; Kalleberg, Reskin & Hudson, 2000). One of the questions that remain is whether permanent and temporary employees differ in work-related attitudes and behaviors because they also differ in formal work arrangement (Wilkin, 2013). Two mechanisms that could influence employee outcomes are the (1) employee's Organizational Identity which affects the differences between temporary and permanent workers with respect to Organizational Citizenship Behavior, and (2) the Future Time Perspective in the (current) Organization.

#### 1.1 Problem description

Temporary employees who perceive unfavorable treatment by for example limited, short-term employment contracts and low job security will show different work-related attitudes and behaviors in comparison to permanent workers. These factors of insecurity for the temporary worker could predict that they will show lower levels of Organizational Citizenship Behavior (Blatt, 2008; Liden, Wayne, Kraimer, & Sparrowe, 2003). Organ (1988) defines OCB as: "are the discretionary behaviors of an individual which are not explicitly recognized by the formal reward system, and in the aggregate promote the efficient and effective functioning of the organization" (p. 4). It is also called extra-role behavior, so doing more than expected in your role/function. Perceiving stigmatization could affect employees' behavioral outcomes, in this case Organizational Citizenship Behavior. Studies around the difference between permanent and temporary workers are mostly based on some stigmatizations about the temporary worker. According to Boyce, Ryan, Imus & Morgeson (2007) stigmatization could be defined as: "involves being treated in a devalued manner because of possession of some key attribute—in this case because one is a temporary worker" (p. 8). One of the stigmatizations is that it has been

largely expected that the short-duration contract of temporary workers has a negative influence on OCB (De Cuyper et al., 2008). Next to that, Moorman & Harland (2002) expect that the relationship between permanent versus temporary workers and the employer could differ. For temporary workers the relationship is mostly based on economic exchange, while permanent workers build long-term relationships (Moorman & Harland, 2002). These relationships could affect the need for showing OCB. This means that permanent workers show faster and more often extra-role behaviors (Liden et al., 2003) because of their long-term relationship. On the opposite side, it will lower the need to show OCB for temporary workers because of their short period in an organization to build up relationships.

This relationship between the type of contract and OCB could be different when someone is perceiving themselves as a member of the organization (in-group feeling). The Organizational Identity of temporary employees could include the feeling if they are treated and defined as second-class citizens of the organization (Roger, 1995). They are perceived as the ones with lower status and secondary-jobs compared to permanent employees with high quality and primary-jobs (Davidson, 1999). The feeling of being a secondary citizen, which is part of belonging to the out-group, influences the Organizational Citizenship Behavior of that individual negatively. On the opposite, individuals who are part of the ingroup of an organization will show more extra-role behavior. This feeling of being part of an organization or not is called Organizational Identity. There is not a universally accepted definition of Organizational Identity. One way to look at organizational identification is that it is based on the social identity theory. According to Tajfel and Turner (1979, 1986) the social identity theory (SIT) maintains that individuals tend to classify themselves and others into various social groups according to the specific characteristics ascribed to or abstracted from the member of the groups. Organizational identification is a specific form of social identification where an individual defines themself in terms of their membership in a particular organization (Meal & Ashforth, 1992). The feeling of being part of the organization in the sense of organizational identification could mediate the defined relationship between contract type and OCB.

Identifying yourself as a member of an organization could take some time. For example, the increased mobility of people has made it more difficult for individuals to identify with others (Lee, 1971). As Alvesson, Ashcraft & Thomas (2008) says:

Defining ourselves as secretaries, middle managers, or professors, for instance, does not entail simply stepping into pre-packaged selves, but always involves negotiating intersections with other simultaneously held identities and making individualized meaning in interaction with the people and systems around us. (p. 10)

This means that in essence it would be easier for permanent employees to create an Organizational Identity than for temporary employees because in particularly temporary employees being for less time part of an organization. Contradictory is that permanent and temporary employees could have a different mindset – open-ended or limited future time perspective - when looking into their future career in a particular organization which could lead to a better or worse creation of Organizational Identity. For

example, an employee with a permanent contract could have a short-term future time perspective. This perceived temporality could influence their feeling of becoming/being part of the organization. The associated question to this is if an employee wants to invest in identifying with the organization when he/she perceives that they are there for a limited time. So, to what extent is the development of an Organizational Identity different for temporary versus permanent workers with a longer or shorter future time perspective. Future time perspective is defined as how much time an individual believes he/she has left in the future and how they perceive that time (Cate & John, 2007; Zacher & Frese, 2009). In this research the concept of the future time perspective is applied to the organizational context and describes how much an individual employee believes he or she has left in the current organization and how he or she perceives that time.

# 1.2 Research question and goal

A lot of research is conducted on the differences between temporary and permanent workers in relation to employee outcomes. This study introduces some new relationships, with Future Time Perspective in the Organization (FTPO) as a new construct in the literature. The aim is to draw upon the current literature of temporary versus permanent employment-related outcomes, the Organizational Identity based on the Social Identity Theory, and theory on subjective time perspective. Integrating these concepts develops new insight into the behavior of temporary and permanent workers in relation to the organization. This has the following research question as a result: 'What is the effect of type of contract (permanent versus temporary) on Organizational Citizenship Behavior, to what extent is this effect mediated by Organizational Identity, and to what extent are these associations moderated by Future Time Perspective in the Organization?'.

This study proposes a moderation and mediation model with Organizational Identity as the mediator of the relationship between type of contract and Organizational Citizenship Behavior (OCB), and with Future Time Perspective in the (current) Organization (FTPO) as the moderator of the relationships between (1) type of contract and Organizational Citizenship Behavior (OCB) and (2) type of contract and Organizational Identity (OI).

#### 1.3 Scientific and managerial relevance

This study has scientific and managerial relevance. Scientifically this study contributes to the theoretical development of how the perceived temporality and Organizational Identity of temporary versus permanent workers influence their extra-role behavior in the organization, which is never researched before. It gives insight into the different employee job-outcomes between temporary and permanent workers. First of all, the addition of the current organizational context is new to the existing scales of future time perspective. This gives a new dimension to the – existing scale of Zacher and Frese (2009)

on - perceived temporality in the current organization of temporary and permanent workers. This newly developed scale will be tested and used for the first time in this research to see whether it has an effect on other constructs and relationships.

Second, a lot of research is conducted on the different employee outcomes between permanent and temporary workers. This study is a contribution to what extent employees perceive their future in the organization as limited or open-ended and how this influences the Organizational Identity and Organizational Citizenship Behavior of temporary and permanent workers. With the new insights of the FTPO scale the added value of the perceived temporality of employees could be researched.

Lastly, there is previous research available on the relationship between temporary and permanent workers and their level of OCB (Von Hippel, 2006) but to what extent Organizational Identity influences this, is not researched before. The research generates theoretical knowledge on if the feeling of being a member of an organization influences the level of showing extra-role behavior. It fills in this scientific gap by studying this mediating relationship of Organizational Identity on the link between the type of contract and OCB.

Next to the scientific contribution this study has also managerial relevance. Organizations face more and more the difference between permanent and temporary employees because temporary employment becomes more common and popular. In addition, the Organizational Citizenship Behavior of employees has an effect on the performance of the organization. Managing temporary and permanent employees in a way that they show Organizational Citizenship Behavior has positive effects on organizations. This study will contribute to the understanding of how perms and temps develop an Organizational Identity and how their mindset/perspective on the future in the organization affects this. The understanding of the behavior of employees is valuable information for organizations that wants to effectively make use of temporary workers, and which factors affect the development of extra-role behaviors of employees.

# 1.4 Outline of the thesis

The thesis consists of five sections, with this introduction chapters as the first one. The second chapter includes the theoretical framework of this research, which elaborates more on the different theoretical concepts and presents the conceptual model. In chapter three the overall methodology of both studies is described. Next to that, the methodology and results of study 1 will be discussed. Chapter four gives the used methodology and findings of study 2. Finally, the conclusion and associated discussion are described in chapter five.

# 2- Theoretical background

This chapter consists of the theoretical background of the following concepts: temporary and permanent employment, Organizational Citizenship Behavior, Organizational Identity, and Future Time Perspective in the Organization. The direct (2.3), mediating (2.4), and moderation (2.5) relationships between the concepts are explained and the associated hypotheses are formulated. Finally, all the theoretical findings together are used to develop the conceptual model (2.6).

# 2.1 – Type of contract

An employer and employee have a formal relationship based on a formal contract, namely a temporary and permanent employment contract. These two types of work arrangements have different characteristics.

A permanent contract (standard employment) is the most continuous type of employment. This contract type is based on a fixed schedule most of the time on a full-time basis (De Cuyper et al., 2008; Kalleberg et al., 2000). In a standard employment relationship, employees work at the employer's workplace and are under the supervision of the employer. Next to that, employees with standard employment have extensive statutory benefits and entitlements, like minimum wage, job security because of protection from unfair exit processes, etcetera in comparison to temporary workers (De Cupyer et al., 2008; Wilkin, 2013).

The second type is called a temporary employment contract. This type has different synonyms, for example: contingent, fixed-term or non-permanent employment is used, and in especially Australia and New Zealand casual employment is used as an equivalent to temporary employment (De Cuyper et al., 2008). According to De Cuyper et al. (2008) the definition of temporary employment is a dependent employment of limited duration. In other words, a job that has a pre-determined end date. Contingent work, which is one of the synonyms of temporary employment, gives this broader definition: "a job in which an employee does not have a contract for long-term employment or one in which the minimum hours worked can vary in a nonsystematic manner" (Polivka & Nardone, 1989, p. 11). What the two definitions have in common is that they are both based on employment with a fixed-term end date. This means that temporary employment brings more job insecurity for employees, in comparison to permanent employment. An addition in the definition from Polivka and Nardone is the non-systematic manner in the minimum working hours of an employee. This part is more focused on for example the on-call and seasonal workers, which is a specific type of nonstandard temporary employment. Another addition is that temporary employment does not mean that employees have a part-time contract, full-time contracts are also possible based on a temporary employment relationship.

#### 2.2 – Organizational Citizenship Behavior (OCB)

"Organizational citizenship behavior is the discretionary behaviors of an individual which are not explicitly recognized by the formal reward system, and in the aggregate promote the efficient and effective functioning of the organization" (Organ, 1988, p.4). Organizational Citizenship Behavior (OCB) is an umbrella term for the extra-role behaviors of employees. It means that employees show behavior which is more than expected out of the formal job description (Chiaburu & Byrne, 2009).

Social Exchange Theory (SET) is one of the theoretical foundations of OCB (Blau, 1964). It explains the employee organization exchange relationship, which is based on the rule of reciprocity (Copanzano & Mitchell, 2005). "Social exchange consist of diffuse, non-specified, informal agreements that are based on trust between two parties." (Moorman & Harland, 2002, p. 174). In this case it consists of the social exchange relationship between the employer and employee. For example, employees show extra-role behavior in return when they feel that the organization is involved in their well-being and treated them in a way that is consistent with what the employee expects (Liaquat & Mehmood, 2017; Moorman & Harland, 2002).

OCB is critical for the effective functioning of the organization (Chiaburu & Byrne, 2009). OCB has benefits for organizations, such as enhancing efficiency, productivity, and overcome turnover (Podsakoff, Whiting, Podsakoff, & Blume, 2009). According to different researchers OCB is related to the individual, team, and organizational performance (Chiaburu & Byrne, 2009).

# 2.3 - Type of contract and Organizational Citizenship Behavior

Permanent and temporary workers differ from each other based on a lot of characteristics. Temporary workers have less job security, a lower contract duration, less protection, and are less involved in training and other organizational benefits in comparison to permanent workers (De Cuyper et al., 2008). These factors of insecurity for the temporary worker could predict various psychological and behavioral outcomes (De Cuyper et al., 2008). One of these behavioral outcomes could be the perceived level of OCB. Most studies about OCB are based on a permanent workforce, but the experiences of temporary employees are different from the permanent ones (Blatt, 2008). According to the research of Arthur & Rousseau (1996) temporary knowledge employees are motivated by different factors compared to permanent employees, and they are most of the time more focused upon careers in the market instead of careers within the organization. There are different explanations about the fact why permanent and temporary employees perform different levels of OCB.

First, one of the foundations of the relationship between the type of contract and OCB is the Social Exchange Theory (SET). The founder of the Social Exchange Theory Peter M. Blau (1964) defined social exchange as follows: "the voluntary actions of individuals that are motivated by the returns they are expected to bring and typically do in fact bring from others which means one person does another a favor and while there is an expectation of some future return, its exact nature is never

specified in advance but must be left to the discretion of the one who makes it" (p. 91). The Social Exchange Theory is based on the comparison between input and outcomes (De Cuyper et al., 2008). Temporary employees who perceive unfavorable treatment by for example limited, short-term employment contracts and low job security will probably show lower levels of OCB (Liden et al., 2003). This way of employee behavior is based on the reciprocity concept. This concept holds that employees who are treated favorably by the organization reciprocate this with an increased OCB and vice versa (Konovsky & Pugh, 1994). Reciprocity is one of the norms of the Social Exchange Theory. Temporary employees are more likely to perceive an imbalance between their input (efforts) and outcomes (rewards) (Isaksson & Bellaagh, 2002). This disbalance perceived by temporary employees and the fact that employees do not build a long-term relationship with the organization should result in lower OCB. Associated with this is the fact that temporary workers by definition have relatively limited engagement towards the organization. The uncertainty whether they will be part of the organization long enough to get paid back from their OCB is related to if they perform extra-role behaviors (George, Levenson, Finegold & Chattopadhyay, 2008). Based on both the theories of Social Comparison and Social Exchange there could be concluded that employees' reactions and behavior are monitored by their perceptions of fairness (De Cupyer et al., 2008). Building further upon the Social Comparison Theory there could be stated that employees compare the outcomes they received with the outcomes received by others (Feldman and Turnley, 2004; Thorteinson, 2003). "Broadly speaking, social comparison theory pertains to the comparative social judgements that individuals make on particular content dimensions" (Kruglanski & Mayseless, 1990 as cited in Wilkin, 2013, p. 49) In the case of an organization, temporary employees choose permanent employees as their reference category for comparison. Temporary employees are seen as secondary citizens who typically receive lower wages and have unattractive job characteristics in comparison to permanent employees (Silla, Francisco & Peiro, 2005). Temporary employees may have a feeling of deprivation because they feel that they receive less beneficial outcomes compared to permanent workers (Wilkin, 2013; De Cuyper et al., 2008). For example, temporary workers could face job insecurity because of the fixed-term contracts in comparison to the perception of job security of permanent workers.

The fixed-term contract of temporary employees puts them in a more uncertain position in an organization compared to permanent workers. As concluded out of the Social Exchange and Social Comparison Theory, attitudes regarding temporary employees on for example their rewards in comparison to permanent workers are perceived lower. Associated with this are the less beneficial working conditions they get from the organization, which consists of more uncertainty than permanent workers face. The perception of unfairness will lead to a lower engagement of temporary workers in Organizational Citizenship Behavior. On the other side, permanent workers thus have more certainty in an organization which makes them more eager to perform extra-role behavior in exchange for the certainty they get in the organization. The hypothesis, based on the argumentation, is as follows:

Hypothesis 1: Temporary workers show lower levels of Organizational Citizenship Behaviors compared to permanent workers.

#### 2.4 – Type of contract, Organizational Identity, and OCB (mediating effect)

The described relationship between the type of contract an employee holds and the Organizational Citizenship Behavior could be mediated by the effect Organizational Identity has on this relationship. The organizational identification mechanism could be a theoretical explanation for why employees perform certain levels of OCB (Blatt, 2008).

Whether someone sees themself as a member of the organization (or not) could be an influence on if and how much he or she shows extra-role behaviors. The feeling of being part of an organization is called Organizational Identity. Organizational Identity is based on the theoretical foundation of the Social Identity Theory (SIT) (Tajfel and Turner, 1979, 1986). According to Tajfel and Turner (1979, 1986), the founders of the SIT, the Social Identity Theory suggests that individuals tend to classify themself and others into different social groups, according to specific characteristics ascribed to or abstracted from the member of a group. Social identity refers to an individual's perception of him- or herself a member of their own group (in-group), more preferable than members of the other groups (outgroup), based on the values and emotional attachment that they have (Alvesson et al., 2008; Von Hippel, 2006). Organizational identification is a specific form of social identification where an employee defines themself in terms of their membership in a particular organization (Meal & Ashforth, 1992). So being part of the in-group (a member of the organization), gives an employee the feeling of belonging and social inclusion in the organization. Being part of the out-group of an organization could give the feeling of social exclusion (Scott, Restubog, & Zagenczyk, 2013). In the research of Kraimer, Wayne, Liden & Sparrowe (2005) an example of social exclusion of newcomers in an organization is given. They argue that; according to the old-timers (current permanent employees) temporary newcomers will not expect to be similar to or behave the same as the group, whereas this expectation does not extend to permanent newcomers (Kraimer et al., 2005). Temporary employees' Organizational Identity could consist of the feeling they are treated as and view themselves as second-class citizens of the organization (Roger, 1995). They are perceived as the ones with lower status and 'secondary-jobs' compared to permanent employees with high quality and primary-jobs (Von Hippel, 2006).

The feeling of being part of an organization could mediate the link between temporary versus permanent employment contracts and OCB in different ways. Organizational identification is useful to align employees' interests and behaviors with the interest and behaviors that benefit the organization (Blatt, 2008). When employees feel that they are part of the organization, they will invest in behaviors that are favorable for the organization. This means that engaging in OCB benefits the organization, but also benefits the self (Chattopadhyay 1999; Vegt, Vliert & Oosterhof, 2003). Rousseau (1998, p.218) stated that: "those who identify are also more likely to want to go the extra mile on behalf of the organization and can help enhance the success of firms" (Edwards, 2005). The feeling of being a

secondary citizen, who belongs to the out-group, influences the Organizational Citizenship Behavior of that employee in a negative way (Von Hippel, 2006). The fact that the concept of OCB has a theoretical foundation in the Social Comparison and Social Exchange Theory means that an employee based their behavior on how they are treated by the organization, and in comparison to other employees (De Cuyper et al., 2008). The fact that organizations treat and see temporary workers as second-class citizens and also gives them less favorable benefits resulting in lower performance of extra-role behaviors of temps. Negative treatment towards temporary workers by organizations, due to seeing them as second-class citizens and give them less favorable benefits in comparison to permanent workers

The level of organizational identification differs between temporary and permanent workers, which influences the performance of OCB. The fact that it takes some time to develop the feeling of being part of the organization makes it harder for temporary workers to become part of the in-group. In this sense, the feeling of being part of the out-group results in the lower level of extra-role behavior. Permanent workers are less influenced by their feeling of being part of the in- or out-group of the organization. They are already incorporated into the organization, which makes it less important to have a high level of Organizational Identity in comparison to temporary workers. Therefore, the mediating effect will be stronger for temporary employees than for permanent employees. The hypothesis regarding this mediating effect is formulated as follows:

Hypothesis 2: The level of Organizational Identity mediates the effect between type of contract (temporary versus permanent) on Organizational Citizenship Behavior.

# 2.5 – Type of contract, Organizational Identity, OCB, and FTPO (moderating effect)

The time an employee has been in an organization, based on the formal employment contract (temporary or permanent), is measured by the clock or calendar and is called the objective time (Levasseur, Shipp, Fried, Rousseau & Zimbardo, 2020). This is the contract duration which is different for temporary and permanent workers. Temporary workers have a fixed-term end date and permanent workers have an open-end contract duration. There is a second type of time on the opposite side of objective time, namely subjective time. According to Levasseur et al. (2020) subjective time is: "time as perceived and experienced by both individuals and collectives. Subjective time is cognitively cyclical, heterogeneous, and interpretive." (p. 1). The objective time and subjective time do not always correspond with each other. An employee could, for example, have a contract duration with a fixed-term of one year, but the subjective time could be shorter or longer than that specific one year. Time perspective is the key concept that characterizes this subjective time of an employee. How an individual thinks about and uses time is called their time perspective, this is a multidimensional concept which focuses on past, present, and future time perspective (Levasseur et al., 2020). When focussing on the objective and subjective time an employee has been in the current organization, the concept of future time perspective is associated. Future Time Perspective (FTP) describes how much time individuals believe they have left in their

future and how they perceive that time (Cate & John, 2007). In this research the concept of the future time perspective is applied to the organizational context and describes how much time an individual employee believes he or she has left in the current organization and how they perceive that time. This results in a new construct called Future Time Perspective in the Organization (FTPO). The Socioemotional Selectivity Theory (SST) is associated with the future time perspective. It says that individuals select their goals based on the perceptions of a limited or open-ended FTP (Lang & Cartensen, 2002). The two dimensions of FTP are distinguished as limited and open-ended (Cate & John, 2007). When time is perceived as limited, the focus of an individual is on restrictions and constraints in the future (Zacher & De Lange, 2011). Meaningful goals have become more important when the focus is on limitation because this perspective is associated with achieving short-term goals (Lang & Carstensen, 2002). On the other side, when an individual's perspective is open-ended, they focus on opportunities. These opportunities consist of all the plans and possibilities they believe to have in the future (Zacher & De Lange, 2011). The goals for open-ended individuals are focused on one's role in the societal and career interests (Lang & Carstensen, 2002)

The creation of an Organizational Identity could take some time. "For people who are unclear about whether and to what degree they belong as a member, the performance can take signification effort and be met with mixed degree of success." (Bartel & Dutton, 2001, p. 120). The creation of identities and identifications is a dynamic process and could differ for individuals (Brown, 2017). This could mean that it will be easier for permanent employees to create an Organizational Identity than for temporary employees because permanent employees have a longer period of time in the organization to develop their Organizational Identity. Contradictory to this is the fact that permanent and temporary employees could have either a limited or open-ended Future Time Perspective in the Organization, which could mediate the relationship between contract type and Organizational Identity. The level of future time perspective could affect the level of the Organizational Identity positively or negatively. An open-ended FTPO gives the employee the feeling that there are enough opportunities aligned with their career interests in the organization. This open-ended focus would also give employees the feeling that they need to be part of the organization and express that they want to be part of the organization, which means that building up an Organizational Identity is valuable. In this research it will be tested whether a temporary employee with an open-ended FTPO (high FTPO) shows higher levels of Organizational Identity in comparison to a limited FTPO (low FTPO). Next to this, the expectation is that this mediation model is stronger for temporary workers than for permanent workers. The hypothesis based on this moderator is as follows:

Hypothesis 3: FTPO moderates the impact of the type of contract on Organizational Identity. For temporary workers the impact of high FTPO compared to low FTPO is stronger compared to permanent workers.

Future Time Perspective in the Organization could also moderate the relationship of the link between type of contract (permanent versus temporary) and Organizational Citizenship Behavior. The same line of reasoning as by hypothesis 3 is suitable for this moderating relationship. OCB is the extra-role behavior of employees towards their organization (Chiaburu & Byrne, 2009). In the research of Engellandt and Riphahn (2005) they found results for the fact that temporary workers provide significantly more unpaid overtime work than permanent workers. "On average, their overtime work propensity exceeds that of permanently employed workers by 60%" (Engellandt & Riphahn, 2005, p. 282). Working unpaid overtime is one of the extra-role behaviors of employees that are not formally in their job description. FTPO could strengthen this relationship between type of contract and Organizational Citizenship Behavior. Employees with an open-ended FTPO see chances and possibilities in their future careers within the organization (Zacher & De Lange, 2011). This results in the willingness to put effort into the organization to reach their goals and fulfill their chances. Especially temporary workers with an open-ended FTPO are the ones who will show extra-role behaviors. The reason for this is that they would like to show the organization that they are willing to get a permanent contract in the future.

There could be concluded that, the same as for hypothesis 3, employees with an open-ended (high) FTPO will show higher levels of Organizational Citizenship Behavior in comparison to employees with a limited (low) FTPO. The expectation is that this relationship is stronger for temporary workers than for permanent workers. The hypothesis based on this moderator is as follows:

Hypothesis 4: FTPO moderates the impact of the type of contract on Organizational Citizenship Behavior. For temporary workers the impact of high FTPO compared to low FTPO is stronger compared to permanent workers.

#### 2.6 – Conceptual model

The four presented hypotheses are combined in the conceptual model. In the conceptual model (see figure 1) are the direct, mediated, and moderated links visualized. Hypothesis 1 reflects the direct link, hypothesis 2 the mediating effect, and hypothesis 3 and 4 shows the moderating links.

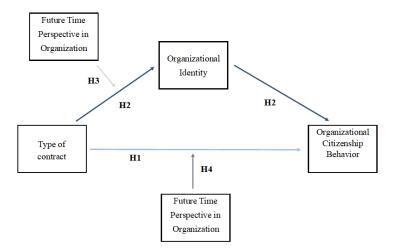


Figure 1 – Conceptual model

# 3- Overall methodology and study 1

In the previous section the theoretical background with the associated hypotheses are presented. This chapter consists of two parts. The first part shows the general research methodology parts of the two studies which are included in this research. The overall research approach, method, and design of studies 1 and 2 are explained (3.1). Next to this, the overall research ethics are presented (3.2). The second part of this chapter consists of the results of the first study which is conducted (3.3). The procedure and respondents, measurement scales, way of analyzing, and the results are defined in this paragraph. Finally, a short discussion of the results of study 1 is provided (3.4).

# 3.1 Research approach, method, and design (study 1 and 2)

The goal of this research is to gain insight into what extent type of contract (temporary versus permanent) influences the Organizational Citizenship Behavior mediated by Organizational Identity and moderated by the Future Time Perspective in the Organization. The research is based on a deductive way of reasoning, which means that a hypothetic-deductive research approach will be used (Sekaran & Bougie, 2016).

This quantitative research is based on a big amount of numerical empirical data and is used to test the hypotheses about relationships between variables (Myers, 2013). This study focuses on quantitative research because of the fact that the goal is to analyze the relationships between the different variables and to confirm or reject the hypotheses. In line with this quantitative approach is the positivistic epistemology. "Epistemology is the theory about the nature of knowledge or how we come to know" (Sekaran & Bougie, 2016, p. 391). Within the positivistic view it is believed that there is an objective truth. This means that data is objectively observed and subjective influences are not part of this view (Sekaran & Bougie, 2016). The study focuses on objectively observed measurements to verify the hypotheses, which is in line with positivism. The use of quantitative research with a deductive way of reasoning and a positivistic view all together makes an integrative research design.

This research made use of two separate studies. Both studies gathered data separately and have their own dataset, but they are complement to each other. The content of the studies is almost the same. The variables that are used in study 2, are also chosen when conducting the analysis in study 1. The first study is executed by Bachelor Business Administration students at the Radboud University. Under the supervision of Dr. J. de Jong in the course 'Project Bedrijfskunde' they collect data around the concept temporality at work. This first study is used to assess whether the new variable FTPO adds additional explained variance. The second study is executed by the collaborative research project group of five Master students from the Radboud University, again under the supervision of Dr. J. de Jong. This study also started with assessing if FTPO adds additional value. The results of this analysis are compared with the results of study 1 to improve the reliability. Next to this analysis, the dataset of study 2 is used to test the hypotheses that are introduced in the theoretical background chapter.

Both studies have some common design issues. First, they have a cross-sectional design, which means that the study consists of one measurement point (Field, 2018). The data only gives information about this particular moment in time and could not inform about development over time (Sekaran & Bougie, 2016). Next to this, the data collection method that is used for both studies is an online survey. The survey is arranged into an online self-administered questionnaire that the respondent completes on his or her own anonymously (Sekaran & Bougie, 2016). A disadvantage of a survey is the fact that respondents cannot respond to or ask for clarification about questions in the survey, this could lead to misinterpretations (Sekaran & Bougie, 2016). On the other side, a big advantage of a survey is that it is suitable to collect a big amount of empirical numeric data, which is needed to test the hypotheses. Moreover, it gives the possibility to ask a large number of questions about a diverse set of constructs (Sekaran & Bougie, 2016). In this research the use of a survey made it possible to include all the constructs of the five Master students into one survey.

The studies had a sample aim to reach a diverse set of respondents in a variety of industries, sectors, and organizations. This will create a representative sample of the differences between permanent and temporary workers, and it improved the generalizability of the research. The sampling method which both studies apply is the convenience sampling. Convenience sampling is a non-probability method and collects data from respondents that are conveniently available (Sekaran & Bougie, 2016). Associated with the convenience sampling, a snowball sampling strategy is used. This means that the link towards the online questionnaire is shared with the networks of the respondents. An advantage of this sampling method is that it is easy to collect enough respondents by using the networks of the respondents. Overall, this way of sampling was suitable because of the fact that the survey is general and could be filled in by almost the whole working population.

#### 3.2 Research ethics

There are some ethical issues concerning the participation within the research and concerning's about the researcher. Anderson (2013) provides three ethical issues that have to be taken into account when conducting a research. The first ethical issue is the confidentiality of the study. Confidentiality is defined as the guarantee that the information of the respondents will not be shared with third parties (Anderson, 2013). This research is confidential in the sense of the anonymous data collection. Next to that, the aim of the research is provided towards the respondent before they start with the online survey. Finally, before the start of the survey the respondents needed to give permission on the following three items: (1) giving permission for using the gathered data for academic research, (2) that they knew that the data gathered in the survey was anonymous, and (3) that they knew that the could stop with the survey whenever they want. If respondents do not give permission to one of these three items, there are deleted out of the dataset.

The second ethical issue consists of the dignity and well-being of the respondents (Anderson, 2013). This issue is handled in the way that respondents are fully anonymous and that the respondent

could withdraw from the survey at any time. The data of the respondent is also be stored in a secure place, which gives others than the researchers not the possibility to get insight into the data.

Third, the issue of research integrity is important. The researcher should steer clear of confusing their own experiences with a valid interpretation of the results (Anderson, 2013). The fact that this research has a quantitative design with a positivistic view made it easier to stay objective in analyzing and interpreting the final results. Furthermore, the collaboration between the master students in the research project under the supervision of Dr. J. P. de Jong created integrity because of the knowledge sharing and feedback moments.

# 3.3 Study 1

#### 3.3.1 Procedure and respondents

This first study is executed by Bachelor Business Administration students at the Radboud University. Under the supervision of Dr. J. de Jong they collect data around the concept temporality at work. The respondents were employees with a temporary or permanent contract within an organization (N=273). Variables that were included in the survey have overlap with the variables in study 2, the variables are: type of contract, Job Insecurity, Employability, Intention to Quit, Commitment, Organizational Citizenship Behavior (OCB), Job Satisfaction, and Future Time Perspective in the (current) Organization (FTPO). Next to these variables some control variables were included in the survey, namely: age, gender, educational level, full-time education or not, tenure within the current organization, working hours per week, and tenure with the current supervisor.

The sample consists of slightly more females (53.5%) than males (46.5%) (female N=156, male N=116), within the age range between 16 and 66 years. The average age of the sample is 33.2 years. 49.1% of the sample has an HBO or university degree. The other 50.9% has a lower degree. Furthermore, there are 157 respondents with a permanent contract, and 116 with a temporary contract. On average the respondents work around 7.38 years at their current organization, with, also on average, around 26,8 working hours per week. In this survey the question 'Do you follow a full-time study at the moment?' was include, which gives the result that 104 of the respondents (38.1%) are following a full-time study when conducting this survey.

#### 3.3.2 Measurement scales

This research makes use of an online survey. This survey consists of items of the scales from the following variables: type of contract, Job Insecurity, Employability, Intention to Quit, Organizational Citizenship Behavior (OCB), Job Satisfaction, and Future Time Perspective in the (current) Organization (FTPO). The operationalization from the chosen items (inclusive the Dutch translations) are included in appendix 1. The used measurement scales for each variable will be described below.

# Type of contract

To indicate which type of contract the respondents have, the question 'Do you have a permanent or temporary contract at this organization?' is asked. The answer options were: 1= permanent contract (a contract without a fixed-term end date) and 2= temporary contract (a contract with a fixed-term end date, like an annual contract or via an employment agency).

# **Job Insecurity**

Job Insecurity could be measured with the existing scale of Borg (1992). This scale is used to measure the overall concerns of employees about their job in the future (De Witte, 1999), and consists of four items. An example item is 'Chances are, I will soon lose my job'. The items are measured using a 5-point Likert-scale ranging from 1= completely disagree till 5= completely agree.

# **Employability**

The scale of Hans de Witte (1999) is used to measure the employability of employees. Employability describes the external mobility of an employee, which indicates the possibility someone has on the labor market. Four of the five items are used to measure employability, with a Likert-scale ranging from 1= completely disagree till 5= completely agree. An example item is 'I can easily switch to another employer, if I want to'.

#### **Intention to Quit**

Intention to Quit indicates to what extent an employee change from an organization towards another organization, or into self-employment or voluntary unemployment (Baillod & Semmer, 1994). The scale out of the PSYCONES questionnaire (Isaksson, Bernhard, Claes, De Witte, Guest & Krausz, 2003) is used to measure Intention to Quit, with a Likert-scale ranging from 1= completely disagree till 5= completely agree. There are three of the five items used, an example is 'If I could, I would quit my job today'.

#### **Organizational Citizenship Behavior (OCB)**

Organizational Citizenship Behavior is measured with the scale developed by Lee and Allen (2002). This scale is based on items that were used in OCB scales in previous studies. The scale consists of items for the OCB which are beneficial to individuals (OCBI) and the organization (OCBO). According to the aim of this research, only the scale for OCBO will be used to measure the OCB of the employees towards their current organization. Six of the eight items of OCBO are measured using a 5-point Likert-scale ranging from 1= completely disagree till 5= completely agree. An example item is: 'Show pride when representing the organization in public'. This scale gives an impression of how often an employee performs organizational citizenship behaviors.

#### **Job Satisfaction**

The scale of Price (1997) is used to measure the Job Satisfaction of the respondents. This four items scale is measured with a Likert-scale ranging from 1= completely disagree till 5= completely agree. An example of an item is 'I am not happy at my work'.

# **Future Time Perspective in the Organization (FTPO)**

Future Time Perspective in the (current) Organization is used as a moderator between (1) the type of contract and Organizational Identity, and (2) the type of contract and Organizational Citizenship Behavior. This moderator is a new variable because of the addition of the 'current organization' context. There are already existing scales to measure Future Time Perspective. One of them is the ten items scale of FTP from Zacher and Frese (2009), which is measured on a 5-point Likert-scale ranging from (1) completely disagree to (5) completely agree. This scale has two underlying dimensions, namely: remaining opportunities and remaining time. An example item is 'I only have limited possibilities in my occupational future'.

Within the collaborative research group, the existing scale is applied towards the context of future time perspective in the (current) organization. Afterwards, the researchers separately translate the scale into Dutch and compared the translation with each other. The Dutch translated items with the most overlap are chosen. The items are measured on a 5-point Likert-scale ranging from (1) completely disagree to (5) completely agree. All the ten items, with the English and Dutch translation, are reported in table 1.

Table 1 – Items FTPO in English and Dutch

	English	Dutch
1	Many opportunities await me in my future at this organization.	Er wachten mij vele mogelijkheden in de toekomst binnen de organisatie.
2	I expect to set many new goals in my future at this organization.	Ik verwacht dat ik veel nieuwe doelen kan stellen in mijn toekomst in deze organisatie.
3	My future at this organization is full of possibilities.	Mijn toekomst binnen dit bedrijf is vol met mogelijkheden.
4	I could do whatever I like in my future at this organization.	Ik kan doen wat ik wil in mijn toekomst binnen deze organisatie.
5	I only have limited possibilities in my future at this organization. (r)	Ik heb maar beperkte mogelijkheden in mijn toekomst binnen de organisatie. (r)
6	I have lots of time to make new plans for my life at this organization.	Ik heb veel tijd om nieuwe plannen te maken voor mijn carrière binnen deze organisatie.
7	Most of my life at this organization lies before me.	Het merendeel van mijn tijd in deze organisatie ligt nog voor mij.
8	My future at this organization seems infinite to me.	Mijn toekomst binnen deze organisatie lijkt mij oneindig voor mij.
9	I have the feeling that my time at this organization is running out. (r)	Ik heb het gevoel dat mijn tijd binnen deze organisatie aan het opraken is. (r)
10	I have the feeling that my time at this organization is limited. (r)	Ik heb het gevoel dat mijn tijd binnen deze organisatie beperkt is. (r)

#### 3.3.3 Analyses

This study is used to test if FTPO adds explained variance above and beyond other constructs. The way of testing this, is by conduction two different linear regressions. Both regressions include the same control variables and independent variable. In the first model the control variables: type of contract, Job Insecurity, Employability, Intention to Quit were include, and in the second model the independent variable FTPO was included. By including FTPO in the second model the additional variance on top of the time-related variables could be assessed. The variable commitment is excluded from the regression because this variable was not included in study 2. To create consistency in assessing whether FTPO has added value, the inclusion of the other four variables is the most suitable way for comparing both studies. OCB and Job Satisfaction were respectively the dependent variables in the linear regressions. The significance of the *F*-change and adjusted R<sup>2</sup> of both models are assessed to test whether FTPO has additional value.

#### 3.3.4 Results

This result section consists of three items. First of all, the means, standard deviations, and the Pearson correlation are reported. Afterward, the results of the confirmatory factor analysis (CFA) are discussed. Finally, the linear regression results are presented.

#### Means, standard deviations, and Pearson's correlations

In table 2 the means, standard deviations, and the Pearson correlations of the studied variables are presented. The Pearson correlation shows the strengths of the relationship between variables (Field, 2018; Hair et al., 2014). The table shows that Job Insecurity has significant correlations with all the other variables. In comparison to this, Employability only has a significant correlation with Job Insecurity (r = .179, p < 0.01). Type of contract has only negative significant correlations with other variables. For example, type of contract negatively correlates with FTPO (r = -.154, p < 0.05). The highest significant correlation is between Job Satisfaction and Intention to Quit, it consists of a negative correlation (r = -.619, p < 0.01). Finally, FTPO shows a positive correlation with both job satisfaction (r = .450, p < 0.01) and Organizational Citizenship Behavior (r = .425, p < 0.01).

Table 2 – Means, standard deviations, and Pearson's correlations

	Mean	SD	1	2	3	4	5	6	7
1- Job Insecurity	4.03	.88	1						
2- Employability	3.84	.95	.179**	1					
3- Intention to Quit	1.62	.84	.209**	.073	1				
4- FTPO	2.90	.78	.263**	024	459**	1			
5- Type of contract	1.42	.50	347**	.088	003	154*	1		
6- Job satisfaction	4.10	.74	.290**	010	619**	.450**	184**	1	
7- OCB	3.92	.70	.225**	009	265**	.425**	368**	.458**	1

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed); \* Correlation is signification at the 0.05 level (2-tailed); SD = Standard Deviation

# Confirmatory factor analysis (CFA)

The Confirmatory Factor Analysis (CFA) is conducted "to test the extent to which a researcher's a priori, theoretical pattern of factor loadings on prespecified constructs represent the actual data." (Hair et al., 2014, p. 603). To test whether the data fits the structure there are four CFA's conducted. There are used three model fit indices to assess the model fit validity, namely: the Chi-Square Test of Model Fit, Confirmatory Factor Index (CFI), and the Root Mean Square Error of Approximation (RMSEA) (Hair et al., 2014).

The first CFA is conducted with only one factor for the four variables FTPO, Intention to Quit, Employability, and Job Insecurity. The Chi-Square is significant  $\chi^2 = 1951.075$  (p <.000), this significance shows that the model fits the data. The associated RMSEA is .185, which is far above the cut-off value that it should close to .06 (Hu & Bentler, 1999). Finally, the CFI is .510, this shows a poor fit. A CFI value larger than .90 shows a good fit (Hair et al., 2014). This first CFA with all the variables loading on one factor, shows a non-satisfactory model.

Second, there is a four factor CFA conducted, within four factors for the four variables. The Chi-Square shows that the model fits the data because the model is significant  $\chi^2 = 561.890$  (p <.000). RMSEA is .087 in this CFA, which is above the < .06 criterium. Finally, the CFI is .895, which is slightly under the > .90 criterium. This second CFA with the five variables loading on five separate factors, shows a more satisfactory model in comparison to the first CFA, but there are some improvements possible for a better model fit.

Third, the five factor CFA includes the four variables, but the FTPO variable is split up in two separate factors. The first dimension includes FTPO 1 till FTPO 7, and the second dimension FTPO 8 till FTPO 10. The Chi-Square shows that the model fits the data because the model is significant  $\chi^2$  = 418.657 (p <.000). RMSEA is .070 in this CFA, which is slightly above < .06 criterium. Finally, the CFI is .933, which is slightly above the > .90 criterium. This indicates that almost all the indices show a good model fit. In comparison to the second CFA, this is a great improvement to the fit.

Finally, the last CFA includes the four factors of the second CFA and additionally a fifth first order factor. This fifth factor combines the in the third CFA distinguished dimensions of FTPO into one new factor because the distinction between the two dimensions is not needed in this research. The Chi-Square is significant  $\chi^2 = 421.401$  (p <.000). The CFI has a value of .933, which is greater than the .90 criterium and indicates a good fit. Next to this, the RMSEA is .070, which is slightly above the < .06 criterium. There could be concluded that this last CFA shows the best model fit in comparison to the other three CFA's. A four factor CFA with first order fits the data much better than the CFA with only one factor, so the initial thought of four separate variables is satisfactory. FTPO is in this sense a separate construct compared to the other variables.

# Linear regression

The results of the two linear regression analyses are reported in table 3. After the examination of the assumption, the decision was made that the linear regression was suitable for the data. The SPSS output of both regression analyses are included in appendix 3. Table 2 shows the results of the linear regression with both dependent variables OCB and JS.

Model 1 of the OCB regression is significant (F-change (4,268) = 17.745, p < .001) and has an exploratory power of .198 (adjusted R²). An F-change shows the predicted added variance of the model in comparison to the previous model (Field source). Model 2, which include the variable FTPO, is significant (F-change (1,267) = 29.046, p < .001) and has an exploratory power of .274. These results show that model 2 (27.4%), after the inclusion of the variable FTPO, predicts more variance compared to model 1 (19.8%).

Model 1 of the JS regression is significant (F-change (4,268) = 50.378, p < .001) and has an strong exploratory power of .421 (adjusted R²). Model 2, which include the variable FTPO, is significant (F-change (1,267) =10.062, p < .001) and has an exploratory power of .440. These results show that model 2 (44.0%), after the inclusion of the variable FTPO, predicts slightly more variance compared to model 1 (42.1%).

Table 3 – Linear reg	ression (Organ	nizational C	itizenshin Bel	haviour and Iol	b Satisfaction)
Tubic 5 Lincui ic	, ression ( O i gai	iizaiionai C	uuzensnip Dei	arrow and so	Danisjacion

	Organization	ssion A  al Citizenship  aviour	- C	ession B tisfaction
Variables	1	1	2	
Job Insecurity	.032 (.049)	004 (.054)	.090 (.044)*	.071 (.044)**
Employability	.025 (.042)	.027 (.040)	.022 (.038)	.023 (.037)
Intention to Quit	218 (.047)***	102 (.050)*	531 (.042)***	468 (.046)***
Type of contract	509 (.084)***	460 (.080)***	277 (.075)**	200 (.075)**
FTPO		.291 (.054)***		.159 (.050)**
Adjusted R <sup>2</sup>	.198 ***	.274 ***	.421 ***	.440 **
R <sup>2</sup> Change	.209 ***	.078 ***	.429 ***	.021 **
F-value	17.745 ***	21.491 ***	50.378 ***	43.679 ***
F-Change		29.046***		10.062 ***

<sup>\*</sup>p<0.05; \*\*p<0.01; \*\*\*p<0.001,  $B=unstandardized\ regression\ coefficient$ ; (SE) = standard error

# 3.4 Discussion Study 1

The main purpose of the analyses of study 1 was to examine the statistical added variance of the new concept Future Time Perspective in the Organization. Both linear regression analyses showed that FTPO adds value on top of other variables (e.g. Intention to Quit, Employability). The first regression analysis had Organizational Citizenship Behavior as dependent variable and added 7.6%. This is more than the added value of the second regression analysis with Job Satisfaction as dependent variable. The added value of this analysis is 1.9%. To increase the reliability of this findings, a second study is

used to compare the results. The same two linear regressions analyses are conducted to verify if FTPO again has additional value.

# 4- Study 2

In chapter three some general methodology issues are discussed and the results of study 1. The results of study 2 are part of this chapter. First, some general information, which includes the measurement scales, procedure and respondents, and used analyses, about study 2 are reported (4.1). After this, the results of the linear regression, additional to study 1, are discussed (4.2). Furthermore, the psychometric analysis and the results of the four hypotheses are included (4.3). Finally, a short discussion of the results of study 2 is provided (4.4)

#### 4.1 General information

#### 4.1.1 Measurement scales

As stated before, this research makes use of an online survey. This survey consists of all the items of the scales from the following variables: type of contract, Organizational Citizenship Behavior, Organizational Identity, and Future Time Perspective in the (current) Organization. The variables that are included in study 1 are also included in the survey of study 2. These variables will not be again explained in this operationalization of the measurement scales of the second study, see paragraph 3.3.2 for the measurement scales of these variables. The operationalization from the chosen items of study 2 (inclusive the Dutch translations) are included in appendix 2. The used measurement scales for each variable will be described. Next to this, the control variables will be presented.

# Type of contract

The type of contract is specified in two groups, namely: permanent and temporary employment contract. This research does not include the different dimensions of temporary employment. The only item to distinguish which contract an employee has is 'Do you have a permanent contract with this organization?' (1= yes; 2= no). Whereby no automatically means that someone has a temporary contract.

#### **Organizational Citizenship Behavior (OCB)**

Organizational Citizenship Behavior is measured with the scale developed by Lee and Allen (2002). This scale is based on items that were used in OCB scales in previous studies. The scale consists of items for the OCB which are beneficial to individuals (OCBI) and the organization (OCBO). According to the aim of this research, only the scale for OCBO will be used to measure the OCB of the employees towards their current organization. The eight items of OCBO will be measured using a 5-point Likert-scale ranging from 1= completely disagree till 5= completely agree. This gives an impression of how often an employee performs organizational citizenship behaviors. An example item of this scale is: 'Take action to protect the organization from potential problems.'.

# **Organizational Identity**

Organizational Identity mediates the relationship between type of contract and OCB. The scale, developed by Meal and Tetrick (1992), includes a ten-item scale. The two underlying components of the scale are: (1) Shared Experiences and (2) Shared Characteristics. The sharing of experiences, successes, and failures of the organization is called Shared Experiences. The successes and failures are applied to and reflect upon the employee just as it reflects upon the organization (Meal & Tetrick, 1992). Shared Characteristics is defined as: when an employee shares the attributes and characteristics of a key member of the organization (Meal & Tetrick, 1992).

Shared Experiences is measured with six items, and Shared Characteristics with four items. All the items are applied towards a general context in which the current organization of the respondent is the point of view. An example item of Shared Experiences is 'When someone criticizes (this organization, it feels like a personal insult' (1= completely disagree; 5= completely agree). An example item that is used for Shared Characteristics is 'I have a number of qualities typical of (name of organization) people' (1= completely disagree; 5= completely agree).

#### **Future Time Perspective in the (current) Organization (FTPO)**

There are already existing scales to measure future time perspective. One of them is the ten items scale of FTP from Zacher and Frese (2009), which is measured on a 5-point Likert-scale ranging from (1) completely disagree to (5) completely agree. This scale has two underlying dimensions, namely: remaining opportunities and remaining time. An example item is 'I only have limited possibilities in my occupational future'.

Within the collaborative research group, the existing scale is applied towards the context of Future Time Perspective in the (current) Organization. Afterwards, the researchers separately translate the scale into Dutch and compared the translation with each other. The Dutch translated items with the most overlap are chosen. The items are measured on a 5-point Likert-scale ranging from (1) completely disagree to (5) completely agree. See table 1 (paragraph 3.3.2) for the ten items of FTPO.

#### **Control variables**

In order to create an overall image of which external factors have an influence on the research, this research makes use of control variables. The use of control variables will improve the internal validity (Becker, 2005). This study makes use of the following control variables: gender, age, education level, tenure within the current organization, working hours per week, and expectation about getting a permanent contract.

First, the three descriptive (demographic) variables are included as control variables. For gender three groups are formulated, namely: 1= man, 2= woman, and 3= other. The respondents' age

are asked to give their year of birth. For the educational level the respondent could choose between: 1= primary school, 2= VMBO (MULO/MAVO/LTS), 3= HAVO, WO (incl. Gymnasium), 4= MBO, 5= HBO/HTS, and 6= university.

Second, three work-related control variables are included. The respondent is asked to indicate their tenure within the organization in years. Next to this, the amount of work hours per week is asked. This indicates if someone has a part-time or full-time employment contract. Finally, all the respondents who filled in that they have a temporary contract got an additional question 'Do you expect to get a permanent contract in the future within this organization?' (1= yes; 2 =no). This could also have an influence on how temporary workers behave in the organization.

# 4.1.2 Procedure and respondents

Study 2 is executed by the collaborative research project group of five Master students from the Radboud University, again under the supervision of Dr. J. de Jong. The overall sample size of this survey consists of 304 respondents. The valid sample size consists of 190 respondents, 62.5 % is valid. There are more females (63.2%) than males (36.8%) in the sample (female N=120, male N=70). The youngest respondent is 18 years and the oldest is 65 years old, with an average age of 34.4 years. 64.7% of the sample had an HBO or university degree, the other 36.3% had a lower degree. Furthermore, 114 respondents have a permanent contract (60%) and 76 a temporary contract (40%). From the 76 temporary workers, 36 respondents expect a permanent contract in the current organization in the future. On average the respondents work around 28.97 hours per week, with a minimum of 3 hours and a maximum of 60 hours per week. The tenure within the (current) organization is on average 6.6 years (min. 1 month, max. 43 years).

In table 4 the mean, standard deviation, and Pearson correlation of all the variables are reported. The Pearson's correlations show the strengths of the relationship between variables. Most interesting are the correlations between the variables: FTPO, type of contract, OI, and OCB. OCB correlates with all these variables. The highest positive correlation is between OI and OCB (r=.577, p < .01). Type of contract does not correlate with OI and FTPO, but does have a negative correlation with OCB (r=-.262, p < .01).

*Table 4 – Means, standard deviations, and Pearson's correlations* 

	Mean	SD	1	2	3	4	5	6	7	8	9
Control variables:											
1- Gender	1.37	.484	1								
2- Educational level	4.77	1.101	047	1							
3- Work hours per week	28.97	14.0	.430**	.137	1						
4- Tenure within the organization	6.62	9.45	.196**	125	.241**	1					
5- Age	34.4	14.1	.239**	189**	.337**	.668**	1				
6- Organizational Citizenship Behavior	3.74	.692	.115	.017	.334**	.187**	.262**	1			
7- Type of contract	1.40	.491	156*	.076	206**	465**	473**	262**	1		
8- Organizational Identity	3.32	.620	017	.151*	.244**	.048	.040	.577**	078	1	
9- Future Time Perspective in the Organization	2.85	1.01	.090	.134	.388**	091	047	.276**	077	.413**	1

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed); \* Correlation is signification at the 0.05 level (2-tailed); SD= Standard Deviation

#### 4.1.3 Analyses

This second study consists of two parts. The first part is the study to test if FTPO adds explained variance above and beyond other constructs. Similar to study 1, two linear regressions are conducted to test this, with OCB and Job Satisfaction as respectively the dependent variables. The significance of the F-change and adjusted  $R^2$  of both models are assessed to test whether FTPO has additional value.

The second part of this study tests if the empirical evidence shows significant effects for the four hypotheses of the research. The three hypotheses will be tested with the linear regression analysis. For hypothesis 1 a linear regression analysis will be conducted. In this analysis the type of contract is the independent variable and Organizational Citizenship Behavior the dependent variable. When conducting the analysis, first the control variables will be included, and in the second model the independent variable.

The PROCESS tool would be used to test hypothesis 2, 3, and 4. The PROCESS tool by Andrew F. Hayes is a multiple linear regression analysis tool. A multiple linear regression analysis could be used to estimate a model to analyze the relationship between one or several independent variable(s) and a dependent variable (Field, 2018; Hair et al., 2014).

Hypothesis 2 is part of the mediating effect, also called the indirect effect. The mediator in this study is the Organizational Identity of an employee. Next to the mediator, also the variables type of contract and OCB are included in the model. In PROCCES model 4 has to be selected for conducting this analysis (Field 2018). "Perfect mediation occurs when [the direct effect] is zero: the relationship between the independent and dependent variable is completely wiped out by including the mediator in the model" (Field, 2018, p. 297).

Hypothesis 3 and 4 are the moderating effects, also called the interaction effect. The moderator in this study is the Future Time Perspective in the (current) Organization. In PROCCES model 1 has to be selected for conducting this analysis (Field, 2018). When there is a significant interaction effect (p<a, with an alpha of 5%) (Field, 2018), there could be concluded that FTPO moderates the relationship between (1) type of contract and Organizational Identity and (2) type of contract and Organizational Citizenship Behavior.

# 4.2 Study 2 – Linear regression

In this paragraph the linear regression to assess the added value of FTPO is reported. As stated above the same analysis is conducted as in study 1. This results in comparable results to what extent FTPO has added value or not. First, shortly the means, standard deviations, and Pearon's correlations of the used variables are discussed. Afterward, the conducted confirmatory factor analysis is reported. Finally, the results of the two linear regressions are presented.

#### Means, standard deviations, and Pearson's correlations

In table 5 the means, standard deviations, and the Pearson correlations of the studied variables are presented. The Pearson correlation shows the strengths of the relationship between variables (Field, 2018; Hair et al., 2014). Table 5 shows that FTPO has significant correlations with all the other variables, except for type of contract. The highest correlation is a positive relationship between FTPO and Job Insecurity (r= .469, p < .01). The highest significant negative correlation is between Job Satisfaction and Intention to Quit (r=-.734, p < .01). This means that the lower the Job Satisfaction, the higher the Intention to Quit.

	Mean	SD	1	2	3	4	5	6	7
1- Job Insecurity	3.86	1.04	1						
2- Employability	3.77	.94	.193**	1					
3- Intention to Quit	1.62	.89	386**	.078	1				
4- FTPO	2.85	1.01	.469**	.151*	428**	1			
5- Type of contract	1.40	.491	352**	.133	.094	077	1		
6- Job Satisfaction	4.13	.82	.316**	009	734**	.462**	045	1	
7- OCB	3.74	.69	.124	059	209**	.276**	215**	.360**	1

Table 5 – Means, standard deviations, and Pearson's correlations

# **Confirmatory Factor Analysis**

The Confirmatory Factor Analysis (CFA) is conducted "to test the extent to which a researcher's a priori, theoretical pattern of factor loadings on prespecified constructs represent the actual data." (Hair et al., 2014, p. 603). To test whether the data fits the structure there are four CFA's conducted. There are used three model fit indices to assess the model fit validity, namely the Chi-Square Test of Model Fit, Confirmatory Factor Index (CFI), and the Root Mean Square Error of Approximation (RMSEA) (Hair et al., 2014).

The first CFA is conducted with only one factor for the four variables FTPO, Intention to Quit, Employability, and Job Insecurity. The Chi-Square is significant  $\chi^2 = 1792.149$  (p <.000), this significance shows that the model fits the data. The associated RMSEA is .211, which is far above the cut-off value that it should close to .06 (Hu & Bentler, 1999). Finally, the CFI is .492, this shows a poor fit. A CFI value larger than .90 shows a good fit (Hair et al., 2014). This first CFA with all the variables loading on one factor, shows a non-satisfactory model.

Second, a CFA is conducted with four factors for the four variables FTPO, Intention to Quit, Employability, and Job Insecurity. The Chi-Square is significant  $\chi^2 = 554.876$  (p <.000), this significance shows that the model fits the data. The associated RMSEA is .103, which is far above the cut-off value that it should close to .06 (Hu & Bentler, 1999). Finally, the CFI is .882, this shows an almost good fit. A CFI value should be larger than .90 to show a good fit (Hair et al., 2014). This first CFA with all the variables loading on one factor, shows a non-satisfactory model.

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed); \* Correlation is signification at the 0.05 level (2-tailed); SD= Standard Deviation

Second, the five factor CFA includes the four variables, but the FTPO variable is split up into two separate factors. The first dimension includes FTPO 1 till FTPO 7, and the second dimension FTPO 8 till FTPO 10. The Chi-Square shows that the model fits the data because the model is significant  $\chi^2 = 408.975$  (p <.000). RMSEA is .082 in this CFA, which is slightly above the < .06 criterium. Finally, the CFI is .927, which is slightly above the > .90 criterium. This indicates that almost all the indices show a good model fit. The two dimensions of FTPO separate give a more satisfactory model than the CFA for the four variables all one factor.

Finally, the last CFA includes the four factors of the second CFA and additionally a fifth first order factor. This fifth factor combines the in the third CFA distinguished dimensions of FTPO into one new factor because the distinction between the two dimensions is not needed in this research. The Chi-Square is significant  $\chi^2 = 415.9292$  (p <.000). The CFI has a value of .926, which is greater than the .90 criterium and indicates a good fit. Next to this, the RMSEA is .083, which is slightly above the <.06 criterium. There could be concluded that this last CFA shows comparable results in comparison to the third CFA. The fact that the distinction between the two dimensions is not needed in this research, this CFA shows the best fit for the data. A four factor CFA with first order fits the data much better than the CFA with only one factor, so the initial thought of four separate variables is satisfactory. FTPO is in this sense a separate construct compared to the other variables.

#### **Linear regression**

The results of the two linear regression analyses are reported in table 6. After the examination of the assumption, the decision was that the linear regression was suitable for the data. The SPSS output of the regression analysis are included in appendix 4.

Table 6 shows the results of both linear regressions. Regression A, with OCB as dependent variable, has a significant model 1(F-change (4,185) = 4.176, p < .01) and has an exploratory power of .063 (adjusted R<sup>2</sup>). Model 2, which include the variable FTPO, is significant (F-change (1,148) = 10.783, p < .001) and has an exploratory power of .110 (adjusted R<sup>2</sup>). These results show that model 2 (11.0%), after the inclusion of the variable FTPO, predicts more variance compared to model 1 (6.3%). Contradictory, for both the exploratory power is very low.

Regression B shows the results of the linear regression with the dependent variable Job Satisfaction. Model 1 is significant (F-change (4,185) = 54.811, p < .001) and has an exploratory power of .531 (adjusted R²). Model 2, which include the variable FTPO, is significant (F-change (1,184) = 10.367 p < .01) and has an exploratory power of .555. These results show that model 2 (55.5%), after the inclusion of the variable FTPO, predicts slightly more variance compared to model 1 (53.2%).

Table 6 – Linear regression (Organizational Citizenship Behaviour and Job Satisfaction)

	Organization	ession A nal Citizenship aviour	<b>Regression B</b> Job Satisfaction			
Variables	1	2	1	2		
Job Insecurity	.014 (.057)	078 (.059)	.031 (.047)	021 (.049)		
Employability	009 (.055)	029 (.054)	.032 (.046)	.016 (.045)		
Intention to Quit	154 (.061)	089 (.062)	664 (.050) ***	612 (.052) ***		
Type of contract	286 (.109) **	310 (.107) **	.053 (.091)	.034 (.089)		
FTPO		.186 (.057) ***		.152 (.047) **		
Adjusted R <sup>2</sup>	.063 ***	.110 **	.532 ***	.555 **		
R <sup>2</sup> Change	.083 **	.051 **	.542 ***	.024 **		
F-value	4.176 **	5.675 ***	54.811 ***	48.138 ***		
F-Change		10.783 ***		10.367 **		

<sup>\*</sup>p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001, B = unstandardized regression coefficient; (SE) = standard error

# 4.3 Testing hypotheses

# 4.3.1 Psychometric analysis

Exploratory factor analysis (EFA) (principal axis factoring) is used to find the underlying structure of the variables: Future Time Perspective in the (current) Organization, Organizational Citizenship Behavior, and Organizational Identity. The goals of EFA is to identify the fewest factors that account for the largest amount of covariance with the observed data (Field, 2018; Hair et al., 2014). The scales of OCB and OI are already existing scales and the scale of FTPO is based on an existing scale. Conducting the EFA is an extra check which, together with the reliability analysis, improves the internal validity of the research (Field, 2018). The reliability analysis shows how many items have a correlation with other items, which is measured with the Cronbach's alpha. A Cronbach' alpha above .7 is accepted and shows internal consistency (Field, 2018; Hair et al., 2014).

#### **Exploratory Factor Analysis (EFA)**

An Exploratory Factor Analysis with all the three variables together is conducted. Appendix 5 includes the SPSS output for the Exploratory Factor Analysis. First of all, Kaiser-Meyer-Olkin (KMO) of sampling adequacy and Bartlett's Test of Sphericity are tested to see whether the factor analysis is useful (Hair et al., 2014). KMO has to be greater than .5, which is the case in this factor analysis. The KMO test is .879, which is almost close to 1. The closer to 1, the better. Bartlett's Test of Sphericity needs to be significant. Since Bartlett's Test of Sphericity is significant (p < .000), conducting a factor analysis is suitable.

After this first check, the communalities are studied. This criterion says that all the communalities need to be above .3. In this case there is no communality lower than .3. The determination of the number of factors is the next step. There are three ways to determine the factors (Field, 2018; Hair et al., 2014): (1) The eigenvalue needs to be greater than 1. In this analysis there are six factors that have an eigenvalue above 1. (2) The next possibility to determine is by looking at the

total variance explained, which should be higher than 60%. Cumulative the explained variance is 65.75% shows that there are six factors. (3) Finally, the scree plot could be used, this plot show visually also six factors. The analysis will be done with six factors, which is surprising because there were only three variables included.

The fact that the correlation matrix shows a factor correlation above .30 means that an oblique rotation is used (Field, 2018). This gives the structure as presented in table 7. As seen in the table, the items of FTPO load nicely on two factors, namely factor 1 and 4. With only the items FTPO 7 and FTPO 8 as cross-loaders on both factors because the differences are for both items smaller than |.20|. This is not an issue for this study. The next variable is Organizational Identity, which loads with six items mostly on factor 5. Also, three items load on factor 3, and one item load on factor 6. Finally, six of the eight items of OCB load on factor 2. Only OCB 3 and OCB 4 are loading on factor 5, which is the factor where most of the Organizational Identity items on load. These two items are 'Defend the organization when other employees criticize it' and 'Show pride when representing the organization in public'. Both items go about the feeling towards the organization, which in essence could, next to OCB, be part of the Organizational Identity.

Overall, (almost) all the items from one variable do not load on factors from other variables. The only exception here is that OCB 3 and 4 load on the factor of Organizational Identity. The fact that the OCB scale is an existing scale lead to the conclusion to not delete these variables. There could be concluded that FTPO, OCB, and OI are three separate scales.

Table 7 – Pattern matrix EFA

Items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
FTPO 1	,924	-,034	,084	-,054	-,149	-,096
FTPO 2	,898	,005	,036	-,017	-,115	-,021
FTPO 3	,759	,087	,092	,135	-,085	-,051
FTPO 4	,621	,011	-,048	,133	-,164	,069
FTPO 5 (recoded)	,514	,050	-,040	,296	,063	,066
FTPO 6	,680	,032	,014	,010	,031	,024
FTPO 7	,528	,029	,003	,396	,128	,141
FTPO 8	,336	,158	-,006	,491	,139	,132
FTPO 9 (recoded)	,071	-,127	,002	,860	-,080	-,041
FTPO 10 (recoded)	,118	-,073	,086	,783	-,091	-,071
OCB1	-,049	,714	,113	,001	,072	-,068
OCB2	,085	,640	,153	-,054	-,061	-,031
OCB3	-,169	,286	,124	,191	-,595	,050
OCB4	,075	,106	,306	,067	-,503	-,042
OCB5	,206	,741	-,150	-,127	,017	,042
OCB6	-,093	,424	,259	,056	-,201	-,149
OCB7	-,001	,761	-,112	,039	-,040	,101
OCB8	-,032	,531	-,170	,018	-,283	,019
Ol1	,090	,022	-,153	,003	-,622	,018
Ol2	,034	,041	,016	-,161	-,516	,183
Ol3	,104	-,067	,081	,036	-,547	,039

Ol4	,143	,126	,065	,003	-,519	-,028
OI5	,049	,004	,083	,064	-,716	-,041
Ol6	-,001	,010	,688	,010	-,099	,140
OI7	-,043	,147	-,026	,180	-,358	,177
OI8_recoded	,056	-,028	,562	,039	,035	-,072
OI9	,063	,044	,453	-,015	-,027	,274
Ol10	-,033	-,058	,108	-,030	-,077	,791

# Reliability analysis

The reliability analysis is conducted for all the three variables separately. The SPSS output for these analyses is presented in appendix 6.

#### 1- Future Time Perspective in the (current) Organization (FTPO)

Since this scale is based on an existing scale there is chosen to hold all the items together into one factor. The reliability analysis is conducted to test whether the FTPO scale is reliable and has internal consistency. Including all the ten items, the Cronbach's alpha of FTPO is .935. A Cronbach's alpha above .7 is accepted, which means that this scale is reliable and has internal consistency (Field, 2018; Hair et al., 2014). There is no improvement possible when deleting one of the items.

#### 2- Organizational Citizenship Behavior (OCB)

The fact that this OCB scale is based on an existing scale, there is decided to keep all the items together into one factor. The reliability analysis gives a Cronbach's alpha of .855 with all the eight items together. This alpha indicates that the scale is reliable and has internal consistency. There is no improvement possible when deleting one of the variables.

# 3- Organizational Identity (OI)

This research wants to study the overall Organizational Identity, so the two dimensions of OI are held together. The reliability analysis is conducted with all the ten items. All the ten items together show a Cronbach's alpha of .782. Deleting item OI8 will improve the Cronbach's alpha to .790. The fact that this improvement is very small, the choice is to not delete this item. The Cronbach's alpha shows acceptable reliability and internal consistency of the OI scale.

#### 4.3.2 Hypothesis 1

Hypothesis 1 predicts that temporary workers show lower levels of Organizational Citizenship Behavior (OCB) compared to permanent workers. To test this hypothesis, a linear regression is conducted. The SPSS output of this analysis is included in appendix 7. The assumptions for doing this regression analysis are tested.

This linear regression consists of two models, see table 9. The first model includes all the control variables, namely: age, gender, educational level, work hours per week, and tenure within the

organization. Model 2 includes the independent variable type of contract. First, both models are significant (model 1: F(5,181) = 5.905, p < .000, model 2: F(6,180) = 5.241, p < .000). There could be concluded that the models are statistically useful.

The outcomes of the regression analysis are presented in table 11. Model 1 is significant (F-change (5,181) = 5.905, p < .000) and has an exploratory power of .117 (adjusted R<sup>2</sup>). This means that 11.7% of the variance in the dependent variable OCB is explained by the control variables. When including the independent variable type of contract into the second model, the model is not significant (F-change (1,180) = 5.241, p = .183).

The fact that model 2, the direct effect between type of contract and OCB, is not significant means that the unstandardized regression coefficients cannot be interpreted. In model 1 only the control variable 'work hours per week' show a positive relationship with OCB (b = .014, p < .000).

Hypothesis 1 is not supported.

Table 9 – Results linear regression hypothesis 1: between type of contract and OCB

	Model 1	Model 2
Variables	B (SE)	B (SE)
Control variables:		
Age	.009(.005)	.007(.005)
Gender	082(.111)	087(.111)
Educational level	.003(.045)	.003(.045)
Work hours per week	.014(.004)***	.014(.004)***
Tenure within organization	.001(.007)	001 (.007)
Independent variable:		
Type of contract		153(.114)
Adjusted R <sup>2</sup>	.117***	.120
R <sup>2</sup> Change	.140***	.008
F-value	5.905***	1.790
F-Change		5.241 ***

<sup>\*</sup> p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001, B = unstandardized regression coefficient; (SE) = standard error

#### 4.3.3 Hypothesis 2

Hypothesis 1 shows there is not a significant effect of type of contract on Organizational Citizenship Behavior. In this hypothesis Organizational Identity is added to this relationship. Hypothesis 2 stated that the level of Organizational Identity mediates the effect between type of contract (temporary versus permanent) on Organizational Citizenship Behavior. For testing this hypothesis the PROCESS tool 3.2 of A.F. Hayes is used. The SPSS output of this analysis is included in appendix 8.

The results of the mediation analysis with PROCESS are reported in table 10. The control variables are included in the mediation model as covariates. The mediation model is not significant. The mediator Organizational Identity do not have a significant effect on the effect between type of contract on OCB (indirect effect = -.0591, SE = .0657, 95% CI [-.1919, .0694]).

The total effect/direct effect of type of contract on OCB is not significant (b= -.1597, t (186) = -1.3916, p = .1658). The direct effect between type of contract on OCB, controlled by Organizational Identity is also not significant (b = -.1006, t (186) = -1.0605, p = .2903). Additionally, the effect between type of contract and Organizational Identity is also not significant (b = -.0957, t (186) = -.9052, p = .3666). There is only a positive significant effect between Organizational Identity and OCB (b = .6175, t (186) = 9.2245, p = .000).

The fact that the mediation effect is not significant means that hypothesis 2 is not supported.

Table 10 – Results mediation analysis

	Step 1	Step 2	
Variables	B (SE)	B (SE)	P [CI 95%]
Direct effects:			
Age	0033(.005)	.0094(.004)	
Gender	2013(.104)	.0229(.094)	
Educational level	.0566(.042)	0357(.038)	
Work hours per week	.0134(.004)***	.0064(.004)	
Tenure organization.	.0028(.006)	0031(.006)	
Type of contract	0957(.106)	1006(.095)	
Organizational Identity		.6175(.067)***	
Main effects:			
Type of contract $\rightarrow$ OI		0957(.106)	.3666
OI → OCB		.6175(.067)***	.0000
Type of contract $\rightarrow$ OCB		1597(.115)	.1658[3861, .0668]
Type of contract $\rightarrow$ OI $\rightarrow$ OCB		0591(.066)	[1920, .0702]
Type of contract → OCB		1006(.095)	.2903[2878, 0866]
(controlled for OI)			
R <sup>2</sup>	.0996**	.4258***	
F-value	3.2990**	18.8557***	

<sup>\*</sup>p<0.05; \*\*p<0.01; \*\*\* p<0.001;  $B=unstandardized\ regression\ coefficient$ ;  $(SE)=standard\ error$ ; P=significance;  $CI=Confidence\ Interval$ 

### 4.3.4 Hypothesis 3 and 4

Hypothesis 3 and 4 indicate a moderation relationship. First, hypothesis 3 assumes that FTPO moderates the impact of the type of contract on Organizational Identity. Second, hypothesis 4 stated that FTPO moderates the direct relationship between type of contract and Organizational Citizenship Behaviour. Both hypotheses propose that for temporary workers the impact of high FTPO compared to low FTPO is stronger compared to permanent workers. For testing these hypotheses the PROCESS tool 3.2 of A.F. Hayes is used. In both moderator analyses the control variables are included as covariates. The variables are mean-centered by selecting the option 'mean center for construction of products', and for the conditioning values the option -1SD, mean, +1SD was selected. The SPSS output of these analyses is included in appendix 9 (hypothesis 3) and 10 (hypothesis 4).

The results of the moderation analysis of hypothesis 3 are reported in table 11. The overall model is significant, which indicate an useful model (F (186) = 5.9120, p < .000). The explained

variance of the model is .2109 ( $R^2$ ), so 21.9% in total. Only the effect between FTPO and OI is significant (b= .2725, p = .0419, 95% CI [.1000, .5347]). This confidence interval does not include 0, which means that this effect is significant. Overall, the moderation effect of FTPO on the relationship between type of contract and Organizational Identity is not significant (b= -.0286, p = .7376, 95% CI [-.1971, .1398]). There could be concluded that hypothesis 3 is not supported, which means that there is not a moderation effect.

The results of the moderation analysis of hypothesis 4 are also reported in table 11. The overall model is significant, so it is useful (F (187) = 4.9497, p < .000). Additionally, the explained variance of the model is .1820 ( $\mathbb{R}^2$ ), which is 18.2%. There are only two effects significant. First, there is a positive effect between FTPO and OCB (b= .1405, p = .0082, 95% CI [.0368, .2443]). Second, there is a small positive effect between work hours per week and OCB (b= .0095, p = .0308, 95% CI [.0009, .0181]). The moderation effect is not significant (b= -.0001, p = .9988, 95% CI [-.1911, .1908]). The confidence interval includes 0, which indicates a non-significant moderation relationship. There could be concluded that hypothesis 4 is not supported, which means that there is not a moderation of FTPO on the direct relationship between type of contract and Organizational Citizenship Behavior.

Table 11 – PROCESS output hypothesis 3 and hypothesis 4

	Hypothesis 3 (OI)		Hypot	thesis 4 (OCB)
Variables	ables B (SE) P [CI 95%]		B (SE)	P [C 95%I]
Control variables:				
Gender	1631(.099)	.0994[3575, .0312]	0671(.11)	.543[2840, .1499]
Educational level	.0526(.04)	.1855[0255, .1307]	0009(.045)	.984[0890, .0872]
Tenure in organization	.0066(.006)	.2843[0055, .0186]	.0009(.007)	.899[0128, .0146]
Work hours per week	.0053(.004)	.1773[0024, .0130]	.0095(.004)*	.031[.0009, .0181]
Age	0005(.005)	.9176[0092, .0083]	.0090(.005)	.077[0010, 0190]
Type of contract	.0594(.271)	.8266[4747, .5935]	1123(.114)	.326[3371, .1125]
FTPO	.2714(.133)*	.0419[.0100, .5347]	.1405(.052)*	.008[.0368, .2443]
TypeCont X FTPO	0286(.09)	.7376[1971, .1398]	000(.097)	.999[1911, .1908]
R <sup>2</sup>	.2109		.1820	
F-value	5.9120		4.9497	
P	.0000		.0000	

<sup>\*</sup> p<0.05; B = unstandardized regression coefficient; (SE) = standard error; P = significance; CI = Confidence interval (95%)

### 4.4 Discussion Study 2

Study 2 consists of two part. The first part replicates the two linear regressions from study 1 and the associated CFA. Again, the results of the analyses showed that FTPO has statistical added variance on top of other variables and is a separate variable distinct from the other variables. FTPO adds 4.7% variance with the dependent variable Organizational Citizenship Behavior, and it adds 2.3% variance with the dependent variable Job Satisfaction. These results are similar to the findings of study 1.

The second part of this study tested the four hypotheses. The conducted EFA showed that the used variables are all separate constructs which could be used in the analyses. Neither one of the hypotheses showed a significant result. There could be concluded that there is not a direct relationship between type of contract and Organizational Citizenship Behavior. Moreover, the mediating effect of Organizational Identity on this direct relationship also showed non-significant results. Finally, Future Time Perspective in the Organization does not moderator the relationships between: type of contract and Organizational Identity, and type of contract and Organizational Citizenship Behavior.

#### 5- Conclusion and discussion

This final chapter consists of five paragraphs. First, the overall conclusion is presented (5.1). This conclusion answers the research question. Next to this, the discussion is reported (5.2). The discussion summarizes what was already found in the literature, and what is found in the research. Third, the practical contributions are in the next paragraph (5.3). The limitations and recommendations for future research are given (5.4). Finally, an overall conclusion is provided (5.5).

#### 5.1 Conclusion

Since the late 1970s and early 1980s, flexible work arrangements became more popular, which resulted in more temporary contracts (De Cuyper et al, 2008). Researchers have some underlying concerns about how temporary work arrangements affect employees' psychological job outcomes, and they are curious how this differs from employees with a permanent work arrangement (De Cuyper et al., 2008; Kalleberg, Reskin & Hudson, 2000). This study aims to draw upon the current literature of temporary versus permanent employment related to the Organizational Identity in the Social Identity Theory, and theory on subjective time perspective. The integration of these concepts give new insights into the different behavioral outcomes between temporary and permanent workers. To achieve the formulated aim, the following research question was defined:

'What is the effect of type of contract (permanent versus temporary) on Organizational Citizenship Behavior, to what extent is this effect mediated by Organizational Identity, and to what extent does Future Time Perspective in the Organization moderates these relationships?'

To answer this research question, there were four hypotheses formulated which were based on the theoretical background. With the statistical program SPSS these hypotheses were tested. There are less significant effects found in this research.

The first hypothesis assumes that temporary workers show lower levels of Organizational Citizenship Behaviors compared to permanent workers. Previous research shows that temporary employees are in a more uncertain position compared to permanent employees, because of their fixed-term contract (De Cuyper et al., 2008). The Social Exchange Theory and Social Comparison Theory lie at the base of this statement (Blau, 1964; Feldman and Turnley, 2004; Thorteinson, 2003). The mechanisms that lie under the feeling of unfairness and uncertainty of temporary employees are embedded in these theories. Temporary employees compare and reciprocate the treatment they got from the organization with permanent employees. The result is that temporary employees engage in lower levels of OCB in comparison to permanent employees because permanent employees do have a more certain position in an organization, which makes them more eager to perform extra-role behavior in exchange for this certainty. This leads to the hypothesized relationship that temporary workers show lower levels of OCB compared to permanent workers. The analysis did not find support for this

hypothesis because of the non-significance of the model. It could be concluded that the type of contract does not affect the level of Organizational Citizenship Behavior.

Hypothesis two stated that the level of Organizational Identity mediates the effect between type of contract (temporary versus permanent) on Organizational Citizenship Behavior. Whether someone sees themselves as a member of the organization (or not) could be an influence on if and how much he or she shows extra-role behaviors. The basis of this statement lies in the Social Identity Theory by Tajfel and Turner (1979, 1986). Organizational identification is a specific form of social identification where an employee defines themself in terms of their membership to a particular organization (Meal & Ashforth, 1992). Organizational identification is useful to align employees' interests and behaviors with the interest and behaviors that benefit the organization (Blatt, 2008). When employees feel that they are part of the organization, they will invest in behaviors that are favorable for the organization. The fact that it takes some time to develop the feeling of being part of the organization makes it harder for temporary workers to become part of the in-group and developing an Organizational Identity. In this sense, the lower level of Organizational Identity results in a lower level of extra-role behavior. The analysis did not find support for the hypothesis because of the non-significance of the model. It could be concluded that Organizational Identity does not mediate the relationship between the type of contract and Organizational Citizenship Behavior.

Hypothesis three and four included the Future Time Perspective in the Organization as a moderator. First, hypothesis three assumes that FTPO moderates the impact of the type of contract on Organizational Identity. Second, hypothesis four stated that FTPO moderates the direct relationship between type of contract and Organizational Citizenship Behaviour. Both hypotheses propose that for temporary workers the impact of high FTPO compared to low FTPO is stronger compared to permanent workers. In this research the concept of the future time perspective is applied to the organizational context and describes how much time an individual employee believes he or she has left in the current organization and how they perceive that time. The two dimensions of FTP are distinguished as limited and open-ended (Cate & John, 2007; Zacher & De Lange, 2011). The analyses did not find support for the formulated hypotheses, because the model is not significant. The conclusion is that FTPO does not moderate the relationship between type of contract and (1) Organizational Citizenship Behavior / (2) Organizational Identity. This also results in the conclusion that for temporary workers the impact of a high FTPO (open-ended) compared to low FTPO (limited) is not found to be significantly stronger compared to permanent workers.

Overall, it could be concluded that there is no evidence for the hypothesized relationship. The relationship between type of contract (temporary versus permanent) and Organizational Citizenship Behavior does not exists in this research. Associated with this, the hypothesized mediator 'Organizational Identity' and moderator 'FTPO' do not have significant effects. The empirical evidence could not answer the research question.

#### 5.2 Discussion

In this section the interpretation from the results, of the two studies, in a broader theoretical framework are examined. The used theories on type of contract, Organizational Identity, Organizational Citizenship Behavior, and Future Time Perspective in the Organization argue for relationships between these constructs. Contradictory, the results do not support one of these hypothesized relationships. This discrepancy is discussed in this section.

First of all, this research used a newly developed construct, called Future Time Perspective in the Organization (FTPO). This construct is based on the existing scale of Zacher & Frese (2009), which is called the future time perspective. The addition of the (current) organization context made this a useful scale in the research. FTPO is defined as how much time employees believe they have left in their future in the organization and how they perceive that time (open-ended or limited). This could be the future time perspective based on the personal/private life and/or based on more work-related aspects. The addition of the (current) organization context makes this scale useful for researches in the field a work-related studies. A work-related FTP could differ from the FTP a person has based on their private life. The findings of the research show that FTPO has added value as a new construct. FTPO has exploratory power on top of time-related variables (e.g. intention to quit, job insecurity) with Organizational Citizenship Behavior or Job Satisfaction as a dependent variable. Empirical evidence shows that FTPO adds more value to OCB compared to Job Satisfaction. This indicates a more added value for performance-related constructs in comparison to a more attitudinal construct. Overall, there is support for the importance of the (current) organization context when defining the future time perspective of employees. Future researches could use this FTPO scale to measure the FTPO of the employees in an organization.

Furthermore, based on the Social Exchange Theory and Social Comparison Theory (Blau, 1964; Feldman and Turnley, 2004; Thorteinson, 2003) it is hypothesized that temporary workers show lower levels of Organizational Citizenship Behaviors compared to permanent workers. This is based on the more uncertain position of temporary workers in comparison to permanent workers. The job insecurity and feeling of being less favorably treated makes that, based on the SET and SCT, these temporary workers show lower levels of OCB. The empirical findings show that there is no significant relationship between type of contract and OCB. This concludes that type of contract is not a predictor of OCB. A theoretical explanation for this finding could be that other factors influence the relationship between type of contract and OCB. Coyle-Shapiro and Kessler (2002) argue this: "Rather than being seen as a cost-efficient response to short-term needs and treated accordingly, contingent employees may well need to be treated in a much more supportive way if they are to give their 'best'." (p. 96). This research by Coyle-Shapiro and Kessler indicates that temporary employees need to be treated in a supportive way to perform OCB. The influence this factor has could be an indicator of

why the basic relationship between type of contract and OCB, without influences of other factors, is not found in the empirical data.

As stated before, there is no empirical evidence for the relationship between type of contract (temporary versus permanent) and OCB. In this research it is tested whether there is a mediating effect of Organizational Identity on this relationship. According to the Social Identity Theory (SIT) of Tajfel and Turner (1979, 1986) individuals classify themselves into various social groups, based on values and emotional attachment. Organizational Identity is a specific form of this social identification where an employee define themself in terms of membership within an organization (Meal & Ashforth, 1992). Based on these theoretical findings, the expectation was that the level of Organizational Identity of a temporary versus permanent employee would affect Organizational Citizenship Behavior. The empirical evidence showed that there is no significant result that indicates this mediating effect. Only between Organizational Identity and OCB, there is a significant positive effect. As the level of Organizational Identity increases, the level of OCB also increases. This is in line with the expectation of the theoretical background, which concluded that when someone is feeling part of the organization (in-group feeling) they align their interest and behavior with the interest and behavior of the organization. This includes performing extra-role behaviour which is favorable for the organization and the self (Blatt, 2008; Chattopadhyay 1999; Vegt, Vliert & Oosterhof, 2003). It could be concluded that the type of contract (temporary versus permanent) an employee has does not affect this relationship. The expectation that temporary employees, who are mostly seen and treated as secondclass citizens of an organization (Roger, 1995), show lower levels of Organizational Identity in comparison to permanent workers, is not supported by the empirical evidence.

Finally, this research hypothesized that FTPO could moderate the relationships between (1) type of contract and OCB, and (2) type of contract and Organizational Identity. Argued is that for temporary workers the impact of high FTPO compared to low FTPO is stronger compared to permanent workers. As argued before, FTPO is a new useful construct to determine how much time employees believe they have left in their future in the organization and how they perceive that time (high FTPO is open-ended, low FTPO is limited) (Cate & John, 2007; Zacher & Frese, 2009). For both of the proposed moderating relationships no significant empirical evidence is found. There is only a positive significant relationship between FTPO and both dependent variables: Organizational Identity and OCB. When someone has a high FTPO, they have higher levels of Organizational Identity or perform higher levels of OCB. These relationships make sense within the theoretical context. First, an open-ended FTPO gives employees the feeling that they have enough opportunities within the organization. Seeing chances within the organization indicates that employees feel that they are and stay part of the organization for a while to fulfil their possibilities. This results in the definition of an employee as itself as a member of an organization (Organizational Identity). Second, a theoretical explanation for the positive relationship between FTPO and OCB lies also in the fact that a high FTPO

gives an employee the feeling that he or she has an open view regarding the future. This open-ended view on the future makes employees more eager to perform Organizational Citizenship Behavior to show the organization that they see chances within the organization and are showing a willingness to stay at the organization. The expectation that the impact of high FTPO compared to low FTPO is stronger for temporary workers than for permanent workers is not supported. This means that type of contract is not part of the relationship between FTPO and OI or OCB.

It could be concluded that this research rejects the fact that type of contract has an influence on Organizational Citizenship Behavior, and does not play a role in de mediation (Organizational Identity) and moderation (FTPO) relationships. Previous researches about the differences between temporary and permanent workers did found results on the different outcomes of these two groups. This study extends to previous knowledge in a way that the hypothesized relationships (and the associated control variables) from of this research do not exist with the influence of type of contract on it. There are positive relationships between Organizational Identity and OCB, FTPO and OI, and FTPO and OCB, which are consistent with the results of earlier researches on this topic. The addition is that in this research these relationships are not type of contract specific.

#### **5.3 Practical contributions**

Next to the theoretical contribution, this research also has practical contributions. First of all, organizations need to realize that, because of the growing part, temporary employees are a valuable asset in the organization. This research does not find empirical evidence for the proposed differences in employees' psychological job outcomes between temporary and permanent workers. Yet, the fact that the part of temporary workers is growing nowadays could mean that organizations can see the whole workforce as equal and treat them equally.

Next to this, the results of this research suggest that a high Organizational Identity and an open-ended FTPO is positively related to and increases OCB. OCB has benefits for organizations, such as enhancing efficiency, productivity, overcome turnover, and is related to individual, team, and organizational performance (Chiaburu & Byrne, 2009; Podsakoff et al, 2009). These are critical indicators for an organization to function. Organizations need to focus on enhancing the OCB of employees by creating higher levels of Organizational Identity and an open-ended FTPO for employees.

#### **5.4** Limitations and directions for future research

Next to the theoretical and practical contributions, this research also has some limitations. In this paragraph the limitations are discussed and the recommendations for future research are provided. The first limitation is based on the research design. Both studies have a cross-sectional design, which means that there is only one measurement point (Sekaran & Bougie, 2016). Initially, study two had a

proposed lagged-design. This was the initial thought to do two measurements during this research. Due to the fact that the current COVID-19 coronavirus slows things down, it made it impossible to do two measurements. The fact that the results are only based on one measurement made it impossible to measure causality, and no conclusion could be made about the change of the results over time (Sekaran & Bougie, 2016). There is a possibility that the results, for example, after the coronavirus would be different than the results are now. The insecurity during these times could influence the way respondents react to the questions in the survey. To investigate these possible results, future research could be conducted by redoing this research within a longitudinal design.

The second limitation is based on the self-reported questionnaire. Self-reported questionnaires (surveys) have advantages: it is cheap, results in a large dataset, and could guarantee anonymity (Sekaran & Bougie, 2016). On the other side, it also has a big disadvantage. The fact that respondents could understand the question differently than it was supposed to brings validity in danger. Respondents with different backgrounds were part of the sample. For example, respondents with a lower educational level could have difficulties with interpreting questions. Finally, the fact that the survey combined all the items of the five Master students resulted in a long questionnaire. This influences the reliability of the data because respondents could answer faster without thinking when it took too long for completing the survey. To overcome these forms of bias, future research could focus on a mixed-method study. A mixed-method study combines quantitative with qualitative data.

Third, the use of a convenience and snowball sampling method resulted in an imbalance in the personal backgrounds of the respondents. Most respondents had a high educational level (HBO or university degree), namely 49.1% in study 1 and 64.7% in study 2. The fact that the network of the five Master students was used, resulted in this disbalance. Next to this, the research is only focused on the Dutch population because of the Dutch survey. This makes it impossible to generalize the results for more culturally diverse backgrounds. A recommendation for future research is to create a more balanced and culturally diverse sample by using a probability sampling method.

Fourth, the biggest limitation of this research is the fact that there is no evidence for the hypothesized relationships. There are some additional analyses conducted to test if there is a possibility to find a significant relationship, but these analyses did not give satisfactory results. A direction for future research is to include other (control) variables, to test if other factors influence these relationships and to find significant evidence. Or to increase the sample size, to see whether this leads to significant results.

Finally, when checking the assumptions of linear regression there is concluded that not all the assumptions are entirely met. Especially, in study 1 the assumption for normality is not completely met. The small sample could also be the reason for this violation of the assumption. For future research a larger sample might give better results on these assumptions.

#### 5.5 Final conclusion

The aim of this thesis was to argue to what extent the type of contract (permanent versus temporary) has a relationship with Organizational Citizenship Behavior, to what extent this relationship is mediating by Organizational Identity, and to what extent the moderating effect of, the new developed scale, FTPO has on these relationships. By using linear regressions (inclusive the mediating and moderating models of PROCESS by Andrew F. Hayes), these hypothesized relationships are tested. The empirical evidence showed that the relationships do not exist when type of contract is the independent variable. There could be different reasons for this finding, for example, the influence of other factors (e.g. supportive treatment) or the sample size. Empirical evidence was found for the positive relations between Organizational Identity and Organizational Citizenship Behavior, Future Time Perspective in the Organization and Organizational Identity, and Future Time Perspective in the Organizational Citizenship Behavior. In sum, this research showed that Future Time Perspective in the Organization is a useful new construct in work-related researched, and that type of contract does not always affect the differences in employee job-outcomes between temporary and permanent workers.

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# **Appendices**

# Appendix 1 – Operationalization study 1

Concept	Item (in English)	Item (In Dutch)
Type of contract	Do you have a permanent or	Heeft u een vast of tijdelijk
	temporary contract at this	contract bij deze organisatie? (1=
	organization? (1= permanent	vast contract (een contract zonder
	contract (a contract without a	einddatum); 2= Tijdelijk contract
	fixed-term end date); 2=	(een contract met een einddatum,
	temporary contract (a contract	zoals een jaarcontract of via een
	with an fixed-term end date, like	uitzendbureau).
	an annual contract or via an	
	employment agency).	
Job Insecurity (De Witte, 1999)	JI1 - Chances are, I will soon lose	De kans bestaat dat ik binnenkort
	my job.(r)	mijn baan verlies. (r)
	JI2 - I feel insecure about the	Ik voel me onzeker over de
	future of my job.	toekomst van mijn baan.
	JI3 - I think I might lose my job in	Ik denk dat ik in de nabije
	the near future. (r)	toekomst mijn baan zal verliezen.
		(r)
	JI4 - I am sure I can keep my job.	Ik weet zeker dat ik deze baan kan
	(r)	behouden. (r)
Employability (De Witte, 1999)	Employ1 – I am optimistic that I	Ik ben optimistisch dat ik ander
	will found work if I am searching	werk zal vinden, als ik daarnaar
	for it.	zou zoeken.
	Employ2 – I am easily found	Ik vind gemakkelijk een andere
	another job when I lose this one.	baan als ik deze verlies.
	Employ3 - I can easily switch to	Ik kan makkelijk van werkgever
	another employer	veranderd, als ik dat zou willen.
	Employ4 – I am confident that I	Ik heb er vertrouwen in dat ik snel
	fast will found a comparable job.	een andere gelijkwaardige baan
		zou kunnen vinden.
Intention to Quit (Isaksson,	IQ1 – Nowadays I want to resign	Tegenwoordig heb ik vaak zin
Bernhard, Claes, De Witte, Guest,	from my current job.	mijn baan op te geven.
& Krausz, 2003)		
	IQ2 – Despite I have obligation	Ondanks te verplichtingen die ik
	towards the organization, I want to	heb tegenover deze organisatie,
	resign from my job.	wil ik mijn baan zo snel mogelijk
		opzeggen.

	IQ3 – If I could do it, I should quit	Als ik kon, zou ik vandaag nog
	today.	ontslag nemen.
Organizational Citizenship	OCB1 - Attended functions that	Ik draag bij aan activiteiten die
Behavior (OCB) (Lee & Allen,	are not required but that help the	niet van mij gevraagd worden,
2002)	organizational image.	maar het imago van de organisatie
		versterken.
	OCB2 - Defend the organization	Ik verdedig de organisatie
	when other employees criticize it.	wanneer anderen deze
		bekritiseren.
	OCB3 - Show pride when	Ik ben trots op de organisatie
	representing the organization in	wanneer ik publiek hier over praat.
	public.	
	OCB4 - Offer ideas to improve the	Ik kom met ideeën om het
	functioning of the organization.	functioneren van de organisatie te
		verbeteren.
	OCB5 - Express loyalty toward	Ik toon loyaliteit aan de
	the organization.	organisatie.
	OCB6 - Take action to protect the	Ik onderneem actie om de
	organization from potential	organisatie te behoeden voor
	problems.	mogelijke problemen.
Job Satisfaction (Price, 1997)	JS1 – I am not happy with my job.	Ik ben niet gelukkig met mijn
	(r)	werk. (r)
	JS2 – My work often bores me. (r)	Mijn werk verveelt me vaak. (r)
	JS3 – Most of the time I am	Meestal ben ik enthousiast over
	enthusiastic about my job.	mijn werk.
	JS4 – I enjoy my job.	Ik vind plezier in mijn baan.
Future Time Perspective in the	FTPO1 - Many opportunities	Er wachten mij vele
(current) Organization (Zacher &	await me in my future at this	mogelijkheden in de toekomst
Frese, 2009) + Thesis project	organization.	binnen deze organisatie.
group	FTPO2 - I expect to set many new	Ik verwacht dat ik veel nieuwe
	goals in my future at this	doelen kan stellen in mijn
	organization.	toekomst binnen deze organisatie.
	FTPO3 - My future at this	Mijn toekomst in deze organisatie
	organization is full of possibilities.	is vol met mogelijkheden.
	FTPO4 - I could do whatever I	Ik kan doen wat ik wil in mijn
	like in my future at this	toekomst binnen deze organisatie.
	organization.	
	FTPO5- I only have limited	Ik heb beperkte mogelijkheden in
	•	1
	possibilities in my future at this	mijn toekomst binnen deze

FTPO6 - I have lots of time to	Ik heb veel tijd om nieuwe
make new plans for my	plannen te maken voor mijn
life/work/tenure/career at this	carrière binnen deze organisatie.
organization.	
FTPO7 - Most of my	Het merendeel van mijn tijd in
life/work/tenure/career at this	deze organisatie ligt nog voor mij.
organization lies before me.	
FTPO8 - My future at this	Mijn toekomst binnen deze
organization seems infinite to me.	organisatie lijkt oneindig voor mij.
FTPO9 - I have the feeling that my	Ik heb het gevoel dat mijn tijd
time at this organization is running	binnen deze organisatie aan het
out. (r)	opraken is. (r)
FTPO10 - I have the feeling that	Ik heb het gevoel dat mijn tijd
my time at this organization is	binnen deze organisatie beperkt is.
limited. (r)	(r)

# Appendix 2 – Operationalization study 2

Concept	Item (in English)	Item (In Dutch)
Type of contract	Do you have a permanent contract	Heb je een vast contract? $(1 = ja;$
	with this organization? (1= yes; 2=	2= nee)
	no)	
Organizational Citizenship	OCB1 - Attended functions that	Ik draag bij aan activiteiten die
Behavior (OCB) (Lee & Allen,	are not required but that help the	niet van mij gevraagd worden,
2002) (5-point Likert-scale	organizational image.	maar het imago van de organisatie
$ranging\ from\ 1 = completely$		versterken.
disagree; 5= completely agree)	OCB2 - Keep up with	Ik hou de ontwikkelingen van de
	developments in the organization.	organisatie bij.
	OCB 3 - Defend the organization	Ik verdedig de organisatie
	when other employees criticize it.	wanneer anderen deze
		bekritiseren.
	OCB 4- Show pride when	Ik ben trots op de organisatie
	representing the organization in	wanneer ik publiek hier over praat.
	public.	
	OCB 5- Offer ideas to improve the	Ik kom met ideeën om het
	functioning of the organization.	functioneren van de organisatie te
		verbeteren.
	OCB 6 - Express loyalty toward	Ik toon loyaliteit aan de
	the organization.	organisatie.
	OCB 7- Take action to protect the	Ik onderneem actie om de
	organization from potential	organisatie te behoeden voor
	problems.	mogelijke problemen.
	OCB 8 - Demonstrate concern	Ik toon bezorgdheid over het
	about the image of the	imago van de organisatie.
	organization.	
Organizational Identity (Meal &	OI1 - When someone criticize this	Als iemand kritiek heeft op de
Tetrick, 1992) (5-point Likert-	organization, it feels like a	organisatie waar ik werk voelt dat
scale ranging from 1= completely	personal insult.	als een persoonlijke belediging.
disagree; 5= completely agree)	OI2 - I'm very interested in what	Ik ben erg geïnteresseerd in wat
	others think about this	anderen van de organisatie waar ik
	organization.	werk vinden.
	OI 3 - When I talk about this	Als ik het heb over de organisatie
	organization, I usually say 'we'	waar ik werk, zeg ik meestal 'wij'
	rather than 'they'.	in plaats van 'zij'.

	OI 4 - This organization's	De successen van de organisatie
	successes are my successes.	waar ik werk zijn ook mijn
		successen.
	OI 5 - When someone praises this	Wanneer iemand de organisatie
	organization, it feels like a	waar ik werk prijst, voelt het als
	personal compliment.	een persoonlijk compliment.
	OI 6 - I act like the rest of the	Ik gedraag me net als de rest van
	people in my organization to a	de mensen in deze organisatie.
	great extent.	de mensen in deze organisatie.
	OI 7 - If a story in the media	Ik zou mij schamen als er in de
	criticized the organization, I would	media een verhaal zou verschijnen
	feel embarrassed.	dat kritiek uit op deze organisatie.
		Ik gedraag met <b>niet</b> als een
	OI 8 - I don't act like a typical	
	member of this organization. (r)	typische medewerker van deze
	OI9 - I have a number of qualities	organisatie. (r)
	•	Ik heb een aantal eigenschappen
	typical of the people in this	die typerend zijn voor de mensen
	organization.	die in deze organisatie werken.
	OI10 - The limitation associated	De beperkingen die verbonden
	with the people in this	zijn aan mensen in deze
	organization apply to me also.	organisatie zijn ook op mij van
		toepassing.
Future Time Perspective in the	FTPO1 - Many opportunities	Er wachten mij vele
(current) Organization (Zacher &	await me in my future at this	mogelijkheden in de toekomst
Frese, 2009) + Thesis project	organization.	binnen deze organisatie.
group (5-point Likert-scale	FTPO2 - I expect to set many new	Ik verwacht dat ik veel nieuwe
ranging from 1=completely	goals in my future at this	doelen kan stellen in mijn
disagree; 5= completely agree)	organization.	toekomst binnen deze organisatie.
	FTPO3 - My future at this	Mijn toekomst in deze organisatie
	organization is full of possibilities.	is vol met mogelijkheden.
	FTPO 4 - I could do whatever I	Ik kan doen wat ik wil in mijn
	like in my future at this	toekomst binnen deze organisatie.
	organization.	
	FTPO5 - I only have limited	Ik heb beperkte mogelijkheden in
	possibilities in my future at this	mijn toekomst binnen deze
	organization. (r)	organisatie. (r)
	FTPO6 - I have lots of time to	Ik heb veel tijd om nieuwe
	make new plans for my	plannen te maken voor mijn
	life/work/tenure/career at this	carrière binnen deze organisatie.
	organization.	

	FTPO7- Most of my	Het merendeel van mijn tijd in
	life/work/tenure/career at this	deze organisatie ligt nog voor mij.
	organization lies before me.	
	FTPO8 - My future at this	Mijn toekomst binnen deze
	organization seems infinite to me.	organisatie lijkt oneindig voor mij.
	FTPO9 - I have the feeling that my	Ik heb het gevoel dat mijn tijd
	time at this organization is running	binnen deze organisatie aan het
	out. (r)	opraken is. (r)
	FTPO10 - I have the feeling that	Ik heb het gevoel dat mijn tijd
	my time at this organization is	binnen deze organisatie beperkt is.
	limited. (r)	(r)
Age	In which year are you born? (in	In welk jaar bent u geboren? (in
	years)	jaren)
Gender	Which gender do you have? (1=	Wat is uw geslacht? (1= man, 2=
	man, 2= woman, and 3= other)	vrouw en 3= anders)
Educational level	What is your highest educational	Wat is de <u>hoogste opleiding</u> die u
	level? (1= lagere school, 2=	heeft afgerond? (1= lagere school,
	VMBO (MULO/MAVO/LTS), 3=	2= VMBO (MULO/MAVO/LTS),
	HAVO of VWO (incl.	3= HAVO of VWO (incl.
	Gymnasium), 4= MBO, 5= HBO	Gymnasium), 4= MBO, 5= HBO
	(HTS), 6 = Universiteit)	(HTS), 6 = Universiteit)
Tenure within the organization	What is your tenure in your	Hoelang werkt u al voor uw
	current organization? (estimation	huidige organisatie? (schatting in
	in years and months)	jaren en maanden)
Type of job	How many hours do you work per	Hoeveel uren werkt u gemiddeld
	week?	per week?
Expectation of getting a	Do you expect that your temporary	Verwacht u dat uw tijdelijke
permanent contract	contract in the future will become	contract in de toekomst omgezet
	a permanent contract in this	zal worden naar een vast contract
	organization? (1=yes; 2=no)	bij deze organisatie? (1=ja; 2=nee)
	l	l .

## Appendix 3 – Linear regression Study 1

## Linear regression 1 – Organizational Citizenship Behaviour

#### Descriptive Statistics

	Mean	Std. Deviation	N
OCB_avg	3,9230769	,70376600	273
Heeft u een vast of tijdelijk contract bij deze organisatie?	1,42	,495	273
ltQ_avg	1,6153846	,83810849	273
Employ_avg	3,8360806	,94975250	273
JI_avg	4,0283883	,88251498	273
FTPO_avg	2,8992674	,77814791	273

#### Correlations

			Heeft u een vast of tijdelijk contract bij deze				
		OCB_avg	organisatie?	ltQ_avg	Employ_avg	JI_avg	FTPO_avg
Pearson Correlation	OCB_avg Heeft u een vast of	1,000	-,368	-,265	-,009	,225	,425
	tijdelijk contract bij deze organisatie?	-,368	1,000	-,003	,088	-,347	-,154
	ItQ_avg	-,265	-,003	1,000	,073	-,209	-,459
	Employ_avg	-,009	,088	,073	1,000	,179	-,024
	JI_avg	,225	-,347	-,209	,179	1,000	,263
	FTPO_avg	,425	-,154	-,459	-,024	,263	1,000
Sig. (1-tailed)	OCB_avg		,000	,000	,439	,000	,000
	Heeft u een vast of tijdelijk contract bij deze organisatie?	,000		,478	,073	,000	,005
	ItQ_avg	,000	,478		,116	,000	,000
	Employ_avg	,439	,073	,116		,001	,347
	Jl_avg	,000	,000	,000	,001		,000
	FTPO_avg	,000	,005	,000	,347	,000	
N	OCB_avg	273	273	273	273	273	273
	Heeft u een vast of tijdelijk contract bij deze organisatie?	273	273	273	273	273	273
	ItQ_avg	273	273	273	273	273	273
	Employ_avg	273	273	273	273	273	273
	Jl_avg	273	273	273	273	273	273
	FTPO_avg	273	273	273	273	273	273

#### Model Summary<sup>c</sup>

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,458ª	,209	,198	,63041258	,209	17,745	4	268	,000
2	,536 <sup>b</sup>	,287	,274	,59980820	,078	29,046	1	267	,000

a. Predictors: (Constant), JI\_avg, Employ\_avg, ItQ\_avg, Heeft u een vast of tijdelijk contract bij deze organisatie?

 $b.\ Predictors: (Constant), Jl\_avg, Employ\_avg, ItQ\_avg, Heeft\ u\ een\ vast\ of\ tijdelijk\ contract\ bij\ deze\ organisatie?, FTPO\_avg$ 

c. Dependent Variable: OCB\_avg

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28,209	4	7,052	17,745	,000b
	Residual	106,509	268	,397		
	Total	134,718	272			
2	Regression	38,659	5	7,732	21,491	,000°
	Residual	96,059	267	,360		
	Total	134,718	272			

- a. Dependent Variable: OCB\_avg
- b. Predictors: (Constant), JI\_avg, Employ\_avg, ItQ\_avg, Heeft u een vast of tijdelijk contract bij deze organisatie?
- c. Predictors: (Constant), JI\_avg, Employ\_avg, ItQ\_avg, Heeft u een vast of tijdelijk contract bij deze organisatie?, FTPO\_avg

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

		Unstandardize	d Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	4,778	,297		16,112	,000
	Heeft u een vast of tijdelijk contract bij deze organisatie?	-,509	,084	-,358	-6,072	,000
	ItQ_avg	-,218	,047	-,260	-4,628	,000
	Employ_avg	,025	,042	,034	,603	,547
	Jl_avg	,032	,049	,040	,646	,519
2	(Constant)	3,811	,334		11,401	,000
	Heeft u een vast of tijdelijk contract bij deze organisatie?	-,460	,080	-,324	-5,732	,000
	ItQ_avg	-,102	,050	-,122	-2,050	,041
	Employ_avg	,027	,040	,037	,681	,497
	Jl_avg	-,004	,047	-,005	-,076	,939
	FTPO_avg	,291	,054	,322	5,389	,000

a. Dependent Variable: OCB\_avg

## Residuals Statistics<sup>a</sup>

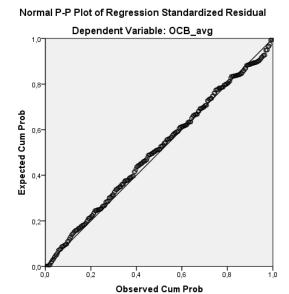
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2,9747581	4,6752954	3,9230769	,37700148	273
Residual	-2,44101977	1,59972084	,000000000	,59426969	273
Std. Predicted Value	-2,515	1,995	,000	1,000	273
Std. Residual	-4,070	2,667	,000	,991	273

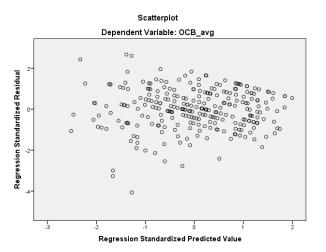
a. Dependent Variable: OCB\_avg

Dependent Variable: OCB\_avg

Mean=
Std. De
N = 27:

Regression Standardized Residual





## **Linear regression – Job Satisfaction**

## Descriptive Statistics

	Mean	Std. Deviation	N
JS_avg	4,1025641	,74354627	273
Heeft u een vast of tijdelijk contract bij deze organisatie?	1,42	,495	273
ItQ_avg	1,6153846	,83810849	273
Employ_avg	3,8360806	,94975250	273
Jl_avg	4,0283883	,88251498	273
FTPO_avg	2,8992674	,77814791	273

#### Correlations

			Heeft u een vast of tijdelijk contract bij deze				
		JS_avg	organisatie?	ItQ_avg	Employ_avg	JI_avg	FTPO_avg
Pearson Correlation	JS_avg	1,000	-,184	-,619	-,010	,290	,450
	Heeft u een vast of tijdelijk contract bij deze organisatie?	-,184	1,000	-,003	,088	-,347	-,154
	ItQ_avg	-,619	-,003	1,000	,073	-,209	-,459
	Employ_avg	-,010	,088	,073	1,000	,179	-,024
	JI_avg	,290	-,347	-,209	,179	1,000	,263
	FTPO_avg	,450	-,154	-,459	-,024	,263	1,000
Sig. (1-tailed)	JS_avg		,001	,000	,437	,000	,000
	Heeft u een vast of tijdelijk contract bij deze organisatie?	,001		,478	,073	,000	,005
	ItQ_avg	,000	,478		,116	,000	,000
	Employ_avg	,437	,073	,116		,001	,347
	Jl_avg	,000	,000	,000	,001		,000
	FTPO_avg	,000	,005	,000	,347	,000	
N	JS_avg	273	273	273	273	273	273
	Heeft u een vast of tijdelijk contract bij deze organisatie?	273	273	273	273	273	273
	ItQ_avg	273	273	273	273	273	273
	Employ_avg	273	273	273	273	273	273
	JI_avg	273	273	273	273	273	273
	FTPO_avg	273	273	273	273	273	273

#### Model Summary<sup>c</sup>

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,655ª	,429	,421	,56593551	,429	50,379	4	268	,000
2	,671 <sup>b</sup>	,450	,440	,55660318	,021	10,062	1	267	,002

- a. Predictors: (Constant), JI\_avg, Employ\_avg, ItQ\_avg, Heeft u een vast of tijdelijk contract bij deze organisatie?
- b. Predictors: (Constant), Jl\_avg, Employ\_avg, ItQ\_avg, Heeft u een vast of tijdelijk contract bij deze organisatie?, FTPO\_avg
- c. Dependent Variable: JS\_avg

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	64,542	4	16,136	50,379	,000 <sup>b</sup>
	Residual	85,836	268	,320		
	Total	150,378	272			
2	Regression	67,660	5	13,532	43,679	,000°
	Residual	82,718	267	,310		
	Total	150,378	272			

- a. Dependent Variable: JS\_avg
- b. Predictors: (Constant), Jl\_avg, Employ\_avg, ItQ\_avg, Heeft u een vast of tijdelijk contract bij deze organisatie?
- c. Predictors: (Constant), Jl\_avg, Employ\_avg, ItQ\_avg, Heeft u een vast of tijdelijk contract bij deze organisatie?, FTPO\_avg

Coefficients<sup>a</sup>

		Unstandardize	d Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	4,837	,266		18,169	,000
	Heeft u een vast of tijdelijk contract bij deze organisatie?	-,227	,075	-,151	-3,010	,003
	ItQ_avg	-,531	,042	-,599	-12,542	,000
	Employ_avg	,022	,038	,028	,582	,561
	JI_avg	,090	,044	,107	2,055	,041
2	(Constant)	4,309	,310		13,889	,000
	Heeft u een vast of tijdelijk contract bij deze organisatie?	-,200	,075	-,133	-2,683	,008
	ltQ_avg	-,468	,046	-,527	-10,121	,000
	Employ_avg	,023	,037	,029	,619	,536
	JI_avg	,071	,044	,084	1,629	,105
	FTPO_avg	,159	,050	,166	3,172	,002

a. Dependent Variable: JS\_avg

## Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	Ν
Predicted Value	2,2910047	4,8255000	4,1025641	,49874736	273
Residual	-1,33322966	1,87820518	,00000000	,55146362	273
Std. Predicted Value	-3,632	1,450	,000	1,000	273
Std. Residual	-2,395	3,374	,000	,991	273

a. Dependent Variable: JS\_avg

20-

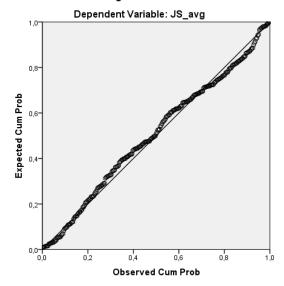
10-

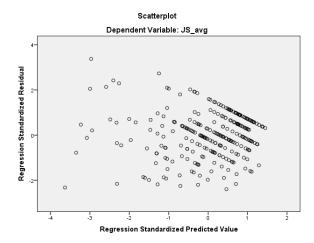
Histogram
Dependent Variable: JS\_avg

Mean = -6,74E-16
Std. Dev. = 0,991
N = 273

-2 0 2
Regression Standardized Residual

Normal P-P Plot of Regression Standardized Residual





### **Assumptions Study 1**

Linearity is the first assumption that has to be checked. The relationship between the outcome variable and the predicators has to be linear (Hair et al., 2014). Looking at both scatterplots, with OCB and JS as dependent variables, they show a linear relationship. The data points does not show a curve or other figure, so the assumption or linearity is met. The scatterplot could is also used to examine the homoscedasticity. Homoscedasticity indicates that at each level of the predicators, the residuals are constant (Hair et al., 2014). The scatterplots do not show a particular pattern, this indicates that the assumption is met. The third assumption is the normality. This assumption could be checked with the normal P-P plot. The data points in the P-P plot are visually scattered around the linear line. Normality could also be checked with the skewness and kurtosis values. The assumption of normality is met when skeweness/SEskeweness <2 and kurtosis/SEkurtosis < 2 (Field, 2018). Both the skewness and kurtosis values show some non-normality for the variables, especially Intention to Quit. It is decided to leave the original variable in the study because the normality assumption is not the biggest issue. Finally, the multicollinearity is fourth assumption. The tolerance value and VIF values do met the required cut-off points (Hair et al., 2014). This indicates that there is no multicollinearity and the assumption is met. Overall, there could be concluded that all the assumptions are met for conducting the linear regression analyses.

## $Appendix \ 4-Linear\ regression\ Study\ 2$

## **Linear regression – Organizational Citizenship Behavior**

## Descriptive Statistics

	Mean	Std. Deviation	N
Do you have a permanent or temporary contract?	1,40	,491	190
FTPO_avg	2,8542105	1,00956178	190
OCB_avg	3,7449561	,69247813	190
IQ_avg	1,6175439	,88950828	190
JS_avg	4,1302632	,81556773	190
Jl_avg	3,8605263	1,04382525	190
Employ_avg	3,7684211	,93629215	190

#### Correlations

						Do you have a permanent or temporary	
		OCB_avg	JI_avg	Employ_avg	IQ_avg	contract?	FTPO_avg
Pearson Correlation	OCB_avg	1,000	,124	-,059	-,209	-,215	,276
	JI_avg	,124	1,000	,193	-,386	-,352	,469
	Employ_avg	-,059	,193	1,000	,078	,133	,151
	IQ_avg	-,209	-,386	,078	1,000	,094	-,428
	Do you have a permanent or temporary contract?	-,215	-,352	,133	,094	1,000	-,077
	FTPO_avg	,276	,469	,151	-,428	-,077	1,000
Sig. (1-tailed)	OCB_avg		,045	,210	,002	,001	,000
	JI_avg	,045		,004	,000	,000	,000
	Employ_avg	,210	,004		,141	,033	,018
	IQ_avg	,002	,000	,141		,099	,000
	Do you have a permanent or temporary contract?	,001	,000	,033	,099		,145
	FTPO_avg	,000	,000	,018	,000	,145	
N	OCB_avg	190	190	190	190	190	190
	JI_avg	190	190	190	190	190	190
	Employ_avg	190	190	190	190	190	190
	IQ_avg	190	190	190	190	190	190
	Do you have a permanent or temporary contract?	190	190	190	190	190	190
	FTPO_avg	190	190	190	190	190	190

#### Model Summary<sup>c</sup>

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,288ª	,083	,063	,67031295	,083	4,176	4	185	,003
2	,366 <sup>b</sup>	,134	,110	,65326247	,051	10,783	1	184	,001

a. Predictors: (Constant), Do you have a permanent or temporary contract?, IQ\_avg, Employ\_avg, Jl\_avg

b. Predictors: (Constant), Do you have a permanent or temporary contract?, IQ\_avg, Employ\_avg, JI\_avg, FTPO\_avg

c. Dependent Variable: OCB\_avg

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7,506	4	1,877	4,176	,003 <sup>b</sup>
	Residual	83,124	185	,449		
	Total	90,630	189			
2	Regression	12,108	5	2,422	5,675	,000°
	Residual	78,522	184	,427		
	Total	90,630	189			

- a. Dependent Variable: OCB\_avg
- b. Predictors: (Constant), Do you have a permanent or temporary contract?, IQ\_avg, Employ\_avg, JI\_avg
- c. Predictors: (Constant), Do you have a permanent or temporary contract?, IQ\_avg, Employ\_avg, JI\_avg, FTPO\_avg

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

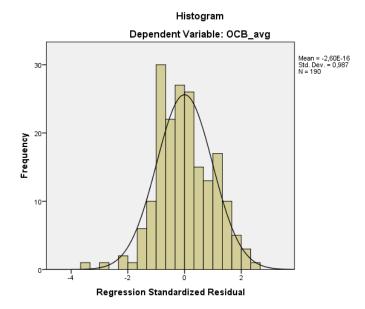
		Unstandardize	d Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	4,483	,350		12,794	,000
	JI_avg	-,014	,057	-,022	-,253	,801
	Employ_avg	-,009	,055	-,012	-,163	,870
	IQ_avg	-,154	,061	-,197	-2,536	,012
	Do you have a permanent or temporary contract?	-,286	,109	-,203	-2,617	,010
2	(Constant)	4,203	,352		11,945	,000
	JI_avg	-,078	,059	-,118	-1,333	,184
	Employ_avg	-,029	,054	-,039	-,530	,597
	IQ_avg	-,089	,062	-,115	-1,439	,152
	Do you have a permanent or temporary contract?	-,310	,107	-,220	-2,906	,004
	FTPO_avg	,186	,057	,271	3,284	,001

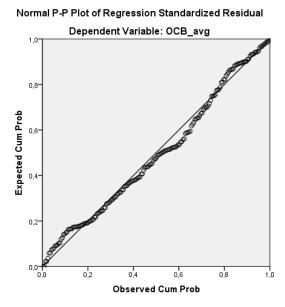
a. Dependent Variable: OCB\_avg

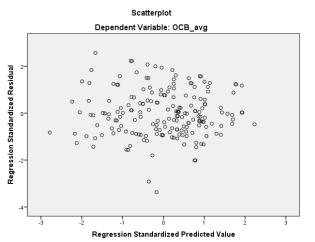
#### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3,0406463	4,3099327	3,7449561	,25310835	190
Residual	-2,20260382	1,67661715	,00000000	,64456351	190
Std. Predicted Value	-2,783	2,232	,000	1,000	190
Std. Residual	-3,372	2,567	,000	,987	190

a. Dependent Variable: OCB\_avg







## **Linear regression – Job Satisfaction**

## Descriptive Statistics

	Mean	Std. Deviation	N
JS_avg	4,1302632	,81556773	190
JI_avg	3,8605263	1,04382525	190
Employ_avg	3,7684211	,93629215	190
IQ_avg	1,6175439	,88950828	190
Do you have a permanent or temporary contract?	1,40	,491	190
FTPO_avg	2,8542105	1,00956178	190

#### Correlations

						Do you have a permanent or temporary	
		JS_avg	Jl_avg	Employ_avg	IQ_avg	contract?	FTPO_avg
Pearson Correlation	JS_avg	1,000	,316	-,008	-,734	-,045	,462
	JI_avg	,316	1,000	,193	-,386	-,352	,469
	Employ_avg	-,008	,193	1,000	,078	,133	,151
	IQ_avg	-,734	-,386	,078	1,000	,094	-,428
	Do you have a permanent or temporary contract?	-,045	-,352	,133	,094	1,000	-,077
	FTPO_avg	,462	,469	,151	-,428	-,077	1,000
Sig. (1-tailed)	JS_avg		,000	,454	,000	,269	,000
	JI_avg	,000		,004	,000	,000	,000
	Employ_avg	,454	,004		,141	,033	,018
	IQ_avg	,000	,000	,141		,099	,000
	Do you have a permanent or temporary contract?	,269	,000	,033	,099		,145
	FTPO_avg	,000	,000	,018	,000	,145	
N	JS_avg	190	190	190	190	190	190
	JI_avg	190	190	190	190	190	190
	Employ_avg	190	190	190	190	190	190
	IQ_avg	190	190	190	190	190	190
	Do you have a permanent or temporary contract?	190	190	190	190	190	190
	FTPO_avg	190	190	190	190	190	190

#### Model Summary<sup>c</sup>

						Cha	inge Statistio	s	
			Adjusted R	Std. Error of	R Square				Sig. F
Model	R	R Square	Square	the Estimate	Change	F Change	df1	df2	Change
1	,736ª	,542	,532	,55765854	,542	54,811	4	185	,000
2	,753 <sup>b</sup>	,567	,555	,54406963	,024	10,357	1	184	,002

- a. Predictors: (Constant), Do you have a permanent or temporary contract?, IQ\_avg, Employ\_avg, Jl\_avg
- b. Predictors: (Constant), Do you have a permanent or temporary contract?, IQ\_avg, Employ\_avg, JI\_avg, FTPO\_avg
- c. Dependent Variable: JS\_avg

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	68,182	4	17,045	54,811	,000b
	Residual	57,532	185	,311		
	Total	125,713	189			
2	Regression	71,247	5	14,249	48,138	,000°
	Residual	54,466	184	,296		
	Total	125,713	189			

- a. Dependent Variable: JS\_avg
- b. Predictors: (Constant), Do you have a permanent or temporary contract?, IQ\_avg, Employ\_avg, JI\_avg
- c. Predictors: (Constant), Do you have a permanent or temporary contract?, IQ\_avg, Employ\_avg, JI\_avg, FTPO\_avg

Coefficients<sup>a</sup>

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	4,890	,291		16,774	,000
	JI_avg	,031	,047	,040	,662	,508
	Employ_avg	,032	,046	,036	,689	,492
	IQ_avg	-,664	,050	-,724	-13,185	,000
	Do you have a permanent or temporary contract?	,053	,091	,032	,588	,557
2	(Constant)	4,661	,293		15,905	,000
	JI_avg	-,021	,049	-,027	-,426	,671
	Employ_avg	,016	,045	,018	,346	,730
	IQ_avg	-,612	,052	-,667	-11,819	,000
	Do you have a permanent or temporary contract?	,034	,089	,020	,379	,705
	FTPO_avg	,152	,047	,188	3,218	,002

a. Dependent Variable: JS\_avg

## Excluded Variables<sup>a</sup>

					Partial	Collinearity Statistics
Model		Beta In	t	Sig.	Correlation	Tolerance
1	FTPO_avg	,188 <sup>b</sup>	3,218	,002	,231	,693

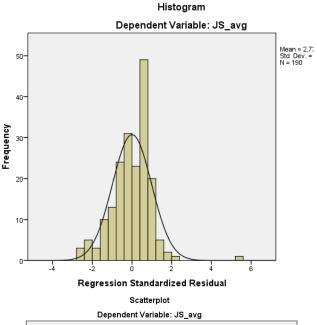
a. Dependent Variable: JS\_avg

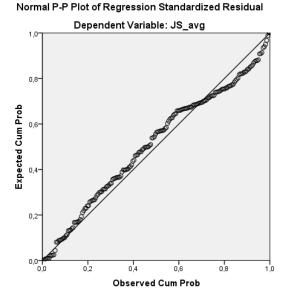
 b. Predictors in the Model: (Constant), Do you have a permanent or temporary contract?, IQ\_avg, Employ\_avg, JI\_avg

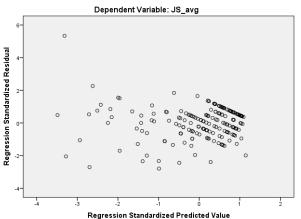
## Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1,9892706	4,8332787	4,1302632	,61397879	190
Residual	-1,52207410	2,90525293	,00000000	,53682471	190
Std. Predicted Value	-3,487	1,145	,000	1,000	190
Std. Residual	-2,798	5,340	,000	,987	190

a. Dependent Variable: JS\_avg







### **Assumptions Study 2**

Linearity is the first assumption that has to be checked. The relationship between the outcome variable and the predicators has to be linear (Hair et al., 2014). Looking at both scatterplots, with OCB and JS as dependent variables, they show a linear relationship. The data points does not show a curve or other figure, so the assumption or linearity is met. The scatterplot could is also used to examine the homoscedasticity. Homoscedasticity indicates that at each level of the predicators, the residuals are constant (Hair et al., 2014). The scatterplots do not show a particular pattern, this indicates that the assumption is met. The third assumption is the normality. This assumption could be checked with the normal P-P plot. The data points in the P-P plot are visually scattered around the linear line. Normality could also be checked with the skewness and kurtosis values. The assumption of normality is met when skeweness/SEskeweness <2 and kurtosis/SEkurtosis < 2 (Field, 2018). This is also the case in this study. Finally, the multicollinearity is fourth assumption. The tolerance value and VIF values do met the required cut-off points (Hair et al., 2014). This indicates that there is no multicollinearity and the assumption is met. Overall, there could be concluded that all the assumptions are met for conducting the linear regression analyses.

## Appendix 5 – Exploratory Factor Analysis (FTPO, OI, and OCB)

## **KMO** and Bartlett's Test

Kaiser-Meyer-Olkin Me	asure of Sampling Adequacy.	,879
Bartlett's Test of	Approx. Chi-Square	2984,251
Sphericity	df	378
	Sig.	,000

#### Communalities

	Initial	Extraction
FTP01	.856	.885
FTPO2	,857	.871
FTPO3	,832	,830
FTPO4	,682	,612
FTPO5_recoded	,605	,527
FTPO6	,537	,476
FTP07	,727	,686
FTPO8	,617	,581
FTPO9_recoded	,765	,832
FTPO10_recoded	,756	,789
OCB1	,461	,480
OCB2	,527	,525
OCB3	,687	,698
OCB4	,600	,561
OCB5	,603	,611
OCB6	,426	,408
OCB7	,592	,628
OCB8	,481	,489
OI1	,456	,415
012	,374	,379
013	,447	,370
OI4	,503	,442
OI5	,596	,590
016	,489	,574
017	,391	,310
OI8_recoded	,349	,323
O19	,390	,344
OI10	,323	,675

Extraction Method: Principal Axis Factoring.

#### Total Variance Explained

		Initial Eigenvalu	100	Extraction	Rotation Sums of Squared Loadings <sup>a</sup>		
Factor	Total	% of Variance	Cumulative %	Total	n Sums of Square % of Variance	Cumulative %	Total
1	8,834	31,550	31,550	8,466	30,234	30,234	6,452
2	3,968	14,170	45,719	3,576	12,772	43,006	4,460
3	1,996	7,127	52,847	1,526	5,450	48,456	2,300
4	1,426	5,095	57,941	,920	3,286	51,742	4,648
5	1,161	4,148	62,090	,781	2,791	54,533	5,432
6	1,002	3,580	65,669	,643	2,297	56,830	1,571
7	,946	3,378	69,047				
8	,827	2,955	72,002				
9	,737	2,634	74,636				
10	,678	2,420	77,056				
11	,652	2,329	79,385				
12	,619	2,211	81,597				
13	,605	2,161	83,758				
14	,555	1,981	85,738				
15	,498	1,780	87,519				
16	,442	1,578	89,097				
17	,421	1,503	90,600				
18	,415	1,482	92,082				
19	,363	1,295	93,377				
20	,320	1,142	94,519				
21	,288	1,030	95,549				
22	,259	,926	96,474				
23	,235	,838	97,312				
24	,218	,779	98,091				
25	,186	,665	98,756				
26	,137	,491	99,247				
27	,126	,451	99,698				
28	,084	,302	100,000				

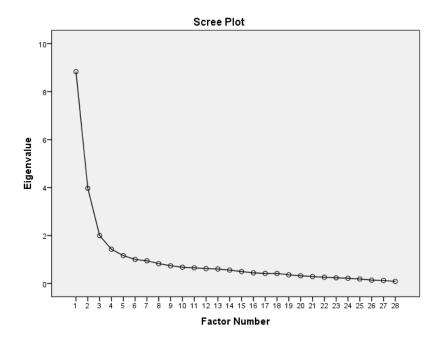
Extraction Method: Principal Axis Factoring.

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

#### Factor Correlation Matrix

Factor	1	2	3	4	5	6
1	1,000	,198	,150	,576	-,292	,184
2	,198	1,000	,129	,074	-,506	,082
3	,150	,129	1,000	,180	-,284	,100
4	,576	,074	,180	1,000	-,185	,071
5	-,292	-,506	-,284	-,185	1,000	-,279
6	,184	,082	,100	,071	-,279	1,000

Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization.



Pattern Matrix<sup>a</sup>

		Factor								
	1	2	3	4	5	6				
FTP01	,924	-,034	,084	-,054	-,149	-,096				
FTPO2	,898	,005	,036	-,017	-,115	-,021				
FTP03	,759	,087	,092	,135	-,085	-,051				
FTPO4	,621	,011	-,048	,133	-,164	,069				
FTPO5_recoded	,514	,050	-,040	,296	,063	,066				
FTPO6	,680	,032	,014	,010	,031	,024				
FTP07	,528	,029	,003	,396	,128	,141				
FTP08	,336	,158	-,006	,491	,139	,132				
FTPO9_recoded	,071	-,127	,002	,860	-,080	-,041				
FTPO10_recoded	,118	-,073	,086	,783	-,091	-,071				
OCB1	-,049	,714	,113	,001	,072	-,068				
OCB2	,085	,640	,153	-,054	-,061	-,031				
OCB3	-,169	,286	,124	,191	-,595	,050				
OCB4	,075	,106	,306	,067	-,503	-,042				
OCB5	,206	,741	-,150	-,127	,017	,042				
OCB6	-,093	,424	,259	,056	-,201	-,149				
OCB7	-,001	,761	-,112	,039	-,040	,101				
OCB8	-,032	,531	-,170	,018	-,283	,019				
OI1	,090	,022	-,153	,003	-,622	,018				
012	,034	,041	,016	-,161	-,516	,183				
013	,104	-,067	,081	,036	-,547	,039				
014	,143	,126	,065	,003	-,519	-,028				
OI5	,049	,004	,083	,064	-,716	-,041				
016	-,001	,010	,688	,010	-,099	,140				
017	-,043	,147	-,026	,180	-,358	,177				
OI8_recoded	,056	-,028	,562	,039	,035	-,072				
OI9	,063	,044	,453	-,015	-,027	,274				
OI10	-,033	-,058	,108	-,030	-,077	,791				

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 14 iterations.

## Appendix 6 – Reliability test (FTPO, OI, and OCB)

## 1- Future Time Perspective in the Organization

## Reliability Statistics

Cronbach's	
Alpha	N of Items
,935	10

### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
FTP01	25,72	81,768	,828	,924
FTPO2	25,67	80,993	,831	,924
FTPO3	25,64	80,760	,843	,923
FTPO4	25,76	85,200	,725	,929
FTPO6	25,87	87,184	,625	,934
FTPO9_recoded	25,29	83,106	,701	,930
FTPO10_recoded	25,36	83,289	,682	,931
FTP07	25,75	80,494	,779	,926
FTP08	26,12	84,166	,704	,930
FTPO5_recoded	25,70	84,560	,696	,930

## 2- Organizational Identity

## Reliability Statistics

Cronbach's	
Alpha	N of Items
,782	10

## Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
OI1	30,30	31,195	,434	,766
012	29,85	30,817	,490	,758
013	29,01	31,740	,504	,757
014	29,65	30,564	,565	,749
015	29,63	29,856	,633	,740
016	29,72	32,008	,464	,762
017	29,79	30,783	,452	,763
OI8_recoded	29,87	34,636	,214	,790
019	29,72	32,594	,401	,769
OI10	30,28	32,929	,357	,774

## 3- Organizational Citizenship Behavior

## Reliability Statistics

Cronbach's	
Alpha	N of Items
,855	8

## Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
OCB1	26,18	23,526	,588	,839
OCB3	26,35	23,122	,639	,833
OCB4	25,95	25,804	,487	,850
OCB5	26,28	22,632	,623	,835
OCB7	26,30	22,179	,680	,827
OCB8	26,49	23,004	,606	,837
OCB2	25,91	23,874	,652	,832
OCB6	25,53	26,272	,530	,847

## Appendix 7 – Hypothesis 1

## Descriptive Statistics

	Mean	Std. Deviation	N
OCB_avg	3,7522282	,69510070	187
Age in numbers	34,2406	13,97582	187
Gender	1,37	,484	187
Educational Level	4,78	1,104	187
Hours per week	29,0602	13,97947	187
Tenure with organization	6,6257	9,47422	187
Do you have a permanent or temporary contract?	1,40	,491	187

#### Correlations

			Correi					
		OCB_avg	Age in numbers	Gender	Educational Level	Hours per week	Tenure with organization	Do you have a permanent or temporary contract?
Pearson Correlation	OCB_avg	1,000	,271	,112	,014	,330	,187	-,222
	Age in numbers	,271	1,000	,239	-,181	,334	,673	-,487
	Gender	,112	,239	1,000	-,045	,427	,204	-,174
	Educational Level	,014	-,181	-,045	1,000	,137	-,124	,078
	Hours per week	,330	,334	,427	,137	1,000	,238	-,213
	Tenure with organization	,187	,673	,204	-,124	,238	1,000	-,464
	Do you have a permanent or temporary contract?	-,222	-,487	-,174	,078	-,213	-,464	1,000
Sig. (1-tailed)	OCB_avg		,000	,063	,427	,000	,005	,001
	Age in numbers	,000		,000	,007	,000	,000	,000
	Gender	,063	,000		,269	,000	,003	,009
	Educational Level	,427	,007	,269		,031	,045	,145
	Hours per week	,000	,000	,000	,031		,001	,002
	Tenure with organization	,005	,000	,003	,045	,001		,000
	Do you have a permanent or temporary contract?	,001	,000	,009	,145	,002	,000	
N	OCB_avg	187	187	187	187	187	187	187
	Age in numbers	187	187	187	187	187	187	187
	Gender	187	187	187	187	187	187	187
	Educational Level	187	187	187	187	187	187	187
	Hours per week	187	187	187	187	187	187	187
	Tenure with organization	187	187	187	187	187	187	187
	Do you have a permanent or temporary contract?	187	187	187	187	187	187	187

#### Model Summary<sup>c</sup>

					Change Statistics					
Mode	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	
1	,375ª	,140	,117	,65335639	,140	5,905	5	181	,000	
2	,386 <sup>b</sup>	,149	,120	,65193592	,008	1,790	1	180	,183	

a. Predictors: (Constant), Tenure with organization, Educational Level, Gender, Hours per week, Age in numbers

b. Predictors: (Constant), Tenure with organization, Educational Level, Gender, Hours per week, Age in numbers, Do you have a permanent or temporary contract?

c. Dependent Variable: OCB\_avg

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

Model	1	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12,604	5	2,521	5,905	,000b
	Residual	77,264	181	,427		
	Total	89,869	186			
2	Regression	13,365	6	2,228	5,241	,000°
	Residual	76,504	180	,425		
	Total	89,869	186			

- a. Dependent Variable: OCB\_avg
- b. Predictors: (Constant), Tenure with organization, Educational Level, Gender, Hours per week, Age in numbers
- c. Predictors: (Constant), Tenure with organization, Educational Level, Gender, Hours per week, Age in numbers, Do you have a permanent or temporary contract?

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

		Unstandardize	d Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	3,113	,297		10,499	,000
	Age in numbers	,009	,005	,183	1,876	,062
	Gender	-,082	,111	-,057	-,737	,462
	Educational Level	,003	,045	,005	,074	,941
	Hours per week	,014	,004	,290	3,571	,000
	Tenure with organization	,001	,007	,007	,078	,938
2	(Constant)	3,410	,370		9,219	,000
	Age in numbers	,007	,005	,151	1,501	,135
	Gender	-,087	,111	-,061	-,788	,432
	Educational Level	,003	,045	,005	,069	,945
	Hours per week	,014	,004	,286	3,526	,001
	Tenure with organization	-,001	,007	-,019	-,203	,839
	Do you have a permanent or temporary contract?	-,153	,114	-,108	-1,338	,183

a. Dependent Variable: OCB\_avg

#### Excluded Variables<sup>a</sup>

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1	Do you have a permanent or temporary contract?	-,108 <sup>b</sup>	-1,338	,183	-,099	,725

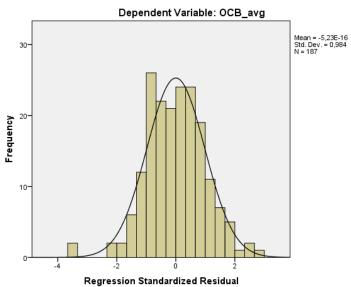
- a. Dependent Variable: OCB\_avg
- b. Predictors in the Model: (Constant), Tenure with organization, Educational Level, Gender, Hours per week, Age in numbers

#### Residuals Statistics<sup>a</sup>

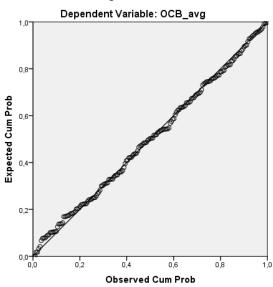
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3,1745656	4,3375978	3,7522282	,26805759	187
Residual	-2,24391127	1,75272632	,000000000	,64133463	187
Std. Predicted Value	-2,155	2,184	,000	1,000	187
Std. Residual	-3,442	2,688	,000	,984	187

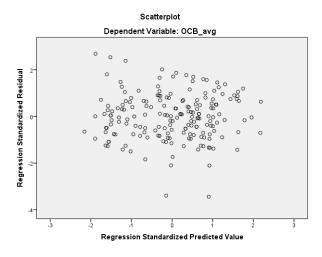
a. Dependent Variable: OCB\_avg





Normal P-P Plot of Regression Standardized Residual





# Appendix 8 – Hypothesis 2

Run MATRIX procedure:									
************* PROCESS Procedure for SPSS Version 3.2.02 **********************************									
Written by Andrew F. Hayes, Ph.D. www.afhayes.com Documentation available in Hayes (2018). www.guilford.com/p/hayes3									
******	******	******	******	******	*****				
Model : 4 Y : OCB_avg X : TypeCor M : OI_avg									
Covariates:									
Gender EdLeve	el TenureOr Hour	sWee Age							
Sample									
Sise: 186									
OUTCOME VARIABLE	::::::::::::::::::::::::::::::::::::::	******	******	******	*****				
Model Summary									
R	R-sq MS	E F	dfl	df2	P				
,3155	,0996 ,361	4 3,2990	€,0000	179,0000	,0042				
Model									
	eff se	t	P	LLCI	ULCI				
	1530 ,3437		,0000	2,4748	3,8313				
	0957 ,1057	-,9052	,3666	-,3042	,1129				
	2013 ,1036	-1,9428	,0536	-,4057	,0032				
	0566 ,0420 0028 ,0064	1,3472 ,4316	,1796 ,6665	-,0263 -,0099	,1395 ,0155				
	0134 ,0038	3,5561	,0005	,0060	,0209				
_	0033 ,0046	-,7084	,4796	-,0124	,0209				

```
Standardised coefficients
          coeff
          -,1535
TypeCont
Gender
         -,1560
EdLevel
          ,1002
TenureOr
          ,0424
          ,3001
HoursWee
          -,0734
OUTCOME VARIABLE:
OCB_avg
Model Summary
            R-sq MSE F dfl df2
,4258 ,2899 18,8557 7,0000 178,0000
       R
                                                       ,0000
     ,6525
Model
                                            LLCI
          coeff
                                                     ULCI
                     se.
                             t
                                      P
        1,4970 ,3733 4,0104 ,0001
-,1006 ,0949 -1,0605 ,2903
constant
                                            ,7604 2,2336
                                   ,2903
                                           -,2878
                                                    ,0866
TypeCont
         ,6175
                                            ,4854
                  ,0669 9,2245
                                   ,0000
                                                     ,7496
OI avg
                                   ,8070
          ,0229
                  ,0928
                           ,2447
Gender
                                            -,1621
                                                     ,2080
                  ,0378
EdLevel
          -,0357
                           -,9427
                                    ,3471
                                            -,1103
                                                     ,0390
                                    ,5869
TenureOr
          -,0031
                   ,0058
                           -,5443
                                            -,0145
                                                     ,0082
                   ,0035 1,8422
                                    ,0671
          ,0064
                                           -,0005
                                                     ,0133
HoursWee
                                    ,0241
                   ,0041
                          2,2756
                                            ,0012
          ,0094
                                                     ,0176
Age
Standardised coefficients
          coeff
TypeCont
         -,1443
OI_avg ,5521
          ,0159
Gender
EdLevel
          -,0564
         -,0428
TenureOr
          ,1288
HoursWee
          ,1890
OUTCOME VARIABLE:
OCB avg
Model Summary
            R-sq MSE F dfl df2
,1513 ,4261 5,3181 6,0000 179,0000
                      MSE
                                F
      P
                                                       ,0000
    ,3890
Model
                  se t p LLCI ULCI
,3732 9,2279 ,0000 2,7076 4,1805
,1147 -1,3916 ,1658 -,3861 ,0668
          coeff
         3,4441
constant
TypeCont
         -,1597
                                                     ,1206
Gender
         -,1014
                  ,1125
                           -,9009
                                    ,3688
                                            -,3233
         -,0007
                                                     ,0893
                  ,0456
                          -,0154
                                    ,9877
EdLevel
                                            -,0907
                                                     ,0124
                  ,0070
                          -,2037
                                    ,8388
TenureOr
         -,0014
                                            -,0152
         ,0147
                                                     ,0228
                  ,0041
                          3,5947
HoursWee
                                    ,0004
                                            ,0066
          ,0074
                  ,0050
                                    ,1415
                                                      ,0173
Age
                          1,4768
                                             -,0025
Standardised coefficients
          coeff
TypeCont
          -,2291
Gender
         -,0702
EdLevel
         -,0011
TenureOr
          -,0194
          ,2945
HoursWee
          ,1485
```

Age

\*\*\*\*\*\*\*\* TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y \*\*\*\*\*\*\*\*\*\* Total effect of X on Y ULCI LLCI 50 -1,3916 ,1658 -,3861 ,1147 ,0668 -,2291 Direct effect of X on Y p LLCI ULCI c'\_ps ,2903 -,2878 ,0866 -,1443 se -1,0605 ,0949 -,1006 Indirect effect(s) of X on Y: Effect BootSE BootLLCI BootULCI -,0591 ,0662 -,1920 ,0702 Partially standardised indirect effect(s) of X on Y: Effect BootSE BootLLCI BootULCI -,0848 ,0939 -,2686 Level of confidence for all confidence intervals in output: 95,0000 Number of bootstrap samples for percentile bootstrap confidence intervals: NOTE: Standardised coefficients for dichotomous or multicategorical X are in partially standardised form. NOTE: Variables names longer than eight characters can produce incorrect output. Shorter variable names are recommended.

----- END MATRIX -----

### Appendix 9 – Hypothesis 3

```
Run MATRIX procedure:
******** PROCESS Procedure for SPSS Version 3.2.02 ************
        Written by Andrew F. Hayes, Ph.D.
                                            www.afhayes.com
   Documentation available in Hayes (2018). www.guilford.com/p/hayes3
Model : 1
   Y : OI_avg
   X : TypeCont
   W : FTPO avg
Gender EdLevel TenureOr HoursWee Age
Sample
Sise: 186
DUTCOME VARIABLE:
OI avg
Model Summary
     R R-sq MSE F dfl df2
,4592 ,2109 ,3203 5,9120 8,0000 177,0000
                                                                 ,0000
                    se t p LLCI ULC1
,5208 4,5190 ,0000 1,3257 3,3813
,2706 ,2194 ,8266 -,4747 ,5935
2.0489 ,0419 ,0100 ,5347
Model
            coeff
constant
         2,3535
          ,0594
TypeCont
FTPO avg
           ,2724
           -,0286
                              -,3355
                                                   -,1971
                                        ,7376
                     ,0854
Int 1
                     ,0985
                                        ,0994
                              -1,6563
Gender
         -,1631
                                                  -,3575
          ,0526
                                        ,1855
                     ,0396
                      ,0396 1,3293
,0061 1,0740
EdLevel
                                                  -,0255
                                        ,2843 -,0055
,1773 -,0024
TenureOr
           ,0066
            ,0053
HoursWee
                     ,0039
                              1,3544
                                                             ,0130
           -,0005
                     ,0045
                              -,1036
                                         ,9176 -,0092
Product terms key:
Int 1 : TypeCont x
                              FTPO avg
Test(s) of highest order unconditional interaction(s):
                          df1
                                    df2
     R2-chng
                   F
      ,0005
                ,1126 1,0000 177,0000
                                            ,7376
****************** ANALYSIS NOTES AND ERRORS ****************
Level of confidence for all confidence intervals in output:
 95,0000
Number of bootstrap samples for percentile bootstrap confidence intervals:
NOTE: Variables names longer than eight characters can produce incorrect output.
    Shorter variable names are recommended.
----- END MATRIX -----
```

### Appendix 10 – Hypothesis 4

```
Run MATRIX procedure:
********* PROCESS Procedure for SPSS Version 3.2.02 ************
        Written by Andrew F. Hayes, Ph.D.
                                         www.afhayes.com
   Documentation available in Hayes (2018). www.guilford.com/p/hayes3
Model : 1
   Y : OCB avg
   X : TypeCont
   W : FTPO avg
Covariates:
 Gender EdLevel TenureOr HoursWee Age
Sample
Sise: 187
OUTCOME VARIABLE:
OCB avg
Model Summary
            R-sq MSE F dfl df2 p
,1820 ,4130 4,9497 8,0000 178,0000 ,0000
     ,4266
Mode1
-,0015 ,9988
-,6100 ,5426
                   ,1099
                                     ,5426
          -,0671
                                               -,2840
                           -,0196
                    ,0447
          -,0009
                                               -,0890
EdLevel
                                      ,9844
                                                         ,0872
                                     ,8988
                    ,0069
                             ,1273
                                              -,0128
                                                        ,0146
TenureOr
           ,0009
                  ,0044 2,1769 ,0308 ,0009
,0051 1,7795 ,0769 -,0010
                                              ,0009
HoursWee
          ,0095
                                                        ,0181
                                                        ,0190
           ,0090
Product terms key:
             TypeCont x
                          FTPO_avg
 Int 1
      .
Test(s) of highest order unconditional interaction(s):
    R2-chng F df1 df2 p
,0000 ,0000 1,0000 178,0000 ,9988
******************** ANALYSIS NOTES AND ERRORS ****************
Level of confidence for all confidence intervals in output:
 95,0000
NOTE: The following variables were mean centered prior to analysis:
       FTPO avg TypeCont
NOTE: Variables names longer than eight characters can produce incorrect output.
    Shorter variable names are recommended.
----- END MATRIX -----
```