





# The relationship between organizational identification and the personality of employees at Avaloq

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## Abstract

This study investigates the relationship between personality and organizational identification. The construct of organizational identification was based on the social identity theory by Tajfel (1972). The research intention was to find out to what extent employees identify with their organization (their employer) depending on their personality. High organizational identification is eligible for both, employer and employee (Cole and Bruch, 2006; Liu, Loi and Lam, 2011; Mael and Ashforth, 1992; Van Dick et al., 2006). Many initiatives focus on factors like creating appealing work environments, compensation, financial and non-financial benefits and home office policies (Lyons and Bandura, 2019). This research intends to investigate the influence of individual factors originating in the person itself. Therefore, hypotheses were generated regarding different personality traits and their individual relation to organizational identification. The study was conducted at Avaloq, a fintech company providing core banking software. Personality was assessed with Goldberg's (1999) IPIP representation of Costa and McCrae's (1992) NEO-PI-R Domains. To survey organizational identification several existing scientific questionnaires were combined. Participants were asked to fill out both questionnaires about personality and organizational identification. The sample of 46 employees revealed that extraversion, agreeableness, neuroticism and openness correlated significantly with organizational identification while conscientiousness did not. Extraversion was found to be a reliable predictor of organizational identification. The implications of these findings are two folded: On the one hand, it implies that the organization can create incentives for its employees, tailored to their personality traits. One the other hand, the results indicate that there are certain factors influencing organizational identification that lie within the person and on which an organization cannot exert any influence.

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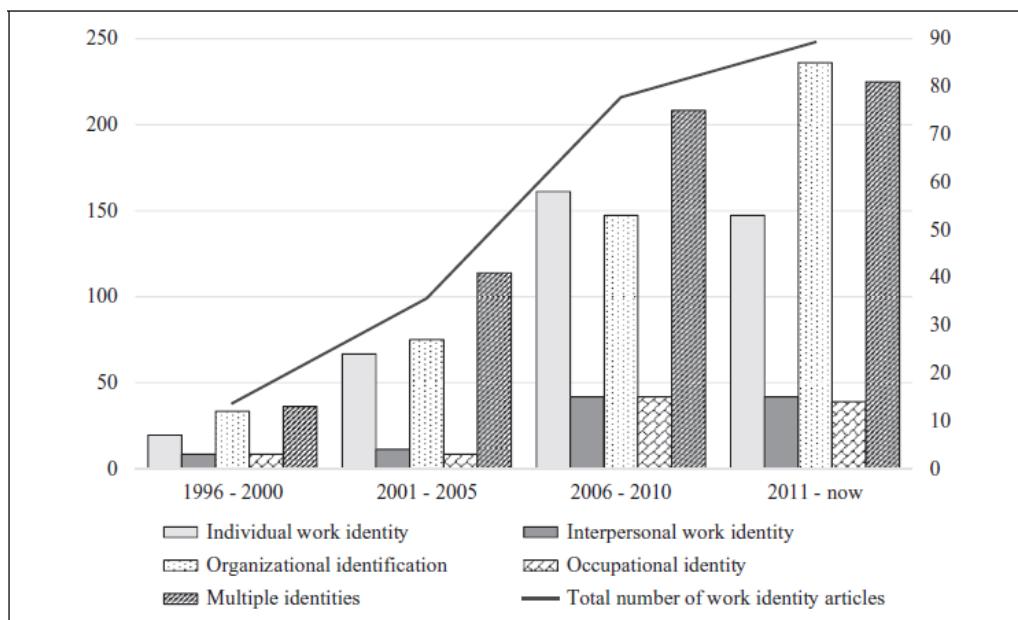
## List of Abbreviations

FFM	Five Factor Model
OCB	Organizational Citizenship Behaviour
SIT	Social Identity Theory

# 1 Introduction

## 1.1 Research Introduction

When born into society, individuals strive to find their place in a complex web of ties (Tajfel, 1972). In our nowadays fast-paced and complex environment this gets more and more important. Identity as a component of an individual's self-concept stems from its awareness of its participation in a social group (or groups) as well as the emotional value associated with that membership (Tajfel, 1972). These social groups can include organizations as well (Boroş, 2008). Research concerning organizational identity and identification has skyrocketed in recent years (Miscenko and Day, 2016). This development is illustrated by Figure 1 that shows research articles published about work identity and work identification. There is a significant increase since the late 1990s (Miscenko and Day, 2016).



*Figure 1: The number of articles published on work identity and identification after 1995 in total and by review category (Miscenko and Day, 2016)*

People spend a significant amount of time of their lives at work. Inevitably, the workplace has an impact on a person's identity and vice

versa (Elsbach, 1999; Miscenko and Day, 2016). Please note that the term "organizational identification" and "work identification" are used interchangeably in this paper.

Employee organizational identification is advantageous for businesses as it results in a number of favourable outcomes for the latter (see 2.4). When identifying with their organization, employees are less inclined to leave the company (Ashforth and Saks, 1996) and are more engaged in their job (Knippenberg and Schie, 2000), thus it is in the interest of a company to find out the factors amplifying an employee's identification with the organization. A lack of trust, unfair treatment, not enough support, a lack of feedback on performance, inadequate pay, or limited prospects for growth are all examples of poor working circumstances (Lyons and Bandura, 2019). Other examples include rigid schedules, an excessive amount of work, stress from the pace of work, and abusive management (Lyons and Bandura, 2019). There are many approaches to get employees to stay with the employer (Lyons and Bandura, 2019). Often, they concentrate on external factors such as salary, benefits, home office policies, and flexible working hours (Lyons and Bandura, 2019; Ongori, 2007).

While there is a talent shortage across many businesses, it is particularly acute within the IT sector. There is a severe lack of tech-savvy workers and a high demand for competent workers (ManpowerGroup, 2013; McCallum, 2022). Companies are vying for these employees and, once attained, highly interested in keeping them (Chiat and Panatik, 2019). For IT companies in particular, it is therefore important to keep their resignation rate as low as possible (Johnson, 2018). Still, this is not only the case for the IT sector. High turnover rates typically have detrimental effects on businesses (Lyons and Bandura, 2019). This specifically applies to "voluntary turnover," which is when workers choose to change employers of their own initiation (Stovel and Bontis, 2002). Leaving employees mean a loss of knowledge (Eckardt, Skaggs and Youndt, 2014) but also a loss of a valuable mentor or an appreciated colleague (Lyons and Bandura, 2019). For the organization, this might result in a loss of motivation

among employees (Gawali, 2009) or work disruption (Lyons and Bandura, 2019). Furthermore, finding and training new employees requires the organization to expend time and resources (Dalton and Todor, 1979; Staw, 1980).

There are various causes that could lead a person to consider leaving their workplace rather than just one (Lyons and Bandura, 2019). Thibault Landry, Schweyer and Whillans (2017) claim that companies need to go beyond compensation and reward programs. According to them, employers should try to understand what employees want and why (Thibault Landry, Schweyer and Whillans, 2017). Even more, as jobs are increasingly seen as being essential to one's self-identity (Hogg and Terry, 2000; Pratt, Rockmann and Kaufmann, 2006). A job is more than just a pay check for many employees. They put substantial time and effort into picking where to work and why (Ibarra, 1999; Iyengar, Wells and Schwartz, 2006; Shamir, 1991). Many workers desire meaning in addition to, or perhaps more than, financial reward (Duchon and Plowman, 2005; Gagné and Forest, 2008; Gagné and Deci, 2005). This aspect supports the assumption that the workplace has a high value for the employee. Work is not only the basic material security but also serves to create identity.

The extent to which employees identify with their organization can vary significantly. The present research aims to investigate to what extent employees' personalities have an impact on their organizational identification. Research suggests that the intention to change jobs and organizational identification are connected (Abrams, Ando and Hinkle, 1998; Riketta, 2005; Van Dick et al., 2004; Zhang and Liu, 2016). This study might explain how personality has an impact on organizational identification and consequently on turnover. Contrary to other explanations for turnover intentions, this would be an internal factor stemming from within the person itself. It should be noted, however, that this study does not claim leaving the organization is exclusively due to the personality of an employee acknowledging there are many different factors playing a crucial role in that decision.

## 1.2 Organizational Introduction

Avaloq is an IT company founded in 1985 in Switzerland and has 2,500 employees. The company provides, develops and maintains core banking systems for banks and wealth managers. They provide Software as a Service (SaaS) as well as Business Process as a Service (BPaaS) solutions for their clients. Besides its core banking system Avaloq provides three more standalone digital products: Avaloq Wealth supports the entire client journey in wealth management, from prospect to trusted relationship, while Avaloq Engage helps to boost client engagement with easy digital banking. Avaloq Insight gives technical and business users access to meaningful data from their banking systems. Avaloq is a global company with local entities in Europe (Switzerland, Germany, United Kingdom, Luxembourg and Spain) as well as in Asia (India, Philippines, Singapore, Hong Kong) and Australia. Avaloq has more than 150 clients in 35 countries. Since October 2020, Avaloq is part of the Japanese NEC corporation.

The Global Executive Board consists of the two co-CEOs in Switzerland and ten further GEB members, each responsible for certain department(s). The company is structured in thirteen different departments: Region APAC and MEA, Product & Technology, Cloud & Infrastructure, Banking Operations, Operations, Finance, Legal, Compliance, Risk & Assurance, Project Delivery Governance & Services, Wealth Products, Region Europe, Region CH and FL, Special Projects and Sales Operations.

Especially IT companies compete for IT savvy employees and have a high interest in keeping a stable staff (ManpowerGroup, 2013; McCallum, 2022). Consequently, the results of the study could be of particular interest to Avaloq.

## 2 Literature Review

### 2.1 Identity vs Identification

The area of identity studies has evolved rather arbitrarily as a result of the variety of theoretical viewpoints available to investigate identity (Miscenko and Day, 2016). As a result, there is an expanding body of literature that is heterogeneous and dispersed (Miscenko and Day, 2016). Workplace surroundings, for example, might drive changes in personal traits and identity (Wille and De Fruyt, 2014). Likewise, identity can influence work environments for example if an individual perceives an inconsistency between its preferred work identity and work situation resulting in attempts to change the job (Kira and Balkin, 2014). Work identity can be defined as the assortment of meanings that one attaches to oneself and others inside a work domain (Gecas, 1982). Researchers have long disagreed on whether identity is a static or dynamic construct. To reconcile both views, according to Markus and Wurf (1987), identity can change to varied degrees.

According to identity theory, the individual's various social roles define its identity (Gecas, 1982). Because each role (and identity) is associated with specific societal expectations, these roles provide structure as well as meaning to human behaviour (Stryker and Burke, 2000). It is useful to take a closer look at both, identity and identification, as they are similar but not interchangeable (Miscenko and Day, 2016). Identity is the meaning of a certain entity (role, organization) that is internalised as part of the concept of self while identification means the cognitive/psychological/ emotional attachment an individual makes to a role, team or organization (Miscenko and Day, 2016). Consequently, identity is more internally oriented while identification externally (Miscenko and Day, 2016). Most commonly, organizational identification is based on the Social Identity Theory (SIT; Tajfel, 1972). This was firstly suggested by Ashforth and Mael (1989) and will be further explained in the next section.

## 2.2 Social Identity Theory (SIT)

Henri Tajfel (1972) suggested that social identification is the sense of belonging to a group and the extent to which members consider themselves as belonging to that group. These identities are essential for their self-concept. According to Tajfel, in modern societies individuals aspire to achieve a positive conception of themselves. Belonging to a specific group can contribute either positively or negatively to the individual's self-perception. People associate with a group to feel better about themselves (Tajfel and Turner, 1979) and to minimize social uncertainty (Reid and Hogg, 2005).

## 2.3 Organizational Identification

Based on the SIT Ashforth and Mael (1989) describe organizational identification as a part of social identification when individuals begin to see themselves as a part of a certain social entity. In the case of organizational identification, the social entity is the organization, the employer (Boroş, 2008). The authors further define cognitive, behavioural and emotional aspects as parts of organizational identification and differentiate between identification itself and its antecedents or consequences. Although defining various aspects of organizational identification they strongly focus on the cognitive aspect. As a result, the following studies focused more on cognitive aspects leading to a research body neglecting affective identification. Johnson, Morgeson and Hekman (2012) also adapt the theory of social identification for their study but distinguish between affective and cognitive organizational identification. Cognitive identification, or self-categorization, is in their opinion a necessary step before anyone may experience any emotions that are connected to one's identification (Johnson, Morgeson and Hekman, 2012). Affective identification reveals a person's sense of belonging to the group (Johnson, Morgeson and Hekman, 2012). Cognition and affect mutually reinforce identification (Kessler and Hollbach, 2005) and, even more, work tends to involve one's sense of self throughout time, such that behaviour,

cognition, and affect converge (Pratt and Ashforth, 2003). Consequently, the distinction between cognitive and affective identification is neglected here.

Essentially, organizational identification is based on one's similarities with others in the organization as well as differences with persons from other organizations (Turner et al., 1987). Edwards and Peccei (2007) describe it as "a psychological linkage between the individual and the organization whereby the individual feels a deep, self-defining affective and cognitive bond with the organization as a social entity" (Edwards and Peccei, 2007). In addition, Dutton, Dukerich and Harquail (1994) specify organizational identification as the extent to which a member defines himself or herself by the same characteristics that he or she believes constitute the organization (Dutton, Dukerich and Harquail, 1994). Identification with an organization implies that one cannot resign without experiencing some form of "psychic loss" (Ashforth & Mael, 1989). It should be mentioned, however, that besides Ashforth and Mael's (1989) best known approach to organizational identification there exist alternative theories for example by Dutton et al. (1994). The extent to which a member defines himself or herself in accordance with the characteristics that, in their opinion, characterise the organization is what they refer to as organizational identification.

Some studies focused on organizational identification in changing contexts. For example, research suggests that pre- and post-merger identification can be easily separated as independent constructs, meaning that people do not modify their identities but instead take on completely new ones (van Dick, Wagner and Lemmer, 2004). The studies mentioned so far presumed organizational identification to be a rather static construct. In comparison, some studies presume organizational identification as a rather dynamic construct. In a longitudinal study, Ekmekci and Casey (2011) found that the extent to which employees identify with their work depends on how frequently individuals interact with other members of the organization and how much information they are exposed to about it. Generally, there is a lack

of research about how organizational identification arises and how it develops over time (Alvesson, 2010).

## 2.4 Positive Outcomes of Organizational Identification

Generally, organizational identification is desirable. One possible outcome is enhanced organizational citizenship behaviour (OCB; Bartel, 2001; Bergami and Bagozzi, 2000; Van Dick et al., 2006). OCB describes employee behaviour, meaning employees who go above and beyond their formal job responsibilities to support their organisation (Mowday, Steers and Porter, 1979). Moreover, the more employees identify with their job, the less the intention to resign is (Ashforth and Saks, 1996; Cole and Bruch, 2006; Knippenberg and Schie, 2000) and the more they are satisfied with their job (Ashforth and Saks, 1996; Lee, 1971; Mael and Ashforth, 1992; Mael and Tetrick, 1992). Even more, organizational identification has been found to positively predict job performance (Liu, Loi and Lam, 2011; Madjar, Greenberg and Chen, 2011). Dutton, Dukerich and Harquail (1994) found that the more employees identify with their organization the more likely they are to behave in line with the goals and expectations of the organization (Dutton, Dukerich and Harquail, 1994). Still, research suggests that there are possible negative outcomes of organizational identification too. The study by Ploeger and Bisel (2013) suggests that highly engaged members were more willing to defend their organization when presented with proof of organizational misconduct (Ploeger and Bisel, 2013). Another study discovered that employees who have higher organizational identification are more likely to act unethically in favour of the organization (Umphress, Bingham and Mitchell, 2010).

## 2.5 Related Constructs

There are three related constructs: First, organizational commitment, second loyalty and third occupational identification. These will be explained in the following.

Although the two constructs organizational commitment and organizational identification have points of overlap, they still cannot be

regarded as synonyms. According to Meyer and Allen's (1997) definition, organizational commitment describes an attitude or orientation that "links the identity of the person to the organization" (Meyer and Allen, 1997). Usually, the organization's and individual's goals become congruent during this process (Meyer and Allen, 1997). Ashforth and Mael (1989) separate the two terms in the way that organizational identification is organization-specific, while organizational commitment is not necessarily (Ashforth and Mael, 1989). Organizational commitment is often assessed by questions that investigate respondents' motivation to put in a lot of effort to advance their organizations, the compatibility of the company's and the employees' ideals, their unwillingness to leave, and their loyalty to or sense of pride in their employers (Maume and Houston, 2001).

Employee loyalty is often used synonymously with organizational commitment. Employees high in loyalty firmly hold the organization's objectives and principles in high regard, are prepared to put in a lot of work on its behalf, and have a strong desire to stay a member of the group without either looking for job alternatives nor responding to job offers (Mowday, Steers and Porter, 1979).

The degree to which a person internalises their profession as an adequate definition of themselves is known as occupational identification (Ashforth et al., 2013). Occupations present a more ambiguous identification target because they belong to a larger societal category than any specific workplace (Ashcraft, 2013). For the sake of completeness, it should be mentioned that Ashforth et al. (2013) have extended the model of organizational identification with regard to the type of employment. They distinguish between occupational, ambivalent, and neutral identification as well as disidentification (Ashforth et al., 2013). However, as this goes beyond the scope of this study, this concept will not be explained further here.

## 2.6 Personality

The Big Five personality test is considered to be one of the most recognized and valid instruments for assessing personality (McCrae

and John, 1992). Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to experience make up the five core dimensions of the five-factor model (FFM) of personality, which organises personality traits in a hierarchical manner (McCrae and John, 1992). According to the Big Five model, personality is composed of five rather independent aspects that together form a useful taxonomy for the study of individual variations (Erdheim, Wang and Zickar, 2006). The FFM was found to be valid in self-reports as well as external ratings, across languages and different ages (McCrae and John, 1992). There is an on-going discussion about personality stability. Recent research suggests that while personality is flexible and people mature with age, personality also has a stable component over the life span, both at the trait level and at the profile level (Bleidorn et al., 2022; Damian et al., 2019). A table containing typical adjectives for the different personality dimensions can be found in Appendix A.

Milestones in scientific personality research have been achieved, particularly in the twentieth century. Starting with Allport and Odber's (1936) categorization of thousands of personality characterising adjectives (the lexical approach), followed by Cattell's (1943) factor analysis of these. The three-factor Psychoticism-Extraversion-Neuroticism (PE-N) model was created by Hans Jürgen Eysenck in 1947 using clinical data from World War II, but its significance extends beyond those of clinical patients. Finally, Fiske (1949), Tupes and Christal (1961), Lewis Goldberg (1981), and Costa and McCrae (1992) were among the scientists who worked successively to establish the FFM of personality and its test.

Numerous authors have contended that five criteria do not adequately capture all that is known about personality differences among individuals (McCrae and John, 1992). FFM sympathisers would not contest these claims. The five elements are only the top level of characteristic description in the hierarchy; they do not completely describe personality (McCrae, Costa and Busch, 1986). A disadvantage of assessing personality using polarity scales is the bias of responses,

especially when one polarity is rated more positively or socially desirable than its opposite (Bäckström, Björklund and Larsson, 2014).

Previous research already investigated relations between personality and organizational related constructs. Ongore (2014) investigated the relationship between personality traits and job engagement; Erdheim, Wang and Zickar (2006) linked personality and organizational commitment and Johnson, Morgeson and Hekman (2012) looked at links between social identification and personality with work attitudes and behaviour.

The dyadic-interactional approach serves as a theoretical approach underpinning the Big Five model (Wiggins and Trapnell, 1996). The expression of personality is an essential part of human behaviour (Tett and Burnett, 2003). Failing to live out one's individual personality characteristics can lead to anxiety (Tett and Burnett, 2003). The theory explains how individuals strive to express their personality by interacting with others and by activities enabling them to show their personality (Wiggins and Trapnell, 1996). Although Costa and McCrae based their FFM on factor analysis, they went on developing a "five-factor theory" which will be exemplified in the following.

Costa and McCrae (1999) describe personality as a dynamic system. Personality traits have an influence on various psychological processes such as (a) interpersonal processes, (b) the construction of identity, (c) emotional expression and/or suppression, (d) self-discipline and goal focus, (e) defence mechanisms and (f) perceiving and processing information (Costa and McCrae, 1999). Personality is partly rooted in our genes (McCrae et al., 2000). It is assumed that traits are partly dispositional and, as such, may not be observable to observers or even understandable to the individual through contemplation (Costa and McCrae, 1999). The five-factor theory states that these dispositional characteristics impact the adaptations that result in behaviour (Costa and McCrae, 1999). The theory also makes the supposition that our self-concept, or how we implicitly and consciously view ourselves as well as our self-esteem, is a part of who we are (Costa and McCrae, 1999). External influences such as experiences in our life and the

environment we live in shape our self-concept and consequently our personality (Costa and McCrae, 1999). As explained, self-concept, identity and personality are closely related. Consequently, this goes in line with the aim of this study to investigate further the relation between personality and organizational identification.

## 2.7 Research Objectives and Hypotheses

The objective of this research is to investigate further the relationship between organizational identification and personality. Personality will be assessed by the Big Five model (Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism). The extent to which people identify with their companies and other work-based groups may be influenced by dispositional characteristics, such as people's innate demand for identification, even if much of the study on social identification until now has focused on its situational antecedents (Kreiner and Ashforth, 2003). As mentioned above, to categorize oneself to a group is the basic dimension of identification which is essential to assess for this study and will be measured via the cognitive identification items. Affective identification follows after cognitive identification and describes the extent to which an individual feels positive affect about being one with a group (Johnson, Morgeson and Hekman, 2012).

According to Tajfel (1972), individuals consider to change their social group when a new group might contribute to their positive aspects of social identity. Individuals with a high score in "openness" have a need for variety and experience and tend to have a curious personality (McCrae and John, 1992). Consequently, they might be less dependent on a social group providing them with social security. In relation to organizational identification, they might be more open to change their job because they are less dependent on their organization as a part of their identity.

*H1: A high level of openness is negatively related to work identification.*

Individuals high in conscientiousness tend to be organized, reliable and responsible (McCrae and John, 1972). High levels in conscientiousness are linked to high organizational commitment (Erdheim, Wang and Zickar, 2006). Johnson, Morgeson and Hekman's study (2012) suggests that cognitive as well as affective identification is associated to organizational commitment. Organizational commitment and organizational identification are not the same but the constructs share common assumptions thus it can be expected that similar to organizational commitment organizational identification is linked to conscientiousness too. Moreover, conscientious individuals tend to be very engaged in their work (Organ and Lingl, 1995).

*H2: A high level of conscientiousness is positively related to work identification.*

The personality trait most frequently linked to positive affect is extraversion (Larsen and Ketelaar, 1991). A number of group process variables, including cohesion, communication, adaptability, and conflict, have been linked to extraversion (Barrick et al., 1998; Barry and Stewart, 1997). Extraverted people like working in teams and interacting with others (Costa and McCrae, 2008). Given their affinity for being in social settings, extraverted individuals should, on average, feel more as a part of the group to which they belong. Thus, the third hypothesis is:

*H3: A high level of extraversion is associated with a high level of work identification.*

The personality trait "Agreeableness" is described by adjectives such as sympathetic, appreciative, kind and trusting (McCrae and John, 1972). Individuals with high scores in this dimension "arouse liking". Since agreeable people are likely to be well liked by others, they quickly integrate into social groupings. Individuals identify with groups in an endeavour to lessen social unpredictability (Hogg, 2000; Reid and Hogg, 2005). Consequently, people with high levels of agreeableness

may be less concerned about changing their group, which in this context would entail changing their job, because they can easily join new groups (social categorization) which satisfy the need of social affiliation.

*H4: A high level agreeableness is associated with a low level of work identification.*

Reducing uncertainty is a major driver why individuals identify with groups (Hogg, 2000; Reid and Hogg, 2005). The need for certainty is reinforced by neuroticism (Hirsh and Inzlicht, 2008). This means that those who have more neurotic characteristics are more likely to believe there is much unpredictability in their lives. Consequently, they have an incentive to make their social self-definitions more explicit in order to lessen this uncertainty which can be achieved by social identification. An individual's propensity to experience anxiety and insecurity is linked with neuroticism (Eysenck, 1986). Highly neurotic individuals struggle with their self-confidence and frequently worry about how they appear in social settings (Johnson, Morgeson and Hekman, 2012). Some individuals experience security through social identity because they may believe that a group provides safety (Johnson, Morgeson and Hekman, 2012). Also, because the group defines the proper behaviour, belonging to a social group may be a means for those with high levels of neuroticism to lessen the unpredictability of social situations (Johnson, Morgeson and Hekman, 2012). Accordingly, the last hypothesis is as follows.

*H5: A high level of neuroticism is positively related to work identification.*

### 3 Methods

#### 3.1 Research Approach

The research philosophy is a mixture of positivism and pragmatism. Following the principles of positivism, the research is following a deductive approach using quantitative methods to investigate the research question (Saunders, Lewis and Thornhill, 2019). The epistemology of positivism is to generate law-like generalizations. This research investigates whether there is an explainable relation between organizational identification and a person's personality. The findings should be generalizable meaning that people with specific personality traits tend to show a certain type of organizational identification. Pragmatism recognizes reality as rich and complex (Saunders, Lewis and Thornhill, 2019). The research was conducted in a real-world company focusing on the practical impact of the results.

#### 3.2 Research Setting

The present study was a field study conducted at the banking software provider Avaloq in the United Kingdom. The company was chosen for accessibility reasons meaning the possibility to generate data out of a sufficiently large sample. The company has several different departments with employees from different occupational backgrounds (for example software engineers, client managers and Human Resource managers) ensuring a broad range of employee backgrounds. Consequently, the company was considered suitable for this research. Moreover, there was no strict criteria to choose the company as the research question generally refers to the extent to which employees identify with their company. Prior to data collection, consent was obtained from the relevant stakeholders. The research project was allowed to proceed on the condition that the results would not be published externally and made available to the company. The study was conducted during the summer months. As this is the holiday season, it is sometimes less busy due to the many absences. On the

one hand, this could lead to more employees finding time to participate in the study. On the other hand, this can also lead to less participation for example when employees are on holiday.

### 3.3 Selecting the Sample

With 140 employees in the United Kingdom, the potential sample size was considered sufficient. Any employee was eligible to participate in the study. In order to obtain an as large and representative sample as possible, the questionnaire was sent to all employees. Employees who anticipated a relatively low organizational identification may have chosen not to participate, which would account for the "non-response" error. They might decide not to participate in the study out of concern that this would have a negative impact on their job. It was explicitly stated in the email as well as at the beginning of the questionnaire that the data would not be made available to the company and would only be used for this study. This was intended to keep the number of non-respondents as small as possible. Another factor to be considered was time. Usually, employees do not have much time during their working day. In order to keep the inhibition threshold as low as possible, the questionnaire was designed short.

### 3.4 Data Collection

Before data collection was started the study, especially the study design, was approved by the Research Ethics Committee (Appendix B). For data collection, standardized online questionnaires were used. Surveys work effectively for explanatory research because they provide the ability to infer links between variables (Saunders, Lewis and Thornhill, 2019). For this survey the program SoSci Survey (SoSci Survey, 2023) was used. Online surveys are easy to distribute and provide a convenient way to collect data as well as to transform the data later to a statistical analysis program. Saunders, Lewis and Thornhill (2019) define 14 A4-pages as a survey's maximum length. The present questionnaire comprises five A4-pages and can be considered as rather short.

A pilot study was conducted prior to data collection. According to Saunders, Lewis and Thornhill (2019) the pilot survey should be filled out by approximately ten persons in order to test technical functionality as well as to check the clarity of the items and spelling mistakes. One item was slightly adjusted after the pilot study for better understanding (see Appendix C). After testing the survey with six persons the pilot study was stopped since no fundamental understanding problems or errors were reported.

The questionnaire was distributed via email to the employees of Avaloq UK using their working email addresses. The email provided some information about the study (Appendix D). The topic was mentioned, as was the fact that the survey was conducted by a student as part of her master's thesis. It was explicitly pointed out that the company would not be given access to the data and that the data would be used exclusively in the context of this study. At the beginning of the study, participants were asked for their consent to take part in the study and were again informed about the purpose of the study and how their data would be processed. After that participants were asked to fill out the organizational identification as well as the personality items. All those items were mandatory to fill out. Finally, some sociodemographic information was requested, but it was not mandatory to respond. On the last page of the questionnaire, the participants were thanked for their participation in the study.

### 3.5 Personality

For assessing personality, the FFM was used as it was found to be valid in self-reports as well as external ratings, across languages and different ages (McCrae and John, 1992). The items were taken from the International Personality Item Pool (IPIP; Goldberg et al., 2006; Appendix C). The IPIP website is intended to provide quick access to measurements of individual differences that are all in the public domain and are being produced collaboratively by scientists worldwide (Goldberg et al., 2006). The format selected for IPIP items is a short phrase. This is more concise than items found in many contemporary

personality assessments, but more contextualised than a single trait adjective (Goldberg et al., 2006). The IPIP collaboratory is meant to be an international effort to create and continuously improve a collection of personality scales that are all available for both scientific and commercial uses and remain in the public domain (Goldberg et al., 2006). The IPIP website describes the scale-construction strategy used by Goldberg (1999) as a process that integrates empirical, rational-intuitive, and psychometric methods. Although suggested guidelines and sample surveys are offered, the IPIP website does not include specific instructions on how to assemble items into scales, administer and score scales, or interpret results. This research does not aim to provide a personality portrait to its participants but to investigate relations between variables thus the higher or lower scores in the different personality factors were considered sufficient.

Goldberg's (1999) IPIP representation of Costa and McCrae's (1992) NEO-PI-R Domains was chosen because each of the preliminary IPIP scales are measuring constructs similar to those in the five NEO-PI-R Broad Domains. There are several reasons why Goldberg's IPIP representation was chosen to investigate the Big Five (Goldberg et al., 2006). First, the usage of the website and the items is free of charge. Second, the items are instantly attainable over the Internet. Third, scoring keys are provided for IPIP scales. Fourth, without obtaining anyone's consent, its components can be arranged in any sequence, scattered among other components, rewritten and translated into other languages. Last but not least the FFM is well suited for hypothesis generation due to its limited number of factors and its scientific reputation (McCrae and Costa, 1997; O'Connor, 2002).

For each construct approximately 15 items were chosen resulting in 74 items in total. Positive items as well as negative items were included. The items were chosen from 20-items scales (per construct). Cronbach's Alpha for the different scales is as follows: Neuroticism = .91, Extraversion = .91, Openness = .89, Agreeableness = .85 and Conscientiousness = .90. The 20-scale items were shortened since the participants were also asked to answer the

items regarding organizational identification. The questionnaire was to be kept as short as possible in order to minimize the inhibition threshold. The items can be found in Appendix D. Participants were asked to rate each statement on a Likert Scale from 1 (Totally disagree) to 5 (Totally agree). Likert scales are simple to comprehend and read (Taherdoost, 2019). One problem of the Likert scale is that participants may avoid extreme response categories, resulting in central tendency bias (Taherdoost, 2019). Additionally, subjects may respond by agreeing or disagreeing with the assertions in order to please the experimenter (Taherdoost, 2019). Another drawback of the Likert scale is social desirability bias, which can occur when participants are not honest and instead strive to depict themselves in a more socially favourable manner (Taherdoost, 2019). Odd numbers of response categories were favoured for this study. They allow the middle category to be understood as a neutral point, giving a person who actually has a neutral position an option and preventing them from being forced to select a side (Taherdoost, 2019). 5-item scales are considered easiest to use, hence it was applied for the present study to achieve the highest possible response rate (Taherdoost, 2019).

### 3.6 Organizational Identification

There are several scales to assess organizational identification. Johnson, Morgeson and Hekman (2012) provide a good overview in their paper which scales and items were developed in previous research. They created their own 8-item scale. As organizational identification is a complex construct eight items appeared to be very short to capture it. As other items seemed to dip into other aspects of organizational identification those were added to the questionnaire. In total 13 other items were added. Generally, studies based on the social identity theory (see 2.2) and items originating in that concept were added.

Gouldner (1958) investigated how manifest and latent social roles influence organizational behaviour. Such roles forming identity influence organizational behaviour. They may include affinities and values

conflicting with those prescribed by the organization. Gouldner's research showed that those who know their colleagues well showed high commitment and were less likely to leave as they shared their professional interest. Thus, the item "How many colleagues do you know well" was included. Hall, Schneider and Nygren (1970) looked at personal factors in organizational identification. Working towards objectives that are both their own and those of the organization at the same time make individuals feel strongly linked with the organization (Hall, Schneider and Nygren, 1970). Their items for "identification" were added as well (see Appendix E). Cheney (1983) analysed aspects of organizational identification in a corporate field setting. He looked at the relationship between organizational identification in relation to how individuals make job-related decisions. If a person considers the welfare of the organization when making decisions, he or she is likely to identify to a high extent with the organization. Thus, these items were identified as suitable for the questionnaire. Mael and Ashforth (1992) based their theory and questionnaire about organizational identification on the SIT. Consequently, their generated items were seen as suitable to include in this research (Appendix E). Riordan and Weatherly (1999) investigated employee identification with the work group. Based on Ashforth and Mael's assumption that individuals can have several identities within one work organization this led to the idea to investigate identification with subgroups such as the working group. Predominantly, this includes the perception to experience the group's successes and failures as one's own (Appendix E). Tyler and Blader (2001) examined identity and cooperative behaviour in groups. They concluded that people's motivation to actively collaborate with the groups to which they belong is mostly driven by identification issues. In order to touch into work group identification as well, the item was added (Appendix E). Polzer (2004) researched how the influence of organizational identification on cooperation is moderated by subgroup interests and reputations. Consequently, one of the items was integrated as well: "I do not fit in well with the other members of this organization". Hogg et al. (2005) investigated effective leadership in work groups referring to the social

identity perspective of leadership. As work group identification was investigated some of these items were adopted (Appendix E). Lastly, participants were asked about two aspects that first come to their mind when thinking about organizational identification at Avaloq.

## 4 Findings/Results

### 4.1 Sample and Descriptive Statistics

Prior to data collection the sample size was calculated via G\*Power (Faul et al., 2009; Appendix F). Test power was set at  $1 - \beta = .80$ . A moderate effect size was estimated ( $\eta p^2 = .30$ ). The calculated sample size was 30 participants. Data collection started 4<sup>th</sup> of June 2023 and was closed one month later on 4<sup>th</sup> of July 2023. 58 participants filled out the survey. Nine participants were excluded as they had not filled out the questionnaire to the last page. When more than 20% of the questions were not answered participants were excluded as well (Parent, 2012). One more person was excluded as there was no data recorded. Finally, 46 persons were included in the data analysis. 16 participants were female (34,8%) and 29 were male (63%). One person preferred to give no answer (2,2%). Most of participants were between 30 to 34 or 45 to 49 years old (see Appendix G). The majority of the participants had a university degree. Most employees worked either one to three or four to seven years for Avaloq (see Appendix G).

### 4.2 Correlation Analysis

The following table (Table 1) shows the scale means values and their standard deviations. Moreover, the table contains the reliability values (Cronbach's Alpha) and inter scale correlations, especially between the personality scales and organizational identification. A graphical representation of the distributions of the data can be found in Figure 2.

Scale	Number of items	M	SD	1	2	3	4	5	6
1 Extraversion	15	2.86	.71	(.91)					
2 Agreeableness	15	3.77	.52	.63**	(.86)				
3 Conscientiousness	15	3.58	.55	.34*	.26	(.82)			
4 Neuroticism	15	3.02	.64	-.42**	-.29	-.47**	(.87)		
5 Openness	14	3.57	.60	.38**	.15	.08	-.17	(.89)	
6 Work Identification	15	2.95	.64	.56**	.40**	.12	-.36**	.42**	(.92)

Table 1: Reliability values and inter scale correlations

N = 46. The reliabilities (Cronbach's alpha) are given in parentheses on the diagonal.

M is the mean and SD the corresponding standard deviation of the respective scale.

\*\* = Correlation is significant at the .01 level (2-sided).

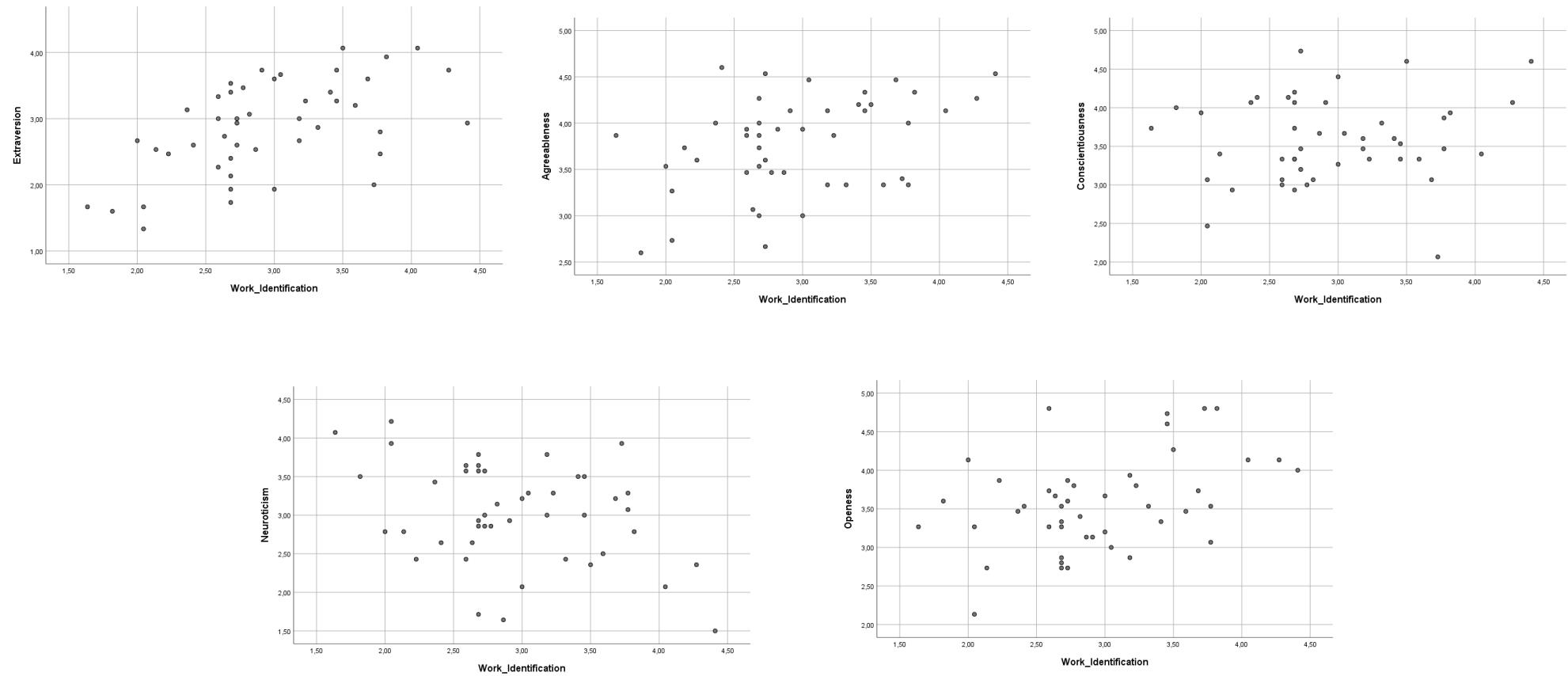
\* = The correlation is significant at the .05 level (2-sided).

Prior to data analysis the data was tested for linearity via scatter plots. The distribution of the dependent variable (work identification) was examined for normal distribution. According to the Shapiro-Wilk test, work identification was normally distributed ( $p > .05$ ).

Outliers were identified via boxplots. There are different ways how to cope with outliers. There is the possibility to keep the outliers in the data set and to continue the analysis as usual. Alternatively, a non-parametric analysis can be conducted. Also, participants can be excluded from the analysis by winsorizing or trimming the data. There were only two light outliers. Conscientiousness and openness both had one outlier each (Appendix H). Correlations for these two scales were calculated with the Pearson's r (see Table 1) and the non-parametric Spearman's  $\rho$ . Cohen's (1988) guidelines were used to interpret the

results. According to him, a correlation of .1 is weak and of .3 moderate. A strong correlation is assumed up from a correlation of .5. The results for Spearman's  $\rho$  were  $\rho = .12$ ,  $p = .44$  for conscientiousness and  $\rho = .36$ ,  $p < .05$ . for openness. Moreover, Pearson's  $r$  was calculated excluding the outliers. Results were  $r = .23$ ,  $p = .13$  for conscientiousness and  $r = .39$ ,  $p < .01$  for openness. The different analysis showed slightly different results but the overall finding remained the same. Consequently, the findings can be considered reliable.

There was a strong positive correlation between work identification and extraversion,  $r = .56$ ,  $p < .001$ . Consequently, hypothesis 1 was confirmed. There was a moderate positive correlation between work identification and agreeableness,  $r = .40$ ,  $p = .005$ . Thus, the correlation is opposite to hypothesis 2 and cannot be supported. There was a weak positive correlation between work identification and conscientiousness,  $r = .12$ ,  $p < .01$ . Accordingly, there is no scientific evidence for hypothesis 3. Work identification and neuroticism had a moderate negative correlation,  $r = -.36$ ,  $p = .015$ . This result is not conform to hypothesis 4. There was a moderate positive correlation between work identification and openness,  $r = .421$ ,  $p = .004$  which means hypothesis 5 was not supported.



*Figure 2: Scatterplots of each personality dimension (extraversion, agreeableness, conscientiousness, neuroticism, openness) and work identification*

### 4.3 Multiple Regression

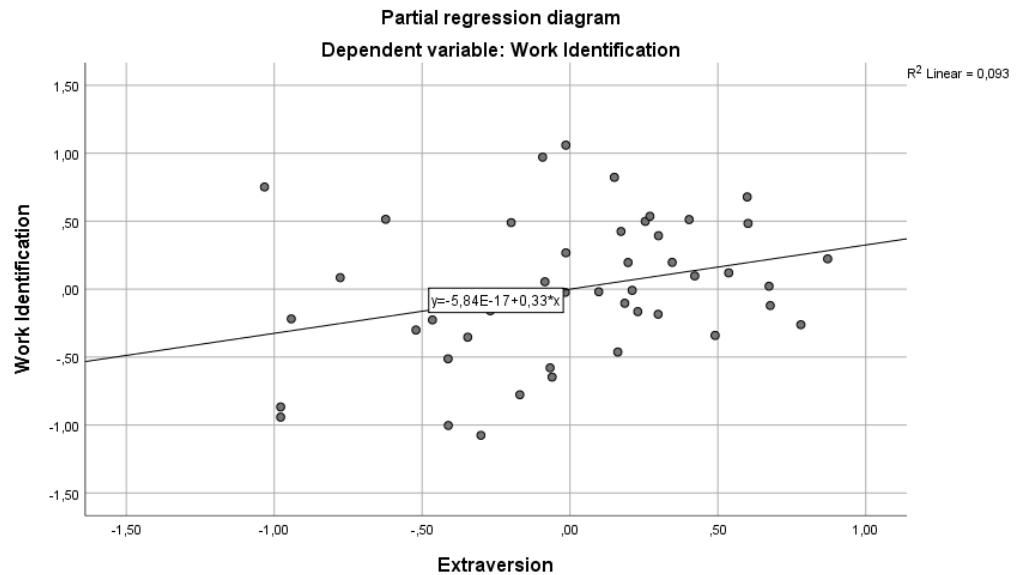
A multiple regression analysis was examined to find out whether personality factors can predict work identification. Linearity was given according to the scatter plot including the studentized residuals (SRE\_1) and the unstandardized predicted value (PRE\_1) as the data was grouped around the zero line (Appendix I). Three different types of outliers or unusual data points were checked: Outliers, leverages and Cook's distance. The standardized residuals indicated no outliers. Also, the studentized excluded residuals indicated no outliers as all values for variable SDR\_1 were in between +/-3. Leverage values were identified according to Velleman & Welsch (1981). They recommend the formula  $(3 \cdot p)/n$  for  $p > 6$  and  $n - p > 12$  ( $p$  = number of predictors,  $n$  = number of cases). With the cut-off at .33 no cases needed to be excluded for the regression analysis. Lastly reviewing the Cook's distances no outliers were identified here. The model has no auto-correlation as the value of the Durbin-Watson statistic is 2.377 (Appendix J). Multicollinearity can be ruled out since none of the correlations among the variables were above .70 (Appendix K). In line with this assumption is that neither one of the tolerance values were below .10 nor a VIF value above 10 (Appendix K). The condition of homoscedasticity as well as the normal distribution of the residuals was fulfilled.

The five personality factors were able to statistically significant predict work identification,  $F(5, 40) = 5.52, p < .01$ . The regression equation is:

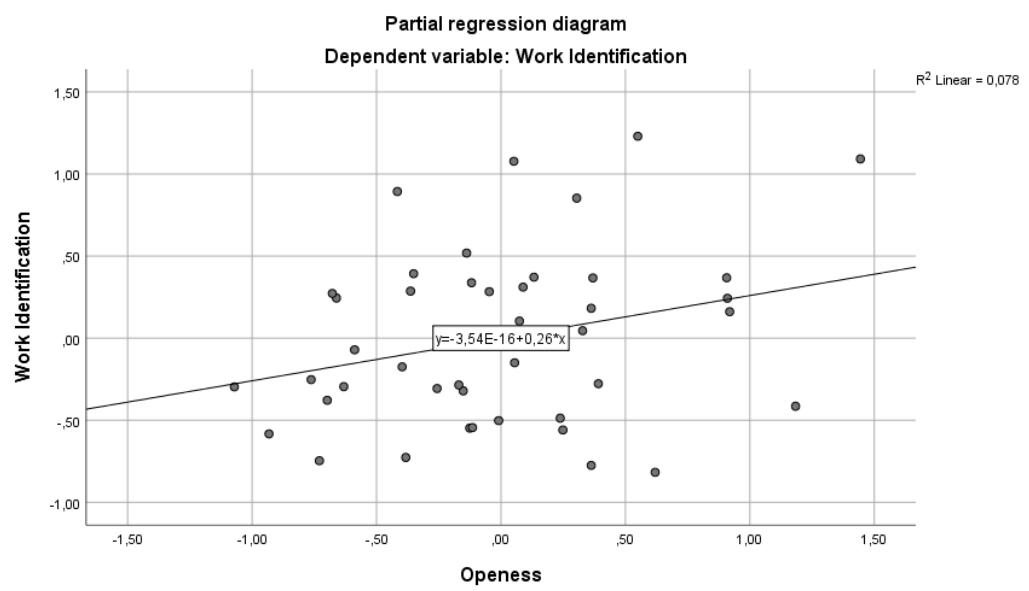
$$\text{work identification} = .33 * \text{extraversion} + .15 * \text{agreeableness} - .17 * \text{conscientiousness} - .20 * \text{neuroticism} + .26 * \text{openness} + 1.72.$$

The  $R^2$  for the overall model was .41 (adjusted  $R^2 = .33$ ; see Appendix L), indicative for a high goodness-of-fit according to Cohen (1988). Extraversion was statistically significant to predict work identification,  $F(5, 40) = 5.52, p < .001$  (see Figure 3). The predictor openness was close to the significance level,  $F(5, 40) = 5.52, p = .74$  (see Figure 4). The other predictors agreeableness, conscientiousness and neuroticism were not significant. Multicollinearity can be excluded as a cause of the nonsignificant predictors. More likely is the high number of predictors as

an explanation. The significance of the model is tested using an ANOVA with an F-distribution. Like all significance tests, it is also susceptible to biases caused by high degrees of freedom, such as many predictors.



*Figure 3: Partial regression diagram work identification and extraversion*



*Figure 4: Partial regression diagram work identification and openness*

#### 4.4 Analysis Individual Text Entry

The answers in the individual text entry (two aspects about organizational identification at Avaloq; see 3.6) were clustered. The majority of answers included terms like “team”, “colleagues” or “people”. Twelve participants mentioned these terms in their answers. The second most common term was “Swiss-related”, mostly in regard to Swiss management, Swiss-driven processes and structures or other Swiss attributes (for example Swiss quality). Descriptions like “top-down management” and “hierarchical” as well as “complicated”, “chaotic” and “confusing” were slightly more frequently used than other terms. Avaloq related vision, mission or values were mentioned rarely.

## 5 Discussion

### 5.1 Discussions of Results

The study intended to research the relation between personality and work identification. Data analysis revealed that one hypothesis could be confirmed while the others were not (see 4.2). Some correlations showed trends in the opposite way the hypotheses had suggested. Although not supporting the hypotheses the results can still be interpreted in a positive manner. The correlations did not show the suggested trends, still they support the assumption that there is some kind of connection between personality and organizational identification, yet the definite relations need to be further researched. More precisely, the correlation between extraversion and work identification was positive and thus consistent with the hypothesis. Extroverts are known to enjoy working together in teams. Frequently interacting with your team members and colleagues can result consequently in a higher extent of work identification.

Agreeableness and work identification were expected to correlate negatively but correlated positively. A straight-forward explanation could be that individuals high in agreeableness quickly adapt to their working environment and consequently develop a deeper connection to their work resulting in a higher work identification. Still, being less afraid to change social groups their tendency of changing jobs (and consequently their social group) might be higher as they are aware of their capability to integrate into social groups.

Conscientiousness and work identification showed a low relation contrary to the hypothesis. This was not expected giving the construct's proximity with organizational commitment (Riketta, 2005). Organizational commitment and organizational identification were found to be connected with each other (Riketta, 2005). It could be a sample specific result indicating that employees do not have a high organizational commitment at Avaloq. As organizational commitment levels were not collected this presumption cannot be tested. If there is

generally no correlation between conscientiousness and work identification the explanation might lay elsewhere. Another explanation could be that being committed to and engaged with work does not allow the conclusion that these employees automatically identify with their work. Possibly individuals high in conscientiousness are very reliable in executing their tasks at work but this is separated from being responsible for the company or being committed to their colleagues. In regard to the social identity theory, it might not allow to draw a connection between the need of belonging to a social group and conscientiousness.

Neuroticism and work identification had a moderate negative correlation, meaning that individuals low in neuroticism had a higher work identification. Avaloq has a very fast-paced and dynamic environment. Possibly more neurotic individuals do not feel comfortable in this kind of work environment leading to a lower work identification. Neurotic individuals tend to be more anxious and unstable (McCrae and John, 1992). Recently undergoing many reorganizations and leadership changes Avaloq might trigger fears and threats in these individuals. Consequently, individuals low in neuroticism might be able to cope better with changing and challenging work environments. It might be useful to elaborate neuroticism in another sample with another work environment.

Openness was moderately positively correlated with work identification. Similarly, as suggested for agreeableness, it might be the case that individuals high in openness easily integrate into social groups and consequently develop work identification to a higher extent compared to those scoring lower in openness. Again, these individuals might be more likely to change jobs as they might have the preference to explore unknown environments and to interact with new people.

Clustering participant's answers of the open entry text field revealed that the majority of employees link work identification with terms like "team", "colleagues" or "people". These answers are in line with the aforementioned social identity theory in relation to work identification: At its core, a company consists of the people who work for it. A company

can provide values, vision statements, high-quality products or reliable services. However, individuals tend to relate primarily to the people they work with. Even more, employees indicated that they identify with and care for their local team members but explicitly stated to be not connected with the overall company, the leadership team or the company values. Interestingly, many participants related work identification at Avaloq as something “Swiss-related”. Founded and head-quartered in Switzerland, claiming to be a Swiss quality enterprise, this connection is reasonable. The perception might be enhanced because of the group executive board being located in Switzerland making many managerial decisions seem to be “Swiss-driven”. In line with this assumption is the fact that some participants mentioned top-down management and hierarchical structures. Being organized as a matrix organization this seems to be the origin for some confusion as some participants expressed feeling “confused” about Avaloq or Avaloq being “over-complicated” and “chaotic”.

As mentioned in the beginning of this paper work identification was not supposed to be exclusively depending on personality. There are many more aspects playing an important role for a complex construct as work identification (Miscenko and Day, 2016). Still, the regression revealed that extraversion and openness (to a limited extent) can be used as predictors to forecast work identification.

Another learning could be that personality is a factor a company has no influence on, like the personality of its employees. This does not mean that a company has no influence at all on its employees’ organizational identification or cannot set incentives. It means that organizational initiatives could be more or less successful depending on the individual’s personality traits.

## 5.2 Implications for Professional Practice

Organizational identification has an impact on the intention to change jobs and is thus of interest for organizations (Ashforth and Saks, 1996; Cole and Bruch, 2006; Knippenberg and Schie, 2000). Employees are the most crucial resource for organizations (Abbasi and Hollman, 2000;

Stovel and Bontis, 2002). Consequently, organizations have a high interest in finding out how to keep their employees (Chiat and Panatik, 2019). In case extraversion and openness were to be verified as robust predictors for organizational identification further studies might explore which impulses could be attractive for these employees. One incentive for the employees scoring high in extraversion and openness might be team events like after work social events or work sports clubs. Certain measures could be taken to create work environments where people with specific personality characteristics feel comfortable, developing a deeper organizational identification. For example, employees might be offered the opportunity to work in cross-country project teams to meet their need for social networking and interacting. Being an international company organized in a matrix structure this should be feasible for Avaloq. Besides broadening a person's working group, it brings variety and new impulses for everyday working life. Moreover, employees might perceive these initiatives as job enhancement. Ultimately, people with all different kinds of personality characteristics might be offered specific organizational structures to enhance their organizational identification and to decrease turnover rates. These various personality differences might be reflected in different occupations. Employees working in the sales department might be more extroverted and open as they need to interact with possible clients to sell the product. They need to establish rapport. Characteristics like extrovert and open can be beneficial here. In contrast to that other business areas with less interaction with colleagues or clients might have naturally another personality character distribution. A software developer may be more introvert and outcome-focused than people-focused as their work requires to be analytical and focused. This comparison might appear stereotypical but it should be seen as an exemplification. The distribution of personality characteristics in different teams could also have an influence on the extent to which these individuals identify with their colleagues. To predict organizational identification occupational differences might be taken into account.

### 5.3 Implications for Future Research

Future research might focus on developing more detailed models to predict organizational identification considering more aspects. For example, the model might include salary, workload and work environment dynamics besides personality. Generally, why people identify with their organization and how organizational identification develops is not sufficiently researched (Alvesson, 2010).

The present results and their interpretation were derived from only one study in one organization. To be able to make more reliable statements it is important to replicate the study in different business contexts with larger sample sizes. Moreover, it might make sense to collect data about similar constructs (for example organizational commitment or loyalty) in order to find relations between these constructs and their interaction. Besides personality further interindividual differences might be elaborated such as attachment behaviour and their effect on work identification. There is a research gap about how organizational identification arises and develops. It would be useful to address this gap in future research in order to find out which organizational attributes, work environments and dynamics reinforce work identification.

This research used correlations to investigate the research question. To create more reliable results future studies might first conduct surveys about organizational identification. Doing that would allow to divide employees in two groups: Those high or low in organizational identification. If personality traits were surveyed afterwards, these groups could be examined for significant differences regarding personality traits. This would allow more valid conclusions to be drawn about the relationship between personality and work identification.

### 5.4 Limitations

There are several limitations which should be considered about this study. As already mentioned, the study results were derived from one sample from one company which are likely to restrict the result's generalisation. The analyses performed were correlations. These do not

allow conclusions on causality. Moreover, the employee's answers indicate a partly critical attitude towards Avaloq. This fact might distort the results as an overall sceptical attitude might cause a general lower work identification. As Avaloq recently underwent several organizational changes, like reorganizations and leadership changes, this might have an influence on the study's results. For example, research suggests that organizational change is related to turnover intentions (Morrell, Loan-Clarke and Wilkinson, 2004). Another aspect to consider is cultural differences. This study was conducted in the United Kingdom. It might be the case that other cultures have a higher or lower degree of organizational identification. For example, research conducted by Abrams, Ando and Hinkle (1998) suggests that British and Japanese employees have different levels of organizational identification. Other internally conducted surveys about employee satisfaction or employee wellbeing might have an influence on the responses given. Generally, self-completed questionnaires typically represent the participant's individual viewpoint and perception. These could not always be correct and hence have a limited reliability. Additionally, respondents may have a tendency to answer survey questions in a way that is socially acceptable. Although confidentiality was ensured in this study, it cannot be excluded that participants did answer in a way they presumed to be acceptable or desired. Future research might also include years the employee has been working for the company as a moderator variable. Asking employees about their years of company affiliation the answers showed that most of the employees worked between one to three or four to seven years for Avaloq ( $N = 32$ ). Only five employees worked less than one year for Avaloq. As organizational identification might take some time to develop the majority of employees working several years for the company might enhance the result's informative value. Still, specifying the impact of company affiliation years could be insightful.

## 6 Conclusion

The present study investigates the relationship between organizational identification and personality traits at Avaloq UK. So far, the research conducted in this field is rather scarce. The present research suggests that personality factors do play a role in organizational identification without claiming to be the only factor in predicting the extent of it. The question why employees identify to what extent with their organization and why some of them feel connected to their work place while others do not is an unanswered question. One might wonder why some employees stay with the same employer for years while others tend to change their job more often. This study does not claim to give a final answer to the aforementioned question. Organizational identification is a complex construct. It is reasonable that its origin and development depend on different factors. Still, this study provides scientific evidence that personality has an influence on a person's organizational identification as all personality factors except conscientiousness showed significant correlations with organizational identification. Especially extraversion turned out to be a reliable variable in predicting organizational identification. The results suggest that specific incentives can be created for employees with certain personality traits to increase work identification. This means, the employer could try to create an appealing work environment tailored to the different personality profiles. For example, people scoring high in extraversion or openness could be given the opportunity to work in cross-country teams. The results also support the assumption that the extent of organizational identification is partly due to the individual's predisposition - for example, the constellation of personality traits. In other words, organizational identification is also dependent on individual characteristics. For the organization, it is difficult to influence these.

It should be considered, however, that the study was conducted in one business area (financial technology) in only one company with one sample. To generalize the results the study should be repeated in

different business contexts with larger samples sizes. It could be useful to include other related constructs as organizational commitment and loyalty to explore possible mutual influences and overlaps.

High turnover rates are related to organizational identification (Ashforth and Saks, 1996; Cole and Bruch, 2006; Knippenberg and Schie, 2000) and similar constructs such as organizational commitment (Riketta, 2005). Generally, high turnover rates are not beneficial for organizations as they mean a loss of knowledge and financial losses for the company (Lyons and Bandura, 2019). As turnover intentions and rates are related to organizational identification this strengthens the assumption that the more employees identify with their organization the less likely they consider to change their job. Here it makes sense to mention the social identity theory again: People consider to change their social group (their work place) if the new group contributes to a (more) positive social identity and enhances their positive self-perception. Interestingly, when participants were asked in this study what they think of “organizational identification at Avaloq” they mentioned their colleagues and team members in the first place. This supports the assumptions of the social identity theory as participants first thought about their social group. Future research should take team and work place dynamics more into consideration. Several employees mentioned explicitly that they value the people they work with but they are not attached to the overall company strategy and values. That feeling of “connection” with team members as well as the extent of it could also be influenced by the unique arrangement of personality characteristics individuals possess naturally.

The world has become a fast-changing place where individuals need to adapt quickly and uncertainty is mundane. As already mentioned in the beginning, according to Tajfel (1972) an individual strives to find its place in this complex world. As an organization can be a source of identity, employers should pay attention to that aspect and not underestimate the power of organizational identification. The better the understanding is why employees identify with their organization the

better organizations can give impulses to provide employees an appealing and beneficial work environment.

## Appendices

### Appendix A: Example of Adjectives describing the Big Five Personality Dimensions (McCrae and John, 1992)

Factor	Adjectives
Extraversion	Active
	Assertive
	Energetic
	Enthusiastic
	Outgoing
Agreeableness	Appreciative
	Forgiving
	Generous
	Kind
	Sympathetic
Conscientiousness	Trusting
	Efficient
	Organized
	Planful
	Reliable
Neuroticism	Responsible
	Thorough
	Anxious
	Self-pitying
	Tense
Openness	Touchy
	Unstable
	Worrying
	Artistic
	Curious
	Imaginative
	Insightful
	Original
	Wide interests

## Appendix B : VRE Ethics Form



Xanthy Kallis <X.Kallis@westminster.ac.uk>  
to me ▾

8 Jun 2023, 15:11 ⭐ ← ⋮

Dear Kira

It was nice bumping into you yesterday, what I wanted to confirm is that I am working on approving your VRE, but in the meantime, carry on with your project as if you have had this approval and I will ensure it is also confirmed on the computer, so you are not wasting any more time.

Good luck with it

Best wishes  
Xanthy

In consultation with my supervisor, this email is valid as an VRE approval.

Appendix C: Goldberg's (1999) IPIP representation of Costa and McCrae's (1992) NEO-PI-R Domains:

Extraversion (Factor I)

+keyed

I am the life of the party.

I feel comfortable around people.

I start conversations.

I talk a lot to different people at parties.

I take charge of events.

I enjoy being the centre of attention.

I find it easy to make friends.

I know how to captivate people.

I feel at ease with people.

I am skilled in handling social situations.

-keyed

I keep in the background.

I don't like to draw attention to myself.

I am quiet around strangers.

I find it difficult to approach strangers.

I bottle up my feelings.

Agreeableness (Factor II)

+keyed

I am interested in people.

I sympathize with others' feelings.

I take time out for others.

I feel others' emotions.

I can *make* people feel at ease.

I inquire about others' wellbeing.

I know how to comfort others.  
I love children.  
I am on good terms with nearly everyone.  
I show my gratitude.  
I think of others first.  
I love to help others.  
I have a good word for everyone.  
-keyed  
I am not really interested in others.  
I am indifferent to the feelings of others.

#### Conscientiousness (Factor III)

+keyed  
I am always prepared.  
I pay attention to details.  
I make plans and stick to them.  
I continue until everything is perfect.  
I love order and regularity.  
I get chores done right away.  
I follow a schedule.  
I am exacting in my work.  
I do things according to a plan.  
I like to tidy up.  
-keyed  
I leave my belongings around.  
I often forget to put things back in their proper place.  
I shirk my duties.  
I do things in a half-way manner. Instead: I'm comfortable leaving things unfinished.  
I find it difficult to get down to work.

Neuroticism (Factor IV)

+keyed

- I am relaxed most of the time.
  - I seldomly feel blue.
  - I am not easily bothered by things.
  - I rarely get irritated.
  - I seldomly get mad.
- keyed
- I get stressed out easily.
  - I worry about things.
  - I am easily disturbed.
  - I get upset easily.
  - I change my mood a lot.
  - I panic easily.
  - I get overwhelmed by emotions.
  - I get caught up in my problems.
  - I grumble about things.

Openness (Factor V)

+keyed

- I have a rich vocabulary.
- I have a vivid imagination.
- I have excellent ideas.
- I am quick to understand things.
- I use difficult words.
- I spend time reflecting on things.
- I am full of ideas.
- I carry the conversation to a higher level.
- I catch on to things quickly.
- I can handle a lot of information.

I love to think up new ways of doing things.

I love to read challenging material.

I am good at many things.

-keyed

I am not interested in abstract ideas.

I have difficulty imagining things.

## Appendix D : Participant Information and Consent

You are being invited to take part in a research study about personality and work identification. This research is being undertaken as part of the researcher's studies for Business and Organisational Psychology at the University of Westminster.

The study will involve you to fill out two questionnaires. The first questionnaire will be about your personality and the second about organisational identification. Together they will take around 15 minutes to complete.

The collected data is used exclusively within the scope of this study. Avaloq has no access to the data.

Please note:

- Your participation in this research is entirely voluntary.
- You have the right to withdraw at any time without giving a reason.
- Withdrawal from the research will not have any negative consequences.
- You have the right to ask for your data to be withdrawn as long as this is practical, and for personal information to be destroyed.
- Your responses will be made anonymous, and will be kept confidential.
- No individuals will be identifiable from any collated data, written report of the research, or any publications arising from it.
- All computer data files will be encrypted and password protected. The researcher will keep files in a secure place and will comply with the requirements of the Data Protection Act.
- The researcher can be contacted during and after participation by email: w1933451@my.westminster.ac.uk

- If you have a complaint about this research project you can contact the project supervisor, Xanthy Kallis by e-mail X.Kallis@westminster.ac.uk.

Participants will be provided access to the study's findings when the data has been analysed.

Please note that all questions below must be answered with "yes" to participate in this survey.

- I have read and understood the participant information.
- I understand that I have a right to withdraw from the research at any time and I do not have to provide a reason.
- I understand that if I withdraw from the research any data included in the results will be removed.
- I confirm I am willing to be a participant in the above research study.
- I note the data collected will be deleted after the data analysis.

## Appendix E: Organizational Identification Items

Johnson, Morgeson and Hekman (2012)

I feel happy to be an employee of Avaloq.

I am proud to be an employee of Avaloq.

It feels good to be an employee of Avaloq.

If I were forced to leave Avaloq, I would be very disappointed.

My self-identity is based in part on my membership at Avaloq.

My membership at Avaloq is very important to my sense of who I am.

My sense of self overlaps with the identity of Avaloq.

If Avaloq were criticized, it would influence how I thought about myself.

Gouldner (1958)

How many Avaloq colleagues do you know well?

Hall, Schneider and Nygren (1970)

The organization is a large family in which I feel a sense of belonging.

I feel a strong sense of identification with Avaloq.

I feel that this organization is recognized as a leader applying good principles.

Cheney (1983)

I often describe myself to others by saying "I work for this organization" or "I am from this organization."

I try to make on-the-job decisions by considering the consequences of my actions for this organization.

I am glad I chose to work for this organization rather than another company.

I have warm feelings toward this organization as a place to work.

I find that my values and the values of this organization are very similar.

Mael and Ashforth (1992)

When I talk about this organization I usually say “we” rather than “they.”

Riordan and Weatherly (1999)

It is important to me that others think highly of my organization.

Tyler and Blader (2001)

When someone praises the accomplishments of my work organization, it feels like a personal compliment to me.

Polzer (2004)

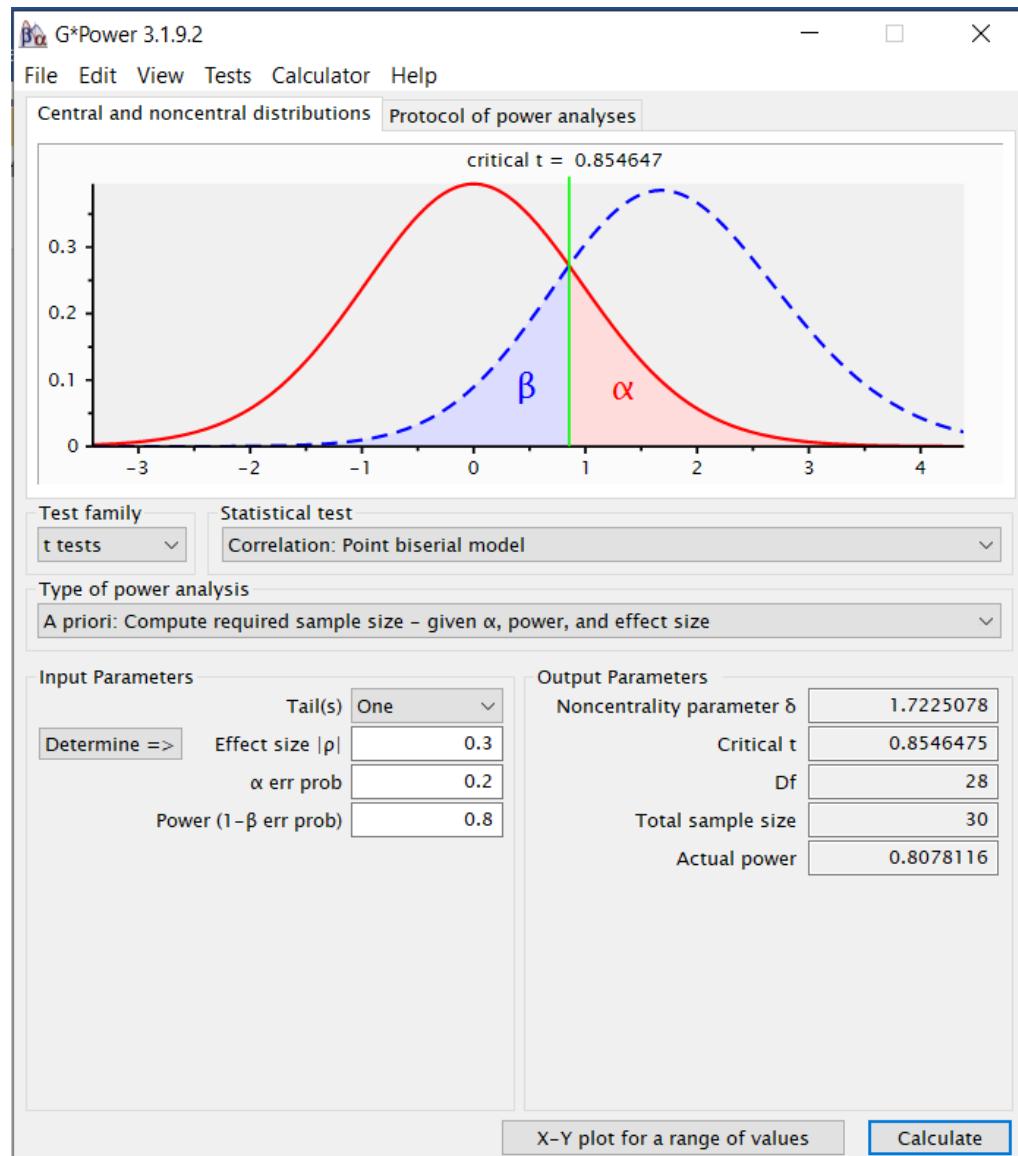
I do not fit in well with the other members of this organization.

Hogg et al. (2005)

I feel like I fit well in this organization.

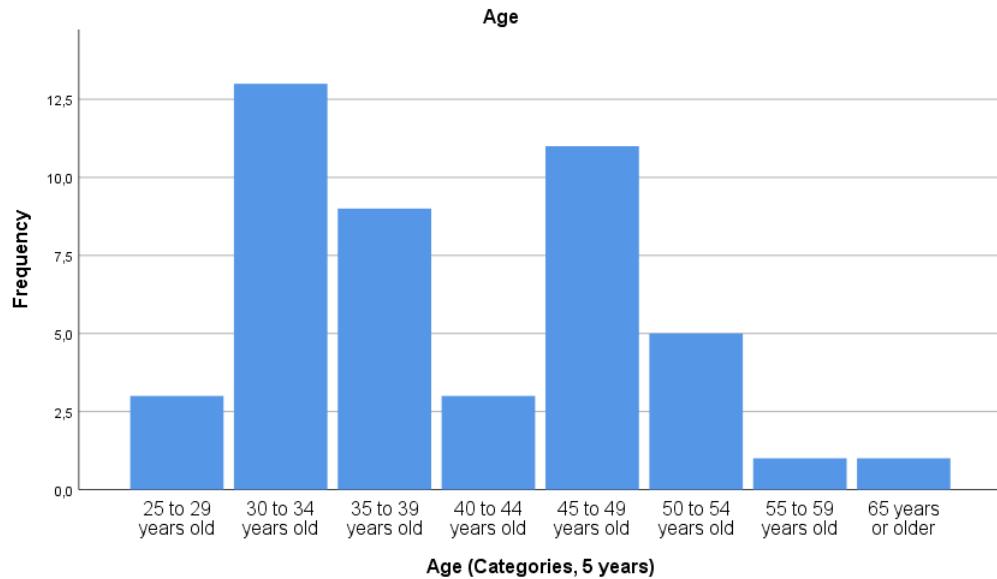
I feel that I am similar to other organization members.

## Appendix F: Sample Size Calculation

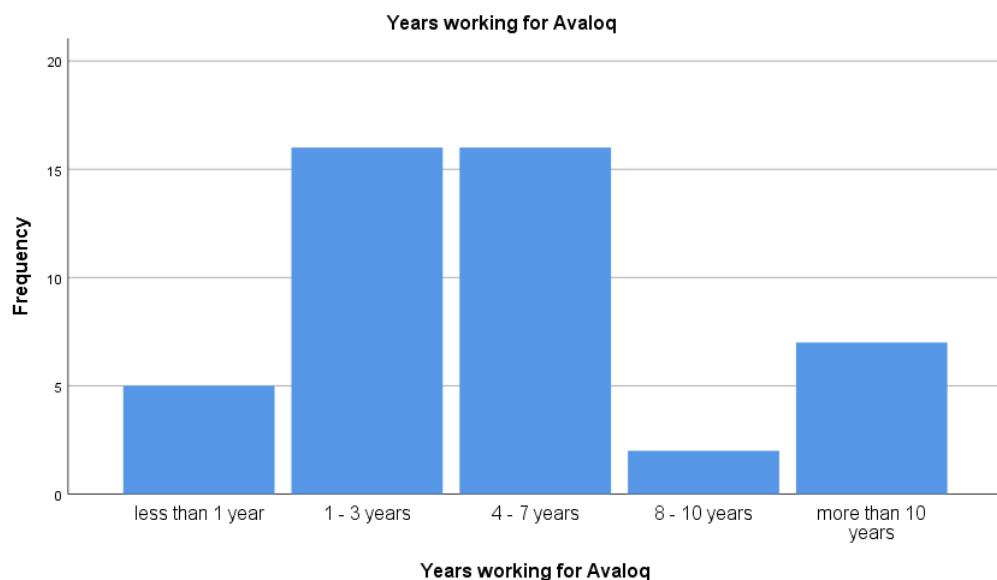


## Appendix G: Descriptive Statistics

Table of Distribution of Age at Avaloq UK

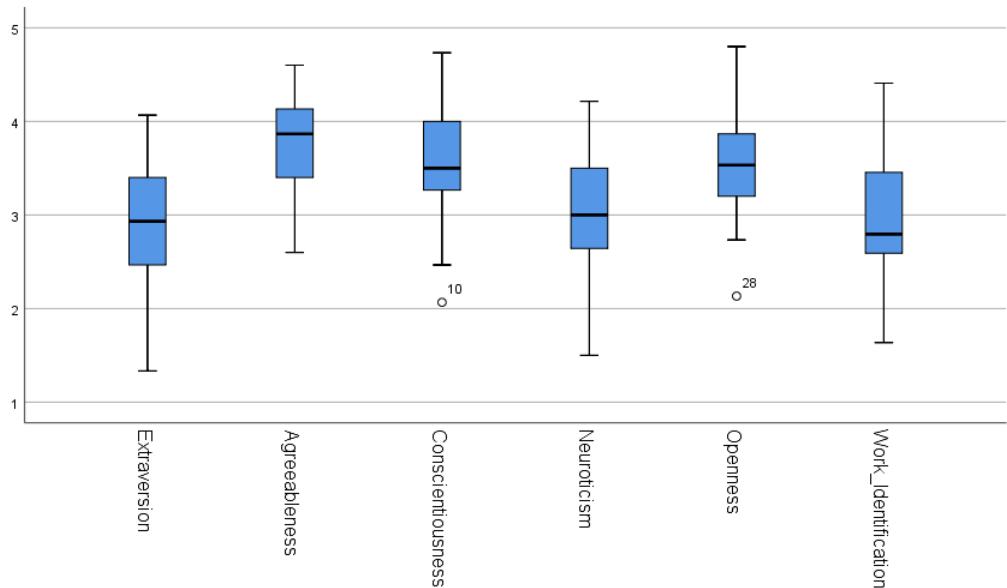


Employees' Company Affiliation at Avaloq UK

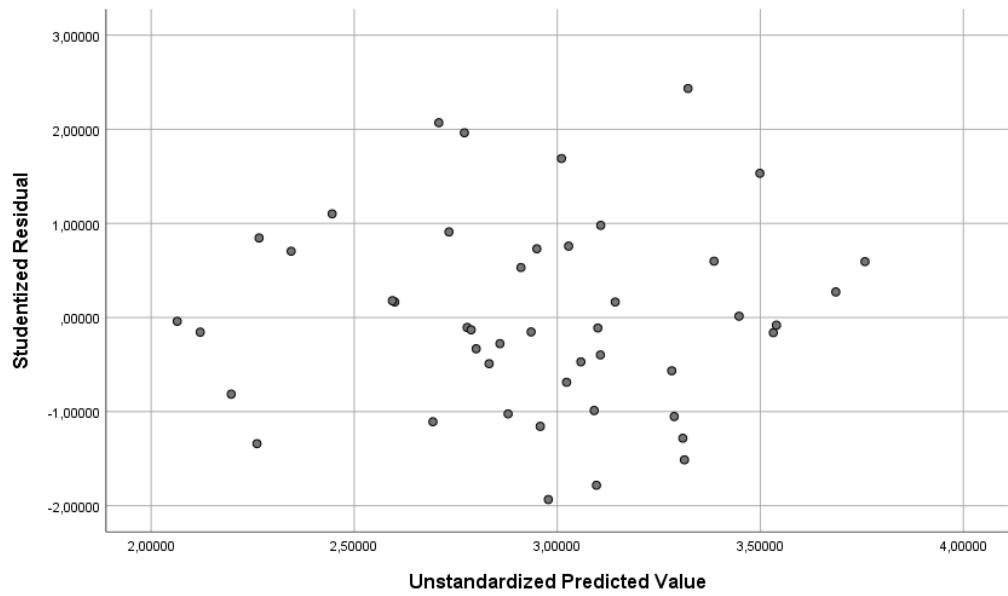


## Appendix H: Boxplots and Outliers

Boxplots and outliers of the five personality traits and work identification



## Appendix I: Scatterplot Studentized Residuals and Unstandardized Predicted Value



## Appendix J: Regression Model Summary

<b>Model Summary</b>					
Model	R	R-Square	Corrected R-Square	Estimated standard error	Durbin-Watson-statistic
1	,639 <sup>a</sup>	,408	,334	,52439	2,377

a. Independent variables: (Constant), Openness, Conscientiousness, Agreeableness, Neuroticism, Extraversion

b. Dependent variable: Work\_Identification

## Appendix K: Collinearity diagnosis and Coefficients

Modell	Dimension	Eigen value	Condition index	Collinearity diagnosis						
				(Constant)	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness	Variance components
1	1	5,863	1,000	,00	,00	,00	,00	,00	,00	
	2	,076	8,774	,00	,11	,00	,01	,24	,00	
	3	,025	15,306	,01	,20	,00	,40	,06	,12	
	4	,022	16,257	,00	,17	,05	,01	,09	,69	
	5	,010	24,377	,01	,46	,67	,21	,19	,02	
	6	,003	41,248	,98	,05	,27	,37	,42	,18	

a. Dependent Variable: Work\_Identification

**Coefficients**

Model	Coefficients												Collinearity statstic	
	Non-standardized coefficients		Standardized coefficients		95,0% confidence interval for B				Correlations					
	Regression coefficient B	Standard error	Beta	T	Sig.	Lower	Upper	Zero order	Partial	Teil	Tolerance	VIF		
1	(Constant)	1,720	1,154		1,491	,144	-,612	4,052						
	Extraversion	,325	,161	,359	2,023	,050	,000	,650	,564	,305	,246	,469	2,131	
	Agreeableness	,154	,196	,124	,785	,437	-,242	,550	,404	,123	,095	,594	1,685	
	Conscientiousness	-,172	,165	-,147	-1,042	,303	-,506	,162	,119	-,163	-,127	,748	1,336	
	Neuroticism	-,197	,145	-,197	-1,356	,183	-,490	,097	-,355	-,210	-,165	,700	1,429	
	Openess	,260	,141	,244	1,838	,074	-,026	,545	,421	,279	,224	,838	1,194	

a. Dependent Variable: Work\_Identification

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