

Exploring Organizational Personality – Applying the HEXACO Model to Members’ Perceptions of their Organization

Masterarbeit

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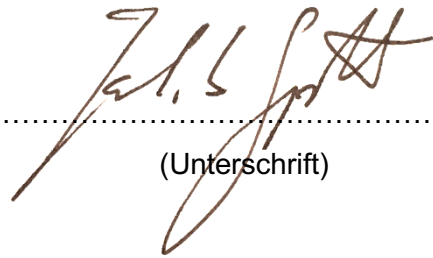
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Zusammenfassung

In dieser Masterarbeit wird der Frage nachgegangen, ob ein Persönlichkeitsmodell zur Beschreibung von Organisationen verwendet werden kann. Die Persönlichkeitspsychologie hat in den letzten Jahrzehnten große Fortschritte gemacht und die Big Five als primäres Konzeptualisierungs- und Quantifizierungsmodell etabliert. Diese Arbeit nutzt die in der Literatur etablierte Analogie zwischen Individuum und Organisation zur Messung von Organisationspersönlichkeit. Wir definieren Organisationspersönlichkeit als ein Set an menschlichen Eigenschaften, die eine Organisation charakterisieren; sie beschreibt die individuelle Wahrnehmung der Mitglieder bezogen auf die Organisation. Zu diesem Zweck wurde der HEXCAO-60-Persönlichkeitsfragebogen adaptiert (eine Weiterentwicklung der Big Five), so dass er auf Organisationen anwendbar ist. Die Ergebnisse der darauffolgenden Studie zeigten, dass weder die HEXACO- noch die Big Five Dimensionen vollständig repliziert werden konnten. Es konnte jedoch eine Fünf-Faktoren-Lösung extrahiert werden, die Ähnlichkeiten mit beiden vorhergenannten Modellen und anderen Organisationskulturinstrumenten aufweist. Die fünf Faktoren sind Modesty, Empathy, Drive, Diligence und Stability.

Schlagwörter: Big Five, HEXACO, Organisationskultur, Unternehmenspersönlichkeit, Organisationspersönlichkeit, Brand Persönlichkeit, Onlinefragebogen.

Abstract

This master's thesis examines the question of whether a personality model can be used to describe organizations. Personality psychology has made much progress in the last few decades, establishing the Big Five as the primary conceptualization and assessment model. This thesis builds on the analogy between the individual and the organization, which is well established in the literature, to measure organizational personality. We define organizational personality as a set of human characteristics associated with an organization; it describes the member's individual perception of their organization. For this purpose, the HEXCAO-60 personality questionnaire (a further development of the Big Five) was adapted so that it can be applied to organizations. Based on the subsequent survey results, neither the HEXACO nor the Big Five traits could be fully replicated. However, a five-factor solution could be extracted that had similarities to both of the aforementioned models and other organizational culture instruments. The five factors were identified as Modesty, Empathy, Drive, Diligence, and Stability.

Keywords: Big Five, HEXACO, Organizational Culture, Company Personality, Organizational Personality, Brand Personality, Online Questionnaire.

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1 Introduction

“How is an organization?” and “How is it perceived by the people working in it?” are typical questions in I/O (Industrial and Organizational) psychology. They want to uncover an organization’s nature, character, or personality. Different subfields have tried to answer these questions using various methodologies and viewpoints. An overview of those is given in the theory part, Chapter 2, of this master’s thesis. This first chapter provides an introduction that argues for a novel approach to answering these questions. Furthermore, this topic’s theoretical and practical relevance is presented below, and the aim of this master’s thesis is described.

1.1 The Issue of an Organization’s Personality

Let’s first start by defining what organizational personality means in the context of this thesis. For this, we borrow from brand personality (see also Chapter 2.4.1), which is described as “*the set of human characteristics associated with a brand*” (Aaker, 1997, p. 347). Following this logic, it makes sense to define organizational personality in the following way: *Organizational personality is the set of human characteristics associated with an organization*¹. On top of this, we must add that within this work, we focus on the perception of the organization’s members. This is a crucial differentiator from brand personality, which describes the viewpoint from the customer’s (outside) perspective.

Before we dive into the theoretical basis, let’s first address why someone would even ask about the “personality” of an organization. If one wants to know how an organization is, one will probably turn to organizational culture research. So why even bother with this new term? As we will see in Chapter 2.3, the literature is not united in its view on measuring and conceptualizing organizational culture (Taras, Roney & Steel, 2009, p. 357ff.). Maybe this is no wonder because of the sheer complexity of the topic and the immense differences between organizations. However, it also leaves the interested reader wondering if there is a different way of addressing the issue. Let’s look instead into the personality psychology literature. There have also been many different models and measurements used over the last decades (see Chapter 2.1), but there is a solid conversion to one model, the Big Five (John, Naumann & Soto, 2008, p. 116ff.). Even most of the other still-used theories are somewhat similar and closely related to this one.

¹ Thanks to Herbert Schwarzenberger for suggesting this short and sweet formulation.

Sometimes, a real breakthrough occurs when models and methods of a different (sub)field are applied to the problem at hand. One very well-working example of this is the electro-acoustic analogies, known to the author from his main line of work. Although this example comes from a far-away field of science, the engineering domain, it nicely shows the concept. Thiele and Small (reprint of the original 1961 article in Thiele, 1971, p. 382ff.; Small, 1972, p. 383ff.) are often cited as the inventors of this, but it dates back even further (Gehlshøj, 1947; cited in Beranek & Mellow, 2012, p. 66). Regardless, they all used the same nice trick by utilizing electronic circuit modeling to describe mechanical and acoustic phenomena, components, and their behavior. This practice is still used today and is completely infused in the way engineers nowadays think of the interaction between those three domains: electronic, mechanical, and acoustical (Beranek & Mellow, 2012, p. 65ff.). What happened there was that electronic engineers used their way of modeling and thinking of the world to describe something (partially) outside its typical application. Since the basis they used (the electronic circuits and its theory/modeling) was so efficient, and the transformation onto the new domains was done so well, it caught on. As stated above, it has become the primary way of describing and calculating systems operating in those domains (electronic, mechanical, and acoustic). The concept exploits what is known as “analogies”, similarities in the underlying differential equations that describe the physical behavior of those things. Returning to this master’s thesis, the question arises: can one also use the analogy between person and organization to apply personality research to organizations?

Of course, many researchers would disagree. They, for example, criticize this approach as an ecological and compositional fallacy (Pettigrew, 1997, p. 428; cited in Hofstede, G. & McCrae 2004, p. 66), which means that it is a logical mistake to derive the group’s character from the individuals. While they are undoubtedly correct, the abovementioned idea is different. Instead, it is meant to take a model established in personality psychology and apply it to organizations. This, of course, makes a transformation necessary. To the author’s knowledge, this has not yet been done. What researchers already did (described in more detail in Chapter 2.4.2) was to use the same method used during the discovery of the Big Five for deriving a model of company personality (Otto, Chater & Stott, 2006, p. 1905ff.; Slaughter, Zickar, Highhouse & Mohr, 2004, p. 85ff.). While this looks very similar to the idea of this thesis, as will be shown, it has not yet reached a convincing point.

Another supporting argument for the idea of an analogy between the individual and the organization comes from Ashforth, Schinoff, and Brickson (2020, p. 29ff.). They describe that humans seem to have no issue talking about organizations in a humanized

language. Strongly reduced, they argue that anthropomorphizing (humanizing non-human beings/things) is in our nature. It helped us evolutionarily to minimize complexity and make sense of others' behavior (Guthrie, 1993; cited in Ashforth et al., 2020, p. 31). Their line of reasoning starts with the anthropomorphizing of nature, animals, and gods. Based on this, it is no wonder that organizations are also subject to this kind of human proclivity. This adds to the idea of the analogy between person and organization. Furthermore, Mitroff (1983, p. 388) argues that archetypes (which we will briefly encounter when talking about C.G. Jung) manifest themselves not only on the individual level but also on the group and organizational level. This is obviously a separate line of understanding personality. Nevertheless, it is very interesting that, again, here, the analogy between person and organization emerges. An important aspect to address clearly is the term "perception" in the title of this master's thesis. It makes no sense to argue that an organization is equal to a person. Perception, on the other hand, taps into the natural anthropomorphizing that humans make automatically. Since it seems so natural to perceive organizations like that, why not use the same tools to analyze them?

Coming back to personality psychology, as stated in the introduction of this chain of thought, a solid basis for efficient modeling and describing is paramount when trying to apply a model to a different field. Starting with a crutch to solve a hard problem of a different domain would be rather counterproductive. Does the field of personality psychology have such a solid foundation and model on which it makes sense to start this investigation? The answer is a solid yes. As we will see in Chapter 2.1, there was/is a strong convergence towards one main model, the Big Five (also sometimes referred to as FFM, Five Factor Model) (John et al., 2008, p. 116ff.). The main message/novelty of this model is that there are five (almost) independent dimensions (often called "traits") on which personality differs between humans: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness/Intellect. All dimensions are continuous scales with a normal distribution. Practically speaking, after taking a Big Five personality questionnaire, the participant will know at which percentile (or z-value) they will be placed, compared to the rest of the sample, in each of the dimensions. For example, Extraversion: 34th-percentile, Agreeableness: 55th-percentile, Conscientiousness: 82nd-percentile, and so on. Of course, this data can then function as a basis for subsequent research, which can use it to investigate the predictive power of certain traits in specific situations. It can also act as a benchmark against other concepts and research results.

Around the 2000s, a possible upgrade was offered in the scientific literature, the HEXACO model. It contains roughly the same traits mentioned above (albeit with minor modifications) but adds a sixth dimension, Honesty/Humility (Ashton, Lee, Perugini, et

al., 2004, p. 361); for more details, see Chapter 2.1.3. While only time will tell which of the two will prevail, the general concept is not so different between the two models. The HEXACO adds more differentiation to the social/altruistic aspects but is not in fundamental opposition to the Big Five model/approach. For this master's thesis, as argued in more detail in Chapter 2.1.5, the HEXACO model is taken as a starting point for the transformation and utilization of the analogy between individuals and organizations.

1.2 Practical and Theoretical Relevance

It is evident that this topic is primarily of theoretical relevance. Nevertheless, even basic research can have practical applications later. Especially in very complex fields (like the social sciences), finding relationships between parameters and making valid predictions relies heavily on sound data and valid models. For example, suppose someone is interested in the best culture for a particular industry. In that case, the way in which experts talk and think about this problem is powerfully shaped by the tools, models, and measurement methods they know of. So, the better the basic models, the better the subsequent analysis will be. This means that even something very theoretical and abstract like this topic could, in the end, be used in practical applications.

We can even go to the very personal level and find an application of organizational personality. It is easy to imagine a scenario where a simple and short description or measure of this sort would help to decide on a path forward or help to interpret the past. For example, during every job interview, the interviewee wants to learn how the company ticks in order to make the decision for/against pursuing this opportunity. Even after onboarding, this quest continues in the form of getting to know how to act and interpret the ways people behave (Schein, E. & Schein, P. 2017, p. 11f.). *“culture was the most common reason people gave for quitting. And it matters more than high wages”* (www.economist.com, 11.04.2024). So, having a proper conceptualization to understand it early on can be very helpful. It will let the applicant know how organizations can differ, how the applicant can adapt quicker during the onboarding, and what critical things to look for. Peter Drucker once said the often-cited quote, *“Culture eats strategy for breakfast”* (Favaro, 2014, 11.04.2024), which generally underlines the high importance of an organization's being.

Making explicit how a company is can also be helpful for employers and HR personnel, especially in terms of how the main workforce perceives the company. This may not align with the image of the top management. Probably everyone has seen implementations of

changes that started with honest and good intentions and have gone sour during the implementation. The mismatch between the perceptions of the organization at the different hierarchical levels may have played a role. So, focusing on the perception of the individual members also has practical value.

For researchers, the assessment of the organizational personality is especially interesting because it allows for comparisons between different companies. Objective values like revenue, number of employees, age, nationality, etc., are helpful, but they are as beneficial as knowing a person's income. Both will not tell you much about how the organization or person is and about their personality. However, knowledge about soft facts can be essential for making predictions, analyzing what has led to success, and what might be different from the competition. As an example, Edgar and Peter Schein (2017, p. 31ff.) describe two distinct company cultures in their book, and the differences are astounding. It also clearly shows the power of the qualitative methodology. For example, both companies claim to treat their employees like family, but how this is acted out is drastically different. While this is fascinating, it does not help when the aim is to quantify relationships between input and output variables. For this, quantitative methods and models are needed. While there is no shortage of different organizational culture models, Taras, Rowney, and Stell found more than 120 (2009, p. 357ff.), the optimal tool has still to be discovered.

Thinking big, organizational personality could serve as a uniting concept that, like the Big Five in personality psychology, creates the common ground for many other analyses. The effects are a fewfold; on one side, it creates a common understanding, a language that many understand, and that makes communication more efficient. On the other hand, it will act as a benchmark for any other new constructs or possible concepts that researchers are generating. Let's take the Big Five as a comparison. Whenever a researcher comes up with a new idea of how to understand human behavior, the question arises if this is really a new finding or if this is just a new name for a specific collection of already-known principles. Now, if the new construct statistically explains something above and beyond the Big Five, it captures something new. There is little reason why the same logic should not apply to organizations. The main missing link is the agreement on one primary model. Even though there is still some debate about the Big Five, and as we will see in the course of this thesis, the HEXACO poses some good arguments to surpass the Big Five (Ashton & Lee, 2007, p. 150ff.). Nevertheless, the uniting feature of one standard model increases the efficiency massively, even if the model might be slightly flawed.

1.3 Research Questions and Aim of this Thesis

Following the motivation laid out in the subchapters before, the following research questions were formulated:

- *How does an instrument based on the HEXACO personality model look like to measure the members' perceptions of their organization?*
- *Would this instrument yield the same factor structure as typically seen in personality psychology (HEXACO or Big Five dimensions)?*

Since the underlying idea of applying a personality model to assess an organization needs to be operationalized, this master's thesis concentrates on the development of an instrument. Also, the pure idea of the analogy application can only properly be tested with the model transformation. So, it makes sense to concentrate on the development and testing of an instrument. If this works reasonably well, it is possible to infer that the whole endeavor was meaningful. For the sake of simplicity, the instrument to be developed will, from now on, be called "OPI" (Organizational Personality Inventory). The reason why the HEXACO model is chosen instead of the more common Big Five is explained in Chapter 2.1.5. In short, the arguments laid out by Ashton and Lee (2007, p. 150ff.) are convincing, and the Honesty/Humility dimension seems intuitively applicable to organizations.

To answer the first research question, an instrument was developed based on the HEXACO-60 (Ashton & Lee, 2009, S. 60, p. 340ff.), described in Chapter 3.2.1, and tested in the subsequent survey. Based on the following factor analysis, the factor structure was obtained and compared to the original HEXACO model. Since the HEXACO and Big Five solutions often exist in parallel and depend to some extent on detailed interpretation (Lee & Ashton, 2008, p. 1005ff.), both are used throughout this thesis as references. The aim of this master's thesis is not to fully develop a new organizational assessment tool that is ready to be rolled out. This would take multiple iterations, finetuning, and bigger sample sizes. Instead, the target is to explore the idea and get a first impression of the applicability of personality theory on organizations. For proper instrument development, an external validity check and benchmarking against other tools are also necessary, which cannot be part of this master's thesis.

2 Literature Review

As expected, the investigation into the question of how an organization is already interested many researchers of different disciplines. The most prominent of those is organizational culture. Since this master's thesis utilizes an instrument developed for the assessment of individuals, the relevant field of research spans between those two and becomes quite large. Within this chapter, the target is to lay out and describe each research field of interest. The order of the following subchapters was purposefully chosen to start with personality psychology. Since the main focus of this thesis is the application of the HEXACO model to organizations, it makes sense to explain this model (and personality psychology in general) first. This will allow the reader to apply this knowledge directly to the other research fields that are subsequently introduced and described. It will also enable a direct comparison at the end of each subchapter to the HEXACO and the Big Five model.

2.1 Personality Psychology

To start with the basics, personality psychology is the most prominent subfield of differential psychology. Both terms are sometimes even used interchangeably. Differential psychology investigates how individual humans differ from each other. Personality psychology was first established as a separate subdiscipline in the 1930s; especially Allport's *"Personality: A Psychological Interpretation"* (1937, p. 1ff.) helped to articulate a clear vision of the field (McAdams, 1997, p. 4). Allport's definition of personality (in its updated form) goes like this: *"[Personality is] the dynamic organization within the individual of those psychophysical systems that determine his [or her] characteristic behavior and thought"* (Allport, 1961; cited in McAdams, 1997, p. 4). Also, the first scientific journal, *"Character and Personality"*, with a personality psychology focus issued in 1932. It seems both terms were used during this time for this field of research. Nowadays, the term "Character" is rarely seen in personality psychology literature and, therefore, less scientifically loaded. However, it pops up in I/O psychology: *"corporate character"* (Chun & Davies, 2006, p. 1ff.) or *"character of organizations"* (Fernández & Hogan, 2003, p. 1ff.) and, of course, in the everyday use of laypeople.

Without a doubt, even before 1930, psychologists (and philosophers) thought about the differences among individual humans. However, to summarize the state of most of the research history, let's use another quote from Allport (and Vernon): *"There seem to be*

virtually as many definitions of personality, character and temperament as there are writers on these subjects" (1930, p. 681). As we will explore in the following pages, this state did not change much for a few decades.

The following subchapters describe various personality models that were (and are) used in the last few decades. Those were often indicative of the state of knowledge when they were invented. Therefore, it is also unavoidable to cover some historical grounds from the last approximately 100 years. It is clearly outside the scope of this master's thesis to do a full dive into personality psychology history; however, it seems fitting to pay respect to all the influential scientists who helped this field get to the state it currently is in. As stated above, the subchapters are organized by personality model, starting with some historic, albeit still used models, and moving to more recent ones. Of course, the most significant focus is put on the Big Five, as it seems to be the best that this research field has come up with. It will end with the HEXACO model, an extension of the Big Five, that the author deems to have even higher potential to be used as a basis for this master's thesis. In the last subchapter, 2.1.5, the loop back to the research question will be closed, and the best-suited model will be discussed. Before we dive in, as a general reminder of how personality models are conceptualized, Figure 1 is shown. It visualizes the understanding of how (latent) traits influence facets (subdimensions), habits, and actual behavior. This might be helpful in understanding the following subchapters.

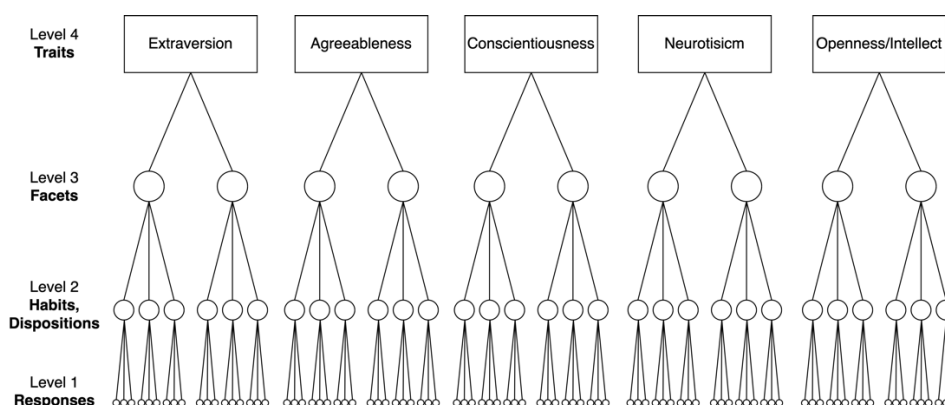


Figure 1: Four layers of personality from trait to responses (similar to Digman, 1990, p. 421).

2.1.1 Historic Personality Models

The oldest (and still often taught) system of conceptualization of personality goes back to Hippocrates and Galen, defining four major types of temperament: sanguine, phlegmatic, melancholic, and choleric (McAdams, 1997, p. 7). Just for fun, at a later stage in Chapter 2.1.4, we will place those four types into the current personality models,

but first, let's continue with other, more recent ones. For simplicity, not all available models and instruments are described below, but just the most relevant ones that gained importance over the last decades. This shall not be taken as the author's assessment of which model or instrument is better or worse, but just what stood the practical test of time and is still referenced and known today.

2.1.1.1 Jungian Personality Types and the Myers-Briggs Type Indicator (MBTI)

A very noteworthy person in the history of psychology at large is Carl Gustav Jung (often "C.G. Jung" or "Carl Jung") (1875-1961). He contributed to the field of psychology as a whole, especially in the field of analytical psychology. Among many other works, he thought about psychological types (Jung, C.G., 1923, p. 1ff.; modern reprint: Jung, C.G., 2016, p. 1ff.). The primary dimension for those types goes from Extraversion to Introversion. With this, he was probably the first to recognize (and name) this fundamental dimension of personality differences (Geyer, 2012, p. 2). He described the difference between an extravert and an introvert in terms of where they draw their energy from. In the case of the extravert, it is outside oneself (outward orientation); in the case of the introvert, it is from the inside (inward orientation) (Jung, C.G., 2016, p. 396f.). A modern-day interpretation of this dimension (like in the Big Five) still encapsulates this aspect. However, nowadays understanding of Extraversion also encompasses being active and a proclivity to positive emotions (Digman, 1997, p. 1250). There are three dimensions in total Jung speaks of:

- Extraversion (E) vs. Introversion (I)
- Sensing (S) vs. Intuiting (N)
- Thinking (T) vs. Feeling (F)

Myers and Briggs built on Jung's thoughts and added a fourth to the mix, creating the Myers-Briggs Type Indicator (MBTI) (Myers & McCaulley, 1985, p. 1ff.). It is important to note that Jung himself did not work on the MBTI (although he was still alive then), and this instrument is only loosely built on Jung's work (Pittenger, 1993, p. 468f.; Myers, 2016, p. 289ff.). However, he laid the groundwork and is often mentioned at the forefront when explaining the MBTI. The fourth additional dimension in the MBTI is:

- Judging (J) vs. Perceiving (P)

The MBTI is worth mentioning because it is a widely used instrument for assessing personality, especially for work-related assessments. It's easy for non-experts to understand because each dimension has only two states (dichotomy). So, a person is

either an introvert or an extravert, etc. In total, this sums up to 16 different combinations (“Personality Types”). One example would be ESTJ: Extraverted, Sensing, Thinking, Judging. The first version of the MBTI was already developed in the 1940s (Saunders, 1991; cited in Pittenger, 1993, p. 468) and has been improved over the decades. Especially from the 1970s onwards, the test gained high popularity and sold two million copies annually in the 1990s (Pittenger, 1993, p. 468). No recent sales numbers were found, but it is reasonable to assume they are still high. For completeness, it must be mentioned that also other instruments exist that obtain those four dimensions, like the GPTP (Golden Personality Type Profiler; www.goldenllc.com, 24.02.2024), Majors PTI (Majors Personality Type Indicator; www.leadersbeacon.com, 24.02.2024), and the PTI (Psychological Type Indicator; www.hrdpress.com, 24.02.2024).

The major problem of the MBTI is its questionable validity (Pittenger, 1993, p. 483; Furnham, 2021; cited in Furnham, 2022, p. 1511). Also, it has been theoretically derived (loosely based on Jung), which means it lacks the empirical basis the later-developed Big Five instruments have. Furthermore, it must be clearly stated that each “dimension” in this model is just a dichotomous variable. There is no satisfactory resolution; an individual is either one or the other in each of the four dimensions. While this gives a person an easy-to-understand categorization, it completely lacks the differentiation between slight and extreme features. As a fun side note, the author did a GPTP assessment in his early 20s (without knowing anything about personality psychology) and fell at 50% in the Thinking-Feeling dimension; he was classified in the Feeling-bin, clearly showing a weakness in the model.

Nevertheless, respect must be paid to the fact that this model is one of the oldest and was (and still is) used very often. Somehow, especially in the I/O psychology field, it has become the go-to tool for employee assessment. This is probably because it is easy to explain, no knowledge about distribution/statistics is needed, and its outcomes are entirely non-judgmental. In contrast, for example, knowing the percentile one is placed on a continuous dimension (like with the Big Five) might make people believe that more (or less) would be better. Also, respect must be given to Jung for recognizing the Intro- vs. Extraversion dimension. It is undebated in the scientific community to be one of the primary dimensions in personality description and has even found its way into everyday language.

2.1.1.2 Cattell's 16PF

Raymond B. Cattell (1905-1998) was one of the most influential researchers in differential psychology (Tucker, 2010, p. 1). His impact on intelligence and personality research was (and still is) quite massive, although it also led him to some questionable conclusions regarding the differences between the human races (Tucker, 2010, p. 1ff.). In intelligence research, he created the idea of separating crystalline from fluid intelligence (Brown, 2016, p. 1ff.), which is still one of the main conceptualizations today. Regarding personality, he (together with some family members) created the 16PF (16 Personality Factor) model. The first version was published in 1949, and the (latest) 5th revision was released in 1993 (5th edition: Cattell, R., Cattell, A. & Cattell, H., 1993; general overview in Cattell, H. & Mead, 2008, p. 144). The 16PF consists of 16 first-level factors ("primary scales") and five second-level factors ("global scales"). The latter are very similar to the Big Five and typically referred to as (Cattell, H. & Mead, 2008, p. 136):

- Extraversion
- Anxiety
- Tough-mindedness
- Independence
- Self-control

His model already has high similarities with the Big Five and was also derived with factor analysis. However, its non-orthogonal factor structure is the major difference compared to the Big Five approach and the reason why it is not considered a subversion. This, on the other hand, allows for the dimensions to be, on purpose, more intercorrelated. According to Heather Cattell and Mead (2008, p. 141ff.), this naturally fits the strongly intercorrelated aspects of human personality better. For a comparison to the Big Five, see Chapter 2.1.4. While Cattell did not adapt to the Big Five framework, his work was definitely relevant and in line with the general progression of the field. Digman (1996, p. 3), a significant figure in the Big Five literature, described Raymond Cattell as having found "*the first glimpse of the Big Five*" as early as 1933.

2.1.1.3 Eysenck's PEN Model

Hans J. Eysenck (1916-1997) was another very influential personality psychologist, with his main contributions starting in the 1950s (Eysenck, H., 1952, p. 1ff.) and his direct influence stretching beyond his retirement into the early 2000s (John et al., 2008, p. 116f.). In the context of this thesis, two parts of his work are worth mentioning. On the one hand, he created the PEN (Psychopathy, Extraversion, and Neuroticism) Model. On

the other hand, he was one of the first to start grounding personality dimensions in biology (Eysenck, M., 2016, p. 210ff)². He was not the only one doing this; Jeffrey A. Gray (1995, p. 1165ff.) must also be mentioned for completeness (for a comparative review, see Matthews & Gilliland, 1999, p 1ff.).

Also, at the time of the creation of the PEN Model, many different conceptualizations of personality and personality models were floating around, not only the two mentioned in the previous subchapters. The factor-analytical approach was already in use. Still, most personality researchers were using models with many dimensions that proved not to stand the test of time, most probably because they had too much complexity, reducing their utility (Eysenck, M., 2016, p. 209). In contrast, Eysenck's model only consists of three independent personality dimensions: Extraversion, Neuroticism, and Psychoticism. Let's ignore the latter one for a bit and concentrate on the first two. We see again, like for the MBTI and Cattell's 16PF, Extraversion, but Eysenck was among the first to recognize Neuroticism as a separate dimension (Eysenck, M., 2016, p. 210). This symbolizes quite a massive breakthrough in understanding personality regarding positive and negative emotions.

If we were describing a person's overall representative mood, we would probably intuitively use one scale ranging from "always happy/positive" to "always unhappy/anxious". This was the understanding of most personality psychologists before Eysenck (Eysenck, M., 2016, p. 210). He realized that there are two separate dimensions at play, one describing the affinity for positive emotions (Extraversion) and one describing the affinity for negative emotions (Neuroticism). Splitting the simple one-dimensional scale into two also explains how some people can regularly experience very high levels of cheerfulness, as well as often feeling very anxious. Those are simply two separate, uncorrelated personality traits. This also explains how some people are more prone to showing strong emotions (negative and positive), and some are more constant. As mentioned above, he was able to link those two proclivities to two different biological processes, which solidifies their separate nature even further.

The last dimension, "Psychoticism", is of limited value to the personality psychology of healthy people. This scale is usually not normally distributed and appears to mainly show high values for very few individuals with actual psychological health issues (Eysenck, M., 2016, p. 210).

² Michael W. Eysenck about his father Hans J. Eysenck.

2.1.2 Big Five Model / Five-Factor Model

As already mentioned in the introduction, there is a strong agreement in the scientific literature on how best to conceptualize and measure personality nowadays. The primary model is the so-called “Big Five” or “FFM” (Five-Factor Model). Its roots go back to Allport (1937, p. 1ff.), who used a lexical approach to derive personality dimensions. However, it took many more contributors to arrive at our current understanding of the Big Five. Most importantly, until the 1960s, a plethora of personality models were created and used alongside each other. Between the 1960s and 1990s lies what Digman describes as the “*Area of skepticism*” (1996, p. 11f.), and McAdams calls “*The decade of doubt*” (1997, p. 20ff.). Especially Mischel’s very influential work (1968, p. 1ff.) was responsible for almost flatlining the endeavor of personality psychology. According to Digman’s (ex-post) analysis, two factors were responsible for this decreased interest in personality psychology in general. First, the predictive power of personality assessments did (on average) not exceed correlations of 0.3. This subsequently meant that only about 10% of the variation could be explained by personality models. Secondly, the general focus of the psychological community moved to the behavioristic approach. It took until the late 1980s to gather enough attention to this field of personality psychology (again) and slowly start the victory match of the Big Five (John et al., 2008, p. 117ff.). It was not that the models suddenly improved but that researchers realized that even correlations below 0.3 are quite relevant and very typical for the social sciences (for a good meta-analysis of meta-analyses, see Hemphill, 2003, p. 78f.).

As a side note for the interested reader on how to assess the impact of even seemingly small correlations, the Binomial Effect Size Display is recommended (Rosenthal & Rubin, 1982, p. 166ff.; Randolph & Edmondson, 2019, p. 1ff.). It states that half of the correlation coefficient is equal to the improvement above chance in an A/B comparison. Let’s take, for example, an A/B decision, with one option being the better one. Without any predictor, the possibility of making this better choice is 50%. If, however, a predictor with a correlation of 0.3 to the desired outcome is known (and used), it will improve the possibility of selecting the better one to 65% ($0.5 + 0.3/2 = 0.65$). In other words, the possibility-difference between the two options for the better outcome, in our example 65% vs. 35%, is equal to the correlation coefficient ($0.65 - 0.35 = 0.3$). If this still seems small, rest assured that accumulating those kinds of prediction improvements will yield high returns in the long run (for the economic evaluation of job performance prediction, see Hunter & Hunter, 1984, p. 91ff.).

Furthermore, it must be clearly stated that even in the late 1980s, there was little agreement on the one primary model, conceptualization, or measurement of personality. To give a feeling of the state at the beginning of 1990, John and colleagues were still citing an Allport quote from the 1950s: “*Each assessor has his own pet units and uses a pet battery of diagnostic devices*” (Allport, 1958, p. 258; cited in John et al., 2008, p. 114). This historical fact bears repeating because nowadays, the Big Five are taught in every personality course like they were written in stone at the beginning of time. John and colleagues (2008, p. 116f.) did an excellent job of showing the convergence in the scientific literature after 2000. They explained it, among other factors, by the simple fact that other important figures (like Cattell and Eysenck) died shortly before 2000. The five dimensions (“factors”, “traits”) are nowadays typically referred to as:

- Extraversion
- Agreeableness
- Conscientiousness
- Neuroticism (sometimes, for simplicity, reversed as “Emotional Stability”)
- Openness/Intellect (sometimes: “Openness to Experience” or simply “Openness”)

For a detailed list of adjectives describing every trait, see Table 4, p. 22. Hundreds of thousands of psychology students have learned those dimensions by the acronym OCEAN and probably with the help of illustrations like the one in Figure 2 below.



Figure 2: Visualization of the Big Five acronym OCEAN (Asendorpf, 2019, p. 70)

The Big Five were first discovered in the English language and replicated in many other languages. However, some interesting inconsistencies were found, and the five factors mentioned above did not simply emerge in every study and language as one would have hoped (for an overview, see Ashton, Lee, Perugini, et al., 2004, p. 357). This was also the basis for developing the HEXACO model (see Chapter 2.1.3). Regardless of those imperfections, the evidence to support the Big Five was strong, and the gain by (finally) adopting a consistent model for the scientific community was worth it.

There is more than one instrument for assessing the Big Five. Multiple tools exist, and they mainly differ in depth (how many items per dimension) and on the number/type of facets (subdimension) for each of the Big Five traits. The most interesting instruments (in the English language) are listed in Table 1 below.

Table 1: Overview of some of the most relevant instruments for measuring the Big Five.

Instrument	Number of items	Number of facets
NEO-PI-R; derivative NEO-PI-3	240	6 per trait
NEO-FFI; latest version NEO-FFI3	60	non
BFI; latest version BFI-2	44 / 60	non / 3 per trait
FIPI / TIPI	5 / 10	no
BFI-10	10	non
BFI-2-S / BFI-2-XS	30 / 15	(3 per trait)
TDA	100	non
Mini Markers	40	non
AB5C-IPIP or IPIP-AB5C	485	35 in-between factors
BFAS	100	2 per trait

The “NEO” instruments are all derivatives of the original NEO (neuroticism, extraversion, openness) instrument, which was developed in the early 80’s (Costa & McCrae, 1985; for an overview see: Costa & McCrae, 2008, p. 224ff.). While the NEO-PI versions are pretty lengthy (240 items), the FFI versions only contain 60 items. The more extended versions also assess six facets per trait. Those can be thought of as subdimensions, adding further detail to each of the Big Five traits. These instruments use phrases where the participants need to mark their amount of agreement on a Likert scale. The NEO instruments are only commercially available (www.parinc.com, 22.09.2023) and are probably the most widely used tools available simply because they have been around for so long. Also, their depth (number of facets) gives the participant a more detailed analysis than many other instruments. Nevertheless, some of the other tools below are also very well established and convincing simply because they are shorter or easier accessible for researchers/practitioners.

The BFI (Big Five Inventory) and its derivatives (BFI-2, FIPI, TIPI, BFI-10) are similar but shorter instruments that were developed separately. The original BFI contains 60 items (John, Donahue & Kentle, 1991, p. 126f.; John et al., 2008, p. 129f.). A free version can be accessed at www.outofservice.com (22.09.2023). Not long ago, the BFI-2 was created, containing 60 items to assess three facets per trait (Soto & John, 2017a, p. 117ff.). Satisfying the need for even shorter instruments, two research groups have taken the BFI and developed versions with just ten items (2 per trait) and one even with just one item per dimension. The FIPI (Five Item Personality Inventory) and the TIPI (Ten

Item Personality Inventory) were developed by Gosling, Rentfrow, and Swann (2003, p. 504ff.). The BFI-10 was created a bit later for the English and German languages (Rammstedt & John, 2007, p. 203ff.), with seemingly better results than the TIPI. Also, the BFI-2 has two shorter siblings (BFI-2-S and BFI-2-XS) with just 30 and 15 items, leaving just two or one item(s) per facet (Soto & John, 2017b, p. 69ff.). Theoretically, even the short versions allow for three facets per dimension, but even the authors suggest not to do that except for large sample sizes (Soto & John, 2017b, p. 77). Figure 3 serves as an example of a typical personality questionnaire, showing the 60 BFI-2 items.

The Big Five Inventory-2 Self-Report Form and Scoring Information

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who *likes to spend time with others*? Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement.

1 Disagree strongly	2 Disagree a little	3 Neutral; no opinion	4 Agree a little	5 Agree strongly
<i>I am someone who . . .</i>				
1. <input type="checkbox"/> Is outgoing, sociable				31. <input type="checkbox"/> Is sometimes shy, introverted
2. <input type="checkbox"/> Is compassionate, has a soft heart				32. <input type="checkbox"/> Is helpful and unselfish with others
3. <input type="checkbox"/> Tends to be disorganized				33. <input type="checkbox"/> Keeps things neat and tidy
4. <input type="checkbox"/> Is relaxed, handles stress well				34. <input type="checkbox"/> Worries a lot
5. <input type="checkbox"/> Has few artistic interests				35. <input type="checkbox"/> Values art and beauty
6. <input type="checkbox"/> Has an assertive personality				36. <input type="checkbox"/> Finds it hard to influence people
7. <input type="checkbox"/> Is respectful, treats others with respect				37. <input type="checkbox"/> Is sometimes rude to others
8. <input type="checkbox"/> Tends to be lazy				38. <input type="checkbox"/> Is efficient, gets things done
9. <input type="checkbox"/> Stays optimistic after experiencing a setback				39. <input type="checkbox"/> Often feels sad
10. <input type="checkbox"/> Is curious about many different things				40. <input type="checkbox"/> Is complex, a deep thinker
11. <input type="checkbox"/> Rarely feels excited or eager				41. <input type="checkbox"/> Is full of energy
12. <input type="checkbox"/> Tends to find fault with others				42. <input type="checkbox"/> Is suspicious of others' intentions
13. <input type="checkbox"/> Is dependable, steady				43. <input type="checkbox"/> Is reliable, can always be counted on
14. <input type="checkbox"/> Is moody, has up and down mood swings				44. <input type="checkbox"/> Keeps their emotions under control
15. <input type="checkbox"/> Is inventive, finds clever ways to do things				45. <input type="checkbox"/> Has difficulty imagining things
16. <input type="checkbox"/> Tends to be quiet				46. <input type="checkbox"/> Is talkative
17. <input type="checkbox"/> Feels little sympathy for others				47. <input type="checkbox"/> Can be cold and uncaring
18. <input type="checkbox"/> Is systematic, likes to keep things in order				48. <input type="checkbox"/> Leaves a mess, doesn't clean up
19. <input type="checkbox"/> Can be tense				49. <input type="checkbox"/> Rarely feels anxious or afraid
20. <input type="checkbox"/> Is fascinated by art, music, or literature				50. <input type="checkbox"/> Thinks poetry and plays are boring
21. <input type="checkbox"/> Is dominant, acts as a leader				51. <input type="checkbox"/> Prefers to have others take charge
22. <input type="checkbox"/> Starts arguments with others				52. <input type="checkbox"/> Is polite, courteous to others
23. <input type="checkbox"/> Has difficulty getting started on tasks				53. <input type="checkbox"/> Is persistent, works until the task is finished
24. <input type="checkbox"/> Feels secure, comfortable with self				54. <input type="checkbox"/> Tends to feel depressed, blue
25. <input type="checkbox"/> Avoids intellectual, philosophical discussions				55. <input type="checkbox"/> Has little interest in abstract Ideas
26. <input type="checkbox"/> Is less active than other people				56. <input type="checkbox"/> Shows a lot of Enthusiasm
27. <input type="checkbox"/> Has a forgiving nature				57. <input type="checkbox"/> Assumes the best about people
28. <input type="checkbox"/> Can be somewhat careless				58. <input type="checkbox"/> Sometimes behaves irresponsibly
29. <input type="checkbox"/> Is emotionally stable, not easily upset				59. <input type="checkbox"/> Is temperamental, gets emotional easily
30. <input type="checkbox"/> Has little creativity				60. <input type="checkbox"/> Is original, comes up with new Ideas

Please check: Did you write a number in front of each statement?

Figure 3: BFI-2 questionnaire (Soto & John, 2017a, p. 142).

The TDA (Trait Descriptive Adjectives) and the Mini-Markers use adjectives instead of phrases on which the personality needs to be rated. The TDA contains 100 items and was developed by Goldberg (1992, p. 26ff.). It seems to be used less now than its derivative, the Mini-Markers, which is a short version of the TDA consisting only of 40 items (Saucier, 1994, p. 506ff.).

The AB5C-IPIP (or sometimes IPIP-AB5C) is an interesting, albeit more theoretical, approach. It is based on the AB5C (Abridged Big Five Dimensional Circumplex), which wants to address the issue of items that fall between each of the two Big Five dimensions (Hofstee, de Raad & Goldberg, 1992, p. 146ff.). This is actually very common for items

but usually ignored for simplicity reasons. The AB5C sorts the items along 45 dimensions, which are comprised of ten “pure” unipolar Big Five dimensions (meaning one positive and one negative scale per Big Five dimension) and 35 interactional scales. This method was developed primarily as a theoretical exercise, as no instrument was created from it. The AB5C-IPIP, on the other hand, used the IPIP (International Personality Item Pool; ipip.ori.org, 24.09.2023) to give the 45 facets names and create a proper instrument out of it (Goldberg, 1999, p. 7ff.). Due to the number of dimensions, this has become the largest instrument with 485 items. However, advances were made in the recent past to develop a shorter form with just 135 items (Bucher & Samuel, 2018, p. 1ff.). The IPIP platform, which is publicly available, was also used to create other, more recent instruments like the IPIP-NEO-120 or the IPIP-NEO-300. Both can be found online: drj.virtualave.net/IPIP (25.05.2024). They are very similar to the exclusively commercially available NEO from Costa and McCrae (Johnson, 2014, p. 78ff.).

The BFAS (Big Five Aspect Scales) is a medium-sized instrument that was developed with the goal in mind to obtain not only the Big Five but also a finer resolution, but not as detailed as the six facets of the NEO instruments (DeYoung, Quilty & Peterson, 2007, p. 880ff.). They constructed their items based on NEO-PI-R and AB5C-IPIP. Two facets per Big Five trait emerged. They argue that much can be gained by going into this middle-level of detail. This also neatly solves the long ongoing debate about naming the fifth dimension, Openness vs. Intellect, by simply having each represented by one underlying aspect of the Openness to Experience factor (DeYoung et al., 2007, p. 883). A fee-based version can be found at www.understandmyself.com (24.09.2023).

One can see quite clearly that the late 1980s and early 1990s were a very productive time for the Big Five. Four of the above-listed instruments were created (or had ancestors that were created) during this time, and most have undergone small improvements over the years. With the solidifying of the agreement on the Big Five, the need for shorter versions emerged. This was simply due to the fact that many studies with different core objectives than personality saw the value in adding personality parameters to their investigation. While attaching a 240-item battery may not be feasible, having ten extra questions might be fine and potentially add substantial insight. The need for such short instruments proves the point mentioned already in the introduction (Chapter 1.1): personality research has reached the point of functioning as a fundamental basis and benchmark for other investigations to build upon.

2.1.3 HEXACO Model

The HEXACO Model is a comparatively new “invention”; that’s why it’s last on this list. It came into being at the beginning of the 2000s. The discovery of the HEXACO was mainly spearheaded by Michael C. Ashton and Kibeom Lee, who wrote most of the fundamental papers (see, for example, Ashton, Lee & Goldberg, 2004, p. 707ff.; Ashton, Lee, Perugini, et al., 2004, p. 356ff.; Ashton & Lee, 2007, p. 150ff.; Lee & Ashton, 2008, p. 1001ff.). They gathered many international studies that tried to replicate the Big Five but often yielded different five factors or more than five factors. They argue that a six-factor solution with the traits below encompasses all the results from different languages way better than the English-dominated Big Five traits do (Ashton, Lee, Perugini, et al., 2004, p. 356ff.). HEXACO is an acronym (similar to OCEAN in the case of the Big Five) describing the six traits of this model:

- Honesty/Humility
- Emotionality
- eXtraversion (capital “X” to conform with the acronym)
- Agreeableness
- Conscientiousness
- Openness to experience

The distinctions between the Big Five and the HEXACO are a few-fold, so let’s start with the most obvious one, the addition of Honesty/Humility. Simply put, this extends the space of captured human characteristics and moves around the Agreeableness and the Emotionality/Neuroticism traits. In scientific terms, one factor is added, and the factor space of Honesty/Humility, Agreeableness, and Emotionality/Neuroticism is rotated differently (Ashton, Lee & De Vries, 2014, p. 141). In practice, the addition of Honesty/Humility eats away from the Big Five Agreeableness and adds characteristics that were not captured in the Big Five (Ashton et al., 2014, p. 140; Howard & Van Zandt, 2020, p. 9). The HEXACO Agreeableness scale spans between agreeable (peaceful, gentle, patient) on one side and anger (quick-tempered, choleric, and stubborn) on the other. Emotionality has an extensive overlap with Neuroticism from the Big Five, but the “anger” aspects that can be associated with Neuroticism are placed in the HEXACO Agreeableness (Ashton et al., 2014, p. 140). Similarly, “sentimentality” is part of Agreeableness in the Big Five but falls under Emotionality in the HEXACO. Last but not least, the Openness to Experience dimension does not include intellectual characteristics, which were intentionally sorted out by the authors in order to separate

the ability aspects from personality assessment (Ashton & Lee, 2007, p. 155). Figure 4 serves as an example showing the HEXACO-60 items and their scoring.

1. I would be quite bored by a visit to an art gallery.	38. I always try to be accurate in my work, even at the expense of time.
2. I plan ahead and organize things, to avoid scrambling at the last minute.	39. I am usually quite flexible in my opinions when people disagree with me.
3. I rarely hold a grudge, even against people who have badly wronged me.	40. The first thing that I always do in a new place is to make friends.
4. I feel reasonably satisfied with myself overall.	41. I can handle difficult situations without needing emotional support from anyone else.
5. I would feel afraid if I had to travel in bad weather conditions.	42. I would get a lot of pleasure from owning expensive luxury goods.
6. I wouldn't use flattery to get a raise or promotion at work, even if I thought it would succeed.	43. I like people who have unconventional views.
7. I'm interested in learning about the history and politics of other countries.	44. I make a lot of mistakes because I don't think before I act.
8. I often push myself very hard when trying to achieve a goal.	45. Most people tend to get angry more quickly than I do.
9. People sometimes tell me that I am too critical of others.	46. Most people are more upbeat and dynamic than I generally am.
10. I rarely express my opinions in group meetings.	47. I feel strong emotions when someone close to me is going away for a long time.
11. I sometimes can't help worrying about little things.	48. I want people to know that I am an important person of high status.
12. If I knew that I could never get caught, I would be willing to steal a million dollars.	49. I don't think of myself as the artistic or creative type.
13. I would enjoy creating a work of art, such as a novel, a song, or a painting.	50. People often call me a perfectionist.
14. When working on something, I don't pay much attention to small details.	51. Even when people make a lot of mistakes, I rarely say anything negative.
15. People sometimes tell me that I'm too stubborn.	52. I sometimes feel that I am a worthless person.
16. I prefer jobs that involve active social interaction to those that involve working alone.	53. Even in an emergency I wouldn't feel like panicking.
17. When I suffer from a painful experience, I need someone to make me feel comfortable.	54. I wouldn't pretend to like someone just to get that person to do favors for me.
18. Having a lot of money is not especially important to me.	55. I find it boring to discuss philosophy.
19. I think that paying attention to radical ideas is a waste of time.	56. I prefer to do whatever comes to mind, rather than stick to a plan.
20. I make decisions based on the feeling of the moment rather than on careful thought.	57. When people tell me that I'm wrong, my first reaction is to argue with them.
21. People think of me as someone who has a quick temper.	58. When I'm in a group of people, I'm often the one who speaks on behalf of the group.
22. On most days, I feel cheerful and optimistic.	59. I remain unemotional even in situations where most people get very sentimental.
23. I feel like crying when I see other people crying.	60. I'd be tempted to use counterfeit money, if I were sure I could get away with it.
24. I think that I am entitled to more respect than the average person is.	
25. If I had the opportunity, I would like to attend a classical music concert.	
26. When working, I sometimes have difficulties due to being disorganized.	
27. My attitude toward people who have treated me badly is "forgive and forget."	
28. I feel that I am an unpopular person.	
29. When it comes to physical danger, I am very fearful.	
30. If I want something from someone, I will laugh at that person's worst jokes.	
31. I've never really enjoyed looking through an encyclopedia.	
32. I do only the minimum amount of work needed to get by.	
33. I tend to be lenient in judging other people.	
34. In social situations, I'm usually the one who makes the first move.	
35. I worry a lot less than most people do.	
36. I would never accept a bribe, even if it were very large.	
37. People have often told me that I have a good imagination.	

Scoring of HEXACO-60 Scales (see Table 1 for Facet-Level Scales):

Honesty-Humility:	6, 12R, 18, 24R, 30R, 36, 42R, 48R, 54, 60R
Emotionality:	5, 11, 17, 23, 29, 35R, 41R, 47, 53R, 59R
Extraversion:	4, 10R, 16, 22, 28R, 34, 40, 46R, 52R, 58
Agreeableness (versus Anger):	3, 9R, 15R, 21R, 27, 33, 39, 45, 51, 57R
Conscientiousness:	2, 8, 14R, 20R, 26R, 32R, 38, 44R, 50, 56R
Openness to Experience:	1R, 7, 13, 19R, 25, 31R, 37, 43, 49R, 55R

(R indicates reverse-scored item.)
Note. The HEXACO-60 items may be used free of charge for nonprofit research purposes. Researchers who wish to use the observer report form of the HEXACO-60 or to use other-language translations of the HEXACO-60 are advised to contact the authors to obtain the authorized observer report form and the authorized translations.

Figure 4: HEXACO-60 questionnaire (Ashton & Lee, 2009, p. 345).

To better separate Honesty/Humility conceptually from Agreeableness, Ashton, Lee, and De Vries (2014, p. 144) offer a theoretical explanation: "High levels of *H* [Honesty/Humility] represent a tendency to cooperate with another person even when one could successfully exploit that individual, whereas high levels of *A* [Agreeableness] represent a tendency to cooperate with another person even when that individual appears to be somewhat exploitive". Honesty/Humility is argued to describe behavior in new (and one-time) interactions, while Agreeableness relates to a person's reaction if they are encroached upon (Ashton et al., 2014, p. 144f.).

Interesting research has also been done on the overlaps between the dark triad and the HEXACO. The valid assumption can be drawn that the Honesty/Humility dimension encompasses most of the inverse dark triad characteristics (Lee et al., 2013, p. 169ff.; Paulhus & Klaiber, 2020, p. 541f.). As a reminder, the dark triad consists of Narcissism, Machiavellianism, and Psychopathy. All of those are intuitively negatively related to Honesty and especially Humility.

Since this Model is not as old as the Big Five, fewer instruments exist. A few of the most used are listed in Table 2 below.

Table 2: Overview of the most relevant instruments for measuring the HEXACO.

Instrument	Number of Items	Number of facets
HEXACO-PI-R (HEXACO-100)	100	4 per trait
HEXACO-PI-R (HEXACO-60)	60	4 per trait
IPIP-HEXACO	240	4 per trait
BHI	24	4 per trait

Both HEXACO-PI-R instruments were developed by the original proponents of the HEXACO model (HEXACO-60: Ashton & Lee, 2009, p. 340ff.; HEXACO-100: Lee & Ashton, 2018, p. 543ff.). The “PI” stands for “Personality Inventory”, and the “R” for “Revised”. It is typical for those kinds of instruments to be refined over time (the same is true for multiple other personality instruments). The HEXACO-60 questionnaire and usage were published and can be used free of charge for research purposes (see Figure 4). It consists of two to three items per facet and ten items per trait (Ashton & Lee, 2009, p. 340ff.). An online version can be found at hexaco.org/hexaco-online (21.02.2024).

The IPIP-HEXACO is a combination of the publicly available IPIP (ipip.ori.org, 24.09.2023) created by Goldberg (1999, p. 7ff.; Goldberg et al., 2006, p. 84ff.) and the HEXACO dimensions (Ashton, Lee & Goldberg, 2007, p. 1515ff.). It uses ten items per facet, the ones of the IPIP that correlated most with the original HEXACO-PI.

The BHI (Brief HEXACO Inventory) was developed by de Vries (2013, p. 871ff.) and has only four items per dimension (24 in total). Theoretically, each item can be used to assess one facet directly. However, this should be done with caution. The author himself admitted that the instrument has a low alpha reliability (it is debatable if this is a problem in practice). Other than that, it is a helpful and short tool.

There is still an ongoing debate in the scientific community about this extension/reinterpretation of the major five vs. six dimensions of human personality. According to the proponents of the HEXACO, the focus on five traits might just have been an unlucky error: *“If the existence of a replicable set of six – not just five – lexical personality factors had been known during the 1980s, the Big Five/FFM would probably not have been adopted so widely by personality researchers. In fact, one may view the near-consensus favoring a five-dimensional structure of personality characteristics as a historical accident”* (Ashton et al., 2014, p. 141).

2.1.4 Discussion and Comparison of the Previously Introduced Models

Let's start with the four oldest personality types (temperaments) mentioned at the beginning of this chapter: sanguine, phlegmatic, melancholic, and choleric (for an overview, see Doody & Immerwahr, 1983, p. 348ff.). Already Hans Eysenck (1953; cited in Asendorpf, 2019, p. 35) has sorted the four types into his Extraversion and Neuroticism dimensions. This resulted in sanguine: extraversion high and neuroticism low; phlegmatic: extraversion low and neuroticism low; melancholic: extraversion low and neuroticism high; and choleric: extraversion high and neuroticism high. This can be directly mapped onto the Big Five, although there might also be some effect on the remaining three dimensions. For the HEXACO, something changed. The anger aspect of the choleric would fall under low Agreeableness more than on the low end of Emotionality.

Table 3 below shows a simplified comparison of the traits to better visualize the different models mentioned before. This list does not include the MBTI, mainly because it is close to impossible to fit the MBTI scales clearly into the Big Five (or HEXACO) framework (Furnham, 2022, p. 1504ff.). The dimensions of the other models can be somewhat neatly placed in similar categories to the Big Five.

Table 3: Comparison of the before-described models and their simplified relation to each other.

Model	Factor I	Factor II	Factor III	Factor IV	Factor V	Factor VI
Big Five	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness/Intellect	-
16PF (Cattell)	Extraversion	Independence	Self-Control	Anxiety	Tough-Mindedness	-
PEN (Eysenck)	Extraversion	Psychoticism ⁻¹		Neuroticism	-	Psychoticism ⁻¹
HEXACO	Extraversion	Agreeableness	Conscientiousness	Emotionality	Openness to experience	Honesty/Humility

Similar to John and colleagues (2008, p. 115). For the 16PF, see Heather Cattell and Mead (2008, p. 141). Remark: ⁻¹ in reverse.

It becomes clear that the Extraversion and Neuroticism traits are the most fundamental and are found in similar forms in almost every test. What follows are Conscientiousness and Agreeableness and then, with less clarity, Openness/Intellect (see also overview table in John et al., 2008, p. 115). This is probably because the concept of the latter is the most complex to grasp and fuzzy in its manifestation. This may be just the nature of this trait since it is the creativity dimension, after all. Defining (and classifying) creative aspects is hard because they tend to fall out of existing classification systems inherently. Practically speaking, it encompasses two concepts that are correlated (Openness and

Intellect). The fact that there is no word in the English language that captures both aspects equally probably adds to the fuzziness.

Since this thesis relies heavily on the HEXACO and the Big Five, a clear understanding is paramount to follow the content. To that end, Table 4 below compares typical descriptors for each trait. Depending on the concrete instrument used, slight deviations are possible. Furthermore, adjectives rarely load on just one factor alone. Regardless, the table was created to give the reader a better understanding of the otherwise quite abstract dimensions.

Table 4: Detailed comparison of descriptive adjectives from the Big Five and the HEXACO.

Trait	Low end		High end	
	Big Five	HEXACO	Big Five	HEXACO
Extraversion	shy, quiet, reserved, timid, withdrawn, bashful	withdrawn, quiet, silent, closed, shy, reserved	talkative, assertive, bold, verbal, unrestrained	outgoing, talkative, bubbly, jolly, frank, cheerful
Agreeableness	cold, unkind, harsh, unsympathetic, uncharitable	quick-tempered, aggressive, stubborn, demanding, bossy	kind, sympathetic, warm, cooperative, helpful	patient, gentle, loving, undemanding, peaceful, tolerant
Conscientiousness	disorganized, unsystematic, careless, inefficient, inconsistent	irresponsible, careless, sloppy, messy, inconsistent, playful	organized, systematic, thorough, neat, practical	organized, responsible, orderly, diligent, efficient, goal oriented
Neuroticism/Emotionality	unenvious, relaxed, Imperturbable	unemotional, tough, fearless, insensitive, poised, steadfast	moody, anxious, envious, fretful, touchy	emotional, fearful, supersensitive, anxious, moody, sentimental
Openness (to experience)	unintellectual, unimaginative, uncreative, simple, unreflective	simple, conservative, conventional, narrow-minded, ignorant	intellectual, creative, complex, imaginative, philosophical, artistic	philosophical, complex, deep, unconventional, analytical
Honesty/Humility	-	self-centered, snobbish, egotistical, greedy, arrogant	-	sincere, honest, kind, warm-hearted, humble

Big Five adjectives from Goldberg (1992, p. 34). HEXACO adjectives from Lee and Ashton (2008, p. 1040ff.).

As an interesting side note, this shift in traits in the HEXACO (compared to the Big Five) also brings forth a stark sex difference, which has not been seen this clearly in the Big Five research. In a worldwide study, Lee and Ashton (2020, p. 1055ff.) found Cohan's d of 0.84 (for some subsamples, even higher than 1.0) for Emotionality differences between men and women (women being higher). Interestingly, there is almost no Agreeableness difference between the sexes in the HEXCAO, which is the case of the Big Five. However, analyzing those results is not straightforward because it strongly varies with the gender equality of the obtained sample. The higher the equality, the stronger the sex differences (Mac Giolla & Kajonius, 2019, p. 705ff.; Lee & Ashton, 2020, p. 1075ff.), which is probably one of the most unexpected findings of psychology in recent years. Be this as it may, for this master's thesis, this fact is less relevant and will not be further considered.

Regardless of the Big Five, the HEXACO, or even the 16PF, there seem to be higher-level order factors into which those dimensions can be sorted. For Cattell's 16PF, they are called "Factor I" and "Factor II". Factor I includes Extraversion, Independence, and reverse Anxiety, activities that are directed outward to the world. Factor II contains Self-control, Tough-mindedness, and reverse Anxiety (again); it describes how internal processes are handled (Cattell, H. & Mead, 2008, p. 140). In the case of the Big Five, Digman (1997, p. 1246ff.) originally called them α and β factor and described them only in vague terms. DeYoung, Peterson, and Higgins (2002, p. 536; DeYoung, 2006, p. 1138ff.) used the more palpable terms "Stability" and "Plasticity". α /Stability is a collection of Conscientiousness, Agreeableness, and reverse Neuroticism. In contrast, β /Plasticity encompasses Extraversion and Openness/Intellect. With some imagination, Cattell's Factors I/II and the Stability/Plasticity can even be linked to the (old) Extraversion and Neuroticism dimensions of Eysenck's PEN model, bringing those conceptualizations even closer together (Digman, 1997, p. 1247). In the case of the HEXACO, the jury is still out. Ashton, Lee, Goldberg, and Vries (2009, p. 88) have investigated the potential existence of higher-order factors with the BFAS (a Big Five instrument) and the HEXACO-PI-R. Based on their conceptualization of higher-order factors, they concluded that there are probably none in either of them present.

Abstracting even further, the idea of a single factor at the highest level of personality emerges, called GFP (General Factor of Personality), or simply "Big One" (found first by Musek, 2007, p. 1213ff.). Following this discovery, other scholars in the field have performed analyses to check for themselves (two meta-analyses: van der Linden, Te Nijenhuis & Bakker, 2010, p. 315ff.; Rushton & Irwing, 2008, p. 679ff.). However, similar to the two-factor solution, this approach was also criticized, mainly for being based only on statistical artifacts (Just, 2011, p. 767ff.; Revelle & Wilt, 2013, p. 493ff.). However, the interpretation of the GFP is roughly what is commonly known as "having a good personality" vs. "having a difficult personality" (Rushton & Irwing, 2011, p. 132), which has some face validity on its own. In Figure 5 below, the structure of three trait levels is shown. As can be seen, the GFP is a combination of α /Stability and β /Plasticity, which were introduced in the paragraph before. Combining this with Figure 1, p. 8, the four levels of personality (Digman, 1990, p. 421) results in six levels of personality in total.

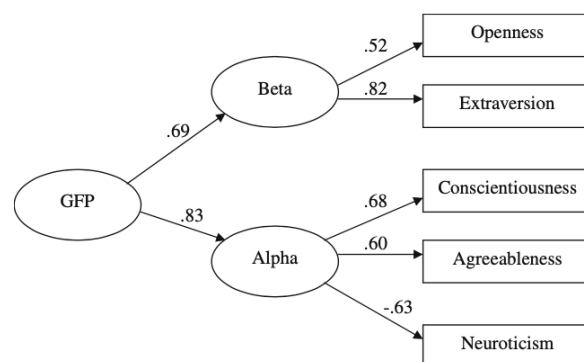


Figure 5: The structure of personality factors from the GFP to the Big Two (α /Stability, β /Plasticity), down to the Big Five traits (van der Linden et al., 2010, p. 319).

2.1.5 Implications for this Thesis

The primary motivation of this master's thesis is to see if a sound personality model (like the Big Five or HEXACO) can also be used to assess an organization's being ("personality"). At the outset of this work, it was clear that the Big Five would be used because this presents the best that personality psychology has to offer in this regard, with a near consensus from the experts. However, after digging deeper into the literature, it became clear to the author that a case can be made for choosing the HEXACO model instead. The main argument in favor of this change is the fact that it is straightforward to interpret the added Honesty/Humility dimension to apply to organizational personality. This is a statement that cannot be easily made about every other trait. One can imagine a culture of honest communication vs. one with high levels of distrust and resentment. On the face of it, this could also be mapped onto the Big Five Agreeableness. However, separating the Honesty/Humility aspects from the (HEXACO) Agreeableness aspects (calm, peaceful vs. forceful, explosive) appears to be a vital gain if opting for the HEXACO. That's why this thesis uses the HEXACO model.

2.2 Conceptualizations of Organizations

Before we dive straight into organizational culture (Chapter 2.3), let us first start a bit broader by thinking about other ways of describing organizations. Two typical models are listed below. They do not directly address how people feel in the organization or the value system, but they illustrate how organizations can be conceptualized. Since this chapter is mainly there for completeness, it will only go into little detail.

2.2.1 *Metaphors for Organizations*

One way of understanding how organizations are is by using metaphors to describe their way of acting. This is a typical qualitative approach where different types are described, and their understanding gives insight into how different organizations are. The development of these metaphors went hand in hand with the various conceptualizations of humans: homo economicus, social man, complex man, etc. (Bardmann & Groth, 2001, p. 7ff.). The most prominent metaphors are the organization as a machine and the organization as an organism. Fitting to the view of man as a rational being (homo economicus) and man as a social being (social man) respectively. However, other views are also common, such as those described by Morgan (2006, p. 11ff.).

Staying with the two listed above (organization vs. machine/organism), we can draw some parallels to the Big Five and the HEXACO. For example, a machine-like quality can be associated with high Conscientiousness and low levels of Agreeableness. On the face of it, a machine does not care about feelings, only about completing tasks. The organism, on the other hand, adapts to outside influences, so it needs to be reasonably open, equaling high Openness. One might also align Extraversion with being organically adaptable; however, the link is not as clear. Of course, those metaphors were not meant to be descriptors of the organizational personality or culture but to include structure and processes as well. Regardless, they generally offer a nice and accessible introduction to the field of organizational beings.

2.2.2 *Mintzberg's Organizational Configurations*

Henry Mintzberg created a way of understanding organizations with a focus on structure. According to him, every organization consists of six essential parts, visualized in Figure 6 below. While most parts are self-explanatory, it might be necessary to clarify what Technostructure and Support Staff include (Mintzberg, 1989, p. 95ff.). The first includes everything that helps the Operating Core to function with high efficiency (production scheduling, planning, training, controlling, etc.). The latter contains less immediate output-connected tasks that support the company in the long run (R&D, legal, marketing, but also cafeteria, etc.). Comparing this type of conceptualization of organizations with personality psychology does not work well. One can, however, draw parallels to human abilities and behaviors, but even this seems rather forced.

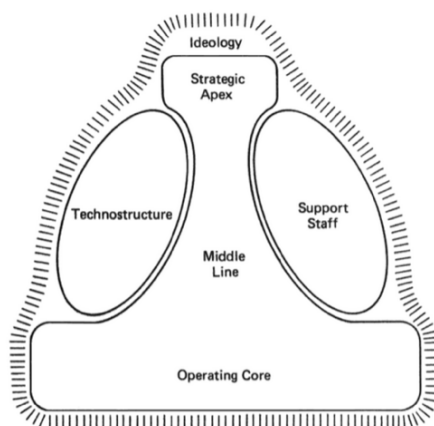


Figure 6: Six essential parts of organizations, according to Mintzberg (1989, p. 99).

Based on the different sizes and importances of the six building blocks in Mintzberg's model (Ideology, Strategic Apex, Middle Line, Operating Core, Technostructure, and Support Staff), he differentiates into six types of organizations (Mintzberg, 1989, p. 110):

- Entrepreneurial Organization; key part: Strategic Apex
- Machine Organization; key part: Technostructure
- Professional Organization; key part: Operating Core
- Diversified Organization; key part: Middle Line
- Innovative Organization; key part: Support Staff
- Missionary Organization; key part: Ideology

Again, like in the previous chapter, we see the machine organization as one possible form. It mainly focuses on optimizing efficiency, which can be viewed as Conscientiousness-driven. Innovative organizations, on the other hand, will likely be open to change (for example, a high number of R&D staff), which shows some parallels to Openness. However, this is where the interaction between this conceptualization and the Big Five and HEXACO ends.

Within this relatively short section, an introduction to organizational being, focusing on structure, hierarchy, and processes, was given. This was presented mainly for completeness and to show that those conceptualizations (and research fields) exist but are not of immediate relevance to the topic of this master's thesis. In the next Chapter, 2.3, we will look at organizational culture, which, as the reader will see, shows some striking similarities with the way we conceptualize personality.

2.3 Organizational Culture

Organizational culture is probably the most prominent type of conceptualizing an organization's being. The term was introduced by Pettigrew (1979, p. 570ff.) and worked on by many scholars in the fields of social psychology, sociology, and business (for a good overview, see Bellot, 2011, p. 31). To give a feeling of the complexity and hard-to-grab nature, the following quote from Pettigrew (1990; cited in Jung, T. et al., 2009, p. 1087)³ is perfect: “[Culture is] a riddle wrapped in a mystery wrapped in an enigma”; no wonder a plethora of definitions exist. A good but lengthy one can be found in Edgar and Peter Schein (2017, p. 6): “*The culture of a group can be defined as the accumulated shared learning of that group as it solves its problems of external adaptation and internal integration; which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, feel and behave in relation to those problems. This accumulated learning is a pattern or system of beliefs, values, and behavioral norms that come to be taken for granted as basic assumptions and eventually drop out of awareness*”. A more hands-on definition was offered and used by Deal and Kennedy (1982, p. 49): “[Culture is] the way we do things around here”.

To start with some history, the study of work environments began around 1930/1940s and grew strongly in the 1960s (Bellot, 2011, p. 29). Pettigrew's use of organizational culture (1979, p. 570ff.) seemed to accompany the start of a new chapter in this field. Shortly after (in the 1980s), many researchers turned to this topic and became especially keen on defining the ideal culture. The field also got more public attention, and commercialization activities for this newly found knowledge increased significantly. However, science had a hard time keeping up with the demand. Since organizational culture is a very multifaceted “thing”, it was even difficult to agree on a proper definition. Edgar Schein's definition in the 1980s (1987, p. 383), shown in updated form at the beginning of this subchapter, really helped to create some common ground (Bellot, 2011, p. 29ff.).

There is also some debate about the difference between “climate” and “culture”. Both terms have been used for multiple decades, and different experts have drawn different distinctions. Some see climate more as the “what?” and culture more as the “why?” of how people act in an organization. They argue that culture research is primarily qualitative, while climate research is more quantitative (Ostroff, Kinicki & Muhammad, 2012, p. 657; Jung, T. et al., 2009, p. 1088). However, many quantitative instruments

³ Tobias Jung; not C.G. Jung.

assessing culture/climate have “culture” in their name (for example, Organizational Culture Inventory and Hofstede’s Culture Dimensions; see following subchapters). Some argue that culture is more profound, and climate is more what one can perceive (Jung, T. et al., 2009, p. 1088; Ostroff et al., 2012, p. 657). All in all, for this thesis, we will not distinguish between the two and only use the term “culture”.

In the beginning, organizational culture (and climate) were mainly investigated by qualitative methods (Ostroff et al., 2012, p. 657). Over the years, especially in and after the 1980s, quantitative methods have also emerged (Jung, T. et al., 2009, p. 1092). They satisfied the need for a more objective application of the organizational culture concept in practice (Bellot, 2011, p. 33). This subfield, however, suffered from a missing convergence onto one model. This is a stark contrast to personality psychology, where, as described in the previous Chapter 2.1, the Big Five can be called a common ground for further discussions and research.

Another big difference between organizational culture and personality psychology is its multidisciplinary nature. Of course, organizational culture is a social phenomenon, but scholars of social psychology, sociology, and economics have all worked on the topic. While each discipline brings valuable new aspects, it also makes it hard to agree on basic terms and even on epistemology (Bellot, 2011, p. 30f.). Like personality psychology, many models and instruments emerged over the years. Unfortunately for researchers, there is little agreement on one model or conceptualization. The next subchapters present some of the most relevant models and instruments and their characteristics.

2.3.1 Models of Organizational Culture

In the introduction paragraphs above, “models” and “instruments” are always used in conjunction. This makes sense because they generally go hand in hand, at least for quantitative instruments. If one develops a model and wants to prove its practical validity, an instrument usually needs to be developed in parallel. They can also be created in parallel from the outset, as was seen for the Big Five. There, questionnaires were used, and models were derived based on the results that, in turn, helped to shape the original questionnaires into proper (efficient) instruments. The same is (mostly) true for organizational culture. The order of the following subchapters was chosen to range from qualitative to typological and ends with quantitative models/instruments. On purpose, a historical order was omitted since the story of this research field is less streamlined and still very diverse. Also, due to the sheer number of available models and instruments, only a small subset that had a high impact is described below.

2.3.1.1 Schein's Three Levels

Edgar D. Schein (1928 – still alive in 2024) probably shaped the research field of organizational culture as no one else has. His iceberg model has become the standard way of talking and thinking about this topic. It relies on conceptualizing organizational culture in three levels (or layers). Only the first level is visible, like the tip of the iceberg. At the same time, the bigger part of the system is hidden underwater (levels two and three) and is only indirectly accessible. The three levels are (Schein, E. 1990, p. 111; Schein, E. & Schein, P. 2017, p. 17ff.)⁴:

- Artifacts
- Espoused Beliefs and Values
- Basic Underlying Assumptions

This conceptualization utilizes a qualitative approach to the field. As with all qualitative approaches, they can excel at capturing the essence and details of individual cases; they help to understand the “why?”. Edgar and Peter Schein (2017, p. 31ff.) describe in detail three organizations they worked with and how the analysis happened. It is fascinating to read and offers a great example of how qualitative analyses can bring out knowledge that would otherwise be hidden. On the other hand, it makes direct comparisons between different cultures nearly impossible. This feature, however, is of interest to researchers and analysts trying to correlate organizational culture to more objective measures, like success, prospect, maturity, fluctuation/retention, etc. The qualitative method will be only of little help in this regard. Another downside of the qualitative approach might be the undefined duration and endpoint of an assessment. Edgar Schein needed to spend many days with each organization, which might not be feasible for many researchers.

With the three-layer conceptualization of culture, Schein grasped something that almost all researchers nowadays agree on (Ostroff et al., 2012, p. 658). Some may call the layers differently or lump the hidden two into one. Regardless, it is practically universally accepted that culture has this structure. Another often-used way of describing the layers is with the so-called “onion model” (Taras et al., 2009, p. 358), which also consists of layers that an investigator has to peel off from the outside to the inside to understand what makes an organization tick. The outer layers are the visible artifacts, and the deeper they go, the more they uncover the underlying assumptions and values. In Chapter 2.5, we will discuss the analogy of the onion model to the levels in personality modes.

⁴ Edgar D. Schein with his son Peter Schein.

2.3.1.2 Competing Values Framework and the Organizational Culture Assessment Instrument

Another often-used instrument to assess organizational culture is the CVF (Competing Values Framework) (Quinn & Rohrbaugh, 1981, p. 122ff.; Cameron & Freeman, 1991, p. 25ff.; Cameron & Quinn, 2006, p. 31ff.), which works with four types: Clan, Hierarchy, Adhocracy, and Market. It has some clear parallels to the BMTI (see Chapter 2.1.1.1) because it also builds on Jungian thoughts. C.G. Jung was a big believer in archetypes, which are prototypical (stereotypical) examples that humans use to simplify their perception (Cameron & Freeman, 1991, p. 26f.). This is not only true for how we perceive other people but also for how we perceive organizations. Based on this, a two-dimensional model was built by (Quinn & Rohrbaugh, 1981, p. 130ff.):

- Organizational Focus (People vs. Organization)
- Structure (Control vs. Flexibility)

In some literature, the Organizational Focus dimension spans between Internal and External. This is not a change of the model but just a shorter and simpler way of describing this scale. It still means that the focus is either on the people (internal) or on the organization compared to the environment (external). Out of those dimensions, the four types mentioned above can be derived. Figure 7 below gives a good overview. Like the MBTI, the types are put at the forefront, and the dimensions are just the building blocks. This increases the simplicity (ease of understanding for non-experts) but also reduces the depth of analysis.

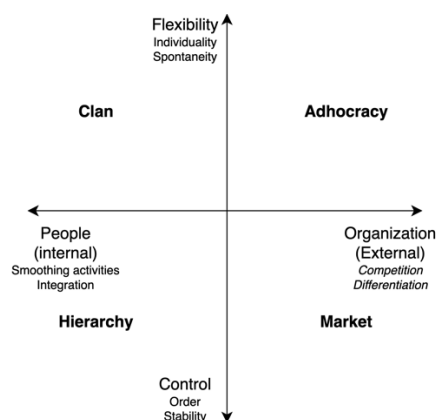


Figure 7: Dimensions of the CVF (similar to Cameron & Freeman, 1991, p. 27; Quinn & Rohrbaugh, 1981, p. 136)

The OCAI (Organizational Culture Assessment Instrument) (Cameron & Quinn, 2006, p. 23ff.) was created in 1999 and serves as the instrument to assess the four types. It is worth noting that the instrument does not evaluate the two main dimensions

(Organizational Focus and Structure) directly but the fit to each of the four prototypical types. Simply put, each type is present in every organization, but the main dominating type is of primary interest. This concept has some similarities with the metaphors for organizations as described in Chapter 2.2.1.

Now, let's compare those dimensions to the Big Five and the HEXACO. How would a member rate their perception of their organization on the Big Five and HEXACO scales depending on the CVF dimension and type? Table 5 below tries to answer this question (see also Table 4, p. 22).

Table 5: Comparison of the CVF and how members perceive them in their organization expressed in the Big Five and HEXACO traits.

Dimension/Type (CVF)	Big Five	HEXACO
Organizational Focus (People vs. Organization)	Agreeableness vs. Extraversion and maybe Openness	Agreeableness and maybe Honesty/Humility vs. Extraversion and maybe Openness to experience
Structure (Control vs. Flexibility)	Conscientiousness vs. Openness	Conscientiousness vs. Openness to experience
Clan	Agreeableness, Conscientiousness ⁻¹	Agreeableness, Honesty/Humility, Conscientiousness ⁻¹
Adhocracy	Openness, Extraversion, Conscientiousness ⁻¹ , Agreeableness ⁻¹	Openness to experience, Extraversion, Conscientiousness ⁻¹ , Agreeableness ⁻¹ ,
Hierarchy	Conscientiousness, Agreeableness, Openness ⁻¹	Conscientiousness, Openness to experience ⁻¹ , Agreeableness ⁻¹
Market	Conscientiousness, Agreeableness ⁻¹	Conscientiousness, Agreeableness ⁻¹

Remark:⁻¹ in reverse.

As can be seen, the Organizational Focus dimension (People vs. Organization) aligns very well with the Agreeableness dimension and some aspects of Extraversion and Openness (to experience). In the CVF, this dimension spans between People Orientation (people development, communication, internal focus) and Organization (competition, goal setting, outward focus). The Structure dimension (Control vs. Flexibility) fits very well with the typical interplay of Openness (to experience) and Conscientiousness. Both are, per definition, not correlated but typically associated with precisely this kind of dynamic. On the Control end, it aligns with high Conscientiousness and low Openness (to experience), while the reverse is valid for the Flexibility end.

The CVF also appears to be similar to Blake and Mouton's two-dimensional Managerial Grid (1964, p. 1ff.; Blake, Mouton & Bidwell, 1962, p. 12ff.). It addresses the core issue of people vs. task orientation. However, the CVF adds to it (at least in the eyes of this thesis' author) by giving each Managerial Grid dimension a constructive opposite pole. For example, a high people orientation will show up similarly in both models, but a low people orientation is primarily viewed as undesired in the Managerial Grid. In the CVF,

however, the low people orientation shows an organizational (external) focus, which is not inherently considered negative.

2.3.1.3 Organizational Culture Inventory / Organizational Culture Circumplex

The most used instrument and model for quantitatively measuring organizational culture today is the OCI (Organizational Culture Inventory), created by Cooke and Lafferty (1987). It has been completed over two million times by the year 2000 (Cooke & Szumal, 2000, p. 147) but is only commercially available. It uses a circular visualization, the Organizational Culture Circumplex, with 12 slices (categories/norms), which are sorted according to the two main dimensions (see Figure 8 below).

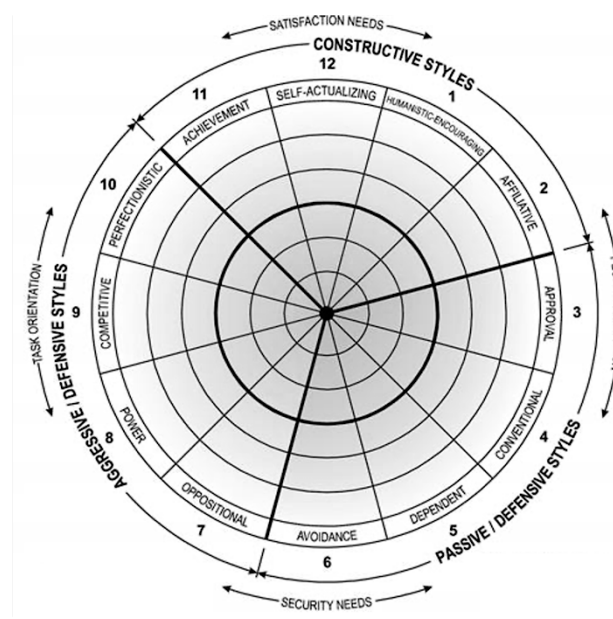


Figure 8: The Organizational Culture Circumplex (www.humansynergistics.com, 09.03.2024).

The horizontal dimension corresponds to the concern for people vs. concern for tasks. The vertical direction symbolizes the difference between a behavior directed towards high-order Satisfaction Needs vs. maintaining low-order Security Needs (Cooke & Szumal, 2000, p. 148). The 12 slices are also grouped into three different styles: Constructive, Defensive/Passive, and Aggressive/Passive. Depending on the scores of the 12 scales, a company can then find its place on the two main dimensions and in one of the three groups. Of the three, only the Constructive style is deemed to be positive. Regardless, let's now again compare those dimensions to the Big Five and the HEXACO. How would members rate their perceptions of their organization on the Big Five and HEXACO scales depending on the OCI result? Table 6 below tries to answer this question (see also Table 4, p. 22).

Table 6: Comparison of OCI dimensions and how members might perceive them in their organization expressed in the Big Five and HEXACO traits.

Dimension (OCI Circumplex)	Big Five	HEXACO
Satisfaction Needs	Openness, maybe Agreeableness	Openness to experience, maybe Honesty/Humility
Security Needs	Neuroticism, maybe Agreeableness ⁻¹ , maybe Extraversion ⁻¹	Emotionality, maybe Extraversion ⁻¹
Task Orientation	Conscientiousness, Agreeableness ⁻¹	Conscientiousness, Agreeableness ⁻¹
People Orientation	Agreeableness	Agreeableness, maybe Openness ⁻¹

Remark: ⁻¹ in reverse.

Assuming the author's interpretation is correct, there is a high matching of the OCI with some factors of the Big Five and the HEXACO but minimal matching of some others. Unsurprisingly, Conscientiousness and Agreeableness are represented well. Both traits are critical when it comes to social interactions in the context of a shared goal. However, Extraversion, probably the most prominent social dimension, is hardly captured in the OCI Circumplex. The same is true for Honesty/Humility, which is also an essential factor in how social interactions are conducted. Openness (to experience) appears to primarily be associated with Satisfaction Needs (Constructive style) since both Passive styles are more inward-focused and do not show openness to change. Of course, this paragraph should not be taken as a hard fact or a general criticism of the OCI since the same game could be played in reverse.

2.3.1.4 Hofstede's Cultural Dimensions

Geert Hofstede (1928-2020) was a significant figure in the field of general culture research. He managed to get employee questionnaire data from IBM from places all around the world (Hofstede, G., Hofstede, G.J. & Minkov 2010, p. 30)⁵. Out of those, he extracted factors. His first version, published in 1980, had four dimensions. Since then, two more have been added. Those six dimensions are (Hofstede, G., 2011, p. 8):

- Power Distance
- Uncertainty Avoidance
- Individualism
- Masculinity vs. Femininity
- Long-Term vs. Short-Term Orientation
- Indulgence vs. Restraint

⁵ Gert Jan Hofstede joined his father Geert Hofstede as co-author.

There is even a commercially available instrument that helps people assess their fit in a specific (typically foreign) culture, reachable at www.hofstede-insights.com (7.10.2023). Although it was created by determining the cultural differences across whole nations, researchers have applied it to organizations (Taras, Kirkman & Steel, 2010, p. 405ff.). Therefore, this instrument also belongs in this list as the most-known quantitative tool for assessing (organizational) culture.

Interestingly, Geert Hofstede worked together with McCrae (2004, p. 52ff.), who was one of the inventors of the influential NEO instruments for assessing the Big Five, to evaluate if there is a link between culture and personality. On the face of it, this would seem like the perfect fit for this master's thesis. However, at a second glance, it becomes clear that Hofstede and McCrae were investigating how nation-average assessments of personality correlate with the culture dimensions. This does not address the question of how members perceive their organization (or nation). Of course, it might be an exciting research field to check how a member's personality might influence their view of a given organizational/national culture. For this thesis, however, Hofstede and McCrae's work can only be used as a rough reference. Nevertheless, Table 7 below compares Hofstede's Culture Dimensions, the Big Five, and the HEXACO. The detailed descriptions from Hofstede (Hofstede, G., 2011, p. 9ff.) were used as a basis in conjunction with Table 4, p. 22.

Table 7: Comparison of Hofstede's Culture Dimensions and how members might perceive them in their organization expressed in the Big Five and HEXACO traits.

Hofstede's Culture Dimension	Big Five	HEXACO
Power Distance	Agreeableness ⁻¹ , maybe Extraversion ⁻¹	Agreeableness ⁻¹ , Honesty/Humility ⁻¹ , maybe Extraversion ⁻¹
Uncertainty Avoidance	Neuroticism, maybe Agreeableness ⁻¹	High Neuroticism, maybe Agreeableness ⁻¹
Individualism	Extraversion, Agreeableness ⁻¹	Honesty/Humility ⁻¹ , Extraversion, Agreeableness ⁻¹
Masculinity (vs. Femininity)	Agreeableness ⁻¹	Agreeableness ⁻¹ , Honesty/Humility ⁻¹
Long-Term Orientation	Openness ⁻¹ , maybe Conscientiousness	Openness to experience ⁻¹ , maybe Conscientiousness
Indulgence (vs. Restraint)	Conscientiousness ⁻¹ , Extraversion	Conscientiousness ⁻¹ , Extraversion

Remark: ⁻¹ in reverse.

Bringing Hofstede's cultural dimensions together with the Big Five and the HEXACO is complicated. Long-Term Orientation, in particular (as explained by Hofstede, G., 2011, p. 13ff.), seems hard to put into both personality models. Generally, in psychology, long-term orientation is associated with conscientiousness. A conscientious person is more likely to forgo immediate pleasures to gain something in the long run (delayed gratification). However, according to Hofstede's definition, this is more encoded in the

Indulged (vs. Restraint) dimension. Long-Term vs. Short-Term Orientation relates to how people view changes. Interestingly, in the Short-Term Orientation, traditions are important, and basic assumptions about life are to remain the same over time. In the Long-Term Orientation, people are more open to changes in their value system. Nevertheless, the other dimensions are also not as clear to align between the models.

2.3.1.5 Lexical Organizational Culture Scale

This instrument is an outlier on the list because it is relatively new (published in 2018), but it utilizes a lexical approach, which makes it a must-have for this thesis. Like the Big Five, Chapman and colleagues (2018, p. 1ff.) used a lexical approach (in two steps) to derive the dimensions along which organizations are described (from the members' perspective). The exact question asked in the last substudy was: "*To what extent do the following adjectives accurately describe the organization for whom you are presently employed?*" (Chapman et al., 2018, p. 6). It is essential to be precise in this regard because Aaker (1997, p. 347ff.) used a similar approach for something else that we will discuss in Chapter 2.4. Coming back to Chapman and colleagues (2018, p. 8), the nine dimensions of the LOCS (Lexical Organizational Culture Scale) are:

- Innovative
- Dominant
- Pace
- Friendly
- Prestigious
- Trendy
- Corporate Social Responsibility
- Traditional⁶
- Diverse

The nine factors were found by factor analysis and evaluation of the scree plot, which is generally a reasonable approach. However, looking at the internal correlations of the individual dimensions reveals very high values (Chapman et al., 2018, p. 9). For example, Innovative correlates with more than 0.50 with Pace, Prestigious, and Corporate Social Responsibility. Overall, of the 36 cross-correlations, 11 are higher than 0.50, and one is even 0.71, which does not seem to be the most orthogonal reduced solution. As a comparison, for the Big Five factors in the BFI-2 and the BFAS,

⁶ To the author's (of this master's thesis) confusion, the item coding in the paper suggests a reverse coding of "Traditional", which will not be considered here.

intercorrelations are consistently below 0.4, even including cross-correlations between different dimensions of different instruments (Soto & John, 2017a; DeYoung et al., 2007, p. 891f.). While high cross-correlations are not generally a sign of poor analysis, it begs the question of whether nine factors are the best, most efficient solution. Regardless, Table 8 below compares the dimensions of the Big Five and the HEXACO. Again, Table 4, p. 22, was used, this time in conjunction with the descriptive adjectives/items from Chapman and colleagues (2018, p. 8).

Table 8: Comparison of LOCS and Big Five and HEXACO traits.

LOCS	Big Five	HEXACO
Innovative	Openness	Openness to Experience
Dominant	Extraversion, maybe Agreeableness ⁻¹	Extraversion, maybe Agreeableness ⁻¹
Pace	Conscientiousness	Conscientiousness, Honesty/Humility
Friendly	Agreeableness, Extraversion	Agreeableness, Extraversion, maybe Honesty/Humility
Prestigious	Openness, Extraversion	Openness, Extraversion
Trendy	Openness, Extraversion	Openness, Extraversion
Corporate Social Responsibility	Agreeableness, Conscientiousness	Honesty/Humility, Agreeableness, Conscientiousness
Traditional*	Openness ⁻¹ , Conscientiousness	Openness to Experience ⁻¹ , Conscientiousness
Diverse	Agreeableness	Honesty/Humility, Agreeableness

Remarks:⁻¹ in reverse. * used in its typical meaning.

All in all, while the approach seems to be very much in line with the vision of this master's thesis, the methodological decision of using nine dimensions seems suboptimal for enhancing the general understanding and for practical usage. Furthermore, the dimensions of Corporate Social Responsibility and Diverse appear too much in line with the current zeitgeist to be universally relevant for describing organizations.

2.3.1.6 Other Instruments and Meta-Analysis Results

It must be mentioned (again) that the above-described models and instruments are just a very minor subset of all the available ones in the literature and practice. To get a feeling, Tobias Jung and colleagues (2009, p. 1089) found 70 instruments for their meta-analysis, and Taras and colleagues (2009, p. 357) speak of more than 120 instruments developed (up to the publication date in 2009). This clearly shows that even the attempt to grasp just the landscape of culture measurement instruments would fill more than one master's thesis. That's why only a few selected models and instruments were presented. There are meta-analyses available that try to bring some structure into the Wild West of culture dimensions. Two of these will be briefly discussed below.

Xenikou and Furnham (1996, p. 349ff.) investigated four different instruments (the OCI, the Culture Gap Survey, the Organizational Beliefs Questionnaire, and the Corporate Culture Survey), which they deemed to be the most relevant at that time. They used those instruments in parallel to extract the underlying factors. They arrived at a six-factor solution, of which they discarded one factor due to inconsistency. The remaining five are listed below (Xenikou & Furnham, 1996, p. 367f.):

- Openness to change in a cooperative culture
- Task-oriented organizational growth
- The human factor in a bureaucratic culture
- Negativism and resistance to new ideas
- Positive social relations in the workplace

It is challenging to relate those descriptions to the Big Five or HEXACO dimensions because they always link two aspects. For example, the human factor in a bureaucratic culture does not clearly indicate if the culture is human or bureaucratic; it is simply too vague. The descriptions in the paper (and the correlations) did not really help (Xenikou & Furnham, 1996, p. 367f., 363). Nevertheless, just from the face of it, not much interpretation is needed to see a resemblance between these factors and Openness, Conscientiousness, Agreeableness, and Neuroticism/Emotionality.

Delobbe, Haccoun, and Vandenberghe (2002, p. 7f.) looked at 17 Instruments and defined four dimensions that they claimed encompass those models. It must be mentioned that they derived these dimensions not by statistical analysis but by just stating them. Nevertheless, they do seem quite intuitive. The four dimensions are:

- People Orientation
- Innovation
- Results/Outcome Orientation
- Control (or Bureaucratic Orientation)

Among the 17 instruments are the OCI, different versions of the CVF, and others. As in the previous chapters, we can align the dimensions with the Big Five and the HEXACO. This is relatively straightforward, so no table is needed: People Orientation aligns with Agreeableness (maybe Honesty/Humility and Extraversion), Innovation with Openness, and Results/Outcome Orientation and Control are both related to Conscientiousness. They also offer a new instrument, the ECO (Echelles de Culture Organisationnelle – French for Organizational Culture Scales), which they created based on items of already existing culture questionnaires and put through factor analysis. Interestingly, they came

up with a five-factor solution. However, the dimensions are not well described and seem to intercorrelate substantially, though they only gave values for an intermediate state during the development. This gave reason not to include the ECO further in this thesis.

2.3.2 Discussion and Comparison to the Big Five/HEXCAO

Looking at the landscape, or at least at the glimpse given so far, it becomes clear that many dimensions would fit quite well with a Big Five or HEXACO framework. Or at least, it would not be surprising to claim some overlap because both personality models were derived through a lexical approach, starting with adjectives that describe human nature. As stated already in the introduction, we tend to anthropomorphize also non-human beings/things (Ashforth et al., 2020, p. 29ff.). So, seeing links between the two domains is only logical. It also becomes clear by looking at the previous models (and the literature) that some personality traits relate more often to organizational culture dimensions than others. This, again, is not surprising. The most prominent two cases are Conscientiousness and Agreeableness. The first is basically the manifestation of the “work dimension”. It encompasses most of the work-related aspects a human can manifest (diligent, systematic, efficient, industrious, etc.). Also, it is the most precise predictor of a person’s success in the workplace (He, Donnellan & Mendoza, 2019, p. 11), besides Intelligence. The second dimension that showed up very often is Agreeableness. This, too, is not surprising because it relates to the way we interact with other people. Simply put, in the Big Five framework, an agreeable person will value harmony and cooperation, while a disagreeable person will be driven by competition. Due to the high relevance of those two traits for the organizational environment, models and instruments with many dimensions are capturing different aspects in separate dimensions. For example, the LCOS (Chapman et al., 2018, p. 1ff.) and also the meta-analysis of Delobbe, Haccoun, and Vandenberghe (2002, p. 1ff.) had more than one conscientiousness-related dimension.

An equivalent to Openness (to experience) is also present in all models. This is not surprising because every organization faces the conundrum of Exploitation vs. Exploration (Gupta, Smith & Shalley, 2006, p. 693ff.). This conceptualization was not mentioned previously but is helpful for this context. It explains that, on the one hand, companies need to exploit their available resources. It must be stated clearly that “exploit” does not mean unjust/unfair exploitation of vulnerable members but simply the fact that the available resources should be appropriately utilized. This typically goes in the direction of Conscientiousness-related aspects. Working with high precision, diligently, and not wasting time on unnecessary tasks. Exploitation is focused inward. On

the other hand, organizations also need to look outwards and adapt to the ever-changing environment; they need to explore new ways of doing things, new markets, new products, and new strategies. This aspect is also part of the culture and shows up in many of the models and instruments. It clearly relates to Openness (to experience) and, therefore, causes a high overlap between culture and personality descriptions. One can even see parallels to the machine vs. organism metaphor, with the machine focusing on exploitation while the organism concentrates on exploration.

The remaining two/three dimensions (Extraversion, Neuroticism/Emotionality, and Honesty/Humility) are less obviously related to the organizational culture dimensions previously presented. This does not mean that they are not present. Let's start with Extraversion. While this seems fundamental to human interaction, it does not get great attention in organizational culture models, which is surprising. The amount of communication within an organization would, for example, already constitute a clear Extraversion-correlate. Also, as was seen in the historical personality models (Chapter 2.1.1), Extraversion is probably the most apparent trait on which humans differ. However, in most instruments, Extraversion seems to be lumped together with people-related aspects, which otherwise mainly encode Agreeableness traits. Neuroticism/Emotionality shows up in the organizational models; however, it has a secondary role. It is mainly related to Security Needs (CVF) or Uncertainty Avoidance (Hofstede's Culture Dimensions). Generally, it is harder to visualize how this trait would manifest in an organization. One way to understand it is the general proclivity for group anxiety and fearfulness. Honesty/Humility is easy to picture in an organizational culture context. It can be understood as an internal style (for example, "Are we talking openly with each other?") or an external style ("Are we telling the truth to customers?"). It can be understood as a facet of Hofstede's Power Distance dimension. Nevertheless, it does not appear that clearly in the described models so far. Searching for equivalents of those three traits in organizations will be one of the main contributions of the instrument and analysis done within this thesis.

As could be seen in this chapter, there are many ways to conceptualize organizational culture. We are far from a consensus in the scientific community. Due to the interdisciplinarity of the topic, it is also very likely that there will never be an agreed-upon model. Nevertheless, the comparison with the Big Five and HEXACO models showed that while there is a reasonable emphasis on Conscientiousness and Agreeableness-related aspects, some other personality traits are less often encoded in organizational culture models. Therefore, the following study might add some aspects that are lacking in the currently available conceptualizations.

2.4 Brand Personality and Company Personality

Brand personality is clearly a marketing viewpoint on brands more than on organizations in general. It describes the external perception of the brand, which is often synonymous with an actual company. The term “brand personality” can be traced back at least to the 1950s (Avis & Aitken, 2015, p. 214ff.). Interestingly, following the brand personality literature, the term “company personality” has popped up from time to time. The reason for lumping it together with brand personality in one subchapter is relatively simple. There is only limited research on the first topic, and the papers that address it focus on the outside perspective of the company’s personality. This is very much in line with the viewpoint of brand personality, at least in the context of this master’s thesis. Therefore, those two are combined in one subchapter for this literature review. It must be noted that also in this research field, no one has directly applied a personality questionnaire to the perception of companies/organizations. What was used, however, was the lexical approach, also utilized in the discovery of the Big Five and the HEXACO.

2.4.1 Aaker’s Brand Personality Model

In a landmark paper, Jennifer Aaker defined brand personality as “*the set of human characteristics associated with a brand*” and derived five dimensions for describing the personality of a brand (1997, p. 347ff.). She used something that one could call a semi-lexical approach, which has also often been used for the development of personality instruments. The approach started with common adjectives previously used in personality research and brand personality literature. Those descriptors were given to subjects who needed to rate various brands along those. Through factor analysis, five factors emerged (Aaker, 1997, p. 349f.). The five dimensions are:

- Sincerity
- Excitement
- Competence
- Sophistication
- Ruggedness

The paper from Aaker is by far the most cited one in this field, with over 15000 citations according to Google Scholar by 2024. No alternatives come even close. Many other researchers have used and also criticized Aaker’s brand personality dimensions (for a review, see Kumar, 2018, p. 203ff.). The criticism ranges from definition to method, general concept, and generalizability. Nevertheless, it is clearly a cornerstone of the

brand literature that most marketers have heard of or learned about. In Table 9, Aaker's five dimensions are compared to the ones from the Big Five and the HEXACO. Again, we use Table 4, p. 22, in conjunction with the descriptions from Aaker (1997, p. 354).

Table 9: Comparison of Aaker's brand personality dimensions with Big Five and HEXACO traits.

Aaker's Brand Personality	Big Five	HEXACO
Sincerity	Conscientiousness, Agreeableness	Honesty/Humility, Conscientiousness
Excitement	Extraversion, Openness	Extraversion, Openness to experience
Competence	Conscientiousness, maybe Openness	Conscientiousness, maybe Openness to experience
Sophistication	Openness	Openness to experience
Ruggedness	Agreeableness ⁻¹ , Neuroticism ⁻¹	Agreeableness ⁻¹ , Neuroticism ⁻¹

Remark: ⁻¹ in reverse.

As can be seen, there is quite a potential overlap. Assuming that a brand's image is mainly created/maintained to attract (potential) customers, it is only fair to assume that it should show characteristics that are desirable or attention-seeking (dimension Excitement). This can be either by giving the customer extra value through image transfer from the brand to the buyer (dimension Competence and Sophistication) or by simplifying the buying decision. Analyzing both settings in depth is not the target of this thesis. Still, it could be an interesting topic for learning more about the interplay of brand personality and customer personality.

2.4.2 Company Personality

As written above, this section lists some research that set out to understand company personality but from an outside perspective, which is closely related to the brand personality concept. Two papers are presented below. For completeness, it has to be mentioned that even one book was published with "Company Personality" in the (sub)title (Furnham & Gunter, 2015, p. 1). However, the authors basically lumped together culture, climate, communications, and customers without specifically addressing personality from a psychological standpoint.

Slaughter, Zickar, Highhouse, and Mohr (2004, p. 85ff.) have chosen the same lexical approach (as was used for determining the Big Five) in order to find the basic dimensions of corporate personality. It has to be noted, again, that they focused on the outside perception of an organization (Slaughter et al., 2004, p. 86), which is in line with the brand personality approach. They also found five factors, which they called Boy Scout, Dominance, Innovativeness, Thrift, and Style. The one potential weakness of their model seems to be the strong intercorrelation between the five factors. Even at face value, the

dimensions of Innovativeness, Thrift, and Style seem to point in a general “sophistication” direction. Looking at the actual intercorrelations (Slaughter et al., 2004, p. 96) reveals that those three factors correlate with 0.5 to 0.57 (Thrift in the reverse). Unfortunately, a direct comparison to Aaker’s work is not possible since she did not list intercorrelations, but as discussed in Chapter 2.3.1.5, values above 0.4 are usually not seen in personality factors. This does not mean that their work is poor, but their solution might not be the most efficient one for capturing the most information (variability) with the fewest possible variables (guiding principle: Occam’s razor).

Otto, Chater, and Stott (2006, p. 1905ff.; 2011, p. 605ff.) followed a similar approach. They first used a clustering of descriptive adjectives to get (and reduce) their lexical base data set, and in a subsequent study, they employed factor analysis. They found four dimensions by which companies are described: Honesty, Prestige, Innovation, and Power. Interestingly, the Eigenvalues of the factors are quite unequal. While this is normal for every factor analysis (regardless of which rotation is used), the amount of difference is at least interesting. The presented Eigenvalues of the four factors ranged from 14.2 down to 4.3 (Otto et al., 2006, p. 1908). For comparison, in Aaker’s research, they went down from 31.4 to 6.7 (1997, p. 351), also showing quite unequal loading.

Based on this topic, a link to the GFP (General Factor of Personality) is possible (see Chapter 2.1.4). Assuming the GFP exists, it describes the personality of a person between the two extremes of having a good vs. difficult personality (Rushton & Irwing, 2011, p. 132). The same could be done for brand personality. It might even be that the significantly higher loading of Otto and colleagues’ research (2011, p. 605ff.) and Aaker (1997, p. 351) points in this direction. Regardless, if this is actually the case, it is at least evident that the first factor found in all three above-listed models (Sincerity, Boy Scout, and Honesty) would correlate heavily with a general factor of brand personality. This general factor could also be described as sympathy towards a brand, a thought that we will pick up again in Chapter 2.5.

The concept of brand personality is, without a doubt, an interesting one. Its utility in practice and conceptualization for marketers is evident. It is helpful for positioning a (new) brand in the market and in understanding customers’ perceptions. In this way, it can help to compare and subsequently shape a brand’s image to fit the desired personality that one deems appealing to their target audience. For this master’s thesis, it is less valuable because it mainly focuses on the customer/outside perspective and not on the internal (culture) aspects that characterize an organization.

2.5 Remarks and Discussion

A different way of organizing the above-listed research fields would have been by type of viewpoint on the company. Is the company described from the outside or an inside perspective? This distinction is also crucial for personality psychology, where the same two types exist. One focuses on the internal processes and propensities, while the other is concerned with the social reputation and perception of others (Hogan, 1991; cited in Slaughter et al., 2004, p. 86). The same logic can be applied to the description of an organization. Most of the organizational culture literature, especially the qualitative, influenced mainly by Edgar Schein (1990, p. 111ff.), is focused on internal mechanisms. On the other hand, brand personality research concentrates more on external perception. Of course, those two are linked and not separate. However, a case could be made that the internal view represents more of the truth while the external one is more of an image that can also be actively shaped through marketing. This has strong parallels to human psychology, where the internal processes, thoughts, and motivations are limitless in depth and complexity. At the same time, the person (persona) presented to the outside can only ever be a limited version. Similar to the brand representation, our presentation can be relatively decoupled from the internal proceedings. This aspect poses a strong counterargument for the combination of the two research domains, or at least it must be done cautiously.

Continuing with the parallels between person and organization, we come back to the paper from Ashforth and colleagues (2020, p. 29ff.). They presented a very interesting chain of thought where they recognized that humans have no hesitation in anthropomorphizing organizations, meaning we use the same language to describe them as we do for other humans. Their fundamental question was, “*Why is it that individuals, like the organizational member[s] [...], seem to have little problem describing organizations in humanized terms?*” (Ashforth et al., 2020, p. 29). Their answers are intuitive and not revolutionizing, but they serve as an essential basis for this master thesis. They claim that organizations are especially apt for being viewed as human-like. Mainly because every interaction with a (human) member of the organization shapes the image of the organization in a human-like form (Ashforth et al., 2020, p. 32). This way of understanding the perception of one’s organization lays the basis for the approach of this master thesis.

Another parallel in conceptualization between culture and personality is the idea of multiple layers. The iceberg or onion model was briefly described in Chapter 2.3.1.1 as the way of thinking about culture. From the outside, only artifacts are visible. In order to

get to the deeper layers (like values and basic assumptions), one must actively engage with the organization's members, for example, by asking "why?" questions. For personality, this seems to be somewhat similar. For example, the various levels, starting from the GFP, the Big Two, the traits (Big Five/HEXACO), the facets, the habits, and down to the actual behavior in each situation (see also Figure 1, p. 8). Also, in intelligence research, the notion of a general g-factor, as a latent parameter underlying all cognitive ability, is the current state of knowledge. Of course, there is always the question of whether those higher-level abstractions actually exist as the latent fundament or if they are just simplifications that happen to pop up due to methodical impurities. Regardless of their existence, if they help with our understanding and prove to be useful (valid) in practice, we should use and work with them.

Another layer-model of personality psychology that most people have heard of (at least in Austria) is Freud's Id, Ego, and Superego (originally in German: Es, Ich, Über-Ich) (reprint in Freud & Giampieri-Deutsch, 2020, p. 83ff). Freud, as the father of psychoanalytical practice, was probably not very interested in measuring personality but more in what motivates/drives people internally. One can think of the three parts as subpersonalities, like little voices in one's head or simply forces inside that tell every one of us what to do. Although the following short description does not provide justice to Freud's theory, it will serve the purpose of this discussion. The Id represents the drive for basic needs and wants; it is very primal and childlike. It is the voice an impulsive person follows and a restrained person ignores. The Superego represents our moral standards. It tells us what we know we should do to be a good person and what others expect us to do; it's our greatest judge. The Ego is what mediates between the two, represents who we are, and decides what we finally do as mature adults (at least in theory). Why is this relevant to the topic at hand? Interestingly, much research on organizational culture concentrated on the tension built between the desired culture and the actual culture (Cooke & Szumal, 2000, p. 153f.), sometimes referred to as "gap-analysis" (Fusch & Gillespie, 2012, p. 11ff.). There is a clear analogy between the wish of the management for a particular culture (Superego), the actual behavior (Ego), and what people would like to do (Id). Although exploring this way of thinking sounds very intriguing, it is not part of this thesis. For the topic at hand, the interest lies in the assessment of the current state of an organization. The same is true for personality tests, which only assess the actual current situation, not a person's ideal self.

An interesting difference between organizational culture and personality research is the critique of quantitative methods. Obviously (as stated in Chapter 2.3.1.1, about Schein's three levels), the qualitative method has high potency for profoundly understanding a

specific organization. Also, humans are probably the most complex beings/things that exist, maybe with the exception of the aggregate of multiple humans into one group/organization. Therefore, any simplification (which quantitative methods need to employ) is destined to fall short at some point. Regardless, it is evident when reading papers on both subjects in parallel that there is no doubt in personality psychology about the validity and usefulness of quantifying personality (at least since the 1990s). On the other hand, almost every organizational culture paper starts by stating that the quantitative approach is not unquestioned in the science community. One can only speculate why this is the case. Reasons might be the lack of agreement on one model, the over-proportional influence of some qualitative researchers, or the lack of usefulness in practice. Or it could be a combination of multiple factors. For example, adding a ten-item Big Five assessment to a typical psychology/sociology study adds minimal effort but opens up a whole new sphere of possibilities for correlations and conclusions. Since loads of literature already exists on the Big Five, there is also much to draw from and compare with. However, no such short measure exists for organizational analysis, and the literature is scattered, making it an unattractive choice to include on top of an existing study.

In any case, personality research is years ahead of organizational culture research, at least if one looks at the ease of how the Big Five (and maybe in the future, the HEXACO) is used in literature. If, at some point, organizational culture literature reaches a somewhat stable agreement on a quantitative model, it is likely that a general factor of organizational culture will also be discussed. This would, in resemblance to the GPF, most likely be a scale spanning between a “good culture” and a “poor/unhealthy/difficult culture”. It would also most probably align very well with the general sympathy towards an organization and correlate with job satisfaction, which could be thought of as a rough analogous to self-esteem, which was also found to be linked to the GPF (Just, 2011, p. 768f.).

Within this chapter, many different disciplines have been introduced, ranging from personality psychology, metaphors about organizations, the structure of organizations, and organizational culture to brand personality. The reason for touching on this massive array of different fields was to give the reader (and the author) a solid basis of the current state of the literature, plus some historical background. Furthermore, it will help with the instrument creation and the analysis in the subsequent chapters.

3 Method

As already became apparent in the introduction, a quantitative instrument will be developed and used as an online questionnaire for the practical section of this master's thesis. The instrument will be called OPI (Organizational Personality Inventory) and is one of the main outcomes of this work. Within this chapter, the research question will be addressed more directly, and testable hypotheses will be derived with the relevant literature in mind. Subsequently, the creation of the OPI is described and documented, and the questionnaire is developed.

Since the approach is quite exploratory and the resources are more limited than one would wish, some compromises must be struck. This will become especially evident in this chapter. For example, the compromise between exhaustive surveys, great for analyses, and the needed brevity for motivating people to participate, as well as the limited time for analysis, needs to be balanced (Jonkisz, Moosbrugger & Brandt, 2012, p. 34f.). As with any master's thesis at the FERNFH, the target of 100 filled questionnaires should be met, but more to this in Chapter 3.2.2.

3.1 Hypotheses

Clear hypotheses, which can be falsified, are needed to answer any research question when utilizing quantitative methods. In case the hypotheses turn out to be valid, the basis is laid for positively answering the research questions and giving the underlying idea merit. Let's start again by reiterating the research questions (Chapter 1.3).

- *How does an instrument based on the HEXACO personality model look like to measure the members' perceptions of their organization?*
- *Would this instrument yield the same factor structure as typically seen in personality psychology (HEXACO or Big Five dimensions)?*

To tackle the first question, Chapter 3.2 is used. There, the OPI will be derived based on the HEXACO-60, which contains 60 items to assess the six traits (Ashton & Lee, 2009, p. 340ff.). The results of the OPI will subsequently be utilized to evaluate its quality and to address the second research question. For the latter, more concrete hypotheses are needed, which are listed below. To gauge the overall value of the statistical results, comparisons to personality psychology will be drawn frequently. Primarily, the original HEXACO-60 results will be used, meaning their loading onto the different factors and

cross-correlations (Ashton & Lee, 2009, p. 342). The BPI-2 (Soto & John, 2017a, p. 117ff.) will serve as a second benchmark. We start with H1, which is a very plain comparison of the OPI and the HEXACO-60.

Hypothesis H1: *Calculating the six HEXACO dimensions with the items of the OPI will yield the same internal reliability and cross-correlation values (within error margins) as the original HEXACO-60 results.*

This hypothesis is very likely to fail because many parameters are changed. Even though the intention is to transform the HEXACO-60 items without interfering with the deeper meaning, changes will occur. Furthermore, the sample will be different, and since the instrument will be deployed in German and English, additional variations have to be expected as well. So, this calls for less stringent fallback hypotheses that would still allow to answer the research question positively. With the H2 (H2a and H2b) hypotheses, factor analytical results will be compared to the original HEXACO results.

Hypothesis H2a: *Factor analyzing the OPI results will lead to the same six factors as the HEXACO, albeit with minor differences in the factor loadings for the various items.*

Of course, “minor” is a suboptimal definition of difference; however, as long as the central concept is still visible behind the factors, H2a can be viewed as proven, and the second research question is positively answered. However, to give even more room for change, H2b is added, which compares the OPI results with the Big Five dimensions. Theoretically, we could extend this line of argumentation and add more and more variations of the personality dimensions (the “Big Two”) or Eysenck’s PEN dimension, etc. However, at a certain point, we would just be fishing for similarities.

Hypothesis H2b: *Factor analyzing the OPI results will yield the same five factors as the Big Five, albeit with minor differences in the factor loadings for the various items.*

When looking at the explained variation of the ideal factors in typical Big Five and HEXACO personality test results, values range from roughly 30% to 50% (Ashton & Lee, 2009, p. 342; Soto & John, 2017a, p. 129). It is essential to note right away that this is not the overall explained variation of a person’s being by the model but how well the used factors capture the variation within the asked questions. This must be kept in mind, especially because in typical instrument developments, the items are chosen to capture the desired dimensions in their purest form (e.g., Ashton & Lee, 2009, p. 341; DeYoung et al., 2007, p. 886). As already briefly discussed in Chapter 2.1.2 (with the AB5C), there are many adjectives (and statements) that reflect more than one dimension. However, in practice, this makes the scoring almost impossible, or at least annoying. Therefore,

questionnaires are typically built with only the items that have high loading on one factor and little to none on the others (for example, Ashton & Lee, 2009, p. 341; DeYoung et al., 2007, p. 886). This skews the results in a way that makes the output appear more uniform and cleaner than reality, leading to high alpha reliability (internal consistency) (de Vries, 2013, p. 871f.). The explained variation is, therefore, actually more of a gauge for the “purity” of the chosen items than the quality of the model. Additionally, the explained variation only holds true for the exact factors extracted by the factor analysis, not necessarily for the simplified scales. However, in practice, it is very common to simply average over the items that primarily load on one factor instead of properly factor analyzing the results. Nevertheless, it is in the interest of understanding how well the item transformation has worked and quantifying how much of the OPI variation is explained by the emerging factors, so H3 is added.

Hypothesis H3: *The variation explained by the resulting OPI factors is within the same range as the original HEXACO-60 and the BFI-2 results.*

Out of interest, a fourth hypothesis is added. In the discussion section of personality psychology (Chapter 2.1.4) and then later in the overall discussion on the literature review (Chapter 2.5), the GFP was mentioned. The hypothesis was formed that this might be a measure of how valuable/good a personality/brand is rated (Rushton & Irwing, 2011, p. 132). Analogous, a general factor of organizational personality could exist. If so, it would point in the direction of overall sympathy for the organization. Following this logic, we can check for it by stating H4.

Hypothesis H4: *The first factor of an unrotated factor analysis of the OPI results correlates significantly with the overall sympathy towards one’s organization.*

H1 to H3 will all directly and indirectly help to answer the first research question. However, some items may not load perfectly on the intended factors. If this is the case, it makes sense to explore a revised version of the OPI (by leaving away some items) during the analysis.

3.2 Development of the Instrument

Within this subchapter, the instrument is presented, and reasons are given why certain things are chosen the way they are. For clarity, it is divided into a specific section for the OPI, which includes the core part of the instrument and the additional questions. Furthermore, the third subchapter describes some general thoughts and the pretest.

The structure of the questionnaire is as follows. After a short introductory text, including the remark about choosing the preferred language (English or German), the only knock-out question is asked. This checks if the participant is currently part of an organization (more to this in section 3.2.2). Then, the OPI items are listed in the order of their number (Table 11, p. 53). Afterward, all the other questions are presented as listed in Table 12, p. 58. The order was chosen in a way that seemed the most logical, first the core questions and then leading into the simpler ones. Also, care was taken to avoid jumping between topics too abruptly within the additional questions.

One big concern from the start was the length of the questionnaire. A quick check of about ten previous master's theses at the FERNFH revealed an average of approximately 40 "core"-items, but the variety was huge, spanning from below 20 to above 60. On top, there were typically about ten "additional" items (socio-demographic, etc.). Based on the author's own experience, about seven to ten minutes seem to constitute the sweet spot that participants are willing to sacrifice. Much longer than that will probably require some other reward (money, price, course credit, etc.). Therefore, the target for the overall questionnaire length was set to be about 60, with roughly 50 for the OPI.

3.2.1 Development of the OPI

Continuing with the issue of length, choosing the right HEXACO questionnaire to start with was important. Available instruments have, of course, a defined length, and they roughly fall into one of three categories, shown below. For reference, the Big Five questionnaires are also listed (taken from Table 1, p. 15, and Table 2, p. 20).

- (Very) short: below 25 items. For example: BHI, FIPI, TIPI, BFI-2-S, BFI-2XS
- Medium: about 50 items. For example: HEXACO-60, NEO-FFI3, BFI-2, Mini Markers.
- Long: 100 items and more. For example: HEXACO-100, IPIP-HEXACO, NEO-PI-3, TDA, AB5C-IPIP, BFAS.

Of course, the length will help with completeness (Soto & John, 2019, p. 445). According to Soto and John (2019, p. 448), reducing a 12-item scale down to six items still obtained 89% of its predictive power for the Big Five personality traits. Furthermore, most questionnaires will measure not only the traits but also several facets of each. In the case of the HEXCAO, four facets per trait are typical, which alone requires at least 24 items (6x4, as done in the BHI). For the OPI, keeping the facets seemed to overcomplicate the anyhow exploratory approach further, so it was decided not to take

facets into account. This leaves this study with the problem of either using the BHI (24 items) or the HEXACO-60 (60 items) as a basis. Because it is always easier to reduce, the HEXACO-60 was chosen. Since the item transformation is a major part of this thesis, and the reduction of items somewhat overlaps with it, the process of arriving at about 50 items is described in detail below.

First, the complete list of 60 questions from the original HEXACO-60 (Ashton & Lee, 2009, p. 345) was taken, and all questions were transformed to apply to the personality of an organization. This already revealed some hard-to-transform items, which were marked. Then, these tricky items were looked at again, and the underlying dimensions and facets were reviewed. Based on this, 12 items were excluded. The following guiding principles were used for the exclusion:

- Items that were close to impossible to transform were excluded.
- Items that captured something already present in one of the other items due to the transformation were omitted.
- The number of items per dimension needed to be the same (reduction from ten to eight).
- The ratio of reverse items per dimension should stay unchanged (approx. 50%).
- Although the facets will not be used directly, for consistency, no facet should not be excluded completely.

Theoretically, the last point could be used to demand two items per facet, leading to eight per dimension and 48 overall. However, this proved to contradict the other targets slightly. In Table 11, p. 53, all the original HEXACO-60 items are shown, and the transformations are given (in English and German). The excluded items are marked with a strikethrough. An overview comparison to the original HEXCAO-60 is shown in Table 10 below. The main reason for not sticking to two items per facet was that two items proved to be quite challenging to transform. One was part of the Aesthetic Appreciation (Openness to Experience), and one from the Dependence (Emotionality) facet. Since the HEXACO-60 only has two items in each of these facets, only one item remained in the OPI. On the other hand, Creativity (Openness to Experience) and Fearfulness (Emotionality) are represented by three items each. That balances out the six dimensions. As stated above, the facets are of secondary interest to this study; therefore, this imbalance was accepted. The remaining items were kept at their original position (constantly rotating in the O-C-A-X-E-H order), with the items above position 48 replacing the corresponding taken-out items before. Table 10 shows a comparison of the statistics of the OPI vs. the HEXACO-60.

Table 10: Overview comparison of the OPI items and the original HEXACO-60.

Parameter	OPI	HEXACO-60
Items per dimension	8	10
Normal vs. reverse items	24:24 (50% reverse)	32:28 (47% reverse)
Normal vs. reverse items per dimension	3-5:3-5	4-6:4-6
Items per facet	2x1, 20x2, 2x3	12x2, 12x3

Let's address now how the item transformation was done. Many items are not directly transferable to the perception of an organization. As an example, let's take the first item, "I would be quite bored by a visit to an art gallery". An organization cannot be bored and not visit an art gallery. Or at least it would be a very specific scenario like: "Our organization would not plan a trip to an art gallery because this is not considered interesting" (or similar). While this would most probably capture the essence, it describes a particular scenario, and this may lead to problems. For example, an organization might not plan trips with its members at all (for very different reasons), which would distort the answer in an undesired way. So, it was decided to generalize and use the original item mainly as a rough guide. The following statement was used for this item: "Art has no relevance within our organization."

Within the previous paragraph, it became clear that the transformation from the original HEXACO-60 (for standard personality evaluation) to the OPI (for organizational personality) is a tricky task. Since most items need substantial rewriting, it becomes imperative to state clearly the targets and boundary conditions that were used in the creation of the OPI items. Most of those were already listed in the Introduction of this thesis, but as a reminder here again in the form of a compact bullet list:

- The construct to assess is the "perception of one's organization". Alternatively, the definition: "a set of human characteristics associated with one's organization" can act as a guiding principle. In case this does not help either, we can borrow from organizational culture "*the way we do things around here*" (Deal & Kennedy, 1982, p. 49).
- Regardless of the above-mentioned guiding definitions, the important part is that the organization is to be assessed. This means not the CEO, not one's behavior in the organization, and not the direct superior, but the overall impression. Of course, all those play into the impression of the organization. However, it is important not to mislead the participants by formulating the items in a way that mainly focuses their attention on one area/group/person alone.

- This brings us to the following question: is the participant part of the organization, or is the organization something distant (for example, the management board located in a different city)? To capture both aspects, it was decided to use both formulations (“we” vs. “the organization”), depending on what fit the item best.
- For practical reasons, it is sometimes not possible to refer to the organization as a whole; in this case, another guiding principle comes into play. Known from the organizational culture literature, most see the core of organizational culture in the typical behavior (what is considered “normal”) and the underlying assumptions and values (Schein, E. & Schein, P., 2017, p. 6; Taras et al., 2009, p. 358f.; Hartnell, Ou & Kinicki, 2011, p. 679f.). Therefore, another way of asking about the perception of one’s organization is by asking about the behavior that is considered typical and appropriate. This goes back to the definition of Deal and Kennedy (1982, p. 49), “*the way we do things around here*”.
- Last but not least, the underlying corresponding trait (and facet) was also considered when creating the OPI items. For this, the knowledge gathered from the literature review came in handy.

A note on the difference between “we” vs. “the organization” must be added. It is expected that this might have a relevant influence on the results. “We” signals something personal and close, maybe focusing the attention more on the close team, while “the organization” clearly directs the focus to the structure and more distant people/mechanisms. Since both parts should be captured within the OPI, it was decided to balance the use of those two forms equally among the items and dimensions. There is even a third type of statement, which does not include “we” nor “the organization” but is more general; for example, “Decisions are typically made by intuition and less on concrete facts” (OPI_20). One can interpret this as “we typically make ...” and “my organization typically makes ...”, so these types of items were not accounted for in the balancing mentioned above.

In the following Table 11, all 60 items are listed, and their transformed version (into the OPI items) is shown. The order shown is the original one from the HEXACO-60 (Ashton & Lee, 2009, p. 345). The items in the OPI questionnaire were presented in the order of the code (OPI_01 to OPI_48). Since the OPI was developed for English and German, both versions are listed. In the questionnaire, a five-point Likert scale was used (Döring & Bortz, 2016, p. 269ff.), which seems like a reasonable compromise between resolution and simplicity. The option of “I don’t know/understand” is also given. This will also help in assessing if the transformation worked or if participants had a hard time answering the questions. Initially, a seven-point Likert scale was intended with two additional options

for “I don’t know” and “I don’t understand”. However, upon seeing how large the questionnaire would appear, the number of options was reduced. Furthermore, the original HEXCAO-60 also uses a 5-point scale, so keeping this the same made sense anyway.

Table 11: OPI items based on the HEXACO-60.

Code	Factor	HEXACO-60	OPI (English)	OPI (German)
OPI_01	O ⁻¹	I would be quite bored by a visit to an art gallery.	Art has no relevance within our organization.	Kunst hat in unserer Organisation keine Relevanz.
OPI_02	C	I plan ahead and organize things, to avoid scrambling at the last minute.	We plan and organize things, to avoid scrambling at the last minute.	Wir planen voraus und sind gut organisiert, um Stress in der letzten Sekunde zu vermeiden.
OPI_03	A	I rarely hold a grudge, even against people who have badly wronged me.	If you make a mistake, we are quick to forgive.	Wenn man einen Fehler gemacht hat, wird einem bei uns schnell wieder verziehen.
OPI_04	X	I feel reasonably satisfied with myself overall.	We ourselves are reasonably satisfied with our organization.	Die meisten sind zufrieden mit unserer Organisation.
OPI_05	E	I would feel afraid if I had to travel in bad weather conditions.	Downturns in the market situation put the whole organization at unease.	Verschlechterungen der Marktbedingungen machen die ganze Organisation nervös.
OPI_06	H	I wouldn't use flattery to get a raise or promotion at work, even if I thought it would succeed.	Flattery is a very atypical way of getting ahead in our organization.	Schmeicheleien sind ein unübliches Mittel in unserer Organisation, um sich Vorteile zu verschaffen.
OPI_07	O	I'm interested in learning about the history and politics of other countries.	We have a culture of interest and learning.	Wir pflegen eine Kultur des Lernens und der Offenheit.
OPI_08	C	I often push myself very hard when trying to achieve a goal.	We set ambitious targets and are pushing another to achieve those.	Wir setzen uns ambitionierte Ziele und treiben uns an diese auch zu erreichen.
OPI_09	A ⁻¹	People sometimes tell me that I am too critical of others.	We usually judge each other strictly.	Wir beurteilen einander in der Regel streng.
OPI_10	X ⁻¹	I rarely express my opinions in group meetings.	In my organization meetings are no good place to express one's opinion.	In meiner Organisation sind Meetings ein schlechter Ort, um die eigene Meinung zu äußern.
OPI_11	E	I sometimes can't help worrying about little things.	It is common in my organization to obsess over seemingly unnecessary things.	In meiner Organisation ist es üblich, sich über scheinbar unnötige Dinge Gedanken zu machen.
OPI_12	H ⁻¹	If I knew that I could never get caught, I would be willing to steal a million	My organization always tries to use the legal framework to its maximum advantage.	Meine Organisation versucht den rechtlichen Rahmen immer maximal zu ihrem Vorteil auszunutzen.
OPI_13	O	I would enjoy creating a work of art, such as a novel, a song, or a painting.	In my organization, creative outlets are valued.	In meiner Organisation werden kreative Hobbies geschätzt.
OPI_14	C ⁻¹	When working on something, I don't pay much attention to small details.	Accuracy is generally a lower priority in our organization.	Genauigkeit hat in unserer Organisation in der Regel eine untergeordnete Priorität.
-	A ⁻¹	People sometimes tell me that I'm too stubborn.	Once we work on a project, it is very hard to change the direction we are going.	Wenn wir an einem Projekt arbeiten, ist es sehr mühsam die Richtung des Projekts zu ändern.
OPI_16	X	I prefer jobs that involve active social interaction to those that involve working alone.	We typically work in teams/groups.	Wir arbeiten typischer Weise in Teams/Gruppen.

-	E	When I suffer from a painful experience, I need someone to make me feel comfortable	In case of a bad day, it is normal to talk about it with someone.	Wenn jemand einen schlechten Tag hat, dann redet man normaler Weise darüber.
OPI_18	H	Having a lot of money is not especially important to me.	Money is a secondary motivator for us to work in my organization.	Geld ist ein untergeordneter Motivator für uns, in meiner Organisation zu arbeiten.
OPI_19	O ⁻¹	I think that paying attention to radical ideas is a waste of time.	We don't even pay attention to crazy-sounding ideas.	Verrückt klingenden Ideen schenken wir erst gar keine Beachtung.
OPI_20	C ⁻¹	I make decisions based on the feeling of the moment rather than on careful thought.	Decisions are typically made by intuition and less on concrete facts.	Entscheidungen werden in der Regel nach Intuition und weniger auf der Grundlage konkreter Fakten getroffen.
OPI_21	A ⁻¹	People think of me as someone who has a quick temper.	It is usual to have heated and loud discussions in my organization.	Hitzige und laute Diskussionen sind in meiner Organisation üblich.
OPI_22	X	On most days, I feel cheerful and optimistic.	People are typically in a good mood when they come to work.	Die Menschen kommen in der Regel mit guter Laune zur Arbeit.
-	E	I feel like crying when I see other people crying.	Showing empathy is not untypical in my organization.	Mitgefühl zu zeigen ist nichts Unübliches in meiner Organisation.
OPI_24	H ⁻¹	I think that I am entitled to more respect than the average person is.	Showing respect is highly valued in my organization.	Respekt zu zeigen ist wichtig in meiner Organisation.
-	Q	If I had the opportunity, I would like to attend a classical music concert.	-	-
OPI_26	C ⁻¹	When working, I sometimes have difficulties due to being disorganized.	We sometimes struggle with efficiently organizing our resources.	Wir tun uns manchmal schwer unsere Ressourcen effizient zu organisieren.
OPI_27	A	My attitude toward people who have treated me badly is "forgive and forget".	We have an open culture of making mistakes.	Wir haben eine offene Fehlerkultur.
-	X ⁻¹	I feel that I am an unpopular person.	In our culture it is normal to be more closed off.	In unserer Organisationskultur ist es normal zurückgezogener zu sein.
OPI_29	E	When it comes to physical danger, I am very fearful.	In my organization, it's common to worry about job security.	In meiner Organisation ist es üblich, sich um seine Jobsicherheit Sorgen zu machen.
OPI_30	H ⁻¹	If I want something from someone, I will laugh at that person's worst jokes.	It is typical to laugh even at the bad jokes of our superiors.	Es ist bei uns üblich auch über die schlechten Witze der Vorgesetzten zu lachen.
OPI_31	O ⁻¹	I've never really enjoyed looking through an encyclopedia.	My organization has little interest in my continuing education.	Meine Organisation hat geringes Interesse daran, dass ich mich fortbilde.
OPI_32	C ⁻¹	I do only the minimum amount of work needed to get by.	In my organization, the expectation is that you only do the bare minimum anyway.	In meiner Organisation wird erwartet, dass man sowieso immer nur das Minimum liefert.
OPI_33	A	I tend to be lenient in judging other people.	In my organization, we are mild in our judgment of others.	In meiner Organisation sind wir mild in unserer Beurteilung von anderen.
OPI_34	X	In social situations, I'm usually the one who makes the first move.	We encourage people to be proactive and take risks.	Wir ermutigen Menschen, proaktiv zu sein und Risiken einzugehen.
OPI_35	E ⁻¹	I worry a lot less than most people do.	Compared to other organizations we are very stable and steadfast.	Verglichen mit anderen Organisationen sind wir sehr stabil und beständig.
OPI_36	H	I would never accept a bribe, even if it were very large.	We are honest, even under high pressure	Wir sind ehrlich, selbst unter hohem Druck.

OPI_37	O	People have often told me that I have a good imagination.	We foster an environment of creative thinking.	Wir fördern ein Umfeld des kreativen Denkens.
OPI_38	C	I always try to be accurate in my work, even at the expense of time.	We value precision and quality highly, even at the expense of time.	Wir schätzen Genauigkeit und hohe Qualität, auch wenn es zu Lasten von Geschwindigkeit geht.
OPI_39	A	I am usually quite flexible in my opinions when people disagree with me.	We live in a culture where compromise is considered something positive.	Wir leben eine Kultur in der Kompromisse positiv gesehen werden.
OPI_40	X	The first thing that I always do in a new place is to make friends.	We take care to integrate new people quickly, not only professionally but also socially.	Wir bemühen uns Neuzugänge auch sozial schnell einzubinden, nicht nur die Arbeit betreffend.
OPI_41	E ⁻¹	I can handle difficult situations without needing emotional support from anyone else.	My organization is very stable, we even get through difficult times without too much fuss.	Meine Organisation ist sehr stabil, selbst schwierige Zeiten stehen wir ohne große Aufregung durch.
OPI_42	H ⁻¹	I would get a lot of pleasure from owning expensive luxury goods.	My organization likes to show how successful it is.	Meine Organisation zeigt gerne, wie erfolgreich sie ist.
OPI_43	O	I like people who have unconventional views.	My organization welcomes people with unconventional views	Meine Organisation ist offen für Personen mit ungewöhnlichen Ansichten.
-	C⁻¹	I make a lot of mistakes because I don't think before I act.	It's part of our culture to act before thinking.	Es ist Teil unserer Kultur zuerst zu handeln und dann zu denken.
OPI_45	A	Most people tend to get angry more quickly than I do.	In other organizations, it is more common to show anger openly than in mine.	In anderen Organisationen ist offen gezeigter Ärger üblicher als in meiner.
OPI_46	X ⁻¹	Most people are more upbeat and dynamic than I generally am.	Other organizations are generally more optimistic and dynamic than ours.	Andere Organisationen sind in der Regel optimistischer und dynamischer als unsere.
OPI_47	E	I feel strong emotions when someone close to me is going away for a long time.	When an important person leaves the organization, they are missed for many years.	Wenn eine wichtige Person die Organisation verlässt, wird sie noch lange vermisst.
OPI_48	H ⁻¹	I want people to know that I am an important person of high status.	Status is an important thing in the culture of my organization.	Status ist etwas Wichtiges in unserer Organisationskultur.
OPI_25	O ⁻¹	I don't think of myself as the artistic or creative type.	We are not very creative as an organization.	Wir sind als Organisation nicht sehr kreativ.
-	C	People often call me a perfectionist.	Perfectionism is an important part of our culture.	Perfektionismus ist ein wichtiger Bestandteil unserer Kultur.
-	A	Even when people make a lot of mistakes, I rarely say anything negative.	Mistakes are typically not addressed directly.	Fehler werden typischer Weise nicht direkt angesprochen.
OPI_28	X ⁻¹	I sometimes feel that I am a worthless person.	Only very few people are proud to work for my organization.	Die wenigsten sind stolz, bei meiner Organisation zu arbeiten.
OPI_17	E ⁻¹	Even in an emergency I wouldn't feel like panicking.	Even in difficult times, we trust that the organization will care for us.	Selbst in schwierigen Zeiten vertrauen wir darauf, dass sich die Organisation um uns kümmert.
-	H	I wouldn't pretend to like someone just to get that person to do favors for me.	-	-
-	Q	I find it boring to discuss philosophy.	-	-
OPI_44	C ⁻¹	I prefer to do whatever comes to mind, rather than stick to a plan.	There is no overall plan in my organization, everyone works on their own.	In meiner Organisation gibt es keinen Gesamtplan, jede:r arbeitet so vor sich hin.

Method

OPI_15	A ⁻¹	When people tell me that I'm wrong, my first reaction is to argue with them.	Tough discussions are part of how our organization operates.	Harte Diskussionen sind Teil der Arbeitsweise unserer Organisation.
-	X	When I'm in a group of people, I'm often the one who speaks on behalf of the group.	-	-
OPI_23	E ⁻¹	I remain unemotional even in situations where most people get very sentimental.	My organization lives in the past.	Meine Organisation lebt in der Vergangenheit.
-	H⁻¹	I'd be tempted to use counterfeit money, if I were sure I could get away with it.	My organization sometimes does things that I think would not hold in front of a court.	Meine Organisation tut manchmal Dinge, von denen ich glaube, dass sie vor Gericht keinen Bestand haben würden.

List of original items from Ashton and Lee (2009, p. 345). Remarks: The abbreviations in the factor column are from the typical HEXACO acronym. ⁻¹ for reverse items. Lines marked with a strikethrough are not taken for the OPI.

3.2.2 Additional Items Used in the Questionnaire

The core part of the questionnaire is the OPI, and its items were described in the previous subchapter. However, other items are also part of the survey. They will help understand the sample's representativeness and to answer H4. Also, the additional data might spark some new ideas that can be discussed in the outlook section of this thesis.

On the first two pages of the survey, remarks on how to switch the language were given (drop-down menu at the top). This option stayed available throughout the whole questionnaire. This was only possible because an online questionnaire was used. Right after this first page, a knock-out question was presented. Since generally, only people who are currently working in an organization are of interest, this was checked before starting the OPI section. Theoretically, one could have also answered the questions for a previous organization. However, in this case, the OPI items would have needed to be differently formulated (past tense instead of present tense), making them harder to understand and probably annoying to some participants. Therefore, it was decided to exclude this possibility. That made the question about being part of an organization a crucial one. For this reason, it was put before the OPI items and implemented as a knock-out question. If answered negatively, the questionnaire came to an end. This page also included a very simple to understand description of organization: "By organization, I mean, for example, companies/firms, institutions, non-profit organizations, etc... anything where people work together in an organized way on a permanent basis.". This addition was one of the outcomes of the pretest; participants were unsure if their institution or NGO also counted as an organization.

After the OPI, it made sense to ask for the typical socio-demographic parameters, mainly age and gender. Additionally, some questions about the organization and one's

involvement were also of interest. That's why the weekly hours, the leadership responsibility, the size of the organization, the duration of the work in the organization, and the age of the organization were asked. Also, finding out the field in which the organization operates was of interest. Furthermore, to address H4, a question about the overall sympathy for one's organization was added. Another interesting question to ask was who/what participants had in mind when answering the OPI. As written in the previous subchapter (on the OPI development), participants should not be guided to think of one specific person or subgroup but of the organization as a whole. Therefore, a list was presented with typical options of who/what participants might have thought about during the OPI items. Finally, the last question allowed participants to add their thoughts on how they perceived the questions. Since the instrument itself is the "device under test", giving this possibility seemed to be a good idea. Table 12 shows the non-OPI items. The order of appearance is as listed in this table with the language as an always-open option, the knock-out question before the OPI items, and the rest after. The questions were arranged in a way that made the flow seem most natural.

Table 12: Additional items besides the OPI used in the questionnaire.

Code	English	German	Answering format
EG_1	<i>(für die deutsche Version, bitte im Menü oben die Sprache umschalten)</i>	<i>(for the English version, please change the language at the top menu)</i>	English / Deutsch
KO_1	Are you currently part of an organization (for example a company, non-profit organization, etc.)?	Bist du derzeit Teil einer Organisation (z.B. Unternehmen, Non-Profit Organisation, etc.)?	Yes/No (knock-out question)
AD_1	How would you rate your overall sympathy for your organization?	Wie würdest du deine Sympathie gegenüber Deiner Organisation einschätzen?	11-point scale (low – high)
(AD_2)	<i>Who/what did you think about when answering the questions before?</i>	<i>An wen/was hast du gedacht, bei der Beantwortung der Fragen vorhin?</i>	<i>See subquestions below</i>
AD_2a	...Myself in the organization	...Mich selbst in der Organisation	Single choice (see text below)
AD_2b	...My direct manager	...Meine direkte Führungskraft	Single choice (see text below)
AD_2c	...My direct co-workers	...Meine unmittelbaren Arbeitskolleg:innen	Single choice (see text below)
AD_2d	...My team	...Mein Team	Single choice (see text below)
AD_2e	...My department	...Meine Abteilung	Single choice (see text below)
AD_2f	...Top management	...Die Führungsebene	Single choice (see text below)
AD_2g	...CEO or similar person	...CEO bzw. vergleichbare Person	Single choice (see text below)
AD_2h	...Mission, Vision, and/or Values of the organization	...Mission, Vision und/oder Werte der Organisation	Single choice (see text below)
AD_2i	...Code of Conduct	...Code of Conduct	Single choice (see text below)
AD_2j	...Internal regulations/rules of procedure	...Interne Richtlinien / Geschäftsordnung	Single choice (see text below)
ORG_1	How many years have you been working for this organization?	Seit wie vielen Jahren arbeitest du bereits für diese Organisation?	Open field with number input

Method

ORG_2	How many employees does the organization have?	Wie viele Mitarbeiter hat die Organisation?	Single choice (see text below)
ORG_3	How many years has the organization been in existence?	Seit wie vielen Jahren gibt es die Organisation bereits?	Single choice (see text below)
ORG_4	In which industry or field does the organization primarily operate?	Welcher Branche gehört die Organisation primär an?	Single choice (see text below)
PER_1	Do you have leadership responsibility in the organization/company?	Hast du in der Organisation Führungsverantwortung?	Single choice (see text below)
PER_2	How many hours do you normally work in the organization per working week?	Wie viele Stunden arbeitest du üblicherweise pro Arbeitswoche für die Organisation?	Open field
PER_3	What is your year of birth?	Was ist Dein Geburtsjahr?	Open field with number input
PER_4	What is your gender?	Was ist Dein Geschlecht?	Single choice (see text below)
AD_3	Are there any thoughts you would like to share with me, in regard to this study?	Gibt es irgendwelche Gedanken, die du mir noch mitteilen möchtest?	Open field

Remarks: EG (English/German), KO (Knock-Out), AD (Additional), ORG (Organization), PER (Personal).

AD_2 (AD_2a till AD_2j): This item group contains things that the participants are expected to think about when answering the questions from the OPI. Initially, this was set up as a multiple-choice question; however, in the pretest, it became clear that participants needed more answering possibilities. Therefore, it was decided to use a set of single-choice-format items with five answering possibilities each: often, rarely, never, “not existent in my organization”, and “I don’t know”. In German: häufig, selten, nie, “gibt es in meiner Organisation nicht”, and “kenne ich nicht”. The following items (AD_2a till AD_2j) were presented: myself in the organization, my direct manager, my direct co-workers, my team, my department, top management, CEO or similar person, “Mission, Vision, and Values of the organization”, Code of Conduct, and Internal regulations/rules of procedure. In German: mich selbst in der Organisation, meine direkte Führungskraft, meine unmittelbaren Arbeitskolleg:innen, mein Team, meine Abteilung, die Führungsebene, CEO bzw. vergleichbare Person, “Mission, Vision und/oder Werte der Organisation”, Code of Conduct, and Interne Richtlinien/Geschäftsordnung.

ORG_2: Here, an integer input would be a feasible option. However, it is presumable that not everyone knows how many people work in one’s organization, especially if it is a large one. Therefore, the following categories are built: 1-9, 10-49, 50-199, 200-999, ≥1000, and others (please specify). The last option was primarily added as a safety measure.

ORG_3: The same logic applies to this item as for ORG_2 above. Also, ranges are given to simplify the participants’ answers: 0-3, 4-9, 10-29, ≥30, and others (please specify). The last option was, again, primarily added as a safety measure.

ORG_4: For the possible answers on the field or industry in which the organization operates, the Wirtschaftskammer Österreich taxonomy was used (www.wko.at,

24.03.2024). Compared to other, seemingly more sophisticated, classification systems, such as the GICS (Global Industry Classification Standard; www.spglobal.com, 24.03.2024), it only contains seven categories that are understandable by non-experts. The downside is that it only contained for-profit organizations and no institutions or government-funded branches. Therefore, the list was extended by those. The possible answers are banking and insurance, trade and crafts, commerce, industry, information and consulting, tourism and leisure, transport and traffic, education and science, health and social services, agriculture and forestry, public administration, and others (please specify). German: Bank und Versicherung, Gewerbe und Handwerk, Handel, Industrie, Information und Consulting, Tourismus und Freizeitwirtschaft, Transport und Verkehr, Bildung und Wissenschaft, Gesundheit und Soziales, Land- und Forstwirtschaft, Öffentliche Verwaltung, and Sonstiges (bitte angeben).

PER_1: Theoretically, this question could be answered with a simple yes/no option. However, it seems relevant to know the level of leadership role. Therefore, the possibilities yes (upper management, executive level), yes (middle management, department leader), yes (lower management, team leader), no, and others (please specify) are given to choose from. In German: ja (oberes Management, Führungsebene), ja (mittleres Management, Abteilungsleitung), ja (unteres Management, Teamleitung), nein, and Sonstiges (bitte angeben).

PER_4: Regarding the gender question, a pragmatic approach was chosen. Practically speaking, the whole sex vs. gender debate is irrelevant to the study at hand. Therefore, an easy-to-understand solution was chosen by offering female, male, diverse/non-binary, and “I don’t want to say” (Döring, 2013, p. 104ff.). In German: weiblich, männlich, divers, and “will ich nicht bekannt geben”.

3.2.3 General Remarks and Pretest

The questionnaire was created in Microsoft Forms (forms.office.com, 30.03.2024). Originally, soSci Survey was planned, but the author wanted to try something new. Forms looks nice and is very quick and easy to use, which makes it very appealing. However, it also became clear that it restricts the creator quite significantly. SoSci Survey would allow for more fine-tuned solutions, but it would also take more time to implement. Nevertheless, the restrictions of Forms made some minor modifications of the original ideas necessary but improved the overall appearance (at least in the author’s view). All questions, except the last one (AD_3), were set as mandatory. So, there are no missing values within the analysis.

From the start, the intention was to make the whole questionnaire easy to read and reduce participants' frustration to a minimum. This meant that many items were rewritten multiple times during the creation and testing phase. The pretest (with four people) proved to be immensely helpful. At least 20 items were changed because participants found them either hard to answer intuitively, needed help understanding what was meant, or even misunderstood the question completely. The author used the "thinking out loud" technique from UX testing for three testers. The insight that the first few testers (in this case, participants) give already highly valuable feedback proved right once more (Nielsen & Landauer, 1993, p. 206ff.). Reversely formulated items proved to be especially challenging to understand. Interestingly, also the naming of the Likert levels was also a relevant topic. Initially, the very common "fully disagree, disagree, neutral, agree, fully agree" was used, but this did not match the expected equal spacing. After some back and forth, it was changed to: "disagree, mainly disagree, neutral, mainly agree, agree". Also, the default formatting and settings in Forms proved to be not as intuitive as initially thought. Again, the feedback was very helpful in getting the questionnaire into a more professional state. The two languages also proved to be quite time-consuming to set up. It was not so much the translation work, but due to the iterative improvement process, changes always had to be done in two different places simultaneously. The Likert sections of the OPI were intentionally split up into six parts, two per page. This was done to keep the "disagree to agree" scale close by and not to overwhelm the participants. This meant that every fundamental change in this scale had to be implemented in 12 places (six per language).

The wording of the whole questionnaire was done in a more informal way than is typical for surveys. This was an intentional decision for multiple reasons. On one hand, it should be as convenient, maybe even fun, for the participants to answer and click through the items. The hope was that a more down-to-earth style would support this target. Furthermore, it should also promote interaction with the author, be it by the use of the last (open-ended) question (AD_3) or by direct contact (for example, via E-Mail). This last option was offered at the beginning of the survey and in the various distribution messages. Due to this general decision in style, the German "Du" instead of "Sie" was also used. Which is somewhat atypical; however, it fits more with the generally desired tone of the survey and distribution network.

3.3 Sampling Method

As with most surveys, a convenience sample was used (Döring & Bortz, 2016, p. 305f.). This will inevitably lead to the typical problem of WEIRD results (Western, Educated, Industrial, Rich, Democratic) (Henrich, Heine & Norenzayan, 2010, p. 61ff.). This acronym describes quite nicely that many studies that represent cornerstones of modern scientific knowledge are obtained by studying a somewhat abnormal sample. Regardless of this, albeit a fascinating side note, this survey is no exception. The questionnaire was distributed in the author's network, presumably leading to a strong bias towards the higher educated and Western demographic. Besides the friends and family of the author, the colleagues from FERNFH, and work, a more extensive group was contacted via LinkedIn. However, this recruited again mainly from the same biased population. A detailed description of the statistics of the participants is given in Chapter 4.1. It must be reiterated that the type of research for this thesis is quite exploratory, allowing for a cruder method because perfection is not the primary target.

The questionnaire was actively open from 6.4.2024 to 15.4.2024. The distribution happened across multiple channels at the same time. Family and Friends, work colleagues, LinkedIn Contacts, and the FERNFH platform were used. They all got similar but optimized introductions to participate in the survey, some in German and some in English. The reason for keeping the time window to about a week was that there was little to expect after a few days anyway. The author did not intend to bug people again unnecessarily, so all the ammunition was used in one go.

4 Results

This chapter describes the (statistical) data analysis, most of which was performed in R (www.r-project.org, 25.05.2024). The data cleaning and preparation were done beforehand in Excel. This chapter is divided into several parts. First, the sample is described, and some basic descriptive statistics are shown. The subsequent subchapters address the hypotheses more concretely. In Chapter 4.2, the HEXACO traits are directly calculated from the items. Afterwards, an exploratory factor analysis was performed (Chapter 4.3). Chapter 4.4 is dedicated to the item selection of the OPI items, resulting in an updated instrument (OPI*). In Chapters 4.5 and 4.6, correlations are shown between the latter and other non-OPI items.

Let us start by briefly describing the data set. In total, 117 people finished the questionnaire. One of them answered that they do not work in an organization at the moment. Therefore, this participant was not considered in the subsequent analysis, leaving 116 data sets. The median time for completing the questionnaire was 8 min and 22 s. The following changes were made to the raw data during the first cleaning step:

- Recoding was done in alignment with the codebook (see Annex: Codebook).
- Since all but the last (AD_3) items were mandatory to be filled out, no missing values are present that need specific handling.
- If possible, “other” inputs were reclassified. For example, “15-20” weekly worked hours (PER_2) were simplified to “17.5”. The remaining “other” inputs were coded with “NA” (Not Available, unclassified) so that they could be treated separately by the software.

4.1 Sample Description and Basic Descriptive Statistics

The 116 participants were split between females: 57 (49.1%), males: 56 (48.3%), and unknowns: 3 (2.6%). The year of birth was widely distributed, ranging from 1952 to 2001 (22/23 to 71/72 years of age). The average year of birth was 1986 (Sd = 9.6), equaling 37/38 years of age. The questionnaire was predominantly done in German (106; 91.4%). The distribution of leadership responsibility was upper management: 7 (6.0%), middle management: 18 (15.5%), lower management: 18 (15.5%), no management: 70 (60.3%), and unclassified: 3 (2.6%).

4.1.1 Non-OPI-Related Items

The overall sympathy (AD_1) was somewhat normally distributed with $M = 6.8$ ($Sd = 1.95$) on a scale from 0-10. The Shapiro-Wilk test failed ($W = 0.935$, $p < 0.01$) because of the missing positive tail. Visually, it appeared very well normally distributed, with a hard cut at ten. The average number of years worked for the organization (ORG_1) was 7.7 ($Sd = 8.0$), ranging from 0 to 40. The tables below show the number of members (ORG_2), Table 13; the age of the organization (ORG_3), Table 14; and the various industries (ORG_4), Table 15. The industry sector dominates with 40 (34.5%) participants, which is no surprise because many of the author's contacts work there.

Table 13: Number of members working in the organization of the participants (ORG_2).

1-9	10-49	50-199	200-999	≥1000	unclassified
7 (6.0%)	26 (22.4%)	32 (27.6%)	22 (19.0%)	29 (25.0%)	0 (0%)

Table 14: Age of the organization of the participants (ORG_3).

0-3	4-9	10-29	≥30	unclassified
3 (2.6%)	19 (16.4%)	26 (22.4%)	68 (58.6%)	0 (0%)

Table 15: Industry that the participants currently work in (ORG_4).

Banking and insurance	Trade and crafts	Commerce	Industry	Information and consulting	Tourism and leisure
6 (5.2%)	4 (3.4%)	7 (6.0%)	40 (34.5%)	13 (11.2%)	4 (3.4%)
Transport and traffic	Education and science	Health and social services	Agriculture and forestry	Public administration	Unclassified
2 (1.7%)	12 (10.3%)	15 (12.9%)	0 (0%)	6 (5.2%)	7 (6.0%)

Table 16 below shows the answers to AD_2 (AD_2a till AD_2j; who/what did you think about when answering the OPI questions?). Almost all participants thought of themselves often or rarely (112; 96.6%) and their immediate community: direct manager (AD_2b): 106 (91.4%), direct co-workers (AD_2c): 110 (94.8%), the team (AD_2d): 111 (95.7%), department (AD_2e): 107 (92.2%) but also the top management (AD_2f): 108 (93.1%). The CEO was lower, with 92 (79.3%) participants thinking at least rarely about them. A similar number thought about "Mission, Vision, and/or Values" (94; 81.0%). Code of Conduct was the least relevant, with only 45 (38.8%) participants thinking about it at least rarely. For this item, also the highest number of "not existent in my organization" and "I don't know emerged" with 14 (12.1%) and 17 (14.7%) participants, respectively. Internal regulations/rules of procedure were also on the low end, with only 64 (55.2%) thinking of them often or rarely.

Comparing the often, rarely, and never answers of the items yields that AD_2a, AD_2c, AD_2d, and AD_2e are statistically the same (Friedman Rank Sum Test, $df = 3$, $\chi^2 = 4.39$, $p = 0.22$). The same is true for the AD_2b, AD_2g, and AD_2h ($df = 2$, $\chi^2 = 0.90$, $p = 0.64$). So there seem to be two clusters: (1) myself, co-workers, team, and department, and (2) direct manager, CEO, and “Mission, Vision, and/or Values”. The answers for top management (AD_2f) and CEO (AD_2g) are statistically different ($df = 1$, $\chi^2 = 7.76$, $p < 0.01$).

Table 16: Results about who/what participants thought of during the OPI items (AD_2).

Code	Who/what did you think about when answering the questions before?	Often	Rarely	Never	Not existent in my organization	I don't know
AD_2a	Myself in the organization	78 (67.2%)	34 (29.3%)	4 (3.4%)	0 (0.0%)	0 (0.0%)
AD_2b	My direct manager	52 (44.8%)	54 (46.6%)	7 (6.0%)	3 (2.6%)	0 (0.0%)
AD_2c	My direct co-workers	89 (76.7%)	21 (18.1%)	5 (4.3%)	1 (0.9%)	0 (0.0%)
AD_2d	My team	83 (71.6%)	28 (24.1%)	1 (0.9%)	4 (3.4%)	0 (0.0%)
AD_2e	My department	78 (67.2%)	29 (25.0%)	2 (1.7%)	7 (6.0%)	0 (0.0%)
AD_2f	Top management	68 (58.6%)	40 (34.5%)	6 (5.2%)	2 (1.7%)	0 (0.0%)
AD_2g	CEO or similar person	53 (45.7%)	39 (33.6%)	14 (12.1%)	6 (5.2%)	4 (3.4%)
AD_2h	Mission, Vision, and/or Values of the organization	47 (40.5%)	47 (40.5%)	17 (14.7%)	4 (3.4%)	1 (0.9%)
AD_2i	Code of Conduct	12 (10.3%)	33 (28.4%)	40 (34.5%)	14 (12.1%)	17 (14.7%)
AD_2j	Internal regulations/rules of procedure	22 (19.0%)	42 (36.2%)	40 (34.5%)	8 (6.9%)	4 (3.4%)

This brings us to the open-ended question (AD_3). Here, 17 participants gave their input. Most comments (9 of 17) fell under the “motivational” category, which was well received by the author and needs no further discussion. Some inputs were minor clarifications of previous items, which were used for the reclassification, and they also require no further analysis. However, some participants added valuable feedback, which is shown below. For simplicity, they will also be discussed directly here.

- *“Sometimes, it was difficult to differentiate; for now, I concentrated on the general organization. In my team, it is different; we are like a pilot project, actively trying to break through those patterns”⁷*. This participant raised a good point about the difficulty in the case of multiple subcultures. However, this issue is not within the scope of this master’s thesis and will, therefore, not be addressed further.
- *“For me, the option “Employees (at work level) outside my team” is missing from “Who did you have in mind”. I was thinking of the primary prevailing mood in our*

⁷ In the original German: „Manchmal war es schwierig zu differenzieren, ich habe jetzt an die allgemeine Organisation gedacht. In meinem Team ist das anders, da wir quasi ein Pilotprojekt sind und versuchen diese Muster zu durchbrechen.“

*rather large company, but at the same time, I am trying to actively work against it as department leader.*⁸. The first part is a valid criticism and should have been included in the options. Additionally, the comment addresses the issue raised in the previous remark, which is relevant, albeit not directly to this work.

- *“Initially, the scale goes up to “stimme voll zu”, then only to “stimme zu”. In addition, 5-point scales tend to cluster in the middle.”*⁹ The first part was an apparent mistake of the author and was immediately corrected upon seeing this comment. The second comment is interesting, albeit not valid for the data collected within this survey; see next Chapter 4.1.2.
- *“Some questions are unclear due to the double negative”*¹⁰. This issue was already a strong focus during the creation of the OPI and the pretests. However, it seems that not all negative formulations were optimal yet, at least for this participant. This issue will be briefly addressed in Chapters 0 and 5.4 again.

All in all, the PER_1 results did not reveal any major surprises. To summarize the comments, subcultures render evaluating the whole organization difficult, double negatives were sometimes unclear, and an option like “co-workers in a different team” should have been included in the AD_2 battery.

4.1.2 OPI Items

Let’s start first by analyzing the responses that stated, “I don’t know/understand”. Those give an impression of how applicable and well-formulated the questions were. Overall, within the OPI items, there are 5568 (116x48) responses; out of those, 97 (1.7%) were “I don’t know/understand” (coded as NA). The average of this answer per item was 2.0 (Sd = 2.5). The highest occurrences happened at OPI_45 (In other organizations, it is more common to show anger openly than in mine): 14 (12.1% of this item) and OPI_46 (Other organizations are generally more optimistic and dynamic than ours): 8 (6.9%). All others had a maximum of 5 (4.3%) participants selecting “I don’t know/understand”.

The distribution over the 5-point scale shows that some items are subject to ceiling and flooring effects. The most extreme is OPI_32 (In my organization, the expectation is that you only do the bare minimum anyway), where 64 (55.2%) selected Disagree. The

⁸ In the original German: *„Bei "an wen hast Du gedacht" fehlt für mich die Option "MitarbeiterInnen (auf Arbeitsebene) außerhalb meines Teams". Ich habe an die primär vorherrschende Stimmung in unserer recht großen Firma gedacht, versuche gleichzeitig, als Abteilungsleiter aktiv dagegen zu arbeiten.“*

⁹ In the original German: *„Anfangs geht die Skala bis „stimme voll zu“, dann nur noch bis „stimme zu“. Außerdem neigen 5-stufige Skalen zu einer Häufung in der Mitte.“*

¹⁰ In the original German: *„Manche Fragen sind durch die doppelte Verneinung unklar.“*

second most extreme was OPI_29 (In my organization, it's common to worry about job security.), with 55 (47.4%) selecting disagree. Besides those two, all the other items had below 40% at an extreme value. Regardless, for simplicity, all items were kept in the subsequent analysis. Overall, the answer distribution between disagree and agree (1-5) revealed no surprises. The highest values were reached by mainly agree (1433 of 5568, 25.7%) and the lowest by disagree (776, 13.9%). The average value was 3.08 (Sd = 1.30). No major clumping in the middle, as was the concern raised above in AD_3, was observed.

For the following analysis, the reversely formulated items were reversed to make the overall interpretation easier. Also, some calculations (like for the Cronbach α -values) expect the input to be like that. This is indicated by the addition of ⁻¹ after the item code in all the tables.

4.2 Direct Scale Creation Based on the HEXACO

This approach is relatively straightforward. Assuming that the transformation of the items worked perfectly, the items that make up a scale can be directly combined, and reliability values calculated. It is usual for this kind of research that each of the items is intended to have loadings on primarily one factor and little on the others. The scales are, therefore, built simply by combining the related items through averaging. This also allows for the easy ignoring of NA (missing) values in the analysis. Again, NAs were ignored for the correlations without omitting any participant's dataset¹¹. This was considered to be the best approach since their occurrence was very low (see Chapter 4.1.2 above). So, basically, missing values were not considered, and all data sets could be taken for the analysis. Table 17 and Table 18 below show the correlations of each item with the scales created in this way; at the end, the Cronbach α -values and scale cross-correlations are listed.

¹¹ This was done by using the `cor()`-function in R with the input: `use="pairwise.complete.obs"`.

Table 17: Direct HEXACO scale calculation; item statistics and correlations.

Code	Question	M	Sd	Scales					
				H	E	X	A	C	O
OPI_06	Flattery is a very atypical way of getting ahead in our organization.	3.26	1.36	0.46	-0.02	0.20	0.18	0.32	0.08
OPI_12 ⁻¹	My organization always tries to use the legal framework to its maximum advantage.	2.79	1.33	0.59	-0.29	0.31	0.38	0.37	0.27
OPI_18	Money is a secondary motivator for us to work in my organization.	3.09	1.20	0.61	-0.21	0.28	0.42	0.13	0.41
OPI_24 ^{-1*}	Showing respect is highly valued in my organization.	2.27	0.97	-0.06	0.37	-0.48	-0.37	-0.45	-0.41
OPI_30 ⁻¹	It is typical to laugh even at the bad jokes of our superiors.	3.65	1.09	0.52	-0.30	0.30	0.23	0.29	0.37
OPI_36	We are honest, even under high pressure	3.44	1.15	0.46	-0.39	0.48	0.43	0.55	0.41
OPI_42 ⁻¹	My organization likes to show how successful it is.	2.16	1.01	0.51	-0.02	-0.19	0.10	-0.16	-0.17
OPI_48 ⁻¹	Status is an important thing in the culture of my organization.	3.08	1.30	0.68	-0.10	0.32	0.34	0.28	0.35
OPI_05	Downturns in the market situation put the whole organization at unease.	3.39	1.29	-0.27	0.55	-0.36	-0.41	-0.30	-0.37
OPI_11	It is common in my organization to obsess over seemingly unnecessary things.	3.16	1.28	-0.41	0.28	-0.43	-0.29	-0.46	-0.38
OPI_17 ⁻¹	Even in difficult times, we trust that the organization will care for us.	2.51	1.19	-0.27	0.67	-0.48	-0.47	-0.46	-0.44
OPI_23 ^{-1*}	My organization lives in the past.	3.51	1.39	0.18	0.05	0.51	0.28	0.40	0.51
OPI_29	In my organization, it's common to worry about job security.	1.97	1.11	-0.12	0.76	-0.15	-0.18	-0.29	-0.20
OPI_35 ⁻¹	Compared to other organizations we are very stable and steadfast.	2.42	1.28	-0.09	0.80	-0.27	-0.28	-0.42	-0.27
OPI_41 ⁻¹	My organization is very stable, we even get through difficult times without too much fuss.	2.51	1.29	-0.18	0.85	-0.29	-0.29	-0.43	-0.29
OPI_47	When an important person leaves the organization, they are missed for many years.	3.22	1.19	0.07	0.08	0.21	0.36	0.01	0.24
OPI_04	We ourselves are reasonably satisfied with our organization.	3.37	1.15	0.31	-0.48	0.67	0.44	0.60	0.53
OPI_10 ⁻¹	In my organization meetings are no good place to express one's opinion.	3.69	1.13	0.29	-0.22	0.63	0.52	0.44	0.50
OPI_16*	We typically work in teams/groups.	3.80	1.24	-0.01	0.00	0.49	0.07	0.27	0.26
OPI_22	People are typically in a good mood when they come to work.	3.72	1.02	0.30	-0.26	0.67	0.39	0.35	0.49
OPI_28 ⁻¹	Only very few people are proud to work for my organization.	3.67	1.16	0.24	-0.23	0.68	0.41	0.46	0.48
OPI_34	We encourage people to be proactive and take risks.	3.16	1.10	0.18	-0.01	0.66	0.25	0.26	0.57
OPI_40	We take care to integrate new people quickly, not only professionally but also socially.	3.85	1.10	0.14	-0.15	0.59	0.35	0.32	0.57
OPI_46 ⁻¹	Other organizations are generally more optimistic and dynamic than ours.	3.17	1.20	0.37	-0.13	0.67	0.32	0.42	0.57
OPI_03	If you make a mistake, we are quick to forgive.	3.95	1.03	0.22	-0.17	0.42	0.67	0.29	0.43

Results

OPI_09 ^{-1*}	We usually judge each other strictly.	3.46	0.93	0.27	-0.04	0.20	0.48	0.15	0.31
OPI_15 ⁻¹	Tough discussions are part of how our organization operates.	3.11	1.25	0.37	-0.21	0.12	0.57	0.13	0.14
OPI_21 ⁻¹	It is usual to have heated and loud discussions in my organization.	3.63	1.18	0.39	-0.22	0.44	0.72	0.31	0.43
OPI_27	We have an open culture of making mistakes.	3.46	1.12	0.34	-0.20	0.58	0.69	0.43	0.57
OPI_33	In my organization, we are mild in our judgment of others.	3.20	0.99	0.24	-0.11	0.05	0.61	-0.02	0.15
OPI_39	We live in a culture where compromise is considered something positive.	3.33	1.05	0.22	-0.32	0.56	0.57	0.40	0.56
OPI_45	In other organizations, it is more common to show anger openly than in mine.	3.19	1.15	0.20	-0.19	0.29	0.59	0.05	0.18
OPI_02	We plan and organize things, to avoid scrambling at the last minute.	3.03	1.25	0.32	-0.48	0.45	0.30	0.68	0.38
OPI_08*	We set ambitious targets and are pushing another to achieve those.	3.78	1.13	0.10	0.00	0.42	0.14	0.45	0.38
OPI_14 ⁻¹	Accuracy is generally a lower priority in our organization.	3.88	1.20	0.08	-0.16	0.15	0.04	0.61	0.10
OPI_20 ⁻¹	Decisions are typically made by intuition and less on concrete facts.	3.41	1.16	0.22	-0.30	0.35	0.18	0.77	0.25
OPI_26 ⁻¹	We sometimes struggle with efficiently organizing our resources.	2.36	1.27	0.43	-0.46	0.45	0.40	0.66	0.41
OPI_32 ⁻¹	In my organization, the expectation is that you only do the bare minimum anyway.	4.30	0.95	0.11	-0.19	0.50	0.19	0.49	0.38
OPI_38	We value precision and quality highly, even at the expense of time.	3.20	1.35	0.38	-0.45	0.32	0.34	0.66	0.28
OPI_44 ⁻¹	There is no overall plan in my organization, everyone works on their own.	3.38	1.29	0.28	-0.32	0.53	0.25	0.73	0.46
OPI_01 ^{-1*}	Art has no relevance within our organization.	2.21	1.34	-0.05	-0.13	0.13	0.06	0.09	0.38
OPI_07	We have a culture of interest and learning.	3.54	1.23	0.27	-0.23	0.69	0.54	0.50	0.69
OPI_13	In my organization, creative outlets are valued.	2.96	1.14	0.31	-0.05	0.45	0.35	0.14	0.66
OPI_19 ⁻¹	We don't even pay attention to crazy-sounding ideas.	3.26	1.12	0.09	-0.03	0.41	0.32	0.18	0.56
OPI_25 ⁻¹	We are not very creative as an organization.	2.79	1.33	0.27	-0.20	0.57	0.28	0.41	0.69
OPI_31 ⁻¹	My organization has little interest in my continuing education.	3.09	1.36	0.32	-0.47	0.48	0.42	0.54	0.53
OPI_37	We foster an environment of creative thinking.	2.27	1.21	0.32	-0.13	0.65	0.42	0.35	0.77
OPI_43	My organization welcomes people with unconventional views	3.65	1.23	0.34	-0.14	0.56	0.48	0.35	0.71

Remarks: The items are sorted in H-E-X-A-C-O order for easier readability. ⁻¹ reverse. * marking the item codes that correlate worst to the calculated scale and which were omitted for the α -value in brackets (see next table). Bold numbers indicate on which trait the items are intended to load.

Table 18: Direct HEXACO scale calculation; Cronbach's α -values and scale cross-correlations.

	Scales	M	Sd	Scales						
				H	E	X	A	C	O	
H	Honesty/Humility	2.97	0.58	0.50 (0.63)						
E	Emotionality	2.83	0.62	-0.27	0.58 (0.69)					
X	eXtraversion	3.56	0.72	0.36	-0.30	0.78 (0.79)				
A	Agreeableness	3.42	0.68	0.47	-0.31	0.55	0.75 (0.75)			
C	Conscientiousness	3.42	0.76	0.39	-0.48	0.62	0.37	0.79 (0.79)		
O	Openness to Experience	3.07	0.78	0.37	-0.28	0.78	0.57	0.52	0.77 (0.80)	

Remarks: Values in brackets show the Cronbach's α -values in case the worst item was omitted (see items marked with * in the previous table). Cronbach's α -values are based on standardized items.

OPI_23, OPI_24, and OPI_47 have correlation values below 0.1 (OPI_24 even slightly negative) to the intended trait. All others but two (OPI_01 and OPI_11) have correlation values of higher than 0.45 to the desired scale. None of those lower correlating items were recognized as suspicious in the first high-level analysis (see previous subchapter). However, many items have high (>0.4) cross-loadings to unintended scales. The α -values for Honesty/Humility and Emotionality are suboptimal, 0.53 and 0.56, respectively. If, in both cases, the least correlating item is omitted, it goes up to 0.63 and 0.69. For the other four factors α -values range from 0.75 to 0.79, with only marginal improvement possibility by omitting the least correlating item.

Comparing this to the HEXACO-60, several parameters can be looked at. Let's start with the Cronbach α -values. Ashton and Lee (2009, p. 342) report values in the range of 0.73 to 0.80, which the above-listed analysis does not reach for Honesty/Humility and Emotionality. If we compare the cross-correlations between the six traits in the above-cited paper, values range from -0.13 to 0.26, with the bulk being between -0.10 and 0.15. The direct calculation of the traits with the OPI results in significantly higher values, ranging from -0.48 up to 0.78; even the lowest absolute value is 0.27. Again, the direct calculation of the HEXCAO traits from the OPI falls short. This concludes a rejection of H1 (p. 47).

4.3 Factor Analysis of the OPI Results

In this approach, a more sophisticated route was taken, and PCA (Principal Component Analysis, a specific case of factor analysis) was applied to the data. To first judge the overall adequacy of the data for PCA, the KMO (Kaiser-Meyer-Olkin) criterion was

calculated; it yielded an overall result of 0.75, which is considered “middling” (Kaiser & Rice, 1974; cited in Backhaus, Erichson, Gensler, Weiber, R. & Weiber, T., 2023, p. 419). So, the overall data is fit to be used. Similar to the KMO is the MSA (Measure of Sampling Adequacy), which is the same parameter just evaluated for each item separately, which will be picked up in Chapter 4.4.

By using a non-rotated version of the PCA first, the number of relevant factors can be assessed best. Again, like for the analysis in the previous subchapter, the OPI correlation matrix was used, which was built by pairwise correlation and taking every data set, even if values were missing (NA). The PCA returned the following Eigenvalues (only the first 15 are listed): 12.17, 3.45, 3.03, 2.57, 1.95, 1.60, 1.55, 1.46, 1.40, 1.34, 1.24, 1.18, 1.03, 1.00, and 0.92. Following the Kaiser criterion, one would need to take the first 14 factors because they have Eigenvalues >1 . These are too many factors for an efficient reduction, especially compared to the hypotheses. In Figure 9 below, the Scree plot is shown, which is also a suitable method for assessing how many factors to extract. According to this, the first five factors should be taken since the curve is basically flat from factor six onwards. The explained variance amounts to 48.2% for five factors and 51.6% for the six-factor solution; only 3.4% difference.

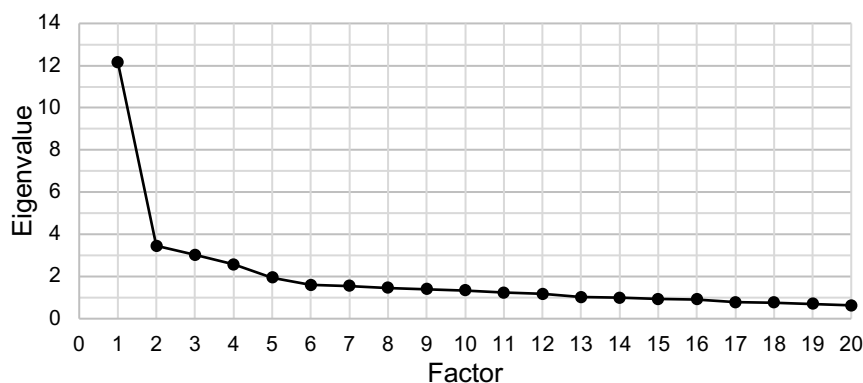


Figure 9: Scree plot of the first 20 unrotated factors of the PCA.

This gives a clear indication about H2a and H2b (p. 47; six vs. five-factor solution); five factors are the way to go. So H2a is rejected. However, out of interest, the six-factor solution was also extracted, and some high-level observations are listed in the following short subchapter.

The explained variation also gives an answer to H3 (p. 48), which was about the explained variation of the factors extracted from the OPI. The benchmarks had numbers in the 30-50% range, either directly stated in the text or calculatable from the Eigenvalues (Ashton & Lee, 2009, p. 342; Soto & John, 2017a, p. 129). The first five OPI factors

already explain 48.2%, placing the results at the upper end of the two other studies and allowing to accept H3 (p. 48).

4.3.1 Six-Factor Solution

This subchapter can be considered bonus material. Basically, the first PCA result indicated that the most appropriate solution to explore the data further is a five-factor solution, not six. Nevertheless, factor analysis is not an exact science, and therefore, the six-factor solution can be extracted and looked at to potentially gain more insight. To this end, a varimax rotation was performed, taking the first six factors into account. The resulting Eigenvalues were 6.65, 5.24, 3.89, 3.81, 2.76, and 2.40. As described above, this explains 51.6% of the variance in the data.

Showing all the loadings and correlation tables would be too much for a brief check; focusing on the five-factor solution in the next subchapter makes more sense. Nevertheless, the correlation table was looked at, and with some goodwill, one could see parallels to the intended HEXACO dimensions, albeit all but clear. The original Honesty/Humility items were quite scattered over the six factors. The Emotionality items mainly concentrated on one factor. The Extraversion items also had a main factor they loaded on, and interestingly, it was the same as for many of the Openness to Experience items. The Agreeableness items were split into two parts, and the Conscientiousness ones lumped together as well.

4.3.2 Five-Factor Solution

A five-factor solution was calculated using a varimax rotation. The resulting eigenvalues are 6.92, 5.35, 3.90, 3.83, and 3.17. The overall explained variance is 48.2%. The loadings onto the five factors and the MSA are shown below in Table 19.

Table 19: Five-factor solution for all OPI items, based on PCA with varimax rotation.

Code	Question	M	Sd	Factors					MSA
				I	II	III	IV	V	
OPI_06	Flattery is a very atypical way of getting ahead in our organization.	3.26	1.36	-	0.45	0.11	-0.24	0.22	0.65
OPI_12 ⁻¹	My organization always tries to use the legal framework to its maximum advantage.	2.79	1.33	-	0.42	-	-	0.49	0.59
OPI_18	Money is a secondary motivator for us to work in my organization.	3.09	1.20	0.26	-0.11	0.48	0.18	0.31	0.79
OPI_24 ⁻¹	Showing respect is highly valued in my organization.	2.27	0.97	-0.25	-0.40	-0.25	-0.37	0.10	0.83
OPI_30 ⁻¹	It is typical to laugh even at the bad jokes of our superiors.	3.65	1.09	0.34	-	-0.12	0.36	0.42	0.59
OPI_36	We are honest, even under high pressure	3.44	1.15	0.24	0.53	0.30	0.24	-	0.81
OPI_42 ⁻¹	My organization likes to show how successful it is.	2.16	1.01	-0.29	-	0.10	-0.14	0.64	0.50
OPI_48 ⁻¹	Status is an important thing in the culture of my organization.	3.08	1.30	0.34	-	0.10	-	0.59	0.65
OPI_05	Downturns in the market situation put the whole organization at unease.	3.39	1.29	-0.27	-	-0.17	-0.50	-0.29	0.78
OPI_11	It is common in my organization to obsess over seemingly unnecessary things.	3.16	1.28	-0.38	-0.38	-	-	-0.43	0.75
OPI_17 ⁻¹	Even in difficult times, we trust that the organization will care for us.	2.51	1.19	-0.24	-0.32	-0.35	-0.56	-	0.86
OPI_23 ⁻¹	My organization lives in the past.	3.51	1.39	0.71	0.14	-	-	0.12	0.63
OPI_29	In my organization, it's common to worry about job security.	1.97	1.11	-	-0.16	-	-0.78	-0.12	0.71
OPI_35 ⁻¹	Compared to other organizations we are very stable and steadfast.	2.42	1.28	-	-0.31	-0.17	-0.79	-	0.72
OPI_41 ⁻¹	My organization is very stable, we even get through difficult times without too much fuss.	2.51	1.29	-	-0.26	-0.17	-0.82	-	0.76
OPI_47	When an important person leaves the organization, they are missed for many years.	3.22	1.19	0.15	-0.12	0.52	-	-	0.60
OPI_04	We ourselves are reasonably satisfied with our organization.	3.37	1.15	0.37	0.50	0.22	0.31	-	0.84
OPI_10 ⁻¹	In my organization meetings are no good place to express one's opinion.	3.69	1.13	0.36	0.42	0.32	-	0.19	0.87
OPI_16	We typically work in teams/groups.	3.80	1.24	0.27	0.26	0.20	-	-0.38	0.61
OPI_22	People are typically in a good mood when they come to work.	3.72	1.02	0.49	0.19	0.23	0.18	0.14	0.79
OPI_28 ⁻¹	Only very few people are proud to work for my organization.	3.67	1.16	0.43	0.36	0.15	0.16	-	0.80
OPI_34	We encourage people to be proactive and take risks.	3.16	1.10	0.74	-	-	-	-	0.85

OPI_40	We take care to integrate new people quickly, not only professionally but also socially.	3.85	1.10	0.51	0.14	0.31	0.20	-0.17	0.83
OPI_46 ⁻¹	Other organizations are generally more optimistic and dynamic than ours.	3.17	1.20	0.69	0.19	-	-	0.33	0.85
OPI_03	If you make a mistake, we are quick to forgive.	3.95	1.03	0.20	0.26	0.64	-	-	0.75
OPI_09 ⁻¹	We usually judge each other strictly.	3.46	0.93	0.15	0.10	0.17	-	0.38	0.48
OPI_15 ⁻¹	Tough discussions are part of how our organization operates.	3.11	1.25	-0.11	0.12	0.23	0.13	0.65	0.61
OPI_21 ⁻¹	It is usual to have heated and loud discussions in my organization.	3.63	1.18	0.27	0.23	0.30	0.12	0.43	0.81
OPI_27	We have an open culture of making mistakes.	3.46	1.12	0.37	0.41	0.59	-	-	0.75
OPI_33	In my organization, we are mild in our judgment of others.	3.20	0.99	-0.11	-	0.66	-	0.26	0.67
OPI_39	We live in a culture where compromise is considered something positive.	3.33	1.05	0.48	0.22	0.45	0.21	-0.10	0.78
OPI_45	In other organizations, it is more common to show anger openly than in mine.	3.19	1.15	-	-	0.58	0.13	0.10	0.59
OPI_02	We plan and organize things, to avoid scrambling at the last minute.	3.03	1.25	0.17	0.59	-	0.24	0.21	0.77
OPI_08	We set ambitious targets and are pushing another to achieve those.	3.78	1.13	0.50	0.22	-	-	-0.19	0.81
OPI_14 ⁻¹	Accuracy is generally a lower priority in our organization.	3.88	1.20	-	0.61	-0.18	-	-	0.62
OPI_20 ⁻¹	Decisions are typically made by intuition and less on concrete facts.	3.41	1.16	0.17	0.78	-0.18	-	-	0.62
OPI_26 ⁻¹	We sometimes struggle with efficiently organizing our resources.	2.36	1.27	0.24	0.52	-	0.24	0.38	0.78
OPI_32 ⁻¹	In my organization, the expectation is that you only do the bare minimum anyway.	4.30	0.95	0.47	0.31	-0.13	0.26	-	0.61
OPI_38	We value precision and quality highly, even at the expense of time.	3.20	1.35	-	0.63	0.24	0.28	-	0.78
OPI_44 ⁻¹	There is no overall plan in my organization, everyone works on their own.	3.38	1.29	0.40	0.62	-	0.13	-	0.68
OPI_01 ⁻¹	Art has no relevance within our organization.	2.21	1.34	0.13	-	-	0.32	-	0.37
OPI_07	We have a culture of interest and learning.	3.54	1.23	0.50	0.43	0.39	-	-	0.84
OPI_13	In my organization, creative outlets are valued.	2.96	1.14	0.51	-0.11	0.32	-	0.19	0.74
OPI_19 ⁻¹	We don't even pay attention to crazy-sounding ideas.	3.32	1.12	0.49	-	0.19	-	-	0.76
OPI_25 ⁻¹	We are not very creative as an organization.	3.06	1.33	0.72	0.11	-	0.19	0.15	0.88
OPI_31 ⁻¹	My organization has little interest in my continuing education.	3.43	1.36	0.28	0.44	-	0.38	0.19	0.89
OPI_37	We foster an environment of creative thinking.	3.00	1.21	0.70	0.10	0.28	-	-	0.87
OPI_43	My organization welcomes people with unconventional views	2.97	1.23	0.63	-	0.39	0.16	-	0.85

Remarks: ⁻¹ reverse. The items are sorted in H-E-X-A-C-O order. Bold numbers indicate loadings with an absolute value equal to or higher than 0.4. Correlation values with absolute values below 0.1 were omitted for easier readability. MSA (Measure of Sampling Adequacy) is used to assess the suitability of the items.

The table will give the reader an impression of the data's heterogeneity. Also, the MSA values were added to help with the assessment, which items to choose later for the proper scale definitions. A mediocre MSA suitability starts at 0.6, with values above 0.8 being good (Kaiser & Rice, 1974; cited in Backhaus et al., 2023, p. 419). Absolute values above 0.4 for loadings (correlations) seem to be a typical threshold for picking items in the literature (Soto & John, 2017a, p. 123); that's why they were made bold in Table 19.

The cross-correlations (not shown in the table) between the factors are generally high, with values ranging from 0.61 to 0.84. Other forms of rotation, besides varimax, were experimented with. Regardless of whether orthogonal (quartimax, equamax, and varimin) or oblique (promax, oblimin, and simplimax) methods were used, the correlations all stayed high (>0.6). Only the not rotated solution had very low cross-correlations (<0.1), but the Eigenvalue distribution (Figure 9) basically made every subsequent analysis after the first factor redundant. So, the factors shown above were taken for further study. To see the meaning of the five-factor solution in more clarity, an item reduction is necessary to weed out the items that load on multiple factors. This was done and is described in the subsequent chapter. This will also help to answer H2b.

4.4 Scale Creation Based on the Five-Factor Solution

Based on the findings of the previous subchapter, a five-factor solution is the best way to analyze and understand the data. Since the aim of this thesis is the creation of an instrument based on the HEXACO traits, it also makes sense to improve the first version of the OPI. For simplicity, this updated version will, from now on, be called OPI*. Typically, in the literature, improvements to existing tools are marked by adding "-R" (for revision) at the end of the original instrument's name. Since the first version of the OPI did not directly yield a satisfactory result, it does not make sense to call this improvement already a revision. In an ideal case, another study would be performed at this point, informed by the five-factor solution mentioned above, with updated/new items generated by the gained insight. However, this was not possible within the scope of this master's thesis. So below, based on the existing material, the item selection, scale creation, and the resulting statistical parameters of the OPI* are presented.

A bottom-up and top-down approach can be used to select items and build scales. The first takes out the worst items (based on various criteria), while the latter fixes items that definitely need to stay. For the OPI*, both approaches were used in conjunction. First, a bottom-up for selecting which items to omit, and later, the top-down to select prototypical

items that help to name the factors and define their meaning. Let's start with the bottom-up part. The following criteria were used to exclude items:

- No loadings higher than 0.4 on any factor.
- Poor MSA (approaching or lower than 0.5).
- Loadings differ by less than 0.2 between the highest and the second highest.

The final verdict was done based on a combination of those criteria, with some subjective judgment in unclear cases. Some items were kept on purpose, even if one of the parameters was suboptimal. This resulted already in a reduction from 48 to 28, with the following number of items per factor (I to V): nine, seven, five, four, and three. As a side note, the original Honestly/Humility, Agreeableness, and Openness to Experience items were reduced to four, and Extraversion even to three. Of the Emotionality items, only one was taken out.

As a next step, the 28 items were grouped and rechecked for weak loading distribution. This time, the spread of the loadings was evaluated in more depth. Since the subsequent step is to use the remaining samples to build five scales, only the items with dominant loading on one factor should be used. Three items were taken out because they either had high relevant second loadings (>0.35) or somewhat high loadings (>0.3) on two other factors. The remaining 25 items were used to calculate the five scales directly, so no PCA was needed. Nevertheless, a factor analysis was performed in parallel only to be used as a reference for the correlations and explained variance (see text). In Table 20, the items are listed and grouped by scale. The scales are sorted by the number of items, from most to fewest. The Cronbach α -values and cross-correlations (of the simple scale calculations) are also given at the end of the table.

Table 20: Scales based on the OPI items; item statistics, Cronbach's α and cross-correlations.*

Code	Question	M	Sd	Scales				
				I	II	III	IV	V
OPI_34	We encourage people to be proactive and take risks.	3.06	1.33	0.77	0.24	-	0.19	0.14
OPI_25 ⁻¹	We are not very creative as an organization.	3.17	1.20	0.75	0.29	-	0.17	0.23
OPI_23 ⁻¹	My organization lives in the past.	3.00	1.21	0.75	0.27	0.29	0.17	-
OPI_37	We foster an environment of creative thinking.	3.16	1.10	0.74	0.16	0.13	-	-
OPI_46 ⁻¹	Other organizations are generally more optimistic and dynamic than ours.	3.51	1.39	0.73	0.21	0.13	0.10	0.13
OPI_08*	We set ambitious targets and are pushing another to achieve those.	3.72	1.02	0.61	0.24	0.25	0.25	0.23
OPI_19 ⁻¹	We don't even pay attention to crazy-sounding ideas.	3.32	1.12	0.54	-	0.17	-	-
OPI_22	People are typically in a good mood when they come to work.	3.78	1.13	0.53	0.20	0.16	-	-

Results

OPI_20 ⁻¹	Decisions are typically made by intuition and less on concrete facts.	3.20	1.35	0.15	0.77	0.21	0.40	0.14
OPI_38	We value precision and quality highly, even at the expense of time.	3.41	1.16	0.25	0.76	-	0.22	-
OPI_14 ⁻¹	Accuracy is generally a lower priority in our organization.	3.03	1.25	0.32	0.68	0.10	0.44	0.22
OPI_02	We plan and organize things, to avoid scrambling at the last minute.	3.44	1.15	0.36	0.63	0.26	0.36	-
OPI_36	We are honest, even under high pressure	3.88	1.20	-	0.62	-0.11	0.17	-
OPI_06	Flattery is a very atypical way of getting ahead in our organization.	3.26	1.36	0.11	0.55	0.11	-	0.23
OPI_33	In my organization, we are mild in our judgment of others.	3.22	1.19	0.16	-	0.72	0.14	0.11
OPI_03	If you make a mistake, we are quick to forgive.	3.95	1.03	0.30	0.25	0.72	0.22	0.25
OPI_45	In other organizations, it is more common to show anger openly than in mine.	3.20	0.99	-	-	0.70	0.17	0.29
OPI_47	When an important person leaves the organization, they are missed for many years.	3.19	1.15	0.16	-	0.64	0.23	0.15
OPI_41 ⁻¹	My organization is very stable, we even get through difficult times without too much fuss.	3.49	1.29	0.17	0.40	0.19	0.87	-
OPI_35 ⁻¹	Compared to other organizations we are very stable and steadfast.	3.58	1.28	0.11	0.42	0.22	0.85	-
OPI_29	In my organization, it's common to worry about job security.	1.97	1.11	-	0.22	0.17	0.79	-
OPI_05	Downturns in the market situation put the whole organization at unease.	3.39	1.29	0.35	0.21	0.27	0.69	0.34
OPI_15 ⁻¹	Tough discussions are part of how our organization operates.	3.08	1.30	0.38	0.21	0.21	-	0.75
OPI_42 ⁻¹	My organization likes to show how successful it is.	3.11	1.25	-	0.17	0.33	0.25	0.75
OPI_48 ⁻¹	Status is an important thing in the culture of my organization.	2.16	1.01	-0.18	-	-	-	0.71
	Scales	M	Sd	Cronbach's α and cross-correlations				
				I	II	III	IV	V
I	Drive	3.35	0.81	0.83				
II	Diligence	3.37	0.83	0.32	0.75			
III	Empathy	3.41	0.76	0.24	0.15	0.63		
IV	Stability	2.56	1.00	0.20	0.40	0.28	0.81	
V	Modesty	2.77	0.88	0.15	0.19	0.29	0.15	0.57

Remarks: ⁻¹ reverse. The items that load on scale IV were reversed compared to before to avoid double negatives. The items are sorted based on their main loading from scale I to V for easier readability. Bold numbers indicate the main loading. Correlation values with absolute values below 0.1 were omitted for easier readability. Cronbach's α -values are based on standardized items.

The Cronbach α -values range from 0.57 (scale V) to 0.83 (scale I). Scales III and V, in particular, have values that are considered suboptimal. This is, to some extent, due to the low number of items making up the scale. Also, leaving away items (as indicated for the direct calculation of the HEXACO traits in Table 17 and Table 18) does not improve but worsens the α -values of scales III and V. The cross-correlations of the scales are between 0.15 and 0.40 (median 0.22), the highest between scales II and IV. Correlating the ideal five factors (from a PCA of the 25 items) to the practically obtained scales

reveals the following values (factors I to V): 0.92, 0.84, 0.78, 0.86, and 0.79. This aligns with the assessment based on the Cronbach's α -values, which also ranks scales III and V as lower quality. The cross-correlations of the ideal factors were also calculated separately and ranged from 0.19 to 0.66 (median: 0.41). The explained variance of those ideal five factors was 56.0%.

For the naming of the scales (as already shown in Table 20), the items were examined in more detail. In every category, one (or two) items captured the essence best by having a very strong loading on this one factor and nearly none on the others.

- In the case of scale I, the prototypical item is OPI_34 (We encourage people to be proactive and take risks). However, creative aspects are also included in this scale, such as OPI_37 (We foster an environment of creative thinking). So, this encapsulates aspects of creativity, optimism, forward orientation, and openness to new ideas. This scale has a high overlap with the Extraversion and Openness traits. Scale I will be called Drive.
- Scale II has reverse OPI_20 (Decisions are typically made by intuition and less on concrete facts) as the prototypical item. It comprises all elements of precision, planning, and fact-based decisions. This scale could have been called Conscientiousness because the overlap is very evident. Nevertheless, it also includes OPI_36 (We are honest, even under high pressure), which was originally from Honesty/Humility. Furthermore, to make a clear distinction between Big Five/HEXACO and the OPI, this scale will be called Diligence.
- Scale III has OPI_45 (In my organization, we are mild in our judgment of others) as a prototypical item. It also includes other typical agreeableness characteristics, as well as the sentimental aspect with OPI_47 (When an important person leaves the organization, they are missed for many years). Scale III will be called Empathy.
- Scale IV has item OPI_29 as the prototypical one (In my organization, it's common to worry about job security). All items about worrying and stability can be found to load there. This scale will be called Stability.
- The last scale, V, has reverse OPI_15 (Tough discussions are part of how our organization operates) as the prototypical item. There are only two others with high loading, and they are reverse OPI_42 (My organization likes to show how successful it is) and reverse OPI_48 (Status is an important thing in the culture of my organization). It can become a bit confusing because of the reversing, but an organization that does not have tough discussions and shows humility regarding its status will be high in this regard. This scale will be called Modesty.

For simplicity reasons, the OPI* scales will be, in alignment with the tradition of acronyms, abbreviated with the term MEDDS (Modesty, Empathy, Drive, Diligence, and Stability). Also, from now on, this will be the order in which the scales are referred to, regardless of their explanatory power and number of items. Comparing the MEDDS with the Big Five to check for H2b (p. 47) reveals a bit of overlap (discussed more in Chapter 5.2.1). Nevertheless, the factor structure clearly differs, and therefore, the hypothesis must be rejected.

4.5 Overall Sympathy Towards One's Organization and the OPI Factors

Following H4 (p. 48), the question is if the first factor of an unrotated factor analysis correlates with the overall sympathy towards one's organization (AD_1). For this, a one-factor solution was extracted (the same as was used for determining the number of factors in Chapter 4.3). The factor loadings were then used to calculate the latent one-factor value for each participant. Care was taken to scale (z-transform) the original items so as not to distort the results by different averages and standard deviations. Also, this made the imputation of missing variables easy by just assuming them to be 0, the mean of the normed items. The overall correlation result for this parameter with the sympathy towards one's organization (AD_1) is 0.62 (Kendall rank correlation, $df = 114$, $z = 9.27$, $p < 0.01$) and statistically significant. This means that 38.4% of the variance from one parameter is explained by the other. If ignoring the non-ideal normal distribution and calculating the Pearson correlation, r even increases to 0.73. Regardless, this means H4 (p. 48) is accepted.

Additionally, the factors from the five-factor solution were also used to correlate with the sympathy towards one's organization. This revealed values ranging from 0.57 to 0.50 (Kendall rank correlation). This high consistency is less surprising if one considers the highly intercorrelated nature of the five factors. With the MEDDS, the correlations are lower: 0.26, 0.28, 0.48, 0.37, and 0.36 (Modesty, Empathy, Drive, Diligence, and Stability). Especially Drive seems to align well with the overall sympathy, while Modesty is the lowest.

4.6 Additional Correlations with the MEDDS

This short subchapter examines some other exploratory correlations. For an overview, Table 21 was created. Most parameters, but four, do not show a statistically significant correlation with the MEDDS. Even those four only show low correlation values (r or τ) of about 0.2. ORG_2 (How many employees does the organization have?) negatively

correlates with Modesty; larger organizations seem to be perceived as less modest. With the age of the organization (ORG_3), the perception of Stability increases. Males, compared to females (PER_4), are more likely to view their organization as less diligent. While the first two have some face validity, the latter is harder to agree with intuitively. More data analysis is needed to also check for other mediating influences, especially the industry, in order to believe this result.

Some of the items from AD_2 (Who/what did you think about when answering the questions before?) were combined into two scales. AD_2a, AD_2c, AD_2d, and AD_2e (myself, co-workers, team, department), and AD_2b, AD_2g and AD_2h (direct manager, CEO, "Mission, Vision and/or Values") were combined into one scale each. This method is arguably crude, but since the answers often, rarely, and never were statistically not different from each other in both groups (see Chapter 4.1.1), this is a reasonable approach to check for hidden relationships in the data. Care was taken, again, only to use the often, rarely, and never answers; additionally, the coding was reversed (higher values now mean more often). The first cluster (myself, co-workers, team, department) significantly correlates with Diligence. This means that participants who thought more often about the above-mentioned groups had higher Diligence values (and vice versa).

Table 21: Correlations (r and τ) of the additional (non-OPI) items with the MEDDS

Code	Question	Modesty	Empathy	Drive	Diligence	Stability
EG_1	English/German	0.05	0.09	0.02	0.04	0.18
ORG_1	How many years have you been working for this organization?	-0.03	-0.07	-0.05	-0.07	0.02
ORG_2	How many employees does the organization have?	-0.21**	-0.11	-0.07	0.03	0.07
ORG_3	How many years has the organization been in existence?	0.00	0.02	-0.12	0.06	0.19**
PER_1	Do you have leadership responsibility in the organization/company?	-0.14	-0.06	-0.11	-0.05	-0.05
PER_2	How many hours do you normally work in the organization per working week?	-0.05	-0.03	-0.01	-0.01	-0.02
PER_3	What is your year of birth?	-0.03	-0.01	-0.04	-0.04	-0.11
PER_4	What is your gender? (female as reference)	-0.11	-0.01	-0.04	-0.20*	-0.16
AD_2 ¹	<i>Who/what did you think about when answering the questions before?</i>					
-a, c, d, e	...myself, co-workers, team, department	0.11	0.05	0.07	0.16*	0.13
-c, d, e	...direct manager, CEO, "Mission, Vision and/or Values".	-0.04	-0.03	0.00	-0.04	-0.07

Remarks: * $p < 0.05$; ** $p < 0.01$ (both marked in bold). AD_2¹ items were reverse coded for more intuitive understanding. Pearson correlation (r) for EG_1, PER_4. Kendall rank correlation (τ) for ORG_1, ORG_2, ORG_3, PER_1, PER_2, PER_3, and both AD_2. For gender, only female and male were taken.

These additional correlations conclude the results chapter of this thesis. After a first section on the sample and some descriptive statistics, the direct HEXCAO traits were calculated from the OPI. Then, an exploratory PCA was performed, showing that five factors are the best way to stratify the data. A six-factor solution was briefly checked for good measure. The focus was then put on the five-factor solution with an update of the OPI items, called the OPI*. The five scales were created and evaluated. The five factors were discussed and named Modesty, Empathy, Drive, Diligence, and Stability (MEDDS). Finally, correlations between the MEDDS, overall sympathy, and other non-OPI parameters were calculated. In the following (and last) chapter, the results and the research questions will be discussed, possible critiques listed, and an outlook given.

5 Discussion and Outlook

This last chapter aims to connect the various threads spun in the chapters before by discussing the study's results in relation to the literature and answering the initial research questions. Furthermore, the thesis's shortcomings are described, and an outlook is given at the end of this chapter.

5.1 General Discussion

The purpose of this master's thesis, as described in Chapter 1.3, was to use the analogy between person and organization to develop an instrument for assessing an organization's personality. The concept of utilizing analogies came from the engineering domain; however, strong support for the analogy between individual and organization was also found in the literature (Ashforth et al., 2020, p. 29ff.; Mitroff, 1983, p. 388). Since the dominant field of understanding an organization's personality (if such a construct exists) comes from organizational culture, this master's thesis can, therefore, be assigned to this research field. The working definition for organizational personality is "*a set of human characteristics associated with an organization*". It is relevant to note that the viewpoint of interest is the one from inside, the members' perception of the organization. In contrast to brand personality, which concentrates on the outside, the customers' perspective.

The conducted study used the HEXACO-60 items (Ashton & Lee, 2009, p. 345) as a basis and transformed them to be applicable to organizations. The resulting questionnaire is called OPI (Organizational Personality Inventory). Through PCA (Principal Component Analysis) of the results, the underlying data structure was explored. During the evaluation, it became clear that factor analysis is not as clear a science as one might think. There are many ways how to select, rotate, and interpret the data that can lead to different results. Similar issues were discussed in the literature, especially by the proponents of the HEXACO model about the Big Five (Ashton, Lee & Goldberg, 2004, p. 709ff.). Regardless, a meaningful solution could be found, which will be discussed in this chapter.

5.1.1 Sample and Method

But first, let's start by discussing the sample and method. As already described in Chapter 3.3, convenience sampling was used, which likely led to WEIRD results (Western, Educated, Industrial, Rich, Democratic) (Henrich et al., 2010, p. 61ff.). Within the questionnaire, many socio-demographic parameters were not retrieved, mainly because they did not appear to be of relevance to this master's thesis. However, the data that was gathered gives a quite heterogeneous impression. For example, the split between females and males was close to perfect. Also, the spread of management responsibility with 7, 18, 18, and 70 (upper, middle, lower, and no management responsibility) can be deemed well distributed. Age and duration at the current organization, as well as the size of the organization, were again widely spread. The split between English and German was, on the other hand, heavily biased towards German (91.4%). The industry fields the participants currently worked in are again diverse but with some tilt towards industry (the field of the author). Based on this data, it can be concluded that the sampling method did not introduce a relevant bias that needs consideration.

Another interesting and relevant aspect of the survey and the analysis is who/what the participants thought about when answering the OPI questions. As described above, the inside perspective was the viewpoint of interest. However, there are again two potentially contradicting perceptions (already described in Chapter 3.2.1). On the one hand, the organization can be viewed as something distant. On the other hand, it can be seen as something personal that the participant is a relevant part of. To check for this, a short item battery was added. The analysis revealed that there are indeed two clusters that lump together, which roughly align with the viewpoints described above. Cluster (1) comprises the thoughts of oneself, immediate co-workers, team, and department. This corresponds to an involved view of the organization. Cluster (2) contains thoughts about the direct manager, the CEO, and the "Mission, Vision, and/or Values" of the organization. This corresponds to the distant view. All in all, more than 90% of participants thought of the various given hierarchy levels (from oneself to the top management) at least some of the time while answering the OPI items. On top of that, 80% thought at least rarely about the "Mission, Vision, and Values". This leads to the conclusion that the goal of invoking both views (as stated in Chapter 3.2.1) was reached. Building on this topic, a missing option in this item battery, which one participant noted, was the option of co-workers from another team. In hindsight, this aspect would have been interesting to correlate with both (involved vs. distant) views.

Let's discuss the OPI results in more detail. Overall, the participants seemed to have no problems understanding and applying the questions to their context. Only two questions had more than 5% "I don't know/understand" answers. Both were about comparisons of one's organization with others. So, overall, the goal of transforming the questions in an applicable way was successful. One participant, however, mentioned that some double-negative formulated items were hard to understand. This is something that should be looked at in more detail in case of a follow-up study. For the results at hand, it appears the items about comparison with other organizations were the most challenging ones.

Continuing with the transformation, it must be plainly stated that the idea of transforming items from a personality questionnaire to the perception of one's organization was a bit naïve. As statistically shown in Chapter 4.2, the main problems with the direct (HEXACO) scale creation were the high correlations of the items with multiple scales and the subsequently high cross-correlation of the scales themselves. Overall, the correlations of the items with the desired (HEXACO) trait were mostly decent, but they often had very high (>0.4) secondary and tertiary correlations with other scales. About five items did generally not correlate properly (<0.1) with the desired scale. All in all, this has led to the conclusion that this endeavor failed and H1 (p. 47) must be rejected.

This also underlines the high importance of item selection. The lexical approach, applied to derive the Big Five (and later the HEXACO), used multiple hundreds of adjectives as a basis (John, Angleitner & Ostendorf, 1988, p. 176ff.; Ashton, Lee & Goldberg, 2004, p. 708f.). Those were then, in various iterations, reduced to finally arrive at the current state of instruments. Only this stepwise selection made it possible to pin down the best items for capturing the essence of each trait (and scale). It became clear during the statistical analysis of this study that items that load/correlate heavily with multiple factors blur the picture and make the factors cross-correlate highly. No rotation method can untangle that. This puts a high responsibility on the researcher to select the right items. That's why iterations and refinement, if possible, by different scientists are crucial. Basically, a wide net needs to be cast, leading to very diffuse results, which subsequently can be used for omitting items that are not primarily associated with only one trait/scale/factor. Nevertheless, the researchers can influence the results quite substantially during this process. That's also why the debate about Big Five vs. HEXACO is hard to settle once and for all. After the latent structure is uncovered (and agreed upon), good items can be found relatively easily, tested against the benchmark, and externally validated. This method was used for many of the revised instruments (DeYoung et al., 2007, p. 889ff.; Saucier, 1994, p. 506ff.; Soto & John, 2017a, p. 123ff). For this master's thesis, however, a multi-stage study was not practical and would have exceeded the effort limits.

5.1.2 Five vs. Six-Factor Solution and the MEDDS

This brings us neatly to the question of how many factors could be extracted from the OPI results. Since the direct scale creation failed, as mentioned above, the next approach was to use PCA to investigate the data structure. Based on the Scree plot, five factors appeared to be the best solution, which is why this was chosen. Subsequently, the items of the OPI were reduced to the ones with clear loading on only one of the five (and some other criteria; see Chapter 4.4). The resulting 25 items were, for simplicity, called OPI*. Theoretically, one could have repeated the evaluation of the number of factors with those OPI* items. Out of interest, this was done, and to the author's surprise, a six-factor solution emerged (based on the Kaiser criterion and Scree plot). This underlines the argumentation in the previous paragraph. Item selection and factor extraction are both subject to the researcher's interpretation. Regardless, for the OPI*, the five-factor path was continued for consistency's sake.

The factors indicate the applicability of personality traits to one's perceptions of one's organization since, as shown in Chapter 4.4, similar factors emerged. The analysis, however, must be taken with a grain of salt since the used items impose the HEXACO personality structure onto the perception of organizations. So, finding strong resemblances had to be expected. To use a blank example, after nailing a screw into a piece of wood, the assumption that this is a good method, simply by seeing the screw in the workpiece, would be clearly false. One would need to benchmark this approach against others and validate the result against some use cases. Similarly, the study at hand cannot function as proof of this new conceptualization. It can only act as an indication that this approach might be worth pursuing in the future. Be this as it may, the results are interesting, nonetheless. As stated previously, there is a strong resemblance between the OPI*-five-factor solution and the typical personality traits. The scales are called as follows (abbreviated by the acronym "MEDDS"):

- Modesty. This category contains characteristics typically associated with the Humility part of Honesty/Humility but also includes politeness aspects associated with Agreeableness. Organizations high on this scale are perceived as valuing humility and polite behavior.
- Empathy. This scale contains typical Big Five Agreeableness but also sentimentality aspects, which, for the HEXACO, are part of Emotionality. Organizations high on this scale are perceived as being people-focused and valuing benevolent behavior.

- Drive. This can be conceptualized as a combination of Extraversion and Openness to Experience. It captures the positive force forward and creative aspects of organizations.
- Diligence. This has a high overlap with Big Five Conscientiousness-associated characteristics. It contains aspects of precession, planning, and honesty.
- Stability. This scale measures one's perception of one's organization as stable, steadfast, and offering high job security.

The empirical support (scale reliability and number of items) is highest for Drive and lowest for Modesty. The latter has only three, albeit every clear, items loading in this factor. Drive, on the other hand, has eight items, representing also the importance of this scale. The factors (and the subsequent scale) are cross-correlating with values ranging up to 0.40 (median 0.22). Comparing this to Big Five instruments, where the cross-correlations are below 0.4 (Soto & John, 2017a; DeYoung et al., 2007, p. 891f.), reveals a small deficiency in the OPI*. Also, Cronbach's α -values are low for two of the scales (0.57 for Modesty and 0.63 for Empathy). However, comparing this with other short instruments for assessing personality (de Vries, 2013, p. 875; Soto & John, 2017b, p. 78; Gosling et al., 2003, p. 516; John & Soto, 2007, p. 465f.) reveals that those numbers are typical. So, exploring the boundaries of those two dimensions in more detail and subsequently adding some more items to get better reliability would likely mitigate this inadequacy.

An interesting finding along the way was that very few items negatively loaded on other factors/scales; they either did not negatively correlate highly or showed correlations in the same direction. For the ideal five-factor solution, all but three off-scale loadings were below -0.2. For the MEDDS, only two items showed negative correlations to off-scales below -0.1. To some extent, this is no wonder because of the correlated nature of the five factors and scales (see Chapters 4.3.2 and 4.4). Comparing this to personality psychology, the AB5C comes to mind. Within this quite complex approach, Hofstee and colleagues (1992, p. 146ff.) defined multiple in-between scales, which contained adjectives correlating in all possible combinations with the traits. Seeing the correlations from the OPI*, one can wonder what those items would look like with the MEDDS. Regardless, it indicates that either the OPI items were not capturing the whole available parameter space or that five factors are actually too many, and redundancy subsequently emerged.

Thinking further about the MEDDS, Digman's Big Two (α and β), later named Stability and Plasticity (Digman, 1997, p. 1246ff.; DeYoung et al., 2002, p. 536; DeYoung, 2006,

p. 1138ff.), come to mind. The resemblance between β /Plasticity and Drive is evident. It is not the name itself, but β /Plasticity is a combination of Extraversion and Openness, exactly as the OPI* Drive dimension is. Conceptually, the remaining four OPI* scales (Modesty, Empathy, Diligence, and Stability) could be thought of as subdimensions of a α /Stability-equivalent. More research is needed to prove this, but some indication is there.

All in all, it must be stated that the OPI* and the MEDDS scales presented above are interesting but could be better. Since it was out of the scope of this master's thesis to properly validate the instrument, be it against others or by triangulation, many questions will need to stay unanswered. What was done, however, is to check back with the culture instruments presented in the literature review section (Chapter 2.3) of this work.

5.1.3 Comparison of the MEDDS to the Existing Models

Comparing the MEDDS to the CVF (Competing Values Framework) (Quinn & Rohrbaugh, 1981, p. 122ff.), Chapter 2.3.1.2, one can draw some parallels. Empathy aligns with People/Internal Organizational Focus. Control aligns with Stability and Diligence. Flexibility and Organization/External Organizational Focus align with Drive. Assuming the mapping is correct, there is a tension between Drive on one side vs. Empathy, Diligence, and Stability on the other. This can be interpreted similarly to the Big Two mentioned above. While Drive creates change and action (β /Plasticity), the other three focus more on the continuous aspects (α /Stability). Seeing it this way, a main axis of the CVF would run between Adhocracy and Hierarchy. The first has an emphasis on change, and the latter has a focus on permanency. Orthogonal to that, Modesty is placed. It is low in the Market and high in the Clan culture.

Looking next at the OCI (Organizational Culture Inventory) (Cooke & Lafferty, 1987), Chapter 2.3.1.3, and juxtaposing it with the MEDDS reveals a high amount of overlap. The four major dimensions have direct representations. People Orientation aligns with Empathy, Security Needs with (reverse) Stability, and Task Orientation mainly with Diligence and reverse Modesty.

Next, we compare the MEDDS to Hofstede's Culture Dimensions (Hofstede, G., 2011, p. 1ff.) from Chapter 2.3.1.4. Let's start with the simple ones: Uncertainty Avoidance aligns with reverse Stability. Individualism aligns with Drive, reverse Modesty, and reverse Empathy. Masculinity is difficult to link with the MEDDS; the same is true for Long-Term Orientation. Power Distance has some conceptual overlap with reverse

Modesty, maybe Diligence and reverse Empathy. Indulgence vs. Restraint is reflected by Drive and reverse Diligence on the one hand and reverse Stability and Diligence on the other. All in all, the mapping does not work as well as for the two previous culture models.

Taking the LOCS (Lexical Organizational Culture Scale) (Chapman et al., 2018, p. 1ff.), Chapter 2.3.1.5, and comparing it with the MEDDS shows, unexpectedly, some overlap. As a reminder, the LOCS has nine partially overlapping dimensions, also including scales like Corporate Social Responsibility and Diverse, which sound too modern to be descriptive of companies (or organizations) in general. Regardless, Modesty aligns with reverse Dominant and reverse Prestigious. Empathy has a clear alignment with Friendly and maybe Corporate Social Responsibility. Drive overlaps with Innovate and Pace, maybe also Trendy. Diligence does not have a representation, which is strange. Stability may be related to Traditional. Diverse does not fit anywhere.

We can also compare the MEDDS to the meta-analyses from Delobbe and colleagues (2002, p. 7f.), described in Chapter 2.3.1.6. Their findings suggest four dimensions that intuitively align with Empathy, Drive, and Diligence. However, their Results/Outcome Orientation and Control (or Bureaucratic Orientation) appear to both map onto Diligence. Modesty does not have an equivalent.

At last, we look at Aaker's Brand Personality Dimensions (1997, p. 347ff.), Chapter 2.4.1, in comparison to the MEDDS. Here, we see an overlap between Sincerity and Modesty (maybe Empathy), Excitement (maybe Sophistication) and Drive, and Competence and Diligence. Ruggedness might overlap with Stability. Anyhow, the dimensions of brand personality are clearly not very concerned with human interaction because there is no equivalent of people orientation like in all the other models.

All in all, there is high congruence between the MEDDS and the OCI, the CVF, and the work from Delobbe and colleagues (2002, p. 7f.), which gives the MEDDS some validity. The difficulties in aligning other models with Hofstede's Culture Dimensions and the weaknesses of the LOCS were already present in the literature review part of this master's thesis (Chapters 2.3.1.4 and 2.3.1.5). Regardless, there seems to be some face validity when comparing the MEDDS to the existing instruments, albeit only theoretical.

Let's continue with the thoughts presented at the end of Chapter 2.3.2, where we compared the culture instruments to the HEXACO and the Big Five. The two obvious scales, Conscientiousness and Openness (to experience), clearly manifest themselves in this study again. The MEDDS representation of the latter, Drive, includes Extraversion,

which could explain why it almost never shows up on its own in the culture models. For Neuroticism/Emotionality, an equivalent was found with reverse Stability. However, it is more narrowly defined as in personality psychology. This could either be because of insufficient coverage of the feature space or because this dimension is simply less prominent in organizations than in individuals. Honesty/Humility seems to split up into honesty, which (at least partially) fits within Diligence on the one hand, and humility as its own dimension, now called Modesty, on the other hand. Nevertheless, it is obvious that more in-depth research is needed to pin this down more precisely. This concludes the general discussion section of the results. In the following subchapter, the hypotheses and research questions are addressed directly and answered in a compact way.

5.2 Addressing the Hypotheses and Research Questions

To properly link the findings with the original intention and conclude this master's thesis, we need to answer the research questions (Chapter 1.3). For easier access, they are listed again below. First, however, the hypotheses will be repeated and discussed, which will serve as a basis for the answers to the research questions:

- *How does an instrument based on the HEXACO personality model look like to measure the members' perceptions of their organization?*
- *Would this instrument yield the same factor structure as typically seen in personality psychology (HEXACO or Big Five dimensions)?*

5.2.1 Discussion of the Hypotheses

Hypothesis H1: *Calculating the six HEXACO dimensions with the items of the OPI will yield the same internal reliability and cross-correlation values (within error margins) as the original HEXACO-60 results.*

This hypothesis H1 can be clearly rejected based on the results in Chapter 4.2. The internal reliabilities (Cronbach's α -values) and the cross-correlations were clearly below the quality of the reference and also below the expectation. The scale cross-correlations were almost all above 0.3, and the highest was even 0.78. While many (but not all) items had high loadings on the desired scale, the secondary and tertiary loadings were often also high. The Cronbach's α -values were good enough for four of the six scales/traits but not for two, especially considering that eight items were used per trait. So, this hypothesis failed.

Hypothesis H2a: *Factor analyzing the OPI results will lead to the same six factors as the HEXACO, albeit with minor differences in the factor loadings for the various items.*

This hypothesis was also rejected. First, the number of useful factors was not as clear as one would have hoped. However, neither the Kaiser criterion nor the Scree plot indicated six factors (Chapter 4.3). The first would have required 14 factors, while the latter suggested taking five, which was done. So, this hypothesis failed as well.

Hypothesis H2b: *Factor analyzing the OPI results will yield the same five factors as the Big Five, albeit with minor differences in the factor loadings for the various items.*

This hypothesis needed more investigation. The five-factor solution was chosen, but even then, high cross-correlations and item cross-loading occurred (Chapter 4.3.2). That's why the OPI* was created as a subset of the full OPI by taking only the clearest items that mainly loaded on one factor. This also made the factor interpretation easier. The scales that emerged by utilizing this approach were labeled Modesty, Empathy, Drive, Diligence, and Stability (short: MEDDS), the descriptions of which can be found in Chapters 4.4 and 5.1.2. While there is a high overlap between them and the Big Five, there are also some distinct differences.

Let's try to place the MEDDS into the Big Five and HEXACO framework. Modesty is a reduced version of Honesty/Humility, covering humility and politeness (typically associated with Agreeableness). Empathy is very similar to (Big Five) Agreeableness but also includes sentimentality, which is part of the HEXACO Emotionality. Drive is a combination of Extraversion and Openness (to Experience) aspects (very similar to the β /Plasticity of the Big Two). Diligence is pretty much the equivalent of Conscientiousness with the honesty aspect added, which would, in the HEXACO, be associated with the Honesty/Humility trait. Stability has apparent similarities with reverse Neuroticism/Emotionality but is narrower, not including anger (Big Five) and sentimentality (HEXACO). So, all in all, there is quite some resemblance, but the hypothesis also needs to be rejected. The similarities to personality psychology are, on the one hand, great to see and were a desired outcome. However, it is also no wonder since the used items were chosen this way.

Hypothesis H3: *The variation explained by the resulting OPI factors is within the same range as the original HEXACO-60 and the BFI-2 results.*

This hypothesis, on the other hand, can be accepted. Taking the original OPI items, the first five factors explained 48.2% of the variance, which is very much at the top end compared with the original HEXACO-60 results and the similarly sized BFI-2 (Ashton &

Lee, 2009, p. 342; Soto & John, 2017a, p. 129). Unsurprisingly, for the reduced item set of the OPI*, it was even higher (56.0%). While this may be interpreted as a sign of the high quality of item selection (and factor analysis), it can also simply mean that five factors are already too many. Theoretically, even one factor could have been a solution when looking at the Scree plot (Figure 9, Chapter 4.3). This brings us to the last hypothesis.

Hypothesis H4: *The first factor of an unrotated factor analysis of the OPI results correlates significantly with the overall sympathy towards one's organization.*

This hypothesis can be accepted. There is a strong and statistically significant correlation of 0.62 (Kendall rank correlation) between this first (primary) factor of the OPI and the overall sympathy towards one's organization. The Pearson correlation is even high with $r = 0.73$, although its application is questionable because of the non-ideally normally distributed sympathy data (see Chapter 4.1.1). Regardless, due to his strong correlation, the question may even arise if not all of what the OPI does is measure sympathy towards one's organization. This is, of course, a separate topic on its own. Nevertheless, the results of this master's thesis give some ground for further exploration of this thought.

5.2.2 Answering the Research Questions

The instrument, based on the HEXACO personality model, was derived and presented in Chapter 3.2.1; the abbreviation OPI was coined for simplicity. While the intentions were true, the results clearly showed that the HEXACO factor structure could not be reproduced. Others may judge if this was because of poor item creation and selection or if the whole endeavor was destined to fail anyway. Regardless, as discussed above, there are some strong parallels. However, it would be a stretch to call those "the same". Nevertheless, an improved version of the OPI, the OPI*, was presented. It allowed for the factor structure to be seen more clearly and helped with naming the scales. It, however, did not further take the HEXACO (or Big Five) traits into account but focused instead on the factor structure present in the data.

On the other hand, addressing members' perceptions of their organization worked well. This can be seen in the results and discussion about who/what participants thought of during the questionnaire (Chapters 4.1.1 and 0). The OPI item's intention of getting the participants to think about their organization in different ways (different groups, people, and statements) appeared to have worked well.

5.3 Critical Reflection on the Work

Within this subchapter, all the critiques that came to mind during the execution of this master's thesis are listed. They span from the theoretical basis to practical implementations during the survey onto the subsequent analysis. Although many of the points were already mentioned during the previous chapters, they are compactly listed below. Some of them serve as a basis for the following outlook chapter.

Let's start with some fundamental criticism of the overall approach. Was it really necessary to develop another tool for assessing (some form of) organizational culture? This is a valid question since, as mentioned multiple times throughout this thesis, many instruments exist already. At the outset, hopes were high that maybe a secret path could be found to better understand and assess organizations. However, based on the results, this is at least questionable. The discovered MEDDS dimensions are interesting but do not directly reflect models found in personality psychology. They were created to find parallels but could only reproduce some similarities. If the analogy were as clear as hoped, the results should have resembled the HEXACO traits (or at least the Big Five) more closely.

Now, let's look at some methodological inadequacies. First, the questionnaire could have been done better. Maybe having a 7-point scale would have increased the precision of the answers, leading to less noise. Also, the floor and ceiling effects might have been somewhat reduced. In hindsight, randomizing the OPI items seems like a better idea than sticking with the original order. It is hard to prove statistically, but looking at the answer distributions, one gets the impression of patterns. Extreme distributions in one direction were typically followed by distributions in the same direction. Also, the four highest numbers of "I don't know/understand" came in consecutive pairs. So, it is likely that some bias was fostered by this approach, which would otherwise have been distributed as random noise over multiple items. This problem was partially mitigated by the 50/50 split between positive and negative formulations.

Statistically, there was a limitation to the author's know-how. Factor analysis counts as one of the more complex methods, as it has many parameters that the researcher needs to tune to make decisions. While there are guidelines for choosing the best number of factors (for example, Kaiser criterion and Scree plot), the same does not apply to PCA vs. PAF (Principal Axes Factoring) and the optimization methods or rotations. If in doubt, the reference literature (from personality psychology) was consulted. Both PCA and PFA are regularly used (for example, PCA: DeYoung et al., 2007, p. 882; Lee & Ashton, 2018, p. 547; PAF: Ashton & Lee, 2009, p. 547; Soto & John, 2017a, p. 123). However, upon

careful examination, there seems to be a difference in usage. While only PCA is used to derive the facets (sub-trait dimensions), it appears that PAF and PCA are used for the traits themselves. PAF was not explored but might have led to different results. It would, however, not have changed the results from the first direct calculation of the HEXACO traits out of the OPI. No PCA was needed (and used) there.

Often, when new instruments are presented in the literature, validation data accompanies them, be it against other instruments, predictive validation, or retest data (Ashton & Lee, 2009, p. 342ff.; DeYoung et al., 2007, p. 889ff.; Saucier, 1994, p. 504ff.; Soto & John, 2017a, p. 124f.). This makes sense because any new tool that wants to earn its place needs to show that it is useful and real. This did not happen within this work. It was initially planned; however, due to time constraints, it was reduced to very few parameters (like one's overall sympathy towards one's organization). However, this poses a strong downside to the results of this master's thesis because there are no arguments that what was found adds anything to the existing state of knowledge.

On the positive side, the declared aim of this project was not to come up with a finished instrument that can be rolled out and replace existing approaches right away. The goal was to explore whether the analogy between the individual and the organization allows for the application of a personality model to organizations. While this has not worked as cleanly as desired, it may spark other ideas and approaches.

5.4 Outlook

This last subchapter usually discusses the work's practical implications and, in the best case, how people will be positively affected by it. Since this research project was quite theoretical and far removed from practical use cases, only further research steps can be listed that would be needed to bring this approach closer to being validated.

As already mentioned in the general discussion (Chapter 5.1), the lexical approach typically needs multiple iterations. Since the iterative nature of item selection, analysis, and validation go hand in hand, it is clear that this master's thesis can only serve as the first step, and more steps are required. This includes additional item creation (based on the new knowledge), allowing for better coverage of the feature space, but also potentially reworking the current ones to capture the essence of each scale better. Also, the very few slightly problematic items (double negatives) should be improved. Furthermore, the external validation against other parameters or models is still pending. As mentioned previously, there are more than 120 instruments for culture evaluation

(Taras et al., 2009, p. 357ff.), so it should not be hard to find a set of good benchmarks to compare with the findings.

Another next step would be to address the too highly cross-correlated nature of the MEDDS. The best path forward is to start with some theoretical work, trying to understand what the factors mean in practice and how examples of reversely correlated settings would manifest themselves. Based on those findings, a new questionnaire needs to be deployed and the new hypotheses tested.

Another interesting direction of research would be to examine the different views of organizations held by individual members. One view is the distant view (organization as something decoupled from oneself), and the other is the involved view (actively seeing oneself as being a part). This could either be further explored in alignment with the OPI or as a separate investigation utilizing a different tool.

Declaration on the Use of Generative AI and AI-Supported Technologies in the Master's Thesis

During the preparation of this work, I used:

- ChatGPT, 3.5 (chat.openai.com, 14.03.2024) for optimizing some formulations in English and for helping me with my questions regarding R and statistics.
- DeepL (www.deepl.com, 14.03.2024) for minor translations between German and English and writing improvements.
- Grammarly 1.63.2.0, for general copyediting, mainly spellchecking and grammar corrections.

After using these tools, I always carefully checked the content, for which I take full responsibility.

References

- Aaker, Jennifer L. (1997). Dimensions of Brand Personality. *Journal of Marketing Research*, 34(3), 347–356.
- Allport, Gordon W. (1937). *Personality: a psychological interpretation*. Oxford, UK: Holt.
- Allport, Gordon W. (1958). What units shall we employ? In Gardner Lindzey (Ed.), *Assessment of human motives* (p. 238–260). New York, NY, USA: Rinehart.
- Allport, Gordon W. (1961). *Pattern and growth in personality*. Oxford, UK: Holt, Reinhart & Winston.
- Allport, Gordon W./Vernon, Philip E. (1930). The field of personality. *Psychological Bulletin*, 27(10), 677–730.
- Asendorpf, Jens B. (2019). *Persönlichkeitsvariation*. Berlin/Heidelberg, Germany: Springer.
- Ashforth, Blake E./Schinoff, Beth S./Brickson, Shelley L. (2020). “My company is friendly,” “Mine’s a rebel”: Anthropomorphism and shifting organizational identity from “What” to “Who”. *The Academy of Management Review*, 45(1), 29–57.
- Ashton, Michael C./Lee, Kibeom/Perugini, Marco/et al. (2004). A Six-Factor Structure of Personality-Descriptive Adjectives: Solutions from Psycholexical Studies in Seven Languages. *Journal of Personality and Social Psychology*, 86(2), 356–366.
- Ashton, Michael C./Lee, Kibeom (2007). Empirical, Theoretical, and Practical Advantages of the HEXACO Model of Personality Structure. *Personality and Social Psychology Review*, 11(2), 150–166.
- Ashton, Michael C./Lee, Kibeom (2009). The HEXACO–60: A Short Measure of the Major Dimensions of Personality. *Journal of Personality Assessment*, 91(4), 340–345.
- Ashton, Michael C./Lee, Kibeom/De Vries, Reinout E. (2014). The HEXACO Honesty-Humility, Agreeableness, and Emotionality Factors: A Review of Research and Theory. *Personality and Social Psychology Review*, 18(2), 139–152.
- Ashton, Michael C./Lee, Kibeom/Goldberg, Lewis R. (2004). A Hierarchical Analysis of 1,710 English Personality-Descriptive Adjectives. *Journal of Personality and Social Psychology*, 87(5), 707–721.

- Ashton, Michael C./Lee, Kibeom/Goldberg, Lewis R. (2007). The IPIP–HEXACO scales: An alternative, public-domain measure of the personality constructs in the HEXACO model. *Personality and Individual Differences*, 42(8), 1515–1526.
- Ashton, Michael C./Lee, Kibeom/Goldberg, Lewis R./de Vries, Reinout E. (2009). Higher-Order Factors of Personality: Do They Exist? *Personality and social psychology review : an official journal of the Society for Personality and Social Psychology, Inc*, 13(2), 79–91.
- Avis, Mark/Aitken, Robert (2015). Intertwined: Brand personification, brand personality and brand relationships in historical perspective. *Journal of Historical Research in Marketing*, 7(2), 208–231.
- Backhaus, Klaus/Erichson, Bernd/Gensler, Sonja/Weiber, Rolf/Weiber, Thomas (2023). *Multivariate Analysemethoden: eine anwendungsorientierte Einführung* (17th edition). Wiesbaden/Germany: Springer Gabler.
- Bardmann, Theodor M./Groth, Torsten (2001). Die Organisation der Organisation. Eine Einleitung. In Theodor M. Bardmann/Torsten Groth (Ed.). *Zirkuläre Positionen 3: Organisation, Management und Beratung* (p. 7–20). Wiesbaden, Germany: Springer Fachmedien Wiesbaden.
- Bellot, Jennifer (2011). Defining and Assessing Organizational Culture. *Nursing Forum*, 46(1), 29–37.
- Beranek, Leo Leroy/Mellow, Tim J. (2012). *Acoustics: sound fields and transducers*. Amsterdam, The Netherlands: Academic Press.
- Blake, Robert R./Mouton, Jane S. (1964). *Managerial grid*. Huston, TX, USA: Gulf Publishing Company.
- Blake, Robert R./Mouton, Jane S./Bidwell, Alvin C. (1962). Managerial grid. *Advanced Management - Office Executive*, 1(9), 12–15.
- Brown, Richard E. (2016). Hebb and Cattell: The Genesis of the Theory of Fluid and Crystallized Intelligence. *Frontiers in Human Neuroscience*, 10(606), 1–11.
- Bucher, Meredith/Samuel, Douglas (2018). Development of a Short Form of the Abridged Big Five-Dimensional Circumplex Model to Aid with the Organization of Personality Traits. *Journal of Personality Assessment*, 101, 1–9.

-
- Cameron, Kim S./Freeman, Sarah J. (1991). Cultural Congruence, Strength and Type: Relationships to Effectiveness. *Research in Organizational Change and Development*, 5, 23–58.
- Cameron, Kim S./Quinn, Robert E. (2006). *Diagnosing and changing organizational culture: based on the competing values framework (2nd edition)*. San Francisco, CA, USA: Jossey-Bass.
- Cattell, Heather E.P./Mead, Alan D. (2008). The Sixteen Personality Factor Questionnaire (16PF). In Gregory J. Boyle/Gerald Matthews/Donald H. Saklofske (Ed.). *The SAGE Handbook of Personality Theory and Assessment: Volume 2 — Personality Measurement and Testing* (p. 135–159). London, UK: SAGE Publications Ltd.
- Cattell, Raymond B./Cattell, A. Karen/Cattell, Heather E.P. (1993). *Sixteen Personality Factor Questionnaire | Fifth Edition*. Savoy, IL, USA: Institute for Personality and Ability Testing.
- Chapman, Derek S./Reeves, Paige/Chapin, Michelle (2018). A Lexical Approach to Identifying Dimensions of Organizational Culture. *Frontiers in Psychology*, 9, 876.
- Chun, Rosa/Davies, Gary (2006). The influence of corporate character on customers and employees: Exploring similarities and differences. *Journal of the Academy of Marketing Science*, 34(2), 138–146.
- Cooke, Robert A./Lafferty, J. Clayton (1987). *Organizational Culture Inventory (OCI)*. Plymouth, MI, USA: Human Synergetics.
- Cooke, Robert/Szumal, Janet (2000). *Using the organizational culture inventory to understand the operating cultures of organizations*. Plymouth, MI, USA: Sage Publications.
- Costa, Paul T./McCrae, Robert R. (1985). *The NEO personality inventory manual*. Odessa, FL, USA: Psychological Assessment Resources.
- Costa, Paul T./McCrae, Robert R. (2008). The NEO Inventories. In Robert P. Archer/Steven R. Smith (Ed.). *Personality assessment* (p. 213–245). New York, NY, USA: Routledge/Taylor & Francis Group.
- Deal, Terrence E./Kennedy, Allen A. (1982). *Corporate cultures: the rites and rituals of corporate life*. Reading, PA, USA: Addison-Wesley Publishing Company.

- DeLobbe, Nathalie/Haccoun, Robert R./Vandenberghe, Christian (2002). Measuring core dimensions of organizational culture : A review of research and development of a new instrument. *AG - LSM Working Papers*, 02(53).
- DeYoung, Colin G. (2006). Higher-order factors of the Big Five in a multi-informant sample. *Journal of Personality and Social Psychology*, 91(6), 1138–1151.
- DeYoung, Colin G./Peterson, Jordan B./Higgins, Daniel M. (2002). Higher-order factors of the Big Five predict conformity: Are there neuroses of health? *Personality and Individual Differences*, 33(4), 533–552.
- DeYoung, Colin G./Quilty, Lena C./Peterson, Jordan B. (2007). Between facets and domains: 10 aspects of the Big Five. *Journal of Personality and Social Psychology*, 93(5), 880–896.
- Digman, John M. (1990). Personality Structure: Emergence of the Five-Factor Model. *Annual Review of Psychology*, 41(1), 417–440.
- Digman, John M. (1996). The curious history of the five-factor model. In Jerry S. Wiggins (Ed.). *The five-factor model of personality: Theoretical perspectives* (p. 1–20). New York, NY, USA: Guilford Press.
- Digman, John M. (1997). Higher-order factors of the Big Five. *Journal of Personality and Social Psychology*, 73(6), 1246–1256.
- Doody, John A./Immerwahr, John (1983). The presistance of the four temperaments. *Soundings: An Interdisciplinary Journal*, 66(3), 348–359.
- Döring, Nicola (2013). Zur Operationalisierung von Geschlecht im Fragebogen – Probleme und Lösungsansätze aus Sicht von Mess-, Umfrage-, Gender- und Queer-Theorie. *GENDER*, 2, 94–113.
- Döring, Nicola/Bortz, Jürgen (2016). *Forschungsmethoden und Evaluation in den Sozial- und Humanwissenschaften* (5th edition). Berlin/Heidelberg, Germany: Springer.
- Eysenck, Hans J. (1952). *The scientific study of personality*. London, UK: Routledge & Kegan Paul.
- Eysenck, Hans J. (1953). *The structure of human personality*. New York, NY, USA: Methuen.
- Eysenck, Michael W. (2016). Hans Eysenck: A research evaluation. *Personality and Individual Differences*, 103, 209–219.

-
- Favaro, Ken (2014). Strategy or Culture: Which Is More Important? Strategy+business. Online: www.strategy-business.com/blog/Strategy-or-Culture-Which-Is-More-Important [Accessed: 11.04.2024].
- Fernández, Jorge E./Hogan, Robert T. (2003). The character of organizations. *Journal of Business Strategy*, 24(1), 38–40.
- Freud, Sigmund/Giampieri-Deutsch, Patrizia (2020). Freuds dynamisches Strukturmodell des Mentalen im 21. Jahrhundert. Einführung in Freuds Schriften Das Ich und das Es und >Die Zerlegung der psychischen Persönlichkeit<. Göttingen, Germany: V&R Unipress/Vienna University Press.
- Furnham, Adrian (2021). *Twenty Ways to Assess Personnel: Different Techniques and their Respective Advantages*. Cambridge, UK: Cambridge University Press.
- Furnham, Adrian (2022). The Big Five Facets and the MBTI: The Relationship between the 30 NEO-PI(R) Facets and the Four Myers-Briggs Type Indicator (MBTI) Scores. *Psychology*, 13(10), 1504–1516.
- Furnham, Adrian/Gunter, Barrie (2015). *Corporate Assessment: Auditing a Company's Personality*. London, UK: Routledge.
- Fusch, Gene/Gillespie, Richard C. (2012). *A practical approach to performance interventions and analysis: 50 models for building a high-performance culture*. Upper Saddle River, NJ, USA: FT Press.
- Gehlshøj, Bent (1947). *Electromechanical and Electroacoustical Analogies and Their Use in Computations and Diagrams of Oscillating Systems*. Copenhagen, Denmark: Academy of Technical Sciences and Danish Society of Engineers.
- Geyer, Peter (2012). Extraversion – Introversion: what C.G. Jung meant and how contemporaries responded. AusAPT Biennial Conference, Meldourne, Australia: October 25-27, 2012.
- Goldberg, Lewis R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment*, 4(1), 26–42.
- Goldberg, Lewis R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In Ivan Mervielde/Ian Deary/Fruyt de Fruyt/Fritz Ostendorf (Ed.). *Personality psychology in Europe (7)* (p. 7–28). Tilburg, the Netherlands: Tilburg University Press.

- Goldberg, Lewis R. et al. (2006). The international personality item pool and the future of public-domain personality measures. *Journal of Research in Personality*, 40(1), 84–96.
- Gosling, Samuel D./Rentfrow, Peter J./Swann Jr., William B. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in personality*, 37(6), 504–528.
- Gray, Jeffrey A. (1995). A model of the limbic system and basal ganglia: Applications to anxiety and schizophrenia. In Michael S. Gazzaniga (Ed.). *The cognitive neurosciences* (p. 1165–1176). Cambridge, MA, USA: The MIT Press.
- Gupta, Anil K./Smith, Ken G./Shalley, Christina E. (2006). The Interplay Between Exploration and Exploitation. *Academy of Management Journal*, 49(4), 693–706.
- Guthrie, Stewart E. (1993). *Faces in the Clouds: A New Theory of Religion*. New York, NY, USA: Oxford University Press.
- Hartnell, Chad A./Ou, Amy Yi/Kinicki, Angelo (2011). Organizational culture and organizational effectiveness: A meta-analytic investigation of the competing values framework's theoretical suppositions. *Journal of Applied Psychology*, 96(4), 677–694.
- He, Yimin/Donnellan, M. Brent/Mendoza, Anjelica M. (2019). Five-factor personality domains and job performance: A second order meta-analysis. *Journal of Research in Personality*, 82, 103848.
- Hemphill, James F. (2003). Interpreting the magnitudes of correlation coefficients. *American Psychologist*, 58(1), 78–79.
- Henrich, Joseph/Heine, Steven J./Norenzayan, Ara (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, 33(2–3), 61–83.
- Hofstede, Geert (2011). Dimensionalizing Cultures: The Hofstede Model in Context. *Online Readings in Psychology and Culture*, 2(1).
- Hofstede, Geert/Hofstede, Gert Jan/Minkov, Michael (2010). *Cultures and organizations: software of the mind: intercultural cooperation and its importance for survival* (3rd edition). New York, NY, USA: McGraw-Hill.
- Hofstede, Geert/McCrae, Robert R. (2004). Personality and Culture Revisited: Linking Traits and Dimensions of Culture. *Cross-Cultural Research: The Journal of Comparative Social Science*, 38(1), 52–88.

-
- Hofstee, Willem K./de Raad, Boele/Goldberg, Lewis R. (1992). Integration of the big five and circumplex approaches to trait structure. *Journal of Personality and Social Psychology*, 63(1), 146–163.
- Hogan, Robert (1991). Personality and personality measurement. In *Handbook of industrial and organizational psychology (Vol. 2)* (2nd edition) (p. 873–919). Palo Alto, CA, USA: Consulting Psychologists Press.
- Howard, Matt C./Van Zandt, Elise C. (2020). The discriminant validity of honesty-humility: A meta-analysis of the HEXACO, Big Five, and Dark Triad. *Journal of Research in Personality*, 87, 103982.
- Hunter, John E./Hunter, Ronda F. (1984). Validity and utility of alternative predictors of job performance. *Psychological Bulletin*, 96(1), 72–98.
- John, Oliver P./Angleitner, Alois/Ostendorf, Fritz (1988). The lexical approach to personality: A historical review of trait taxonomic research. *European Journal of Personality*, 2(3), 171–203.
- John, Oliver P./Donahue, E.M./Kentle, R.L. (1991). *The Big Five Inventory - Versions 4a and 54*. Berkeley, CA, USA: University of California, Berkeley, Institute of Personality and Social Research.
- John, Oliver P./Naumann, Laura P./Soto, Christopher J. (2008). Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues. In Oliver P. John/Richard W. Robins/Lawrence A. Pervin (Ed.). *Handbook of personality: Theory and research* (3rd edition) (p. 114–158). New York, NY, USA: Guilford Press.
- John, Oliver P./Soto, Christopher J. (2007). The importance of being valid: Reliability and the process of construct validation. In Richard W. Robins/R. Chris Fraley/Robert F. Krueger (Ed.). *Handbook of research methods in personality psychology* (p. 461–494). New York, NY, USA: The Guilford Press.
- Johnson, John A. (2014). Measuring thirty facets of the Five Factor Model with a 120-item public domain inventory: Development of the IPIP-NEO-120. *Journal of Research in Personality*, 51, 78–89.
- Jonkisz, Ewa/Moosbrugger, Helfried/Brandt, Holger (2012). Planung und Entwicklung von Tests und Fragebogen. In Helfried Moosbrugger/Augustin Kelava (Ed.). *Testtheorie und Fragebogenkonstruktion* Springer-Lehrbuch. (p. 27–74). Berlin/Heidelberg, Germany: Springer.

- Jung, Carl G. (1923). *Psychological Types*. London, UK: Routledge & Kegan Paul.
- Jung, Carl G. (2016). *Psychological Types*. New York, NY, USA: Routledge.
- Jung, Tobias et al. (2009). Instruments for Exploring Organizational Culture: A Review of the Literature. *Public Administration Review*, 69(6), 1087–1096.
- Just, Caroline (2011). A review of literature on the general factor of personality. *Personality and Individual Differences*, 50(6), 765–771.
- Kaiser, Henry F./Rice, John (1974). Little Jiffy, Mark Iv. *Educational and Psychological Measurement*, 34(1), 111–117.
- Kumar, Ajay (2018). Story of Aaker's brand personality scale criticism. *Spanish Journal of Marketing - ESIC*, 22(2), 203–230.
- Lee, Kibeom et al. (2013). Sex, Power, and Money: Prediction from the Dark Triad and Honesty–Humility. *European Journal of Personality*, 27(2), 169–184.
- Lee, Kibeom/Ashton, Michael C. (2008). The HEXACO Personality Factors in the Indigenous Personality Lexicons of English and 11 Other Languages. *Journal of Personality*, 76(5), 1001–1054.
- Lee, Kibeom/Ashton, Michael C. (2018). Psychometric Properties of the HEXACO-100. *Assessment*, 25(5), 543–556.
- Lee, Kibeom/Ashton, Michael C. (2020). Sex differences in HEXACO personality characteristics across countries and ethnicities. *Journal of Personality*, 88(6), 1075–1090.
- van der Linden, Dimitri/Te Nijenhuis, Jan/Bakker, Arnold B. (2010). The General Factor of Personality: A meta-analysis of Big Five intercorrelations and a criterion-related validity study. *Journal of Research in Personality*, 44(3), 315–327.
- Mac Giolla, Erik/Kajonius, Petri J. (2019). Sex differences in personality are larger in gender equal countries: Replicating and extending a surprising finding. *International Journal of Psychology*, 54(6), 705–711.
- Matthews, Gerald/Gilliland, Kirby (1999). The personality theories of H.J. Eysenck and J.A. Gray: a comparative review. *Personality and Individual Differences*, 26(4), 583–626.

-
- McAdams, Dan P. (1997). A Conceptual History of Personality Psychology. In Robert Hogan/John Johnson/Stephen R. Briggs (Ed.). *Handbook of Personality Psychology* (p. 3–39). San Diego, CA, USA: Academic Press.
- Mintzberg, Henry (1989). *Mintzberg on Management: Inside Our Strange World of Organizations*. New York, NY, USA: Simon and Schuster.
- Mischel, Walter (1968). *Personality and assessment*. New York, NY, USA: Wiley.
- Mitroff, Ian I. (1983). Archetypal Social Systems Analysis: On the Deeper Structure of Human Systems. *The Academy of Management Review*, 8(3), 387.
- Morgan, Gareth (2006). *Images of organization* (2nd edition). Thousand Oaks, CA, USA: Sage Publications.
- Musek, Janek (2007). A general factor of personality: Evidence for the Big One in the five-factor model. *Journal of Research in Personality*, 41(6), 1213–1233.
- Myers, Isabel B./McCaulley, Mary H. (1985). *Manual: A Guide to the Development and Use of the Myers-Briggs Type Indicator*. Palo Alto, CA, USA: Consulting Psychologists.
- Myers, Steve (2016). Myers-Briggs typology and Jungian individuation. *Journal of Analytical Psychology*, 61(3), 289–308.
- Nielsen, Jakob/Landauer, Thomas K. (1993). A mathematical model of the finding of usability problems. *Proceedings of the SIGCHI conference on Human factors in computing systems - CHI '93. the SIGCHI conference, Amsterdam, The Netherlands: ACM Press*.
- Ostroff, Cheri/Kinicki, Angelo J./Muhammad, Rabiah S. (2012). Organizational Culture and Climate. In Irving Weiner (Ed.). *Handbook of Psychology* (2nd edition) (p. 643–676). Hoboken, NJ, USA: John Wiley & Sons.
- Otto, Philipp E./Chater, Nick/Stott, Henry (2006). How People Perceive Companies: Personality Dimensions as Fundamentals? *Proceedings of the Annual Meeting of the Cognitive Science Society, Vancouver, Canada: July 26-29, 2006*.
- Otto, Philipp E./Chater, Nick/Stott, Henry (2011). The psychological representation of corporate 'personality'. *Applied Cognitive Psychology*, 25(4), 605–614.
- Paulhus, Delroy L./Klaiber, Patrick (2020). HEXACO, Dark Personalities, and Brunswik Symmetry. *European Journal of Personality*, 34(4), 541–542.

- Pettigrew, Andrew M. (1979). On Studying Organizational Cultures. *Administrative Science Quarterly*, 24(4), 570–581.
- Pettigrew, Andrew M. (1990). Conclusion: Organizational Climate and Culture: Two Constructs in Search of a Role. In Benjamin Schneider (Ed.). *Organizational climate and culture* *Frontiers of industrial and organizational psychology*. (p. 413–434). San Francisco, CA, USA: Jossey-Bass.
- Pettigrew, Thomas F. (1997). Personality and social structure: Social psychological contributions. In Robert Hogan/John Johnson/Stephen R. Briggs (Ed.). *Handbook of personality psychology* (p. 417–438). San Diego, CA, USA: Academic Press.
- Pittenger, David J. (1993). The Utility of the Myers-Briggs Type Indicator. *Review of Educational Research*, 63(4), 467–488.
- Quinn, Robert E./Rohrbaugh, John (1981). A Competing Values Approach to Organizational Effectiveness. *Public Productivity Review*, 5(2), 122.
- Rammstedt, Beatrice/John, Oliver P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of Research in Personality*, 41(1), 203–212.
- Randolph, Justus J./Edmondson, R. Shawn (2019). Using the Binomial Effect Size Display (BESD) to Present the Magnitude of Effect Sizes to the Evaluation Audience. *Practical Assessment, Research, and Evaluation*, 10(14), 1–7.
- Revelle, William/Wilt, Joshua (2013). The General Factor of Personality: A General Critique. *Journal of research in personality*, 47(5), 493–504.
- Rosenthal, Robert/Rubin, Donald B. (1982). A simple, general purpose display of magnitude of experimental effect. *Journal of Educational Psychology*, 74(2), 166–169.
- Rushton, J. Philippe/Irwing, Paul (2008). A General Factor of Personality (GFP) from two meta-analyses of the Big Five: Digman (1997) and Mount, Barrick, Scullen, and Rounds (2005). *Personality and Individual Differences*, 45(7), 679–683.
- Rushton, Philippe/Irwing, Paul (2011). The general factor of personality: Normal and abnormal. In Tomas Chamorro-Premuzic/Sophie von Stumm/Adrian Furnham (Ed.). *The Wiley-Blackwell handbook of individual differences* (p. 132–161). Hoboken, NJ, USA: Wiley Blackwell.

-
- Saucier, Gerard (1994). Mini-Markers: A brief version of Goldberg's unipolar Big-Five markers. *Journal of Personality Assessment*, 63(3), 506–516.
- Saunders, Frances Wright (1991). *Katharine and Isabel: mother's light, daughter's journey*. Palo Alto, CA, USA: Consulting Psychologists Press.
- Schein, Edgar H. (1987). What is culture? In Jay M. Shafritz/J. Steven Ott (Ed.). *Classics of organization theory* (2nd edition) (p. 381–396). Chicago, IL, USA: Dorsey Press.
- Schein, Edgar H. (1990). Organizational culture. *American Psychologist*, 45(2), 109–119.
- Schein, Edgar H./Schein, Peter (2017). *Organizational culture and leadership* (5th edition). Hoboken, NJ, USA: Wiley.
- Slaughter, Jerel E./Zickar, Michael J./Highhouse, Scott/Mohr, David C. (2004). Personality Trait Inferences About Organizations: Development of a Measure and Assessment of Construct Validity. *Journal of Applied Psychology*, 89(1), 85–103.
- Small, Richard H. (1972). Direct Radiator Loudspeaker System Analysis. *Journal of the Audio Engineering Society*, 20(5), 383–395.
- Soto, Christopher J./John, Oliver P. (2017a). The next Big Five Inventory (BFI-2): Developing and assessing a hierarchical model with 15 facets to enhance bandwidth, fidelity, and predictive power. *Journal of Personality and Social Psychology*, 113(1), 117–143.
- Soto, Christopher J./John, Oliver P. (2017b). Short and extra-short forms of the Big Five Inventory-2: The BFI-2-S and BFI-2-XS. *Journal of Research in Personality*, 68, 69–81.
- Soto, Christopher J./John, Oliver P. (2019). Optimizing the length, width, and balance of a personality scale: How do internal characteristics affect external validity? *Psychological Assessment*, 31(4), 444–459.
- Taras, Vas/Kirkman, Bradley L./Steel, Piers (2010). Examining the impact of Culture's consequences: A three-decade, multilevel, meta-analytic review of Hofstede's cultural value dimensions. *Journal of Applied Psychology*, 95(3), 405–439.
- Taras, Vas/Rowney, Julie/Steel, Piers (2009). Half a century of measuring culture: Review of approaches, challenges, and limitations based on the analysis of 121 instruments for quantifying culture. *Journal of International Management*, 15(4), 357–373.

- Thiele, Albert N. (1971). Loudspeakers in Vented Boxes: Part 1. *Journal of the Audio Engineering Society*, 19(5), 382–392.
- Tucker, William H. (2010). *The Cattell Controversy: Race, Science, and Ideology*. Champaign, IL, USA: University of Illinois Press.
- de Vries, Reinout E. (2013). The 24-item Brief HEXACO Inventory (BHI). *Journal of Research in Personality*, 47(6), 871–880.
- Xenikou, Athena/Furnham, Adrian (1996). A Correlational and Factor Analytic Study of Four Questionnaire Measures of Organizational Culture. *Human Relations*, 49(3), 349–371.

Online Sources

- drj.virtualave.net/IPIP/kipneo300.htm [Accessed: 25.05.2024]
- forms.office.com [Accessed: 30.03.2024]
- hexaco.org/hexaco-online [Accessed: 21.02.2024]
- ipip.ori.org [Accessed: 24.09.2023]
- www.economist.com/business/2022/07/07/reading-corporate-culture-from-the-outside [Accessed: 11.04.2024]
- www.goldenllc.com/golden-personality-profiler-admin.php [Accessed: 24.02.2024]
- www.hofstede-insights.com/solutions/the-culture-compass [Accessed: 7.10.2023]
- www.humansynergistics.com/about-us/the-circumplex [Accessed: 09.03.2024]
- www.hrdpress.com/Psychological-Type-Indicator-Online-Assessment-PTIO [Accessed: 24.02.2024]
- www.leadersbeacon.com/majors-pti [Accessed: 24.02.2024]
- www.ocf.berkeley.edu/~johnlab [Accessed: 22.09.2023]
- www.outofservice.com/bigfive [Accessed: 22.09.2023]
- www.parinc.com/Products?pkey=276 [Accessed: 22.09.2023]
- www.parinc.com/Products/Pkey/275 [Accessed: 22.09.2023]
- www.parinc.com/Products?pkey=274 [Accessed: 22.09.2023]

<https://www.r-project.org/economist> [Accessed: 25.05.2024]

www.spglobal.com/spdji/en/landing/topic/gics [Accessed: 24.03.2024]

www.understandmyself.com [Accessed: 24.09.2023]

www.wko.at/oe/branchen/start [Accessed: 24.03.2024]

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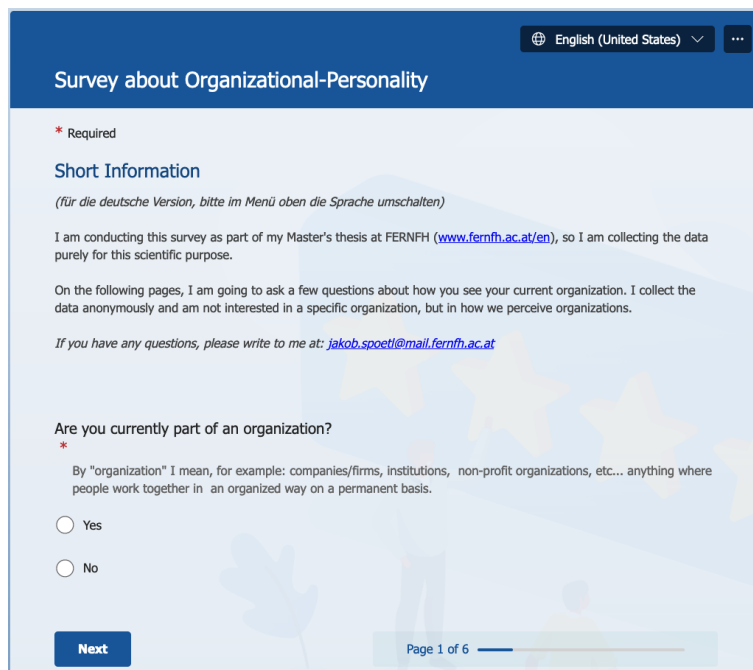
Annex: Questionnaire

Only the English version is shown below. The German version was a straightforward translation. The questionnaire was reachable by the following link: forms.office.com/e/T7XfTW21vt.

First page:



Second page:



Third page:

English (United States) ▼ 🔍 ⋮

Survey about Organizational-Personality

* Required

And now a few questions about how you see your organization. 🔍

In case you are part of several organizations, please focus on the one you know best.

How much do the following statements apply to your organization? (Part 1 of 3) * 🔍

As always with these surveys: there is no right and wrong!
Please just answer as you see fit.

	Disagree	Mainly disagree	Neutral	Mainly agree	Agree	<i>I don't understand/ know</i>
Art has no relevance within our organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We plan and organize things, to avoid scrambling at the last minute.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If you make a mistake, we are quick to forgive.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We ourselves are reasonably satisfied with our organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Downturns in the market situation put the whole organization at unease.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flattery is a very atypical way of getting ahead in our organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We have a culture of interest and learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We set ambitious targets and are pushing another to achieve those.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Disagree	Mainly disagree	Neutral	Mainly agree	Agree	<i>I don't understand/ know</i>
We usually judge each other strictly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my organization meetings are no good place to express one's opinion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is common in my organization to obsess over seemingly unnecessary things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization always tries to use the legal framework to its maximum advantage.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my organization, creative outlets are valued.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accuracy is generally a lower priority in our organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tough discussions are part of how our organization operates.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We typically work in teams/groups.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Back](#)
[Next](#)
Page 2 of 6

Fourth page:

English (United States) ▼ 🔍 ⋮

Survey about Organizational-Personality

* Required

And now a few more questions about how you see your organization 🔍

As always with these surveys: there is no right and wrong!
Please just answer as you see fit.

...and on we go... :-) (Part 2 of 3) * 🔍

	Disagree	Mainly disagree	Neutral	Mainly agree	Agree	<i>I don't understand/ know</i>
Even in difficult times, we trust that the organization will care for us.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Money is a secondary motivator for us to work in my organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We don't even pay attention to crazy-sounding ideas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decisions are typically made by intuition and less on concrete facts.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is usual to have heated and loud discussions in my organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People are typically in a good mood when they come to work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization lives in the past.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Showing respect is highly valued in my organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Disagree	Mainly disagree	Neutral	Mainly agree	Agree	<i>I don't understand/ know</i>
We are not very creative as an organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We sometimes struggle with efficiently organizing our resources.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We have an open culture of making mistakes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Only very few people are proud to work for my organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my organization, it's common to worry about job security.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is typical to laugh even at the bad jokes of our superiors.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization has little interest in my continuing education.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my organization, the expectation is that you only do the bare minimum anyway.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Page 3 of 6

Fifth page:

English (United States) ▼

Survey about Organizational-Personality

* Required

And now the last questions about how you see your organization. 🔒

You're making good progress, just this one page and then the end is already in sight.

Part 3 of 3 * 🔒

	Disagree	Mainly disagree	Neutral	Mainly agree	Agree	<i>I don't understand/ know</i>
In my organization, we are mild in our judgment of others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We encourage people to be proactive and take risks.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compared to other organizations we are very stable and steadfast.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We are honest, even under high pressure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We foster an environment of creative thinking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We value precision and quality highly, even at the expense of time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We live in a culture where compromise is considered something positive.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We take care to integrate new people quickly, not only professionally but also socially.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Disagree	Mainly disagree	Neutral	Mainly agree	Agree	<i>I don't understand/ know</i>
My organization is very stable, we even get through difficult times without too much fuss.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization likes to show how successful it is.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization welcomes people with unconventional views	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is no overall plan in my organization, everyone works on their own.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In other organizations, it is more common to show anger openly than in mine.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other organizations are generally more optimistic and dynamic than ours.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When an important person leaves the organization, they are missed for many years.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Status is an important thing in the culture of my organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Sixth page:

English (United States) v
🔍 ⋮

Survey about Organizational-Personality

* Required

General Questions 🔍

You are almost done. :-)

How would you rate your overall sympathy for your organization? * 🔍

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

very low very high

Who/what did you think about when answering the questions before? * 🔍

	Often	Rarely	Never	Not existent in my organization	I don't know
Myself in the organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My direct manager	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My direct co-workers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Top management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CEO or similar person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mission, Vision, and/or Values of the organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Code of Conduct	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internal regulations / rules of procedure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How many years have you been working for this organization? * 🔍

Please enter a number greater than or equal to 0

How many members (employees) does the organization have? * 🔍

1-9

10-49

50-199

200-999

≥1000

Other

How many years has the organization been in existence? * 🔍

0-3


4-9

10-29

≥30

Other

Sixth page (continued):

In which industry or field does the organization primarily operate? * 

Banking and insurance

Trade and crafts

Commerce

Industry

Information and consulting

Tourism and leisure

Transport and traffic


Education and science

Health and social services

Agriculture and forestry

Public administration

Other

Do you have leadership responsibility in the organization/company? * 


Yes (upper Management, Executive Level)


Yes (middle Management, Department Leader)


Yes (lower Management, Team Leader)

No

Other

How many hours do you normally work in the organization per working week? * 

What is your year of birth? * 


What is your gender? * 

Female

Male

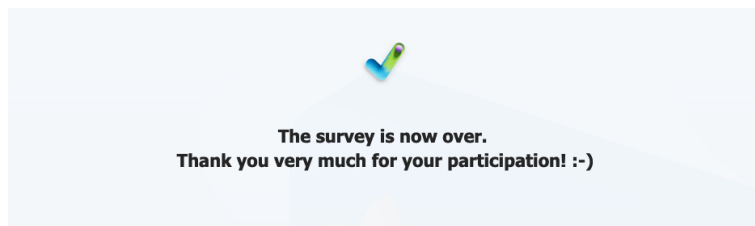
Diverse/non-binary

I don't want to say

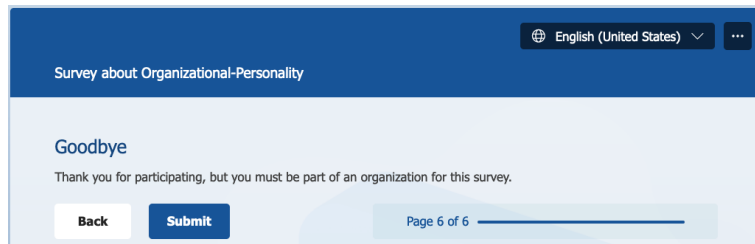
Are there any thoughts you would like to share with me, in regard to this study? 

Page 5 of 6

Seventh (and last regular) page:



Third page, in case of not being part of an organization:



Annex: Codebook

OPI (Organizational Personality Inventory) items:

Item Code	Item Question (English)	Item Question (German)	Answer Format
OPI_01	Art has no relevance within our organization.	Kunst hat in unserer Organisation keine Relevanz.	1 (Disagree) to 5 (Agree) NA (I don't know/ understand)
OPI_02	We plan and organize things, to avoid scrambling at the last minute.	Wir planen voraus und sind gut organisiert, um Stress in der letzten Sekunde zu vermeiden.	
OPI_03	If you make a mistake, we are quick to forgive.	Wenn man einen Fehler gemacht hat, wird einem bei uns schnell wieder verziehen.	
OPI_04	We ourselves are reasonably satisfied with our organization.	Die meisten sind zufrieden mit unserer Organisation.	
OPI_05	Downturns in the market situation put the whole organization at unease.	Verschlechterungen der Marktbedingungen machen die ganze Organisation nervös.	
OPI_06	Flattery is a very atypical way of getting ahead in our organization.	Schmeicheleien sind ein unübliches Mittel in unserer Organisation, um sich Vorteile zu verschaffen.	
OPI_07	We have a culture of interest and learning.	Wir pflegen eine Kultur des Lernens und der Offenheit.	
OPI_08	We set ambitious targets and are pushing another to achieve those.	Wir setzen uns ambitionierte Ziele und treiben uns an diese auch zu erreichen.	
OPI_09	We usually judge each other strictly.	Wir beurteilen einander in der Regel streng.	
OPI_10	In my organization meetings are no good place to express one's opinion.	In meiner Organisation sind Meetings ein schlechter Ort, um die eigene Meinung zu äußern.	
OPI_11	It is common in my organization to obsess over seemingly unnecessary things.	In meiner Organisation ist es üblich, sich über scheinbar unnötige Dinge Gedanken zu machen.	
OPI_12	My organization always tries to use the legal framework to its maximum advantage.	Meine Organisation versucht den rechtlichen Rahmen immer maximal zu ihrem Vorteil auszunutzen.	
OPI_13	In my organization, creative outlets are valued.	In meiner Organisation werden kreative Hobbies geschätzt.	
OPI_14	Accuracy is generally a lower priority in our organization.	Genauigkeit hat in unserer Organisation in der Regel eine untergeordnete Priorität.	
OPI_15	Tough discussions are part of how our organization operates.	Harte Diskussionen sind Teil der Arbeitsweise unserer Organisation.	
OPI_16	We typically work in teams/groups.	Wir arbeiten typischer Weise in Teams/Gruppen.	
OPI_17	Even in difficult times, we trust that the organization will care for us.	Selbst in schwierigen Zeiten vertrauen wir darauf, dass sich die Organisation um uns kümmert.	
OPI_18	Money is a secondary motivator for us to work in my organization.	Geld ist ein untergeordneter Motivator für uns, in meiner Organisation zu arbeiten.	
OPI_19	We don't even pay attention to crazy-sounding ideas.	Verrückt klingenden Ideen schenken wir erst gar keine Beachtung.	
OPI_20	Decisions are typically made by intuition and less on concrete facts.	Entscheidungen werden in der Regel nach Intuition und weniger auf der Grundlage konkreter Fakten getroffen.	

Annex: Codebook

OPI_21	It is usual to have heated and loud discussions in my organization.	Hitzige und laute Diskussionen sind in meiner Organisation üblich.
OPI_22	People are typically in a good mood when they come to work.	Die Menschen kommen in der Regel mit guter Laune zur Arbeit.
OPI_23	My organization lives in the past.	Meine Organisation lebt in der Vergangenheit.
OPI_24	Showing respect is highly valued in my organization.	Respekt zu zeigen ist wichtig in meiner Organisation.
OPI_25	We are not very creative as an organization.	Wir sind als Organisation nicht sehr kreativ.
OPI_26	We sometimes struggle with efficiently organizing our resources.	Wir tun uns manchmal schwer unsere Ressourcen effizient zu organisieren.
OPI_27	We have an open culture of making mistakes.	Wir haben eine offene Fehlerkultur.
OPI_28	Only very few people are proud to work for my organization.	Die wenigsten sind stolz, bei meiner Organisation zu arbeiten.
OPI_29	In my organization, it's common to worry about job security.	In meiner Organisation ist es üblich, sich um seine Jobsicherheit Sorgen zu machen.
OPI_30	It is typical to laugh even at the bad jokes of our superiors.	Es ist bei uns üblich auch über die schlechten Witze der Vorgesetzten zu lachen.
OPI_31	My organization has little interest in my continuing education.	Meine Organisation hat geringes Interesse daran, dass ich mich fortbilde.
OPI_32	In my organization, the expectation is that you only do the bare minimum anyway.	In meiner Organisation wird erwartet, dass man sowieso immer nur das Minimum liefert.
OPI_33	In my organization, we are mild in our judgment of others.	In meiner Organisation sind wir mild in unserer Beurteilung von anderen.
OPI_34	We encourage people to be proactive and take risks.	Wir ermutigen Menschen, proaktiv zu sein und Risiken einzugehen.
OPI_35	Compared to other organizations we are very stable and steadfast.	Verglichen mit anderen Organisationen sind wir sehr stabil und beständig.
OPI_36	We are honest, even under high pressure	Wir sind ehrlich, selbst unter hohem Druck.
OPI_37	We foster an environment of creative thinking.	Wir fördern ein Umfeld des kreativen Denkens.
OPI_38	We value precision and quality highly, even at the expense of time.	Wir schätzen Genauigkeit und hohe Qualität, auch wenn es zu Lasten von Geschwindigkeit geht.
OPI_39	We live in a culture where compromise is considered something positive.	Wir leben eine Kultur in der Kompromisse positiv gesehen werden.
OPI_40	We take care to integrate new people quickly, not only professionally but also socially.	Wir bemühen uns Neuzugänge auch sozial schnell einzubinden, nicht nur die Arbeit betreffend.
OPI_41	My organization is very stable, we even get through difficult times without too much fuss.	Meine Organisation ist sehr stabil, selbst schwierige Zeiten stehen wir ohne große Aufregung durch.
OPI_42	My organization likes to show how successful it is.	Meine Organisation zeigt gerne, wie erfolgreich sie ist.
OPI_43	My organization welcomes people with unconventional views	Meine Organisation ist offen für Personen mit ungewöhnlichen Ansichten.
OPI_44	There is no overall plan in my organization, everyone works on their own.	In meiner Organisation gibt es keinen Gesamtplan, jede:r arbeitet so vor sich hin.
OPI_45	In other organizations, it is more common to show anger openly than in mine.	In anderen Organisationen ist offen gezeigter Ärger üblicher als in meiner.

OPI_46	Other organizations are generally more optimistic and dynamic than ours.	Andere Organisationen sind in der Regel optimistischer und dynamischer als unsere.	
OPI_47	When an important person leaves the organization, they are missed for many years.	Wenn eine wichtige Person die Organisation verlässt, wird sie noch lange vermisst.	
OPI_48	Status is an important thing in the culture of my organization.	Status ist etwas Wichtiges in unserer Organisationskultur.	

Additional (non-OPI) Items:

EG_1	<i>(für die deutsche Version, bitte im Menü oben die Sprache umschalten)</i>	<i>(for the English version, please change the language at the top menu)</i>	1 (English) 2 (Deutsch)
KO_1	Are you currently part of an organization (for example a company, non-profit organization, etc.)?	Bist du derzeit Teil einer Organisation (z.B. Unternehmen, Non-Profit Organisation, etc.)?	1 (Yes) 2 (No)
AD_1	How would you rate your overall sympathy for your organization?	Wie würdest du deine Sympathie gegenüber Deiner Organisation einschätzen?	0 (low) to 10 (high)
	<i>Who/what did you think about when answering the questions before?</i>	<i>An wen/was hast du gedacht, bei der Beantwortung der Fragen vorhin?</i>	-
AD_2a	...Myself in the organization	...Mich selbst in der Organisation	1 (Often)
AD_2b	...My direct manager	...Meine direkte Führungskraft	2 (Rarely)
AD_2c	...My direct co-workers	...Meine unmittelbaren Arbeitskolleg:innen	3 (Never)
AD_2d	...My team	...Mein Team	4 (Not existent in my organization)
AD_2e	...My department	...Meine Abteilung	5 (I don't know)
AD_2f	...Top management	...Die Führungsebene	
AD_2g	...CEO or similar person	...CEO bzw. vergleichbare Person	
AD_2h	...Mission, Vision, and/or Values of the organization	...Mission, Vision und/oder Werte der Organisation	
AD_2i	...Code of Conduct	...Code of Conduct	
AD_2j	...Internal regulations/rules of procedure	...Interne Richtlinien / Geschäftsordnung	
ORG_1	How many years have you been working for this organization?	Seit wie vielen Jahren arbeitest du bereits für diese Organisation?	Integer number, NA (non-sensical input)
ORG_2	How many employees does the organization have?	Wie viele Mitarbeiter hat die Organisation?	1 (1-9) 2 (10-49) 3 (50-199) 4 (200-999) 5 (≥1000) NA (unclassified)
ORG_3	How many years has the organization been in existence?	Seit wie vielen Jahren gibt es die Organisation bereits?	1 (0-3) 2 (4-9) 3 (10-29) 4 (≥30) NA (unclassified)

ORG_4	In which industry or field does the organization primarily operate?	Welcher Branche gehört die Organisation primär an?	1 (banking and insurance) 2 (trade and crafts) 3 (commerce) 4 (industry) 5 (information and consulting) 6 (tourism and leisure) 7 (transport and traffic) 8 (education and science) 9 (health and social services) 10 (agriculture and forestry) 11 (public administration) NA (unclassified)
PER_1	Do you have leadership responsibility in the organization/company?	Hast du in der Organisation Führungsverantwortung?	1 (yes, upper management, executive level) 2 (yes, middle management, department leader) 3 (yes, lower management, team leader) 4 (no) NA (unclassified)
PER_2	How many hours do you normally work in the organization per working week?	Wie viele Stunden arbeitest du üblicherweise pro Arbeitswoche für die Organisation?	Integer number, NA (non-sensical input)
PER_3	What is your year of birth?	Was ist Dein Geburtsjahr?	Integer number, NA (non-sensical input)
PER_4	What is your gender?	Was ist Dein Geschlecht?	1 (female) 2 (male) 3 (diverse/non-binary) 4 (I don't want to say)
AD_3	Are there any thoughts you would like to share with me, in regard to this study?	Gibt es irgendwelche Gedanken, die du mir noch mitteilen möchtest?	Open field