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PERSONALITY TRAITS AND CAREER SUCCESS - A MULTILAYERED APPROACH

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List of Abbreviations

AI	Artificial Intelligence
CFA	Confirmatory Factor Analysis
CFI	Confirmatory Fit Index
CMV	Common Method Variance
df	Degrees of Freedom
GFP	Generalfaktor der Persönlichkeit
GFP-E	Generalfaktor der Persönlichkeit für Executives
n	Sample size
n.s.	Not significant
NWW	New Ways of Working
p	Significance Value
PFA	Hauptachsen-Faktorenanalyse
r	Correlation Coefficient
RMSEA	Root Mean Square Error of Approximation
SD	Standard Deviation
TLI	Tucker-Lewis Index

1 Introduction

1.1 Scope and Research Questions

For years career success emerged as one of the focal points in managerial psychology research. It still remains a key topic in contemporary literature (Akkermans & Kubasch, 2017). It gains additional importance because working conditions have recently changed due to digital transformation (Timonen & Vuori, 2018), leading to new working settings. The COVID-19 pandemic, with all its lockdown consequences, accelerates the urgency of the issue. According to a recent study by Stanford University, only 20% of US employees would like to work permanently in the office, while in Europe, 50% want to work from home at least one day a week in the future (Bloom, 2020).

Overall, career success is described as “the real or perceived achievements individuals have accumulated as a result of their work experiences” (Judge et al., 1999, p. 621). These two kinds of achievements, the real and perceived ones, are also referred to as objective or subjective career success (Abele et al., 2011; Seibert & Kraimer, 2001). Objective success indicators relate to externally measurable aspects such as salary or hierarchical status (Spurk et al., 2016). In contrast, subjective success represents “a self-evaluation of career progress” (Arthur et al., 2005, p.179) such as career satisfaction (Eisenbarth et al., 2018). Both approaches are acknowledged in career success research (Abele et al., 2011). Yet, Heslin (2005) previously criticized the measurement of success in research. He emphasized the need for improvements in conceptualization and comprehension for both objective and subjective success indicators, especially since career success has been measured almost exclusively in terms of salary and satisfaction. Looking at more recent research, success has also been measured on the basis of

various criteria such as car access or own office (Eisenbarth et al., 2018). So, the question arises whether these indicators of success are still appropriate today.

Personality has been recognized as an essential predictor of work and career success (Semeijn et al., 2020; Wille et al., 2013). In examining associations between personality traits and professional outcomes the Five-Factor Model (McCrae & Costa, 1987), also known as the Big Five, represents the prevalent theoretical framework (Boudreau et al., 2001; Seibert & Kraimer, 2001; Vergauwe et al., 2017; Zacher, 2014). It comprises five personality dimensions: extraversion, conscientiousness, neuroticism, agreeableness, and openness to experience (McCrae & Costa, 1987). This widely recognized framework stands primarily for bright and affirmative personality attributes (Judge et al., 2009). Previous studies in career and personality research show that the diverse Big Five dimensions differently affect career related outcomes (Judge et al., 1999; Ng et al., 2005; Smithikrai, 2007). Hogan & Holland (2003) indicated in their meta-analysis on job performance that the best predictors when relating to “getting along” are agreeableness, neuroticism, and conscientiousness. When focusing on “getting ahead” performance, extraversion, neuroticism, and conscientiousness are the advisable predictors. Eventually only conscientiousness and neuroticism were stated to be the relevant ones when considering overall performance (Barrick, 2005; Smithikrai & Suwannadet, 2018). Yet, conscientiousness, neuroticism, and extraversion seem to be the most relevant dimensions when looking at career success (Judge et al., 1999).

In more recent times, the rather negative side of the personality range received increasing scientific attention, not least triggered by severe scandals in the business world. Examples include the Enron case, the Dieseltgate by Volkswagen, or certainly the protagonists of the financial crisis in 2007/08 such as Lehman Brothers (Boddy, 2015; Spapens, 2018). Especially the Dark Triad personality construct, consisting of Machiavellianism, psychopathy, and

narcissism (Paulhus & Williams, 2002), has attracted growing academic consideration (Jonason et al., 2010a; LeBreton et al., 2018; Lee & Ashton, 2014). Surprisingly these rather undesirable personality characteristics do not only promote negative outcomes. Actually characteristics of the Dark Triad construct exist alongside well-developed social abilities that can disguise their counterproductive entity and let them appear desirable (Hogan & Hogan, 2001).

Consequently, the two topics of personality and career success constitute the scope of the thesis. To split the topic up and to explore it as differentiated as possible, a comprehensive scientific approach is required. Supported by a multilayered methodological procedure, the relationship of personality and career success was investigated on heterogeneous criteria:

- (1) Multifaceted bandwidth of personality
- (2) Diversity of career success indicators
- (3) Varied decision-making levels
- (4) New work environment

First, a meta-level exists between bright and dark personalities, namely the Big Five and the Dark Triad. These multidimensional constructs represent independent personality dimensions like extraversion and narcissism. Beyond the consideration of the singular dimensions, personality factors can also be mapped at a higher level and examined holistically. The starting point of this consideration is that the Big Five dimensions significantly correlate with each other. These correlations in turn can be explicated by higher order personality factors, including a single prevailing highest order factor (Ashton et al., 2009; Musek, 2017a). Second, the approach to measure career success may include traditional objective indicators as well as differentiated subjective criteria. Third, when studying career outcomes, the decision-making level can be diversified. In any case, study participants should be employees. To gain insights for all employees, the broader workforce should be considered. If the interest concerns exclusively

executives, only upper management levels should be included. Lastly, when measuring career success in a broader view, the working environment should also be taken into consideration. Especially nowadays in the changing world of work pushed by digital transformation and home office solutions.

Essay 1 is the starting point and the basis for knowledge gain of this dissertation. When analyzing the impact of personality traits on diverse outcomes, both the Big Five and the Dark Triad have been selected in combination in a number of studies (e.g., Lee & Ashton, 2014; Wall et al., 2019). This determines the setting for the study and outlines the full bandwidth of the personality spectrum. It takes a broad approach by addressing both the bright and dark personality traits: the Big Five dimensions (McCrae & Costa, 1987) and the Dark Triad (Paulhus & Williams, 2002). Here, we examined the relationship between these expansive personality traits and the selected objective career success indicators of budget responsibility and personnel decision-making authority. Looking at the decision-making level any kind of employee is considered in this examination.

Correspondingly apart from the achievements of the broader workforce, the connection between personality traits and the success of managers has long been discussed in science and practice (e.g., Seibert & Kraimer, 2001). Certain leaders are particularly successful independently of specific personality traits, for example, due to luck, practice and hard work or the level-headed handling of critical events (Bono et al., 2014). But personality still remains important. In order to improve the predictive probability of personality regarding work outcomes, the continuative question arises which concept of personality is more appropriate: a narrower or wider spectrum.

Essay 2 takes this as its cue to examine the issue at the management level. The Big Five as a multifaceted concept that is often considered as a broad spectrum in the discussion of

bandwidths. Yet, it has been pointed out that personality factors can also be modeled at a higher aggregated level (Sitser et al., 2013), superordinate by a singular factor, namely a general factor of personality (GFP) (Kowalski et al., 2016). The GFP comprises core characteristics of a socially adapted and "good" personality (Musek, 2017b). This approach steadily gains more relevance within the recent scientific discussion, e.g. with regard as a predictor for likability and popularity (Van der Linden et al., 2010). In contrast, a research gap in the relationship between the general factor of personality and leadership success is identified, especially at the top management level. More concretely asked in Essay 2: Does a GFP-E specific for executives exist? Further: If so, how does this specific GFP for executives (GFP-E) look like in terms of gender differences and how is it related to the Dark Triad and measures of success and satisfaction?

Indicated in previous research (Kowalski et al., 2016) narcissism appears to be distinct from the other two components of the Dark Triad. It is perceived more positively (Rauthmann & Kolar, 2012) and proved to be the brightest trait in the leadership context compared to both other dimensions (Volmer et al., 2016). *Essay 3* takes these findings into deeper account by excluding psychopathy and Machiavellianism and focusing on narcissism instead of all three Dark Triad components. Further, strong research efforts have already been made concerning narcissism and its effects on career success. Still, the literature to date does not shed light on the potential impact of paradox personalities on career success. As in the progressively volatile, global, and competitive organizational settings scholars and practitioners are increasingly adopting a paradox perspective (Smith & Lewis, 2011; Waldman et al., 2019; Zhang & Han, 2019). A construct that is repeatedly considered when looking at paradoxes in the workplace is humility (e.g., Owens et al., 2015). Honesty-humility is also known as the additional sixth factor of the HEXACO model (Ashton et al., 2004), an extension of the Big Five. To address the stated

criticism concerning the conceptualization and operationalization of career success (e.g., Heslin, 2005) and to represent career success in its entirety, this third paper includes four measures of objective career success as well as a multidimensional subjective career success scale. This wide approach is especially important since working conditions have recently undergone another shift through digital transformation (Timonen & Vuori, 2018). It results in new work settings characterized by more variability in location and timing (Gerdenitsch et al., 2015; Kok et al., 2014). All in all, Essay 3 is based on paradox theory and investigates the relationship between narcissism and humility with both objective and subjective career success in new work settings. In summary, this dissertation answers the following research questions:

1. How successful are both light and dark personalities in terms of objective success criteria?
2. Does a GFP-E specific to managers exist and, if so, how is it related to the Dark Triad, career success and satisfaction measures?
3. Do paradox personalities, in particular narcissism and humility, succeed in new work environments?

1.2 Aim and Methodological Approach

The following section gives a brief overview of the aim and the methodological approach of this dissertation. Thereby each essay is based on its own empirical study using a specific sample and methodology to best meet the needs of each setting. Table 1. includes an overview of the basic methodological characteristics of this dissertation.

Table 1. Basic methodological characteristics of the three essays

	1st Essay	2nd Essay	3rd Essay
Aim	Examining the effects of the Big Five and Dark Triad personality traits on objective career success with artificial intelligence features	Extracting a general factor of personality specifically for managers and linking it to the personality traits of the Dark Triad, success and satisfaction measures	Investigating the relationship between the paradoxical personality traits narcissism and humility with both objective and subjective career success
Independent Variables	Big Five Dark Triad	GFP from Big Five Dark Triad	Narcissism Humility
Dependent Variables	Objective career success	Work performance Career Success Life Satisfaction	Objective career success Subjective career success
Measurement Approach	Dual approach combining AI-based automated speech analysis with traditional self-reported survey data	Self-reported survey data	Dyadic approach relating self-reported and other-reported survey data
Sample	German employees <i>N</i> = 247	German managers <i>N</i> = 320	US employees <i>N</i> = 398 in 199 dyads
Setting	Academic environment	Traditional work environment	New work environment

Essay 1 incorporates a comprehensive methodology by addressing both bright and dark personality traits of the Big Five (McCrae & Costa, 1987) as well as the Dark Triad (Paulhus & Williams, 2002). Here, the aim is to examine the relationship between these wide personality traits and objective career success indicators budget responsibility and personnel decision-making authority. Usually, these personality constructs are measured via traditional questionnaires. Yet criticism of the existing self-report approaches is expressed due to measurement biases (Sumner et al., 2012), mostly because of an orientation towards socially desirable responding (Jonason et al., 2010b; Kowalski et al., 2018; Paulhus & Vazire, 2007). A

solution may be found in the individual linguistic style of a person (Tausczik & Pennebaker, 2010). It reflects numerous personality characteristics, differs distinctively between people and is constant in time (Boyd & Pennebaker, 2017). To utilize this feature, the study investigated the hypothesized effects by applying a dual approach combining AI-based automated speech analysis with traditional self-reported survey data. So, the peculiarity of the study also lies in its methodological design. This study combines different measurement approaches for the diverse personality traits: The Dark Triad was collected traditionally, the Big Five traits were measured innovatively through voice and a psycholinguistic software. The data was collected mainly in the German academia environment. Since career success criteria were used as dependent variables, only working individuals were included in the analyses. Multiple logistic regression analyses were performed to examine the stated research question.

Essay 2 aims to extract a specific personality factor for executives (GFP-E) from the classic dimensions of the Big Five that forms a superordinate highest order construct. This particular GFP-E is then linked to the personality traits of the Dark Triad, individual success and satisfaction measures. Since this GFP-E differs from the conventional GFP in terms of its scope consisting exclusively of executives, the study focuses on the top management level. Therefore, only board members and managing directors were included in the study, resulting in a total sample of $N = 320$ German-speaking managers. The study is based on self-reported survey data. The GFP-E was extracted using a Principal Axes Factor Analysis (PFA) based on the study by Kowalski et al. (2016). Multiple regression analyses were performed to test the stated hypotheses regarding the Dark Triad, work performance, individual success and satisfaction with life. In order to determine gender differences within the GFP-E, Mann-Whitney tests were performed.

Essay 3 highlights the changing world of work and examines solely two contrary personality traits while the dependent variables are broadly based. Specifically, the study examines the relationship between the paradoxical personality traits narcissism and humility with both objective and subjective career success in new work settings. The working environment was depicted through the concept of NWW. To fit the circumstances, a dyadic approach relating self-reported and other-reported survey data has been chosen. This is on the one hand due to a possible risk of common-method variance (CMV), yet even more important because of the uniqueness of humility. Ironically, high levels of humility in self-reports indicate a lack of humility (Davis et al., 2010). Here, the focus shifts again to career success for broader decision-making levels, which is why the sample consists of $n = 398$ professionals in 199 dyads. Dyadic data collection was performed online using a US-based panel provider. So, the personality traits were other-reported data, NWW and the dependent variables are self-reported. Hierarchical moderated multiple and logistic regression analyses were used to test the hypotheses.

1.3 Structure of this Dissertation and Contributions

This dissertation investigates the interplay of personality and career success. Both topics constitute the scope of the thesis. At the beginning, chapter 1 contains a summarizing and structuring introduction. It sheds light on the theoretical frameworks, introduces the essential idea and the underlying multilayered methodological approach of the thesis. Chapter 2 then comprises the resulting three essays in the field of personality and career success. Essay 1 represents the basis by analyzes the effect of both bright and dark personality traits of the Big Five and the Dark Triad on objective career success. Essay 2 then extracts the GFP-E from the

Big Five, a general factor of personality specifically for managers, and combines it with the personality traits of the Dark Triad, success and satisfaction measures. Essay 3 considers the changing working world and sets the focus on the relationship between the paradoxical personality traits narcissism and humility, with both objective and subjective career success in new work settings. All three papers draw on different quantitative datasets for each specific research question. They are individual academic contributions, where each of them incorporates a literature review, methodology, results, and finally a discussion. In total these findings contribute to existing knowledge of both bright and dark personality by showing that psychopaths and especially narcissists can be quite successful in their professional life. Emotional stability and conscientiousness proved to be the relevant predictors in a professional setting. Supplementary to the important content-related insights, this thesis further contributes to an increasing body of research incorporating language and personality. It encompasses as one of the first studies that introduces elements of artificial intelligence to the research streams of personality and success by using an automated psycholinguistic analysis technology. This dissertation further contributes to the literature on paradoxes in the workplace by enhancing previous leadership approaches. While positive effects of paradoxical personalities have already been found at the top management level it was demonstrated that this phenomenon couldn't be converted to the general career success perspective. Further, by expanding the research focus to new modes of working it could be shown that the working environment in today's organizations proves to be an essential contextual factor impacting an employee's career.

Finally, chapter 3 concludes with a general discussion including theoretical and practical implications of this thesis, limitations as well as directions for future research.

2 Essays

2.1 Essay 1: Artificial Intelligence in personality and career success research

Abstract

This study investigates the effects of the Big Five and Dark Triad personality traits on objective career success indicators using AI-based automated speech analysis. The research design is characterized by a dual approach, combining traditional methodological elements with artificial intelligence features. The Big Five traits were measured with automated speech analysis. The Dirty Dozen was used to collect the seemingly negative personality traits of the Dark Triad. The study sample was comprised of 247 test participants. On the dark side of personality, the results of the multiple regression analyses indicated a positive relationship between psychopathy and personnel decision-making authority. Moreover, narcissism was positively related to budget responsibility. On the bright side, emotional stability was positively connected to budget responsibility as well. Furthermore, significant interaction effects could be confirmed. The insights provided by the results allow a more sophisticated and improved view to identify potential leaders within organizations and enterprises.

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The study is based on shared data from a joint survey from Universität Hohenheim and Hochschule Fresenius. They used the data set for papers, yet the focus of their research & the variables used differ from this very paper. Please find the references attached:

Schaumlöffel, L., Hübner, R., Thiel, S., & Stulle, K. P. (2018). Du bist, was du sprichst–Validierung der Sprachanalysetechnologie PRECIRE® anhand des HEXACO®-Persönlichkeitsmodells. In *Psychologische Diagnostik durch Sprachanalyse* (pp. 57-158). Springer Gabler, Wiesbaden.

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2.1.1 Introduction

When examining relationships between personality traits and professional outcomes, the Five-Factor Model (McCrae & Costa, 1987) represents the prevalent theoretical framework (e.g., Vergauwe, Wille, Hofmans, & De Fruyt, 2017). It primarily stands for positive and affirmative personality attributes. However, in recent years, the seemingly negative side of the personality spectrum has received increasing scientific attention, triggered by severe scandals in the business world, for example, the protagonists of the financial crisis in 2007-2008, such as the Lehman Brothers, or, recently, the Volkswagen Dieselgate. The Dark Triad (Paulhus & Williams, 2002), consisting of Machiavellianism, psychopathy, and narcissism, has especially attracted growing academic attention (LeBreton, Shiverdecker, & Grimaldi, 2018; Lee & Ashton, 2014).

Typically, these constructs are measured via traditional questionnaires. Yet, criticism of the existing self-report approaches has been expressed. This is due to measurement biases, mostly because of an orientation towards socially desirable responding (Jonason, Li, & Teicher, 2010; Kowalski, Rogoza, Vernon, & Schermer, 2018). Given the risk of biased measurements, this study looks one step further by introducing the method of automated speech analysis to personality and management research. The technology incorporates artificial intelligence by identifying and utilizing patterns in spoken and transcribed language. It then derives communication-related, linguistic, and psychological characteristics.

This study combines different measurement approaches for the diverse personality traits. The Big Five were measured with the innovative method of speech analysis. Data on the relatively new and less established construct of the Dark Triad were collected in a traditional questionnaire. This mixed-method approach takes into consideration that the technology of

automated speech analysis is a completely innovative approach in measuring personality and cannot yet provide valid and reliable data for the Dark Triad characteristics.

In addition to this methodical extension, the study contributes to existing career success research. The seemingly negative characteristics of the Dark Triad can certainly not be only considered as undesirable (Smith, Hill, Wallace, Recendes, & Judge, 2018); the latest research in work-related contexts shows that one might even profit from them (Wisse, Barelds, & Rietzschel, 2015). Thus, the challenging question arises as to if dark personality traits could be associated with a successful professional life (e.g., Jonason, Koehn, Okan, & O'Connor, 2018).

Aside from introducing a new method, the purpose of the present paper is also to examine personality concerning its impact on career success. Criticism of commonly used variables, e.g., salary or promotions, has been expressed due to the influences of external circumstances, and scholars have emphasized that improvements are needed for identifying and operationalizing success (Abele, Spurk, & Volmer, 2011; Heslin, 2005). Therefore, this study proposes a combination of two variables for measuring career success, explicitly: budget responsibility and personnel decision-making authority. The sample consisted of 303 test participants in Germany. The insights developed provide a more sophisticated and improved view to identify successful individuals acting in organizations. The results are relevant for a wide range of Human Resources responsibilities, such as training, recruiting, incentive systems, and teambuilding.

2.1.2 Methodological and conceptual background

2.1.2.1 Automated speech analysis and artificial intelligence

The measurement of personality is typically performed using self-report questionnaires (Boyd & Pennebaker, 2017), but concerns about the existing approaches have been expressed

(Sumner, Byers, Boochever, & Park, 2012). Personality researchers have had doubts about the concrete measurement and representation of who individuals really are (Boyd & Pennebaker, 2017). A promising method to overcome these difficulties is currently offered by automated speech analysis. This innovative technology is based on the empirical finding that the language of an individual is an essential expression of one's personality. Everybody has his or her own unique patterns that reflect numerous characteristics (e.g., Pennebaker & Graybeal, 2001). Moreover, language differs noticeably between people and is reasonably consistent over time (Boyd & Pennebaker, 2017). Aside from personality, the language of an individual might reveal characteristics such as age, gender, social status, or motives (e.g., Laserna, Seih, & Pennebaker, 2014).

The studies investigating personality and language, mainly the Big Five or, more recently, the Dark Triad as well (e.g., Sumner et al., 2012; Vander Molen, Kaplan, Choi, & Montoya, 2018), often observe social media usage (e.g., Twitter) and wording (Golbeck, Robles, Edmondson, & Turner, 2011; Quercia, Kosinski, Stillwell, & Crowcroft, 2011). A number of papers have used machine learning algorithms to predict personality traits on social network sites (e.g., Sumner et al., 2012). Studies based on automatic recognition have primarily focused on transcribed language in terms of word count and textual features. As of yet, they have disregarded prosody. Certainly, there are possibilities to also measure acoustic features, for example, by using COVAREP. Studies have combined these different approaches in multi-modal attempts (e.g., Nazari, Lucas, & Gratch, 2015); however, many mistakes can occur because everything is conducted manually, and it is quite time consuming since each step is performed separately. It has not been possible to measure all relevant linguistic features in one step so far.

The role of language as the key to knowledge was formerly declared by philosopher Ludwig Wittgenstein, followed by Noam Chomsky, who established linguistics as a base for cognitive learning. Automated speech analysis follows this line of research. An innovative technology that is capable of aiding the dissolution of the difficulties listed above is Precire, a new psycholinguistic software. It is able to identify certain psychological characteristics of the speaker based on voice recordings and transcribed speech. The technology uses methods of so-called formal-quantitative text analysis and combines these with prosodic parameters. Being able to learn from each analysis and draw conclusions from it, it is assigned to the field of artificial intelligence. Precire breaks down written and spoken language into digital blocks and elements, called features. The 564,367 features (e.g., word categories, audio features) result in a mathematical image of the language that is then compared to psychologically-based reference data (N = 5,201) (PRECIRE Technologies GmbH, 2016). The Precire technology development is based on the same basic idea as the Linguistic Inquiry and Word Count (LIWC) (Pennebaker, Booth, & Francis, 2007), yet, it goes one step further by not only looking at categories but also considering the context of words, word combinations, syntactic information and prosodic features. No semantic evaluations are performed; the language itself is analyzed. The underlying algorithm of the machine is not disclosed for copyright reasons. The construct validity of the assorted features measured with Precire, including the HEXACO model (Ashton & Lee, 2009), has been confirmed by external validation studies (e.g., Schaumlöffel, Hübner, Thiel, & Stulle, 2018). The aim of this study is to investigate the well-established Five-Factor Model of Personality using this new methodological approach.

2.1.2.2 Career success

Objective career success is related to externally measurable aspects such as salary, hierarchical status, or employment position (Abele & Spurk, 2009). In contrast, subjective indicators are linked to considerations such as career or salary satisfaction (Eisenbarth, Hart, & Sedikides, 2018). This study focuses on objective career outcomes because they are directly observable, measurable, and confirmable by an independent person (Arthur, Khapova, & Wilderom, 2005). However, it is emphasized that operationalization improvements are needed for both objective and subjective success (Heslin, 2005). Yet, these are strongly affected and dependent on education level, pay norms, labor-market conditions, competitors, and fields of employment (Abele et al., 2011; Heslin, 2005). Due to this fact, this study proposes two measurement approaches to objective career success: (1) budget responsibility and (2) personnel decision-making authority. Success is represented in those indicators because they concern the two most important areas of influence for a company's prosperity: money and employees. Consequently, trust has been set in the skills and experience of the employee to meet these highly important tasks.

2.1.2.3 The Dark Triad of personality

The Dark Triad relates to conceptually different yet empirically overlapping personality traits (Furnham, Richards, & Paulhus, 2013): Machiavellianism, psychopathy, and narcissism (Paulhus & Williams, 2002). Primarily, narcissism and psychopathy have their seeds in clinical literature (Furnham & Crump, 2005), but psychopathy is broadly regarded as the darkest personality trait (Rauthmann & Kolar, 2012). Surprisingly, these rather undesirable personality characteristics do not have only negative outcomes. If connected with additional attributes, such

as intelligence or physical attractiveness, they support attaining leadership positions (Furnham, 2010). Not without reason, some speak of psychopaths and narcissists as successful (Babiak & Hare, 2006; Chatterjee & Hambrick, 2007; Hall & Benning, 2006). They embody several desirable traits, like the ability to assert oneself, leadership, and management skills as well as charm (Ames, 2009; Paunonen, Lönnqvist, Verkasalo, Leikas, & Nissinen, 2006). Certainly, they “get ahead” without “getting along” (Rauthmann & Kolar, 2013, p. 622). Taken together, those deep within the Dark Triad might not have the best impact on their colleagues or subordinates, but they seem to have the potential to be successful in their jobs. Previous research on single Dark Triad traits has shown that not all three of the components have the same impact on career success (Spurk, Keller, & Hirschi, 2016). Therefore, their individual facets will be considered.

Machiavellianism. The term Machiavellianism goes back to Niccolo Machiavelli, a Florentine philosopher known for his manipulative strategies, listed in the work *Il Principe*, which was published in 1532. Correspondingly, it is characterized by exploitation, manipulation, cheating and by being self-centered, deceitful, and ruthless (Zettler & Solga, 2013). They are even called “master manipulators” (Paulhus, 2014). In an organizational context, they show a high level of commitment in terms of their career while, at the same time, showing negativity to other work-related topics, such as teamwork (Zettler, Friedrich, & Hilbig, 2011). Hence, a negative relationship concerning personnel might be possible. Research has revealed that Machiavellianism is positively related to leadership positions and career satisfaction (Spurk et al., 2016). Altogether, individuals high in Machiavellianism might not be successful in their professional life in terms of budget responsibility due to their cheating and exploitative character. Since they are very manipulative and critical in teamwork situations, we

assume the existence of a negative relationship with personnel decision-making authority. Therefore, we propose the following:

Hypothesis 1: Machiavellianism is negatively related to (a) budget responsibility and to (b) personnel decision-making authority.

Psychopathy. Psychopathy is characterized by an absence of concern, guilt, or regret (O'Boyle Jr, Forsyth, Banks, & McDaniel, 2012). Furthermore, those with psychopathy show disrespect for social norms and the rights of others along with delusive strategies for achieving their own personal accomplishments (Chiaburu, Muñoz, & Gardner, 2013) by mistreating employees or filling in expense accounts (Stevens, Deuling, & Armenakis, 2012). Psychopathy's role in organizational management is the least investigated facet (Mathieu, Neumann, Hare, & Babiak, 2014), and there are discrepancies in the research results so far. A study by Spurk et al. (2016) showed negative relationships between psychopathy and measures like salary and leadership positions. On the other hand, psychopathic employees were capable of gaining promotions, operating in high-level positions, and influencing business decisions (Mathieu et al., 2014). Contrary to the study of Spurk et al. (2016), we expect individuals highly in psychopathy to be more successful in terms of decision-making authority due to their frigid tactics and success-striving. Yet, due to their impulsiveness, unpredictability, and lack of responsibility, a negative relationship concerning monetary decisions is assumed. We hypothesize:

Hypothesis 2: Psychopathy is negatively related to (a) budget responsibility and positively related to (b) personnel decision-making authority.

Narcissism. The term narcissism has its roots in the Greek myth of Narcissus, a man who fell in love with his own reflection. It is characterized by a “dysfunctional form of overly high self-esteem and grandiose view of the self” (Back, Schmukle, & Egloff, 2010, p. 132). In addition to this extraordinary level of self-love, typical attributes describing narcissistic behavior include manipulation of their own interests, a lack of empathy, eligibility and arrogance, enmity, and self-absorption (Judge, Piccolo, & Kosalka, 2009). However, they also encompass positive traits, such as charisma, confidence, and risk-taking (Hochwarter & Thompson, 2012) as well as a kind of motivational drive to be concerned with how well they are doing (Nevicka, De Hoogh, Van Vianen, Beersma, & McIlwain, 2011). They also possess relevant and prototypical leadership skills, such as confidence, self-efficacy, and self-esteem (Nevicka et al., 2011). Previous research has shown that narcissism is related to enjoyment and engagement in work (Andreassen, Ursin, Eriksen, & Pallesen, 2012), and it also has a positive relationship to salary (Spurk et al., 2016). Overall, narcissism seems to be related to the most promising opportunities for achieving career success in comparison to the other two components. Thus, we assume:

Hypothesis 3: Narcissism is positively related to (a) budget responsibility and (b) personnel decision-making authority.

2.1.2.4 Five-Factor Model of Personality

The Five-Factor Model (McCrae & Costa, 1987) is comprised of five personality dimensions: extraversion, conscientiousness, neuroticism, agreeableness, and openness to

experience. Each of these five personality dimensions have already been linked to indicators of professional success. Previous studies in career and personality research have shown that the diverse Big Five dimensions affect success outcomes differently (Ng, Eby, Sorensen, & Feldman, 2005; Smithikrai, 2007). Conscientiousness, neuroticism, and extraversion seem to be the most relevant dimensions in relation to career success (Judge, Higgins, Thoresen, & Barrick, 1999). Hogan and Holland (2003) showed in their meta-analysis that the best predictors for career success are neuroticism, conscientiousness, and agreeableness in relation to “getting along” performance, but, in comparison, concerning “getting ahead”, the relevant predictors are conscientiousness, neuroticism, and extraversion. In more recent studies, only conscientiousness and neuroticism have been claimed as the relevant predictors when considering overall performance (Barrick, 2005; Smithikrai & Suwannadet, 2018); these two are even called the “generalizable predictors” (Barrick, 2005, p. 361).

Since the present study focuses on career success, the “getting ahead” predictors are more suitable. Hence, this study only provides hypotheses concerning two of the five dimensions, conscientiousness and neuroticism. For comprehensiveness, data on the dimensions of extraversion, openness to experience, and agreeableness were collected and evaluated, but no specific hypotheses were generated. In various studies, conscientiousness positively predicted extrinsic career success or job success (e.g., Sutin, Costa Jr, Miech, & Eaton, 2009). Furthermore, neuroticism negatively predicted extrinsic career success (e.g., Sutin et al., 2009) and was negatively related to career satisfaction as well (Seibert & Kraimer, 2001). Consequently, based on this information, we predict the following hypotheses:

Hypothesis 4: Emotional stability is positively related to (a) budget responsibility and (b) personnel decision-making authority.

Hypothesis 5: Conscientiousness is positively related to (a) budget responsibility and (b) personnel decision-making authority.

Test of Interaction Effects. Since we examined both positive and dark traits in one person at the same time, an interaction of the characteristics could have a particular impact on the dependent variables. For this reason, we additionally investigated the possible interaction effects of the Big Five and the Dark Triad traits. The expectation was that conscientious and emotionally stable Machiavellists, narcissists and psychopaths would be more successful. We therefore hypothesize:

Hypothesis 6: The interaction of emotional stability and the Dark Triad components is positively related to (a) budget responsibility and (b) personnel decision-making authority.

Hypothesis 7: The interaction of conscientiousness and the Dark Triad components is positively related to (a) budget responsibility and (b) personnel decision-making authority.

2.1.3 Method

2.1.3.1 Sample, research design, and measures

Sample. Data was collected mainly within the academic environment of two large German universities during lectures and on internal web pages. The recruited sample had a total

size of 303 participants, consisting of 59.7% females with an average age of 28.8 years (SD = 10.6). Regarding their employment status, 18.5% of the sample indicated they were not employed. For data analysis, only test participants who indicated employment were used. Thus, 247 participants were included in the analysis.

Research design. The study design is characterized by a mixed-methodology. The test participants completed a conventional questionnaire and submitted a voice recording. As a result, the study included two separate work steps for the participants. First, they responded to different survey items, including demographic data, on an online platform created for them. After, they received a telephone number and a corresponding password for their individual voice recording. After dialing the number and submitting the password, the voice recording began. Individualized codes were assigned to the subjects to later link the results of the speech analyses to those of the online questionnaire. The anonymity of the test participants was ensured. In order to motivate subjects to participate, they were offered an evaluation of the delivered speech sample as an incentive. This included a psychological communication profile.

2.1.3.2 Measures

Dark Triad. The personality traits of the Dark Triad were collected using The Dirty Dozen (Jonason & Webster, 2010). This 12-item inventory (e.g., “I tend to manipulate others to get my way”) uses a seven-point scale (1 = strongly disagree, 7 = strongly agree) and has already been used in various other studies in this field of research (e.g., Lee et al., 2013). The three constructs were calculated as an average across the items of each scale. The Cronbach’s α

coefficients were $\alpha = .765$, $\alpha = .875$, and $\alpha = .640$ for narcissism, Machiavellianism, and psychopathy, respectively.

Big Five. The Big Five were measured by automated voice analysis using the psycholinguistic software Precire. The basis of the technology was conducted using a normative sample consisting of $N = 5,201$ persons and numerous established personality inventories. The Five-Factor Model of Personality dimensions were implemented using the B5T (Satow, 2011) questionnaire. To ensure the standardization of the survey, the telephone interview contained a collection of 45 questions. The recording consisted of computer-based questions from both professional and private environments, such as “What does your perfect Sunday look like?”. The recording was complete once sufficient linguistic material had been collected, on average, 10-15 minutes per person. The evaluation of the test procedure was completely automated. Once the voice sample was delivered at any time of day or night, it was transcribed semi-automatically by a service provider. Since the Precire-technology works as an automated system using AI-elements, we received the analyzed results with the respective expression of each person and dimension on a nine-point scale (1= low, 9= high).

Objective career success. The dependent variable was measured by two self-reported items; test participants were asked about their (1) budget responsibility (e.g., "Do you make budget decisions?") and (2) personnel decision-making authority (e.g., "Do you have decisive decision-making power when hiring and terminating employees?"). The items were classified into the answer categories "yes" or "no".

2.1.4 Results

2.1.4.1 Confirmatory Factor Analysis

The aim of the Confirmatory Factor Analysis (CFA) was to display that all three Dark Triad components could be empirically discriminated. A one-factor solution (all 12 items loaded at the same factor) was compared to the three-factor solution (respectively, 4 items loaded at the same factor). The goodness-of-fit statistics model for the one-factor model [χ^2 (54 df) = 426.060, $p > .000$; $\chi^2 /df = 7.89$; RMSEA = .151; GFI = .794, CFI = .738, TLI = .680.] were insufficient in comparison to the three-factor model [χ^2 (51 df) = 189.046, $p > .000$; $\chi^2 /df = 3.71$; RMSEA = .095; GFI = .904, CFI = .903, TLI = .847].

2.1.4.2 Descriptive statistics and correlations

Table 2 shows the bivariate correlations between the study's control, independent, and dependent variables. Some of the important correlations are highlighted below. Looking at the Big Five and the Dark Triad, psychopathy was significantly negatively correlated with extraversion ($r = -.200$, $p < .001$) and agreeableness ($r = -.126$, $p < .005$) as well as positively correlated with emotional stability ($r = .279$, $p < .001$). Furthermore, Machiavellianism was significantly negatively correlated with conscientiousness ($r = -.141$, $p < .005$) and agreeableness ($r = -.214$, $p < .001$).

Table 2. Means, standard deviations, and correlations for all study variables

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Gender (men)	.40	.490	1												
2. Age	29.87	11.01	.243**	1											
3. Work experience	2.65	2.207	.267**	.870**	1										
4. Machiavellianism	3.14	1.382	.154*	-.176**	-.131*	1									
5. Psychopathy	2.85	1.086	.371**	.011	.031	.500**	1								
6. Narcissism	3.82	1.143	.087	-.171**	-.172**	.494**	.249**	1							
7. Extraversion	6.40	1.624	-.096	-.003	.061	-.051	-.200**	.017	1						
8. Emotional Stability	4.83	1.836	.351**	.171**	.141*	.103	.279**	-.023	-.157*	1					
9. Agreeableness	5.83	1.960	.038	.009	-.016	-.214**	-.126*	-.104	-.147*	-.025	1				
10. Conscientiousness	5.54	1.357	-.044	.169**	.138*	-.141*	-.056	-.12	-.004	.018	.049	1			
11. Openness	5.43	1.988	-.046	.057	.012	-.079	-.033	.013	.052	-.116	.062	.004	1		
12. Budget Responsibility	.19	.393	.260**	.387**	.353**	.079	.127*	.173**	.028	.203**	-.002	.034	.051	1	
13. Decision-Making	.17	.373	.150*	.461**	.436**	-.018	.130*	.022	.079	.142*	-.088	.078	0.008	.532**	1

Table 3. Multiple Logistic Regression analyses of Machiavellianism, Psychopathy, Narcissism and Big Five Dimensions

Variable	Budget Responsibility					Personnel Decision-Making Authority				
	B	SE	Wald	p	Exp(B)	B	SE	Wald	p	Exp(B)
Dark Triad										
Machiavellianism	.056	.173	.105	.746	1.058	-.108	.181	.353	.553	.8980
Psychopathy	.055	.198	.077	.782	1.056	.436	.213	4.182	.041	1.5470
Narcissism	.644	.205	9.813	.002	1.904	.305	.199	2.342	.126	1.3570
Big Five										
Extraversion	.082	.116	.497	.481	1.085	.154	.131	1.372	.241	1.166
Emotional Stability	.196	.108	3.288	.070	1.217	.135	.117	1.33	.249	1.145
Agreeableness	-.035	.094	.138	.711	.966	-.141	.100	2.00	.157	.869
Conscientiousness	-.059	.135	.195	.658	.942	.006	.150	.002	.969	1.006
Openness	.090	.094	.920	.337	1.094	-.004	.101	.002	.965	.996

Note. $N = 247$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; Controlled for Gender, Age and Work experience.

2.1.4.3 Hypothesis testing

Direct Effects. To test hypotheses H1-H5, we used multiple logistic regression analyses. Control and independent variables were entered simultaneously. As Table 3 indicates, H1 could not be supported; the results indicated that Machiavellianism had no significant relationship with budget responsibility ($B = .056$, $Wald = .105$, $p = .746$) and personnel decision-making authority ($B = -.108$, $Wald = .353$, $p = .553$). Furthermore, H2 could partially be supported. Personnel decision-making authority ($B = .436$, $Wald = 4.182$, $p = .041$) was significantly positively related to psychopathy. The results further demonstrated no relationship between psychopathy and budget responsibility ($B = .055$, $Wald = .077$, $p = .782$). The results did indicate partial support for H3, with narcissism being positively related to budget responsibility ($B = .644$, $Wald = 9.813$, $p = .002$) but not to personnel decision-making authority ($B = .305$, $Wald = 2.342$, $p = .126$). As Table 2 further demonstrates, H4 could be partially supported. Emotional stability was significantly related to budget responsibility ($B = .196$, $Wald = 3.288$, $p = .070$) but not to personnel decision-making authority ($B = .135$, $Wald = 1.33$, $p = .249$). H5 could not be supported; conscientiousness was neither related to budget responsibility ($B = -.059$, $Wald = .195$, $p = .658$) nor to personnel decision-making authority ($B = .006$, $Wald = .002$, $p = .964$).

Interaction Effects. In order to test the predicted interactions, we used an extended option of the prior analytical strategy. Specifically, we performed hierarchical binary logistic regressions for the two dependent variables. Control variables (i.e., sex, age, work experience) were entered in Step 1. The independent Big Five variables, emotional stability and conscientiousness, were included in Step 2. Further, the independent Dark Triad variable was included in Step 3. The interactions terms were included in Step 4. The results in Model 4 of

Table 4 and Table 5 indicated that H6 could not be supported; no interaction effect was significantly related to either one of the dependent variables. However, H7 could be partially supported. The results also indicated that the interaction of conscientiousness and psychopathy was positively related to budget responsibility ($B = .402$, $Wald = 6.065$, $p = .014$). The interaction of conscientiousness and Machiavellianism had a significant negative relationship ($B = -.237$, $Wald = 3.655$, $p = .056$), which was predicted to be positive. Furthermore, the results in Model 4 of Table 4 indicate that the interaction of conscientiousness and psychopathy was positively related to personnel decision-making authority ($B = .253$, $Wald = 2.973$, $p = .085$).

Table 4. Hierarchical regression analysis for Budget Responsibility

Variable	Model 1					Model 2					Model 3					Model 4				
	B	SE	Wald	p	Exp(B)	B	SE	Wald	p	Exp(B)	B	SE	Wald	p	Exp(B)	B	SE	Wald	p	Exp(B)
<i>Step 1: Control variables</i>																				
Sex	1.044	.368	8.032	.005	2.840	.838	.390	4.624	.032	2.311	.606	.420	2.087	.149	1.833	.464	.438	1.119	.290	1.590
Age	.063	.031	3.980	.046	1.065	.060	.032	3.590	.058	1.062	.076	.035	4.709	.030	1.079	.101	.039	6.712	.010	1.106
Work experience	.042	.163	.067	.796	1.043	.059	.164	.129	.720	1.061	.101	.174	.337	.561	1.106	.026	.186	.020	.887	1.027
<i>Step 2: Main effects</i>																				
Emotional Stability						.174	.106	2.682	.102	1.190	.201	.115	3.034	.082	1.223	.884	.576	2.360	.124	2.421
Conscientiousness						-.061	.133	.209	.648	.941	-.007	.138	.003	.959	.993	-.588	.655	.805	.370	.555
<i>Step 3: Main effects</i>																				
Machiavellianism											.058	.176	.108	.742	1.059	.597	.916	.425	.514	1.817
Psychopathy											-.014	.205	.005	.946	.986	-1.677	1.157	2.102	.147	.187
Narcissism											.678	.209	10.477	.001	1.969	1.646	1.049	2.464	.116	5.186
<i>Step 4: Interactions</i>																				
ES x Mach																.144	.101	2.034	.154	1.155
ES x Psy																-.102	.119	.737	.391	.903
ES x Narc																-.197	.128	2.359	.125	.821
Con x Mach																-.237	.124	3.655	.056	.789
Con x Psy																.402	.163	6.065	.014	1.495
Con x Narc																.041	.149	.075	.784	1.042

Note. $N = 247$; * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$;

Table 5. Hierarchical regression analysis for Personnel Decision-Making Authority

Variable	Model 1					Model 2					Model 3					Model 4				
	B	SE	Wald	p	Exp(B)	B	SE	Wald	p	Exp(B)	B	SE	Wald	p	Exp(B)	B	SE	Wald	p	Exp(B)
<i>Step 1: Control variables</i>																				
Sex	.241	.4	.36	.548	1.272	.092	.423	.05	.828	1.096	-.271	.454	.356	.551	.763	-.361	.470	.588	.443	.697
Age	.054	.033	2.70	.100	1.055	.051	.033	2.41	.120	1.053	.06	.035	2.870	.090	1.062	.066	.037	3.179	.075	1.068
Work experience	.231	.177	1.72	.190	1.260	.241	.177	1.85	.174	1.273	.268	.185	2.108	.147	1.308	.252	.191	1.748	.186	1.287
<i>Step 2: Main effects</i>																				
Emotional Stability						.132	.116	1.30	.255	1.141	.092	.123	.554	.456	1.096	-.781	.49	2.541	.111	.458
Conscientiousness						-.007	.145	.00	.962	0.993	.027	.15	.033	.855	1.028	-.198	.618	.103	.749	.820
<i>Step 3: Main effects</i>																				
Machiavellianism											-.105	.183	.331	.565	.900	-.282	.969	.084	.771	.755
Psychopathy											.402	.219	3.380	.066	1.495	-1.34	1.123	1.416	.234	.263
Narcissism											.318	.201	2.511	.113	1.375	.35	1.120	.099	.754	1.421
<i>Step 4: Interactions</i>																				
ES x Mach																.044	.100	.197	.657	1.045
ES x Psy																.065	.12	.292	.589	1.067
ES x Narc																.131	.124	1.132	.287	1.140
Con x Mach																-.017	.137	.015	.901	.983
Con x Psy																.253	.147	2.973	.085	1.288
Con x Narc																-.122	.164	.551	.458	.885

Note. $N = 247$; * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$;

2.1.5 Discussion

2.1.5.1 Implications for theory

Our study contributes to a growing body of research integrating language and personality (Golbeck et al., 2011; Quercia et al., 2011). The results of our analyses provide support for the positive effect of psychopathy on personnel decision-making authority. However, they contradict a similar study of Spurk et al. (2016), who found a consistently negative impact of psychopathy on career outcomes. These dissimilarities could be due to the distinctive indicators of success (e.g., salary) used in the studies' settings. Moreover, no relationship was found with budget responsibility. This might be due to the fact that psychopathy consists of different facets that were not considered individually here (see Eisenbarth et al., 2018). Further, the results of our analyses provided support for the positive effect of narcissism on budget responsibility. Nevertheless, we could not find a significant relationship with personnel decision-making authority. Additionally, Machiavellianism was unexpectedly not related to either one of the two dependent variables. One explanation might be that Machiavellians' success depends on the environment in which they work. They appear to have an advantage in rather unstructured organizations (Jones & Paulhus, 2009), which was not considered here.

Looking at the Big Five, the results of our analyses provided support for the positive effects of emotional stability and budget responsibility. Contrary to our expectations, no significant effects for conscientiousness were discovered concerning the career indicators. Yet, positive interaction effects between conscientiousness and psychopathy concerning both budget responsibility and personnel decision-making authority were apparent. However, opposing our expectations, the interaction of conscientiousness and Machiavellianism concerning budget responsibility was significantly negative. Conscientious Machiavellians might appear too

paradoxical to be trusted in monetary matters. Nevertheless, our results support that conscientiousness and emotional stability were prevalent when examining performance (e.g., Smithikrai & Suwannadet, 2018).

The usage of automated speech analysis and AI elements is one of the most significant contributions of this study. The results, however, could not confirm our hypotheses in all respects. Compared to previous questionnaire-based studies, some of the present results are consistent, e.g., the correlations between conscientiousness and Machiavellianism as well as between emotional stability and psychopathy (Paulhus & Williams, 2002). No agreement with existing results could be found concerning narcissism, extraversion, or openness (Spain, Harms, & LeBreton, 2014). Nonetheless, prior study results in this area of interest have been inconsistent (Vernon, Villani, Vickers, & Harris, 2008).

The present study further suggested a combination of two indicators for career success since personnel decision-making authority has not been used as an objective success criterion before. This widens the scope of measurement approaches for objective career success and meets scholars' desire for new measurement approaches (e.g., Heslin, 2005). Furthermore, these indicators reflect the two most important areas of influence for a company's success; they convey the characteristics of responsibility and trust. Therefore, they appear more than adequate for the measurement of success and should be tested and used in further analyses.

2.1.5.2 Implications for practice

These findings imply several practical conclusions. The Dark Triad traits have been widely linked to a series of negative consequences (O'Boyle Jr et al., 2012). Although such people are usually considered undesirable, the present study has shown that narcissists and

psychopaths can be quite effective in their professional lives. So, individuals rating high in the Dark Triad components can partially be successful (Spurk et al., 2016) but can act in a risky manner at the same time. In order to avoid undesirable outcomes in daily business, preferred characteristics should be recognized early. Consequently, more attention must be paid to the selection of employees and managers. Advanced tools like automated speech analysis may help to improve this selection process in the human resources sector, especially in recruiting, training, coaching, and further education. Future developments in this area will capture dark personality traits as well and, therefore, might substitute the traditional components of personal management. As claimed by aforementioned studies, negative traits, such as those investigated here, must be of concern to all HR specialists having the power to evaluate employees (Wille & Fruyt, 2014). The application of language analysis can provide many possibilities beyond science only. It enables an objective, non-personal measurement of personality for a wide range of HR responsibilities. It offers paths for both practitioners and companies, and it may even replace traditional employment tests.

2.1.5.3 Limitations and further research

The present research has some limitations. The sample mainly consisted of students. In the evaluation, however, only employed test participants were included. The study did not question specific industries and did not distinguish between the public and private sector. This might be considered in future research because different dark traits can be found in distinctive sectors (Furnham, Hyde, & Trickey, 2014). The investigation did not include subjective career success, which will certainly be important for future studies in this area. The assumption would be that the perception of success changes as a result of the generational change in the labor

market, e.g. for millennials, whose views differ from their predecessors (Rudolph, Rauvola, & Zacher, 2017).

As the test participants were the sources of both the independent and dependent variables, the common method bias needs to be mentioned. Nonetheless, it should be emphasized that data were collected with two methods, and the dependent variables were objectively measurable. Further research should consider data from different sources.

From a methodological point of view, it would be essential to also be able to measure the dark personality traits via automated speech analyses. There is an urgent need to develop speech analysis technologies to measure personality traits beyond the Big Five traits. Because the dark traits are still under-researched in management, there are notable future perspectives for managerial practice together with psychological research in this area.

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2.2 Essay 2: Der Generalfaktor der Persönlichkeit und die Dunkle Triade - Eine empirische Studie unter deutschen Managerinnen und Managern

Zusammenfassung

Um die komplexe Verbindung zwischen Wesenskennzeichen und Führungserfolg auf Top-Managementebene zu entschlüsseln, bietet der Generalfaktor der Persönlichkeit (GFP) eine interessante, aber bis dato eher selten genutzte Alternative zu herkömmlichen Konzepten der Persönlichkeitspsychologie. Hier setzt die vorliegende Studie an. Sie extrahiert aus den klassischen Dimensionen der Big Five einen übergeordneten Generalfaktor und verknüpft diesen mit den Persönlichkeitsmerkmalen der Dunklen Triade. Die Erhebung bei 320 deutschen Vorständen und Geschäftsführern zeigt, dass sich der Persönlichkeitsfaktor speziell für das Top-Management (GFP-E) durch die Faktorladungen und hinsichtlich der Facettenhierarchie vom herkömmlichen GFP unterscheidet. Der spezifisch für Executives ermittelte GFP-E korreliert positiv mit individuellen Erfolgs- und Zufriedenheitsmaßen sowie mit Narzissmus, einer Dimension der Dunklen Triade. Außerdem zeigen sich negative Zusammenhänge zu Machiavellismus und Psychopathie. Die Ergebnisse erlauben weiterführende Implikationen für die Forschung sowie die Auswahl und Förderung von Managern in der Unternehmenspraxis.

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2.2.1 Einleitung

Der Zusammenhang zwischen Persönlichkeitseigenschaften und dem Erfolg von Führungskräften wird in Wissenschaft und Praxis schon lange diskutiert (z.B. Lord, De Vader & Alliger, 1986; Seibert & Kraimer, 2001). Dabei liegen auch Ansätze vor, die unabhängig von spezifischen Persönlichkeitsmerkmalen Erklärungen liefern, warum bestimmte Führungskräfte besonders erfolgreich sind, beispielsweise indem Gunst und Glück, Übung und harte Arbeit oder der besonnene Umgang mit kritischen Ereignissen eine Rolle spielen (Bono, Shen, Yoon, & Day, 2014). Die eigenschaftstheoretisch geprägten Ansätze sehen hingegen eine enge Verbindung zwischen dem Führungserfolg von Leitungsorganen und deren individuellen Persönlichkeitsmerkmalen (Kauffeld, Ianiro, & Sauer, 2014), eine Auffassung, welche durch die Mehrheit der Forschungsarbeiten gestützt wird (Bono et al., 2014). Um die Vorhersagewahrscheinlichkeit von Persönlichkeit und tätigkeitsbezogenen Ergebnissen, z.B. Arbeitsleistung, zu verbessern, stellt sich die fundamentale Frage, welches Maß für Persönlichkeitsmerkmale besser geeignet ist: ein engeres oder breiteres Spektrum. Das Fünf-Faktoren-Modell, auch bekannt als die Big Five (McCrae & Costa, 1987), wird in der Diskussion um Bandbreiten häufig als breites Spektrum betrachtet (Sitser, van der Linden, & Born, 2013). Es bietet einen umfassenden und etablierten theoretischen Bezugsrahmen für den Vergleich empirischer Befunde im Wirkungszusammenhang zwischen Persönlichkeit und Führung (De Hoogh, Den Hartog, & Koopman, 2005). Die Bedeutung des Modells wird in der Führungsforschung regelmäßig betont (Stiehl, Gatzka, Elprana, & Felfe, 2015). Allerdings wurde in der Vergangenheit mehrfach darauf hingewiesen, dass auch Persönlichkeitsfaktoren auf höherer Ebene abbildbar sind (Sitser et al., 2013). Dabei wird vermehrt dazu angeregt, über die gezielte Betrachtung der singulären Dimensionen hinaus die Big Five ganzheitlich zu untersuchen (Bono et al., 2014). Ausgangspunkt dieser Überlegungen ist, dass die Big-Five-Skalen

signifikant miteinander verbunden sind. Diese Korrelationen können durch Persönlichkeitsfaktoren höherer Ordnung erklärt werden, einschließlich eines dominanten Faktors höchster Ordnung (Ashton, Lee, Goldberg, & de Vries, 2009; Musek, 2017a).

Im Mittelpunkt der Überlegungen steht der Gedanke, ob es möglich ist, die Persönlichkeit bereits übergeordnet durch einen singulären Faktor ausreichend zu erfassen (Digman, 1997; Egan, Chan, & Shorter, 2014; Kowalski, Vernon, & Schermer, 2016; Musek, 2007). Denn unter Persönlichkeitsforschern wird verstärkt anerkannt, dass der Aufbau der Persönlichkeit hierarchisch angeordnet sein kann: Auf der obersten Ebene steht demnach der Generalfaktor der Persönlichkeit (GFP) (Musek, 2007), auf der darauffolgenden Ebene fünf oder sechs Faktoren (Ashton & Lee, 2008; McCrae & Costa, 1987) und schließlich auf der untersten Ebene sogenannte Nuancen (Fisher & Robie, 2019). So umfasst der GFP Kernmerkmale einer sozial angepassten und "guten" Persönlichkeit (Musek, 2017b). Dieser Ansatz gewinnt innerhalb der jüngeren wissenschaftlichen Erörterung stetig an Bedeutung, z.B. hinsichtlich Sympathie und Beliebtheit (Van der Linden, Scholte, Cillessen, te Nijenhuis, & Segers, 2010a) oder emotionaler Intelligenz (Van der Linden, Pekaar, Bakker, Schermer, Vernon, Dunkel, & Petrides, 2017). Weniger ergründet ist hingegen der Zusammenhang zwischen dem Generalfaktor der Persönlichkeit und dem Führungserfolg, insbesondere auf oberster Leitungsebene. Vorhergehende meta-analytische Forschungen zu Charakteristika von Führungskräften zeigen, dass erfolgreiche Führung mit einer hohen Extraversion, Gewissenhaftigkeit und Offenheit für Erfahrung sowie geringer Verträglichkeit und Neurotizismus in Verbindung steht (Bono et al., 2014). Dieser führungskräftespezifische Kontext legt die Frage nahe, ob sich eine solche Persönlichkeitsstruktur auch für den GFP im Spitzenmanagement wiederfindet. Für die Unternehmenspraxis jedenfalls erschließt ein einfaktorieller Messansatz die Perspektive auf

eine vereinfachte und dennoch leistungsfähige Eignungsdiagnostik für die Auswahl, Förderung und Weiterbildung potenzieller Führungsnachwuchskandidaten.

Nun stellt sich hinsichtlich der Big Five heraus, dass der Ansatz nicht alle relevanten Facetten einer Vorgesetztenpersönlichkeit umfassend abzubilden vermag, welche Verhalten, Motive, Interessen und Ziele einer Führungskraft in ihrer Gesamtheit prägen und formen (Furnham, Richards, & Paulhus, 2013). Damit rückt verstärkt auch die Existenz „dunkler“ Elemente im Vorgesetztenverhalten in das Blickfeld der aktuelleren Führungsforschung (Landay, Harms, & Credé, 2019; Spain, Harms, & LeBreton, 2014). Dies betrifft negative Charakterzüge, wie sie in der sogenannten Dunklen Triade (Paulhus & Williams, 2002) mit ihren Dimensionen Narzissmus, Machiavellismus und Psychopathie Ausdruck finden. In vorgenannten Kontext ergaben quantitative Untersuchungen, dass die jeweiligen Dimensionen der Dunklen Triade unterschiedlich positiv oder negativ auf einzelne Variablen wirken, wie z.B. Zufriedenheit oder Erfolg (Rohmann, Hanke, & Bierhoff, 2019; Spurk, Keller, & Hirschi, 2016). Untersuchungen zum GFP und der Dunklen Triade unterstützen die Existenz einer Dunklen Dyade aus Machiavellismus und Psychopathie (Kowalski et al., 2016). Narzissmus wird positiver wahrgenommen (Rauthmann & Kolar, 2012) und erwies sich im Führungskontext zu Untergebenen auch als die „hellste“ Eigenschaft der Dunklen Triade (Volmer et al., 2016).

Der zentrale Beitrag der vorliegenden Studie liegt daher zunächst in der Feststellung eines spezifischen, durch die Big Five Dimensionen extrahierten GFP für das Top-Management. Zwei weitere wesentliche Ziele dieser Untersuchung bestehen in der Verbindung der Dunklen Triade mit dem GFP speziell für Spitzen-Führungskräfte und persönlichen Erfolgs- und Zufriedenheitsmaßen auf Leitungsebene.

2.2.2 Theoretische Grundlagen und Hypothesenherleitung

2.2.2.1 Der Generalfaktor der Persönlichkeit

Jüngere Überlegungen stellen den Generalfaktor der Persönlichkeit (GFP) an die Spitze der hierarchischen Struktur der Persönlichkeit, gewissermaßen als übergeordneter Faktor der klassischen Big Five (Van der Linden, te Nijenhuis, & Bakker, 2010b). Dieses facettenreiche Konzept entschlüsselt die Persönlichkeit in die fünf Dimensionen Neurotizismus, Extraversion, Offenheit für Erfahrungen, Verträglichkeit und Gewissenhaftigkeit (McCrae & Costa, 1987). Neurotizismus erfasst den emotionalen Umgang von Personen mit Ereignissen, differenziert nach emotionaler Labilität und Stabilität. Extraversion beschreibt, inwieweit ein Mensch eher nach außen orientiert oder introvertiert auftritt (Bendersky & Shah, 2013). Offenheit für Erfahrungen wird mit Begriffen wie „Phantasie“ und „Vorstellungskraft“ in Verbindung gebracht und unterscheidet in ihren Extremen besonders kreative oder betont konservativ bewahrende Personen (Howard & Howard, 2010). Verträglichkeit beziehungsweise Anpassungsfähigkeit kennzeichnen Verhaltensweisen im Umgang mit anderen Menschen wie Altruismus, Mitgefühl und Hilfsbereitschaft (Judge, Livingston, & Hurst, 2012). Die Gewissenhaftigkeit erfasst die Kompetenz in der Planung, Organisation und Durchführung von Aufgaben.

Mit den Big Five lassen sich zwischen 15 und 28 Prozent der Unterschiede erklären zwischen Personen, die Führungspositionen anstreben und erreichen und einer vergleichbaren (männlichen) Bevölkerung (Judge, Bono, Ilies, & Gerhardt, 2002a). Der Einfluss von Neurotizismus auf relevante Erfolgsgrößen unter Führungskräften sei hier beispielhaft dargestellt: Emotionale Stabilität gilt als Prädiktor wichtiger Kriterien wie Gesundheitszustand, persönliches Netzwerk, erreichter Bildungsstand, Einstellung zur Arbeit, Zufriedenheit und Leistung (Kaiser, LeBreton, & Hogan, 2015). So handeln emotional stabile Manager besonnener und belastbarer als eher labil ausgeprägte

Führungstypen. Letztere neigen durch ihr ängstliches Verhalten schnell dazu, verärgert oder erschüttert zu reagieren und durch ihre eher negative Einstellung eine „toxische“ Unternehmensumgebung zu schaffen (Judge, Piccolo, & Kosalka, 2009).

Als „Extrakt“ aus den Big Five bildet der GFP ein übergeordnetes (*highest order*) Konstrukt. Personen mit einem ausgeprägten GFP stehen für hohe emotionale Stabilität, Motivation, Zufriedenheit und ausgeprägtes Selbstbewusstsein (Musek, 2007). Digman (1997) separiert in seiner Meta-Analyse zu höherrangigen Persönlichkeitsdimensionen innerhalb der Big Five zunächst die zwei übergeordneten (*second order*) Faktoren Alpha und Beta. Der Alpha-Faktor ergibt sich aus den Dimensionen Gewissenhaftigkeit, Verträglichkeit und Neurotizismus, subsumiert unter Stabilität. Der Beta-Faktor besteht aus den verbleibenden Dimensionen Offenheit und Extraversion und wird unter der Bezeichnung Plastizität zusammengefasst (Kowalski et al., 2016). Erste Ergebnisse aus der Studie von Digman (1997) deuten bereits darauf hin, dass sich neben dem Alpha- und Beta-Faktor auch ein einziges übergeordnetes Persönlichkeitskonstrukt ermitteln lässt. Es wird auch als Big One oder als Generalfaktor der Persönlichkeit (GFP) bezeichnet (Musek, 2007). Die Möglichkeit, Persönlichkeit in einem einzigen Faktor abzubilden und zu interpretieren, ist wissenschaftlich wie praktisch relevant und erstrebenswert, da sie Effizienzvorteile in empirischen Studien und eignungsdiagnostischen Verfahren bietet, ohne wesentliche Informationsverluste in Kauf nehmen zu müssen. Aus diesem Grund liegt der Fokus der vorliegenden Untersuchung auf dem einen übergeordneten Persönlichkeitsfaktor und nicht auf den second order Faktoren Alpha und Beta.

Menschen mit einem hoch ausgeprägten GFP lassen sich durch gesellschaftlich besonders angesehene Persönlichkeitszüge charakterisieren (Musek, 2007). Er verknüpft geringen Neurotizismus mit hohen Ausprägungen für Extraversion, Offenheit, Verträglichkeit und Gewissenhaftigkeit (Kowalski et al., 2016). Zusammenfassend

beschreiben Van der Linden et al. (2010b) den GFP als substantielles Konstrukt, welches das Spektrum zwischen erwünschter Persönlichkeit am oberen Ende und einer weniger wünschenswerten Persönlichkeit am unteren Ende der Ausprägungsskala widerspiegelt. Nachdem der GFP eine Kombination positiver Persönlichkeitsausprägungen darstellt, rücken die einzelnen Dimensionen der Big Five als solche damit in den Hintergrund (Just, 2011). Abbildung 1 zeigt den Zusammenhang zwischen den Facetten der Big Five sowie den Reduktionen von Digman (1997) und Muek (2007).

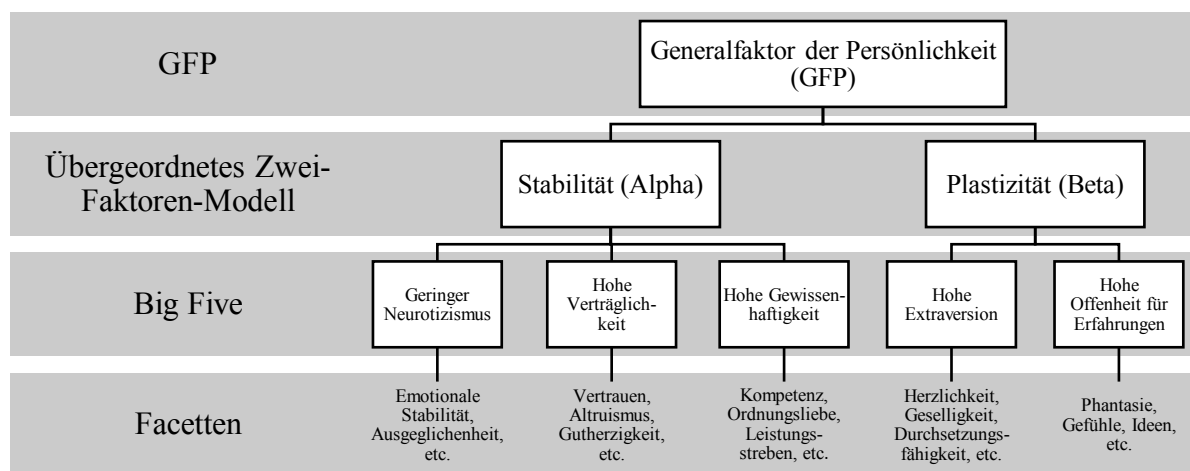


Abbildung 1. Strukturelle Hierarchie der Persönlichkeitsdimensionen von den Facetten der Big Five bis zum GFP; Darstellung in Anlehnung an Maltby, Day & Macaskill (2013) und Muek (2007).

Diese Studie legt den Schwerpunkt der Erkenntnisfindung auf das oberste Management-Level. In die Stichprobe gingen deshalb nur Vorstände und Geschäftsführer ein. Bei der Betrachtung von Führungseigenschaften und besonders erfolgreicher Führung sei auf die Unterscheidung zwischen leadership emergence und leadership effectiveness hingewiesen (z.B. in Grijalva, Harms, Newman, Gaddis, & Fraley, 2015): Ersteres zielt auf den Prozess ab, durch den Menschen in der Wahrnehmung anderer als Führungspersönlichkeit angesehen werden, Letzteres auf die eigentliche Leistung einer Führungskraft bei der Erreichung ihrer Ziele.

Hinsichtlich des Zusammenhangs von den Big Five zu leadership emergence und leadership effectiveness wird ersichtlich, dass die Dimension Extraversion besonders hervorsticht. Personen mit hohen Ausprägungen von Extraversion werden mit Blick auf eine mögliche Managementkarriere (*leadership emergence*) als Führungsperson wahrgenommen, da gesellige Menschen eher dazu neigen, sich in Gruppensituationen durchzusetzen und Selbstbewusstsein auszustrahlen. Auch bezüglich der tatsächlichen Führungsfunktion und der daraus resultierenden Zielerreichung (*leadership effectiveness*) zeigt die Forschung, dass extravertierte Manager erfolgreich sind (Bono & Judge, 2004; Bono et al., 2014). Gewissenhaftigkeit steht positiv mit *leadership emergence* in Verbindung, was an den Merkmalen Zuverlässigkeit, Zielerreichungsmotivation und Integrität liegt. Der Zusammenhang zu *leadership effectiveness* besteht jedoch nicht. Offenheit steht sowohl mit *leadership emergence* als auch *leadership effectiveness* in positivem Zusammenhang, was auf die hohe Kreativität und Neugier sowie die Problemlösefähigkeit zurückzuführen ist. Neurotizismus steht negativ in Verbindung zu *leadership effectiveness*, was hinsichtlich der Beschreibung von geringer emotionaler Stabilität, z.B. Ängstlichkeit, nicht überrascht. Es besteht keine Verbindung zu *leadership emergence*.

Der Sachverhalt bei der Dimension Verträglichkeit scheint an sich recht eindeutig zu sein: Vertrauenswürdigkeit, Freundlichkeit und Kooperationsbereitschaft versprechen Erfolg im Berufsleben. Doch tatsächlich steht Verträglichkeit negativ mit *leadership emergence* in Zusammenhang. Es scheint, als würde konformes und fürsorgliches Verhalten nicht als Führungseigenschaft wahrgenommen werden. Bezüglich *leadership effectiveness* zeigten sich keine Zusammenhänge (Bono et al., 2014).

So werden zusammenfassend hohe Ausprägungen von Extraversion, Gewissenhaftigkeit, emotionaler Stabilität und Offenheit als erfolgversprechende Merkmale

für Führungskräfte erachtet (Bono & Judge, 2004), die Kernmerkmale Kooperation und Gemeinschaft von Verträglichkeit jedoch negativ mit erfolgreicher Führung in Verbindung gebracht (Judge et al., 2002a). Die Überlegung liegt nahe, dass sich diese charakterlichen Besonderheiten auch im GFP für Führungskräfte widerspiegeln. Hinsichtlich ihrer Bedeutung als Korrelate von Führung lässt sich innerhalb der Big Five eine Rangfolge erkennen (Bono et al., 2014): Beginnend mit Extraversion, gefolgt von Gewissenhaftigkeit, Offenheit, Neurotizismus und schließlich Verträglichkeit. Diese führungspezifische Bedeutsamkeit der einzelnen Big Five Dimensionen könnte sich auch in der Hierarchie der Faktorladungen manifestieren. Zur besseren definitorischen Abgrenzung zum herkömmlichen GFP wird deshalb für die obere Führungsebene der Begriff GFP-E¹ eingeführt. Es wird demnach für diesen spezifisch auf Managementebene ausgeprägten GFP-E erwartet:

Hypothese 1a: Es existiert ein für Führungskräfte spezifischer GFP-E mit hoher Ausprägung von Extraversion, Gewissenhaftigkeit und Offenheit für Erfahrung sowie einer niedrigen Ausprägung von Neurotizismus und Verträglichkeit.

Hypothese 1b: Im GFP-E zeigt Extraversion die höchste Faktorladung gefolgt von Gewissenhaftigkeit, Offenheit, Neurotizismus und an letzter Stelle Verträglichkeit.

Neben den verschiedenen Untersuchungen zur Faktorstruktur des GFP sowie seines Stellenwertes innerhalb der Hierarchie der Persönlichkeit zeigt der weitere wissenschaftliche Diskurs Zusammenhänge mit positiven Verhaltensvariablen und sozioökonomisch

¹ Im Folgenden wird der hier in der Studie extrahierte Führungskräfte GFP als GFP-E bezeichnet.

erstrebenswerten Eigenschaften (Just, 2011). Personen mit hohem GFP erhalten positivere Bewertungen ihrer Arbeitsleistung (Van der Linden et al., 2010b). Sie sind sozialer eingestellt, verfügen über einen erhöhten Selbstwert, eine stärkere mentale Konstitution sowie eine gesteigerte Lebenszufriedenheit (Erdle, Irwing, Rushton, & Park, 2010; Figueredo, Vásquez, Brumbach, & Schneider, 2007; Musek, 2007). Im Bewerbungsprozess setzen sich Personen mit hohem GFP im Vergleich zu denen mit einer niedrigeren Ausprägung eher durch (Van der Linden, Bakker, & Serlie, 2011) und erlangen eher Führungspositionen (Van der Linden, Te Nijenhuis, Cremers, Van de Ven, & Van der Heijden-Lek, 2014).

Demnach lässt sich ein möglicher GFP mit verschiedenen arbeitsbezogenen Ergebnissen und Zufriedenheitsmaßen assoziieren (Dunkel & Van der Linden, 2014; Erdle et al., 2010; Kowalski et al., 2016; Musek, 2007). Ziel dieser Erhebung ist die Feststellung eines Zusammenhangs zwischen dem potentiellen GFP-E auf Executive Level und individuellen Erfolgsgrößen, konkret der Bezug zur Leistungsbereitschaft im Job, dem individuellen Erfolg und der Lebenszufriedenheit. Es liegt auf Basis der angeführten Erkenntnisse zum GFP nahe, positive Zusammenhänge im Hinblick auf den GFP-E zu erwarten. So werden effektive deutsche Manager z.B. durch eine hohe Leistungsorientierung charakterisiert (Brodbeck, Frese, & Javidan, 2002). Das lässt auf eine positive Verbindung mit Arbeitsleistung und auch Erfolg schließen. Der Zusammenhang zwischen persönlichem Wohlbefinden und einem erfolgreichen Arbeitsleben wurde bereits in einer Reihe von Studien untersucht (Russell, 2008). Erfolg im Beruf hängt mit der allgemeinen Lebenszufriedenheit zusammen (Judge & Watanabe, 1993). Aufgrund der Stichprobe aus Vorständen und Geschäftsführern kann so vermutet werden, dass sie durch Status, Macht und finanzielle Absicherung mit ihrem Job zufrieden sind. Dies kann sich positiv auf die

Lebenszufriedenheit auswirken. Auf Grundlage der vorangegangenen Erörterungen erwarten wir für den GFP-E und die Erfolgs- und Zufriedenheitsmaße:

Hypothese 2: Der GFP-E steht in positivem Zusammenhang mit (a) Arbeitsleistung, (b) Erfolg und (c) Lebenszufriedenheit.

Der GFP umfasst positive, erstrebenswerte Merkmale einer sozial anerkannten Persönlichkeit (Museum, 2017b). Um Führungspersönlichkeiten adäquat und umfassend abzubilden, reichen die Dimensionen der Big Five und damit das Spektrum eines potentiellen GFP-E nicht mehr gänzlich aus (Furnham et al., 2013). Der Fokus der Führungsforschung lag in den letzten Jahrzehnten auf der idealisierten, effektiven und hellen Form von Führung (May, Schilling, & Schyns, 2015). Jedoch geht aus der aktuellen Persönlichkeits- und Führungsliteratur hervor, dass eine signifikante Anzahl von ‚dunklen Persönlichkeiten‘ in Managementpositionen zu finden ist. Dementsprechend spiegelt die dunkle Seite der Führung einen Teil der Führungsrealität wider (Furtner, 2017). Damit rücken dunkle Eigenschaften und deren Betrachtung gerade im Führungskontext mehr und mehr in den Fokus der Aufmerksamkeit (Harms, Spain, & Hannah, 2011; Kaiser et al., 2015). Im Folgenden wird daher das Konzept der Dunklen Triade vorgestellt und mit dem GFP in Zusammenhang gebracht.

2.2.2.2 Dunkle Triade der Persönlichkeit

Die Dunkle Triade der Persönlichkeit (Paulhus & Williams, 2002) beinhaltet die Dimensionen Narzissmus, Machiavellismus und Psychopathie. Außerhalb des klinischen Bezugs wird die Dunkle Triade vor allem in der allgemeinen Bevölkerung anhand

studentischer Stichproben und auch in der Management-Psychologie diskutiert (z.B. Spain, 2019). *Narzissmus* bezeichnet in erster Linie eine stark überzogene Selbstwertschätzung und damit zusammenhängende Verhaltensweisen (Schütz, Marcus, & Sellin, 2004). Auch übertriebene Erwartungen an andere Personen, ein Mangel an Empathie sowie Arroganz und Überheblichkeit (Raskin & Terry, 1988) spielen hierbei eine Rolle. Jede Art von Kritik wird als Bedrohung des Selbstwertgefühls, als Beleidigung oder Ablehnung verstanden (Bushman & Baumeister, 1998; Stucke, 2003). *Machiavellismus* umfasst die Fähigkeiten eines guten Manipulators (Christie & Geis, 1970), eine zynische Weltsicht sowie emotionale Abgeklärtheit und Härte (Jones & Paulhus, 2009). *Psychopathie* repräsentiert den von außen wahrgenommen gefährlichsten Teil (Paulhus, Williams, & Harms, 2001) der dunklen Eigenschaften, indem emotionale Defizite durch charmante und manipulative Persönlichkeitszüge kaschiert werden. Psychopathie führt häufig zu einem impulsiven Lebensstil und kann mit zum Teil kriminellen Verhaltensweisen einhergehen (Cooke & Michie, 2001). Es wird allgemein angenommen, dass Personen mit psychopathischen Tendenzen sehr aversive Persönlichkeitsmerkmale aufweisen, die sich negativ auf das erfolgreiche Funktionieren am Arbeitsplatz auswirken (Landay et al., 2019). Sie erweisen sich im organisationalen Umfeld als kaum kooperativ, sozial unverträglich und weniger hilfsbereit (Boddy, 2010). Im berufsbezogenen Zusammenhang steht Psychopathie auch für eine impulsive, ungeplante Arbeitsweise, für Verantwortungslosigkeit und Reizhung (Hare, 2003).

Was die Wirkung der Dunklen Triade in Organisationen angeht, zeigen sich durchaus auch positive Effekte beim Führungsverhalten (Kaiser et al., 2015), so zum Beispiel im charismatischen Auftreten des Narzissten (Back, Kufner, Dufner, Gerlach, Rauthmann, & Denissen, 2013). Personen mit hoher Ausprägung der Dunklen Triade können zweifelsfrei beruflich erfolgreich sein, z.B. hinsichtlich des positiven Zusammenhangs von Narzissmus

und Gehalt oder Machiavellismus mit Führungsposition. Jedoch war Psychopathie mit allen der gemessenen Erfolgsgrößen negativ verbunden (Spurk et al., 2016). Diese Kontradiktion auf Leitungsebene hängt vor allem damit zusammen, dass die Dunkle Triade sowohl Stärken als auch Schwächen umfasst (Furnham et al., 2013; Judge et al., 2009). Kaiser et al. (2015) diskutieren deshalb zu Recht, welche Verhaltensweisen durch welche Ausartungen der Dunklen Triade besonders hervorstechen, vor allem dann, wenn die Akteure ihre Maske ablegen und tatsächlich erkennen lassen, wie sie mit Stress- und Konfliktsituationen umgehen (Gaddis & Foster, 2015). Solche Personen sind ihren Vorgesetzten, Kollegen und Mitarbeitern gegenüber eher destruktiv eingestellt, bei Entscheidungsprozessen halten sie sich verstärkt zurück und stellen lieber ihre eigenen Belange in den Vordergrund (Resick, Whitman, Weingarden, & Hiller, 2009). Manager mit der Befähigung zur Selbstreflexion sind sich ihrer dunklen Seiten eher bewusst, können diese deshalb besser kontrollieren und laufen daher weniger Gefahr, ihnen zu erliegen (Harms et al., 2011).

Insgesamt stellt sich die Dunkle Triade somit sehr viel komplexer dar als ursprünglich angenommen. Wissenschaftler wie Rauthmann & Kolar (2012) haben sich deshalb in der Vergangenheit auch der Frage gewidmet, wie dunkel und „böartig“ die Dunkle Triade als Ganzes aber auch in ihren einzelnen Facetten wahrgenommen wird. Sie fanden heraus, dass die Dimension Narzissmus im Vergleich zu Machiavellismus und Psychopathie als günstiger angesehen wird. So ist zum Beispiel Narzissmus positiv, Machiavellismus negativ und Psychopathie sowohl positiv als auch negativ mit sozioemotionalen Fähigkeiten verbunden (Nagler, Reiter, Furtner, & Rauthmann, 2014). In Bezug auf den Erfolg und das Wohlbefinden von Untergebenen erwies sich Narzissmus bei Führungskräften auch als die hellste Eigenschaft der Dunklen Triade (Volmer et al., 2016). Die Ergebnisse lassen vermuten, dass sich Narzissmus bezüglich dieser Untersuchungsaspekte signifikant von Machiavellismus und Psychopathie unterscheidet,

Machiavellismus von Psychopathie jedoch nicht. Machiavellismus und (sekundäre) Psychopathie wurden bereits negativ (Ali & Chamorro-Premuzic, 2010) und Narzissmus positiv mit Lebenszufriedenheit in Verbindung gebracht (Rohmann et al., 2019). Narzisstische Ausprägungen jedoch sind eher akzeptiert und haben weniger negative Konsequenzen für Organismus und Umwelt (Rauthmann & Kolar, 2012), wonach wir hier eher positive Zusammenhänge im Gegensatz zu den zwei übrigen Komponenten erwarten. Auf Basis der vorangegangenen Diskussion erwarten wir für die einzelnen Dimensionen der Dunklen Triade sowie für die Erfolgs- und Zufriedenheitsmaße:

Hypothese 3: Narzissmus steht in positivem Zusammenhang mit (a) Arbeitsleistung, (b) Erfolg und (c) Lebenszufriedenheit.

Hypothese 4: Machiavellismus steht in negativem Zusammenhang mit (a) Arbeitsleistung, (b) Erfolg und (c) Lebenszufriedenheit.

Hypothese 5: Psychopathie steht in negativem Zusammenhang mit (a) Arbeitsleistung, (b) Erfolg und (c) Lebenszufriedenheit.

Die Wissenschaft hält dazu an, verstärkt Geschlechterunterschiede innerhalb des GFP zu berücksichtigen (Just, 2011; Kowalski et al., 2016). Bono et al. (2014) empfehlen in ihrer Meta-Analyse zu Persönlichkeit und Führung, zukünftig auch auf Führungskräfteebene Geschlechtsspezifika zu erheben. In vorherigen Studien, beispielsweise von Kowalski et al. (2016), lassen die untersuchten Stichproben keine genderspezifischen Unterschiede bei GFP und der Dunklen Triade erkennen. Als Grund wurde die geringe Anzahl weiblicher Probanden und demzufolge eine mäßige Vergleichbarkeit genannt. Interessanterweise

enthalten andere Studien höhere Werte für die Dunkle Triade bei Männern (Jonason & Tost, 2010; O'Boyle Jr, Forsyth, Banks, & McDaniel, 2012). Angeregt durch vorherige Untersuchungsergebnisse zu Geschlechterunterschieden bezüglich des GFP wird auch in der vorliegenden Studie ein Geschlechtervergleich durchgeführt.

2.2.3 Methodologie

2.2.3.1 Stichprobe und Datenerhebung

Die Studienstichprobe bestand aus insgesamt $N = 320$ deutschsprachigen Führungskräften, wobei die Mehrheit männlich war ($n = 205$, 64.1%). Das Alter lag zwischen 27 und 76 Jahren ($M = 47.89$, $SD = 8.801$). Für die Datenanalyse wurden nur Personen berücksichtigt, die (1) Führungsverantwortung vorwiesen und (2) Führungserfahrung von mindestens einem Jahr angaben. Bei den Führungskräften handelte es sich um Vorstände und Geschäftsführer. Die Studienteilnehmer wurden über die Online-Business-Plattform Xing² zu der Befragung aufgerufen und mittels eines Online-Fragebogens um eine Selbsteinschätzung gebeten. Dabei wurden 3.000 Personen anhand verschiedener Filterkriterien (Unternehmensgröße > 50 Mitarbeiter, Personalverantwortung, Führungsposition [Geschäftsführer, Vorstand], vorhandene Führungserfahrung) ausgewählt und personalisiert angeschrieben.

2.2.3.2 Erhebungsinstrumente

Big Five. Die Persönlichkeitsdimensionen der Big Five wurden mithilfe der Kurzversion NEO-FFI-30 (Körner, Geyer, Roth, Drapeau, Schmutzer, Albani, Schumann,

² www.xing.com

& Brähler, 2008) des NEO-Fünf-Faktoren-Inventar (Costa & McCrae, 1985) erhoben. Die Messung der Big Five anhand des NEO-FFI gilt als das am häufigsten angewandte Persönlichkeitsinventar in Wissenschaft und Praxis (Furnham, 1996; Gosling, Rentfrow, & Swann Jr, 2003). Der Fragebogen bestand aus insgesamt 30 Items, jede Skala wurde mit sechs Fragen gemessen. Beispielsitems³ für die fünf Dimensionen waren: „Ich fühle mich oft angespannt und nervös“ (N), „Ich fühle mich oft im Zentrum des Geschehens“ (E), „Mich begeistern die Motive, die ich in der Kunst und in der Natur finde“ (O), „Ich bekomme häufiger Streit mit meiner Familie und meinen Kollegen“ (A) und „Wenn ich eine Verpflichtung eingehe, so kann man sich auf mich verlassen“ (C). Die interne Konsistenz anhand von Cronbachs Alpha betrug für Neurotizismus $\alpha=.72$, für Extraversion $\alpha=.74$, Offenheit für Erfahrungen $\alpha=.70$, für Verträglichkeit $\alpha=.74$ und für Gewissenhaftigkeit $\alpha=.72$. Diese Werte liegen oberhalb der Akzeptanzgrenze von .70 (Cortina, 1993).

Dunkle Triade der Persönlichkeit. Die Persönlichkeitsmerkmale der Dunklen Triade wurden mithilfe der Triad of Personality at Work (TOP) (Schwarzinger & Schuler, 2016) erfasst. Da mit dem TOP keine klinische, sondern eine rein berufsrelevante Messung der komplexen Konstrukte angestrebt wird, werden die dort ausgegebenen Dimensionswerte mit narzisstischer Arbeitshaltung, machiavellistischer Arbeitseinstellung und psychopathischem Arbeitsstil bezeichnet. Im Original beinhaltet das Inventar 60 Items zur Selbstbeschreibung auf elf Subskalen. Für die vorliegende Studie wurden von jeder der elf Subskalen je zwei Items ausgewählt. Für Narzissmus wurden acht Items genutzt, welche die Subskalen Führungsanspruch, Überzeugungsglaube, Autoritätsbedürfnis, Risikofreude und Überlegenheitsgefühl repräsentieren. Die Skala Überzeugungsglaube erfasst den Glauben an

³ Der Verwendung des Fragebogens hat der Hogrefe Verlag zugestimmt. Jeglicher Einsatz einzelner Fragen fällt unter das Urheberrecht des Hogrefe Verlags.

die eigene überragende Fähigkeit, andere Personen beeinflussen zu können. Für Machiavellismus wurden insgesamt sechs Items für die Skalen Sentimentalität, Durchsetzungsglaube und Skepsis ausgewählt. Bei der Messung von Sentimentalität geht es vor allem darum, den Grad der Emotionslosigkeit herauszufinden. Für Psychopathie wurden ebenfalls sechs Items eingesetzt, welche die Skalen Flexibilität, Impulsivität und Beschönigung abbilden. Flexibilität umfasst das Fehlen von langfristigen, realistischen Zielen und die fehlende Neigung zur Übernahme von Verantwortung. Beschönigung bildet pathologisches Lügen berufsbezogen ab, etwa die Bereitschaft, nicht immer die ganze Wahrheit im Geschäftsleben anzugeben. Beispielitems für die drei Konstrukte waren „Meine Kollegen bewundern und beneiden mich“ (N), „Berufliche Kontakte wähle ich danach aus, ob sie mir nutzen können“ (M) und „Es fällt mir selten auf, wenn es Kollegen schlecht geht“ (P). Cronbachs Alpha betrug für Narzissmus $\alpha=.77$, für Machiavellismus $\alpha=.75$ und für Psychopathie $\alpha=.62$. Die Skala Psychopathie liegt an der unteren Grenze der Akzeptanz (Schmitt, 1996).

Zufriedenheits- und Erfolgsmaße von Führungskräften.

Arbeitsleistung wurde anhand eines Fragebogens von Roederer (2011) mit fünf Items gemessen. Ein beispielhaftes Item war „Ich kann die Probleme, die in meiner Arbeit entstehen, effektiv lösen“. Das Inventar wurde bereits unter Führungskräften angewendet. Cronbachs Alpha für Arbeitsleistung betrug $\alpha=.81$.

Lebenszufriedenheit wurde anhand des Satisfaction with Life Scale (SWLS) von Diener, Emmons, Larsen & Griffin (1985) untersucht. Die Skala umfasste fünf Items. Ein Beispielitem aus der Studie war: „In vielerlei Hinsicht entspricht mein Leben meinen Idealvorstellungen“. Das Ergebnis aus dem SWLS ergibt sich durch die Summe der

Punktergebnisse aller Fragen (Diener et al., 1985). Cronbachs Alpha für die Skala Lebenszufriedenheit betrug $\alpha = .85$.

Individueller Erfolg wurde anhand von sieben Fragen des Inventars berufsbezogener Einstellungen und Selbsteinschätzungen (IBES) von Marcus (2006) untersucht. Die Skala bestand aus sechs Fragen zum persönlichen und finanziellen Erfolg, zum Beispiel „Mit den Erfolgen, die ich in meinem Beruf habe, bin ich sehr zufrieden“ oder „Mit der Sicherung meiner wirtschaftlichen Existenz bin ich sehr zufrieden“. Cronbachs Alpha für die Skala Individueller Erfolg betrug $\alpha = .77$.

Die Skalenwerte bildeten sich aus den Mittelwerten der zugehörigen Items, denen eine siebenstufige Likert-Skala von 1 bis 7 (1 = „Stimme überhaupt nicht zu“ bis 7 = „Stimme voll und ganz zu“) zugrunde lag.

Als *Kontrollvariablen* wurden das Alter und das Geschlecht der Studienteilnehmer erhoben.

2.2.4 Ergebnisse

2.2.4.1 Deskriptive Analysen

Die Mittelwerte, Standardabweichungen und Interkorrelationen aller Studienvariablen sind in Tabelle 6 dargestellt. Der unter den Führungskräften ausgeprägte GFP-E korrelierte signifikant positiv mit den Variablen Arbeitsleistung ($r = .542, p < .01$), Lebenszufriedenheit ($r = .429, p < .01$) und Erfolg ($r = .415, p < .01$). Ebenfalls zeigte der GFP-E für die Stichprobe der Führungskräfte einen signifikant positiven Zusammenhang zu

Narzissmus ($r = .162$, $p < .01$) sowie jeweils einen signifikant negativen Zusammenhang zu Machiavellismus ($r = -.242$, $p < .01$) und Psychopathie ($r = -.384$, $p < .01$) auf.

2.2.4.2 Der Generalfaktor der Persönlichkeit für Führungskräfte (GFP-E)

Der GFP-E für Führungskräfte wurde angelehnt an die Studie von Kowalski et al. (2016) aufbereitet. Mittels einer Hauptachsen-Faktorenanalyse (PFA) wurde aus den NEO-FFI-30-Ergebnissen ein GFP-E extrahiert. Die Analyse zeigte innerhalb des extrahierten Ein-Faktor-Modells die höchste interne Kommunalität für Neurotizismus (.17), gefolgt von Extraversion (.14) sowie Gewissenhaftigkeit (.11), Verträglichkeit (.08) und Offenheit (.03). Die höchste Faktorladung zeigte Neurotizismus (-.63), gefolgt von Extraversion (.51), Gewissenhaftigkeit (.43), Verträglichkeit (.34) und schließlich Offenheit (.17). Der gebildete GFP-E berechnete sich als gewichtete Summe der NEO-FFI-Skalenwerte mit den Faktorladungen als Gewichte ($\text{GFP-E} = -.63 \times \text{Neurotizismus} + .51 \times \text{Extraversion} + .43 \times \text{Gewissenhaftigkeit} + .34 \times \text{Verträglichkeit} + .17 \times \text{Offenheit}$). Somit kann nicht bestätigt werden, dass sich für Führungskräfte ein spezifischer GFP-E mit hoher Ausprägung von Extraversion, Gewissenhaftigkeit sowie Offenheit für Erfahrung und niedriger Ausprägung von Verträglichkeit und Neurotizismus ableiten lässt (*Hypothese 1a*). Es lassen sich hinsichtlich der Faktorladungen und Rangfolge der Facetten Unterschiede zum GFP feststellen, sie weichen jedoch teilweise von der postulierten Rangordnung ab (*Hypothese 1b*). Der erwartete positive Zusammenhang des GFP-E mit den Erfolgs- und Zufriedenheitsmaßen (*Hypothese 2*) konnte bestätigt werden. Der GFP-E steht positiv mit Arbeitsleistung ($\beta = .503$, $p < 0.001$), Erfolg ($\beta = .403$, $p < 0.001$) und Lebenszufriedenheit ($\beta = .524$, $p < 0.001$) in Zusammenhang.

Tabelle 6. Mittelwerte, Standardabweichungen und Interkorrelationen aller Studienvariablen

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Alter	47,89	8,81	1													
2. Geschlecht	1,36	0,48	.223**	1												
3. GFP-E	6,55	1,03	.154**	.111*	1											
4. Neurotizismus	1,98	0,74	-.132*	.003	-.717**	1										
5. Extraversion	5,18	0,81	.054	.128*	6.83**	-.332**	1									
6. Offenheit	4,78	1,05	.099	.147**	.271**	-.042	.09	1								
7. Verträglichkeit	5,21	0,96	.245**	.139*	.510**	-.187**	.127*	.155**	1							
8. Gewissenhaftigkeit	5,94	0,69	-.099	-.003	.539**	-.249**	.248**	.003	.132*	1						
9. Narzissmus	4,41	0,79	-.07	-.004	.162**	-.160**	.356**	.037	-.319**	.149**	1					
10. Machiavellismus	3,32	0,98	-.104	-.034	-.242**	.181**	-.065	-.196**	-.409**	.102	.316**	1				
11. Psychopathie	3,26	0,95	-.151**	-.06	-.384**	.254**	-.034	-.185**	-.491**	-.271**	.282**	.290**	1			
12. Arbeitsleistung	5,94	0,67	-.017	.083	.542**	-.324**	.405**	.088	.155**	.569**	.288**	-.021	-.181**	1		
13. Erfolg	6,11	0,76	.148**	.137*	.415**	-.369**	.343**	.024	.161**	.169**	.088	-.191**	-.108	.294**	1	
14. Lebenszufriedenheit	5,67	0,89	-.017	.034	.429**	-.348**	.419**	.022	.102	.208**	.157**	-.032	-.092	.310**	.502**	1

Anmerkungen: N = 320; **. p < 0.01; *. p < 0.05; Korrelation mittels Spearman-Rangkorrelations-Test.

2.2.4.3 Dunkle Triade der Persönlichkeit

Der vermutete positive Zusammenhang von Narzissmus mit den Erfolgs- und Zufriedenheitsmaßen (*Hypothese 3*) konnte nur partiell bestätigt werden. Narzissmus steht positiv mit Arbeitsleistung in Verbindung ($\beta = .195$, $p < 0.001$), jedoch nicht mit Erfolg ($\beta = -.004$, $p = \text{n.s.}$) und Lebenszufriedenheit ($\beta = .038$, $p = \text{n.s.}$). Der angenommene negative Zusammenhang von Machiavellismus (*Hypothese 4*) und Psychopathie (*Hypothese 5*) mit den Erfolgs- und Zufriedenheitsmaßen bestätigte sich hingegen nicht. Innerhalb der Regressionsanalysen zeigten sich für Machiavellismus bezüglich der abhängigen Variablen Arbeitsleistung ($\beta = .039$, $p = \text{n.s.}$), Erfolg ($\beta = -.067$, $p = \text{n.s.}$) und Lebenszufriedenheit ($\beta = .059$, $p = \text{n.s.}$) keine signifikanten Zusammenhänge. Für Psychopathie zeigten sich ebenfalls keine signifikanten Zusammenhänge mit Arbeitsleistung ($\beta = -.048$, $p = \text{n.s.}$), Erfolg ($\beta = .10$, $p = \text{n.s.}$) und Lebenszufriedenheit ($\beta = .086$, $p = \text{n.s.}$).

Das adjustierte R^2 für die Regression von GFP-E und den Dunkle-Triade-Dimensionen auf Arbeitsleistung lag bei .329, auf Erfolg bei .160 und bei Lebenszufriedenheit bei .226.

Um die aufgestellten Hypothesen 2 – 5 zu überprüfen, wurden multiple Regressionsanalysen durchgeführt. Hier wurden jeweils Alter und Geschlecht als Kontrollvariablen in die Analysen aufgenommen. Innerhalb der Regressionsanalyse bilden GFP-E, Narzissmus, Machiavellismus und Psychopathie die Prädiktoren und die gegenübergestellten Variablen Arbeitsleistung, Zufriedenheit und Erfolg jeweils die Kriterien. Tabelle 7 zeigt die Ergebnisse der multiplen Regressionsanalysen im Überblick.

Tabelle 7. Regressionsanalyse von GFP-E und Dunkler Triade auf Erfolgs- und Zufriedenheitsvariablen

	Arbeitsleistung				Erfolg				Lebenszufriedenheit			
	B	SE	β	t	B	SE	β	t	B	SE	β	t
GFP-E	.327	.036	.503	9.018** *	.298	.046	.403	6.457** *	.452	.052	.524	8.744** *
Narzissmus	.164	.045	.195	3.636** *	-.004	.057	-.005	-.077	.038	.064	.034	.586
Machiavellismus	.027	.036	.039	.756	-.052	.045	-.067	-1.154	.053	.051	.059	1.043
Psychopathie	-.034	.039	-.048	-1.880	.089	.049	.10	1.618	.080	.055	.086	1.448
R ²	.329				.160				.226			

Anmerkungen: N = 320; *** p < 0.001; ** p < 0.01; * p < 0.05; β ist der standardisierte Regressionskoeffizient

Anhand von Mann-Whitney-Tests wurden signifikante Geschlechterunterschiede innerhalb des GFP-E festgestellt. Demnach verfügen weibliche Führungskräfte über einen höheren GFP-E als ihre männlichen Kollegen. Dies war so nicht zu erwarten und widerspricht früheren Forschungsergebnissen (Kowalski et al., 2016). Innerhalb der Dunklen Triade ließen sich wie vermutet keine signifikanten Differenzen finden. Alle Werte für männliche und weibliche Studienteilnehmer sowie Signifikanzwerte der Unterschiede können Tabelle 8 entnommen werden.

Tabelle 8. Mittelwert, Standardabweichung sowie Unterschiede für den GFP-E und die Dunkle Triade

	Mittelwert (SD)		Signifikanz Mann-Whitney-Test
	Männer	Frauen	
GFP-E	6,45 (1.06)	6,72 (.95)	.047
Narzissmus	4,41 (.75)	4,41 (.87)	.950
Machiavellismus	3,34 (.97)	3,28 (1.00)	.542
Psychopathie	3,31 (.95)	3,18 (.94)	.285

2.2.5 Diskussion

2.2.5.1 Zusammenfassung

Erste Überlegungen zu einer Aggregation der Big Five zu dualen Faktormodellen durch Digman (1997) sowie zu einem überlagernden Generalfaktor der Persönlichkeit durch Musek (2007) bildeten den Ausgangspunkt der vorliegenden Studie. Sie setzte sich konkret drei Ziele: (1) Die Feststellung eines Generalfaktor der Persönlichkeit GFP-E für Top-Manager, (2) die Verknüpfung von diesem speziellen GFP-E für Führungskräfte mit der Dunklen Triade der Persönlichkeit und (3) die Analyse des Zusammenhangs von GFP-E und Dunkler Triade mit persönlichen Erfolgs- und Zufriedenheitsmaßen.

2.2.5.2 Theoretische Implikationen

Ein spezifischer GFP-E mit positiver Ladung auf Extraversion, Gewissenhaftigkeit und Offenheit für Erfahrung sowie negativer Ausprägung auf Verträglichkeit und Neurotizismus konnte für Führungskräfte nicht abgeleitet werden. Anders als erwartet ist dieser GFP-E gekennzeichnet durch eine hohe Verträglichkeit, was sich nicht mit vorliegenden Befunden für das oberer Management deckt (Bono & Judge, 2004; Judge et al., 2002a). Der dargestellte GFP-E und die entsprechenden Faktorladungen passen somit nur teilweise zu den in der Literatur dargestellten Big-Five-Persönlichkeitsprofilen von Führungskräften (Bono et al., 2014; Judge, Heller, & Mount, 2002b). Dieses Ergebnis ist kontraintuitiv. Eine mögliche Ursache hierfür könnte im Wandel der Führungskultur liegen. Denn die mit der Digitalisierung verbundenen zusätzlichen Anforderungen der neuen Arbeitswelt bedingen eine Anpassung bestehender Führungskonzepte. Diese tendieren vermehrt zu Kooperation sowie Partizipation und sind mit einer höheren Interaktion zwischen Mitarbeitern und Führungskräften verbunden (Lippold,

2019). Die höhere Einvernehmlichkeit untereinander mag daher auch den Grund für die vorliegende positive Ausprägung von Verträglichkeit darstellen. Eine weitere Erklärungsmöglichkeit für die Studienergebnisse könnte eine potenziell verzerrte Selbstwahrnehmung der Teilnehmer sein. Diskrepanzen zwischen der Selbsteinschätzung von Führungskräften und deren Fremdeinschätzung durch andere Personen (z.B. Geführte oder Kollegen) wird in der Literatur schon lange diskutiert und beschrieben (Lee & Carpenter, 2018). So weisen höherrangige Mitarbeiter, wie z.B. leitende Angestellte, eine größere Diskrepanz zwischen Eigen- und Fremdbewertungen auf als ihre niedrigrangigeren Kollegen (Sala, 2003). Zusätzlich könnten die Ergebnisse durch sozial erwünschtes Antwortverhalten verzerrt sein. Studienteilnehmer antworten tendenziell in einer Richtung, die sie so gut wie möglich aussehen lassen (Donaldson & Grant-Vallone, 2002). Dies mag insbesondere auf Leitungsorgane zutreffen, die sehr darauf achten, wie andere ihr Führungsverhalten sehen (Densten & Sarros, 2012; Ketchen Jr, Adams, & Shook, 2008). Es liegt deshalb nahe, dass sie das Bestreben, Reputation und Managementbefähigung in der Außenwahrnehmung zu sichern, auch im Fragebogenkontext beibehalten. So dürfte die vorliegende Stichprobe aus ManagerInnen in Kombination mit Selbstauskünften anfällig sein für sozial erwünschte Antworttendenzen, welche in der gemeinhin als positiv konnotierten Dimension der Verträglichkeit zum Ausdruck kommen könnten.

Hinsichtlich der Faktorladungen zeigen sich sowohl Überschneidungen als auch Unterscheidungen zum klassischen GFP. Die Gemeinsamkeiten manifestieren sich jeweils in der höchsten Ladung von Neurotizismus und in der niedrigsten von Offenheit. Als Unterschied zeigte Extraversion die zweithöchste Faktorladung im GFP-E, gefolgt von Gewissenhaftigkeit und Verträglichkeit. Ein spezifischer GFP-E kann demnach als Unterscheidung zum herkömmlichen GFP in der Rangfolge der Facetten festgestellt werden, wenn auch in etwas

abweichender Form zur angenommenen Hierarchie. Die gefundene Hierarchie im GFP-E bekräftigt die Wichtigkeit der Dimension Extraversion im Führungskontext, was sich mit vorhergehenden Befunden zu Persönlichkeit und Führung deckt (Bono et al., 2014).

Der für die oberste Leitungshierarchie extrahierte GFP-E steht positiv mit erhöhter Arbeitsleistung, Lebenszufriedenheit und Erfolg in Verbindung. Diese Ergebnisse lehnen sich an vorangegangene Studien zum GFP und verschiedenen Erfolgsgrößen an (Erdle et al., 2010; Kowalski et al., 2016; Musek, 2007; Van der Linden et al., 2010b). Die vorliegenden Studienergebnisse unterstreichen damit den Zusammenhang zwischen wünschenswerten Output-Größen und einem führungskräftespezifischen GFP-E im Geschäftsumfeld.

Spain et al. (2014) raten in Bezug auf die Big Five und den GFP zu einer Erweiterung des Betrachtungsspektrums um eher negative Persönlichkeitseigenschaften, die innerhalb der Dunklen Triade abgebildet sind. Die vorliegende Analyse hat in diesem Zusammenhang gezeigt, dass der GFP-E signifikant positiv mit Narzissmus und signifikant negativ mit Machiavellismus und Psychopathie korreliert. Die positive Korrelation zwischen dem GFP-E und Narzissmus deutet tendenziell auf eine positive Bedeutung dieses Wesensmerkmals auf Führungsebene hin. Diese Korrelation stützt die Vermutung, dass Narzissmus in seinen Eigenschaften bei Führungskräften wesentlich positiver wirkt als die anderen beiden Dimensionen und dass das Konzept der Dunklen Triade somit in seiner grundlegenden Konzeptualisierung zu hinterfragen ist (Erdle et al., 2010; Kowalski et al., 2016; Rauthmann & Kolar, 2012). Narzissmus stellt in der Literatur zwar eine Persönlichkeitsdimension dar, die überwiegend negative Aspekte beinhaltet. Dennoch ist die Verbindung mit dem GFP-E positiv, was die Diskussion um eine Dunkle Dyade aus Machiavellismus und Psychopathie unterstützt (z.B. in Pailing, Boon, & Egan, 2014). Anzumerken ist hier, dass dieser Studie eine spezielle Stichprobe aus Vorständen und Geschäftsführern zugrunde liegt und daher nicht auf Narzissmus im Allgemeinen

übertragbar ist. Während das Top-Management verstärkt auch durch motivationale und repräsentative Aufgaben gekennzeichnet ist, deren Erfüllung durch Narzissmus begünstigt werden kann, prägt die inhaltliche Aufgabenstellung in der mittleren und unteren Führungsebene Team- und Projektarbeit, denen narzisstisches Auftreten entgegenstehen kann. Ein weiterer Gesichtspunkt stellt die unterschiedliche Entscheidungslage bei Top- und Lower-Management dar. Im Gegensatz zur obersten Führungsebene befindet sich die mittlere Leitungsriege in einer Sandwichrolle mit erheblichem Interaktionsbedarf nach oben und unten. Narzisstisches Verhalten dürfte da eher missfallen. Derartige Rücksichten müssen Top-Führungskräfte weniger nehmen, solange ihre Aufsichtsgremien hinter ihnen stehen. Narzissmus bleibt als Dimension, die gesondert und ohne die ggf. negative Wirkung durch die Dunkle Triade betrachtet werden sollte (Egan et al., 2014; Kowalski et al., 2016). Nach Rauthmann & Kolar (2012) sind Narzissten insgesamt charmanter, vom Aussehen und Auftreten her ansehnlicher, pflichtbewusster und motivierter. Was wiederum erklärt, warum Narzissmus als eher positiv angesehen wird und entsprechend unter Führungskräften - anders als bei Kowalski et al. (2016) - signifikant positiv mit dem GFP-E korreliert (Rauthmann & Kolar, 2012). Jedoch gibt es einen kurvilinearen Zusammenhang zwischen Narzissmus und *leadership effectiveness*, wonach das optimale Niveau von Führungsnarzissmus im mittleren Bereich liegt (Grijalva, Harms, Newman, Gaddis, & Fraley, 2015). Das deutet darauf hin, dass Narzissmus weder ganz vorteilhaft noch vollkommen schädlich ist, sondern am ehesten in mittlerer Ausprägung eine positive Wirkung auf *leadership effectiveness* entfaltet. Narzissmus steht neben dem GFP-E positiv in Verbindung mit Arbeitsleistung. Die Regressionsanalyse zeigte keinen Zusammenhang zwischen Narzissmus, persönlichem Erfolg sowie Zufriedenheit. Hinsichtlich Psychopathie und Machiavellismus ließen sich keine signifikanten Zusammenhänge zu den Zufriedenheits- und Erfolgsmaßen feststellen. Dies kann zum einen

durch den Umstand bedingt sein, dass Psychopathie aus verschiedenen Facetten besteht. Diese hängen teilweise nur mit bestimmten Elementen von beruflichem Erfolg und Zufriedenheit zusammen (Eisenbarth, Hart, & Sedikides, 2018). Zum anderen hängt der Erfolg von Machiavellisten u.a. von der Umgebung ab, in der sie arbeiten. Sie scheinen in eher unstrukturierten Organisationen Vorteile zu haben (Jones & Paulhus, 2009). Für solche Kontextfaktoren konnte in der vorliegenden Studie jedoch nicht umfänglich kontrolliert werden.

Bei der Analyse von Geschlechterunterschieden zeigen die Ergebnisse nur für den GFP-E einen signifikanten Unterschied, wonach Frauen über einen höheren GFP-E verfügen als männliche Führungskräfte. Ein Grund hierfür könnte sein, dass Frauen in Führungspositionen mehr GFP-E Qualitäten aufweisen müssen, um überhaupt in die Führungsetagen zu gelangen. Frauen wird die Übernahme von Führungsverantwortung weniger zugetraut (Heilman & Haynes, 2005), und weibliche Leistungen werden in der Regel von vornherein schlechter bewertet als die ihrer Kollegen (Heilman, 2012). Als Stichwort sei hier die „Gläserne Decke“ genannt, die in der Karriere einer Frau eine undurchdringliche Barriere darstellt (Heilman, 2001). Trotz beachtlicher Erfolge bei der Frauenquote bestehen immer noch Diskrepanzen bei der Verteilung von Führungspositionen auf deutschen Chefetagen. Frauen sind hier mit 29% immer noch deutlich unterrepräsentiert (Hartl, Kirchler, & Muehlbacher, 2013; Schmidt & Stette, 2018).

2.2.5.3 Praktische Implikationen

Die festgestellten Bedeutungsunterschiede innerhalb des GFP-E erlauben für die Personalauswahl eine hilfreiche Orientierung, wenn es darum geht, für Führungskräfte ein erfolgsversprechendes Persönlichkeitsprofil festzulegen. Wobei neben den klassischen Big Five

auch die unterschiedlichen Dimensionen der Dunklen Triade Berücksichtigung finden sollten, speziell die des Narzissmus. Neben der Personalauswahl und Personalbeurteilung dienen die Ergebnisse insbesondere auch der Förderung von Mitarbeitern. Das betrifft unmittelbar zwar nur den Führungsnachwuchs, wirkt aber mittelbar über die Zeitachse auf sämtlichen Hierarchieebenen und auf die Unternehmenskultur insgesamt ein. Nach Kaiser et al. (2015) gewinnt die Dunkle Triade für die Leitungsverantwortung immer größeren Einfluss. Innerhalb der beruflichen Praxis sollten Personalinstrumente wie Aus- und Weiterbildung, Coaching, Mentoring oder Organisationsentwicklung entsprechend ausgestaltet werden, unter anderem, um die dunklen Seiten der Führungsmannschaft unter Beobachtung zu halten und gegebenenfalls Strategien zur Vermeidung von möglichen negativen Verhaltensweisen durch erhöhte Ausprägungen dieser Dimensionen zu erarbeiten. Die Analysen der Geschlechterunterschiede weisen darauf hin, dass Frauen in Führungspositionen emotional stabiler, extravertierter, offener, kooperativer und gewissenhafter sind als ihre männlichen Kollegen, wonach bestehende Geschlechtsterrorurteile zu überdenken sind. Der Auswahl und Förderung weiblicher Bewerberinnen und Mitarbeiterinnen für vakante Positionen im Top-Management und auf mittlerer Führungsebene sollte daher mehr Aufmerksamkeit zuteil werden. Weitere Forschung ist jedoch nötig, um mögliche Vorurteile zu überprüfen und gegebenenfalls langfristig auszuräumen.

2.2.5.4 Limitationen und Empfehlungen für weitere Forschung

Eine abschließende Betrachtung der vorliegenden Untersuchung erfordert den Hinweis auf bestimmte Einschränkungen. So beruhen die Studienergebnisse auf Selbsteinschätzungen, was allgemein einer kritischen Beurteilung bedarf. Insbesondere im Zusammenhang mit dem

GFP-E, der Dunklen Triade sowie Zufriedenheits- und Erfolgsmaßen. Eine Bewertung Dritter könnte möglicherweise zu anderen Resultaten führen. So steht *leadership effectiveness* bei Selbsteinschätzungen in positivem Zusammenhang mit Narzissmus. Bei Fremdbewertungen, zum Beispiel durch Mitarbeiter oder Kollegen, wurde dagegen kein Zusammenhang festgestellt (Grijalva et al., 2015). Die Forschungsergebnisse hinsichtlich der positiven Ausprägung von Verträglichkeit im GFP-E lassen auch vermuten, dass die Stichprobe aus Top-ManagerInnen zwar hochrelevant ist, aber auch eine Anfälligkeit für Verzerrungen im Kontext von Selbstauskunft und Fragebogenforschung aufweist. Diese Zielgruppe scheint für klassische Fragebogenforschung eher weniger geeignet zu sein. Das unterstreicht die Notwendigkeit einer Einbeziehung von Fremdbeurteilungen oder auch alternativen Erhebungsverfahren (z.B. stärker objektivierten Sprachanalysen oder neurowissenschaftlichen Messansätzen) in zukünftigen Studien.

Zukünftige Forschung könnte als Basis für einen GFP auch das HEXACO-Modell (Ashton, Lee, Perugini, Szarota, De Vries, Di Blas, Boies, & De Raad, 2004) berücksichtigen. Es nutzt die fünf Persönlichkeitsmerkmale plus einen sechsten Faktor für Ehrlichkeit-Bescheidenheit. Gerade auch im Vergleich mit eher negativen Persönlichkeitseigenschaften wie der Dunklen Triade könnte die zusätzliche Dimension einen wichtigen Beitrag in der Führungsforschung leisten. Auch hier könnte sich die Verknüpfung von Selbst- und Fremdbeurteilungen als sinnvolle Forschungsergänzung anbieten, da bei Selbstauskünften zur Bescheidenheit etwa davor gewarnt wird, dass hier eine hohe Ausprägung von Bescheidenheit de facto auf einen Mangel an dieser Eigenschaft hinweisen könnte (Davis, Worthington Jr, & Hook, 2010). Bescheidene Personen würden sich nicht als solche bezeichnen, unbescheidene Personen im Gegensatz schon eher. Eine solche Erweiterung unserer Forschung wäre daher im Hinblick auf narzisstische Persönlichkeiten besonders reizvoll.

Bei Betrachtung der Faktorladungen des GFP-E wird deutlich, dass Offenheit für Erfahrungen die geringste Faktorladung verzeichnet. Dies war auch in anderen Studien der Fall (Kowalski et al., 2016; Musek, 2007). Man könnte für zukünftige Studien, die einen GFP-E unter Führungskräften analysieren, eine Betrachtung ohne Offenheit für Erfahrungen in Erwägung ziehen. Dieser Überlegung wird hier jedoch nicht gefolgt. Aktuelle Diskussionen innerhalb der Management-Praxis unterstreichen die Relevanz der Dimension bezüglich Kreativität und Innovationskraft, auch im Hinblick auf die stetig zunehmende Digitalisierung. Offenheit für Erfahrung beschreibt nachweislich eine erhöhte Affinität zu Erneuerungen, wobei die verbleibenden Dimensionen der Big Five sowie die der Dunklen Triade weniger stark auf Kreativität und Innovation wirken (Dahmen-Wassenberg, Kämmerle, Unterrainer, & Fink, 2016). Mit Blick auf Management- und HR-Praxis und dem zunehmenden Bedarf an Personen mit erhöhter Offenheit für Erfahrungen (Kienbaum Management Consultants, 2015) sollte die Dimension daher auch in weiteren Studien mitgeführt werden.

Um innerhalb der Persönlichkeits- und Führungsforschung verstärkt Geschlechterunterschiede untersuchen zu können, könnten zukünftig Stichproben von Frauen und Männern von vornherein gleichmäßig erhoben werden. Die wachsende Anzahl weiblicher Führungskräfte auch in den oberen Führungsetagen unterstreicht diese Notwendigkeit. In der aktuellen Studie war die Mehrheit der Studienteilnehmer männlich. Die Ergebnisse zeigten nur für den GFP-E einen signifikanten Unterschied, wonach Frauen über einen höheren GFP-E verfügen als männliche Führungskräfte.

2.2.6 Literatur

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2.3 Essay 3: No benefits for paradox personalities? Narcissism and humility in new work careers

Abstract

Remarkable contributions have already been made on narcissism and its particular influence on career success, yet the literature to date does not capture the potential impact of paradoxical personalities. Especially when considering the role of humility as a complement to a multifaceted constellation of characters. This gap finds additional relevance in light of recent changes in today's world of work in terms of flexibility and complexity. Therefore, our study examines the relationship between narcissism and humility with objective and subjective career success in new work settings. The research is based on dyadic data of 398 cross-industry US professionals in 199 pairs. Hypotheses are tested using hierarchical moderated multiple, and logistic regression analyses. As expected, the interaction between narcissism and humility showed negative effects on leadership position, project responsibility, and salary. Considering new ways of working in a three-way interaction with narcissism and humility, the effect turned positive for salary. Thus, in the new world of work, the humble narcissist is successful in material terms. Surprisingly, no relations to subjective career success were evident. Our findings contribute to the literature on new ways of working, career success, and paradox personalities by showing that although humble narcissists may generally experience lower levels of career success, they rather succeed in new working environments.

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2.3.1 Introduction

Career success has long been at the core of academic discussions in managerial psychology research, remaining a key topic in contemporary literature (Akkermans & Kubasch, 2017). Furthermore, personality has been identified as an essential predictor of work and career success (Wille *et al.*, 2013b; Semeijn *et al.*, 2020). Previously, not least triggered by severe scandals in the business world, the negative sides of personality, especially Machiavellianism, psychopathy, and narcissism - known as the Dark Triad (Paulhus & Williams, 2002) - have become central to examining the relationship between personality and career outcomes (Lee and Ashton, 2014; LeBreton *et al.*, 2018). However, despite its adverse characteristics, narcissism separates itself from the triad, as it is perceived as the most positive of the three components (Rauthmann & Kolar, 2012) and has already been positively associated with career success outcomes (Spurk *et al.*, 2016; Wille *et al.*, 2013a).

Working conditions are constantly changing and have recently undergone another shift through digital transformation (Timonen & Vuori, 2018), resulting in new work settings characterized by more variability in location and timing (Kok *et al.*, 2014; Gerdenitsch *et al.*, 2015). This new flexibility in the job environment based on freedom and mutual trust is collectively referred to as new ways of working (NWW) (Ten Brummelhuis *et al.*; 2012, Kok *et al.*, 2014). To respond to the increasingly volatile, global, and competitive organizational settings as well as to the growing demands on employees, scholars have gradually begun adopting a paradox perspective (Waldman *et al.*, 2019; Smith & Lewis, 2011; Zhang and Han, 2019). Paradoxes comprise conflicting yet interconnected elements that coexist and endure over time (Smith & Lewis, 2011), and the expanding body of paradox theory research has allowed a new understanding of organizational challenges (Waldman *et al.*, 2019).

Considering personality level, individuals can truly possess paradoxical character traits that enable teams and supervisors to meet structural and contradictory demands concurrently (Zhang et al., 2015). For instance, managers, in times of flattened hierarchies, are somewhat the equal of their followers but are still expected to lead them. A construct that is repeatedly considered when looking at paradoxes in the workplace is humility (e.g., Owens et al., 2015). Leadership research indicates that narcissism and humility can coexist in harmony (Zhang et al., 2017; Liu et al., 2021). They appear contradictory and incompatible but can promote beneficial outcomes, such as firm innovation or followers' job performance (Zhang et al., 2017; Owens et al., 2015). A famous example of this opposing personality combination is Steve Jobs, who was considered a narcissist but seemed to be balanced by a certain amount of humility (Owens et al., 2015).

Strong research efforts have already been made concerning narcissism and its effects on career success. Still, the literature to date does not shed light on the potential impact of paradox personalities on career success, especially the role of humility as the counterpart of a multifaceted character constellation. This gap in today's literature is additionally relevant regarding organizations' recent shift toward new work settings. Thus, this paper sets out to answer the question 'Do paradox personalities, in particular narcissism and humility, succeed in new work environments?'.

The present study contributes to three literature streams. First, we contribute to the literature on paradoxes in the workplace by extending the pure leadership context and including the broader workforce perspective. The positive outcomes of the portrayed paradoxical personalities have previously been observed only at the top management level (e.g., Owens et al., 2015; Zhang et al., 2017). Our study results revealed that this phenomenon is not transferable from the executive level to the career success context, as humble narcissists are generally less

successful in their careers. Second, responding to previous research calling for more studies on NWW (Gerards et al., 2018), our study contributes to current research by showing that the working environment represents a relevant contextual factor impacting employees' careers. In a modern working environment, the humble narcissist can indeed be successful. We therefore demonstrate that the outcomes of humble narcissism change within NWW. Third, by including a greater variety of indicators for both objective and subjective success, the present study contributes to the broader discussion on the complexity of what career success actually means and which aspects need to be considered.

This study's topic seems more relevant than ever. The COVID-19 pandemic, with all its lockdown consequences, will accelerate the urgency of the issue. According to a recent study by Stanford University, only 20% of US employees would like to work permanently in the office. In Europe, 50% want to work from home at least one day a week in the future (Bloom, 2020). As diverse forms of mobile work will play a prominent role, the current results will emphasize the higher significance of specific personality traits in the new working world of today and tomorrow.

2.3.2 Theoretical Background

2.3.2.1 Career success

Career success is described as “the real or perceived achievements individuals have accumulated as a result of their work experiences” (Judge et al., 1999, p.621). The definition differentiates between two kinds of achievements, the real and perceived ones, also referred to as objective or subjective career success, respectively (Seibert & Kraimer, 2001; Abele et al., 2011). Objective success indicators relate to externally measurable aspects, such as salary or

hierarchical status (Spurk et al., 2016). In contrast, subjective success represents “a self-evaluation of career progress” (Arthur et al., 2005, p.179), such as career satisfaction (Eisenbarth et al., 2018). Both approaches are acknowledged in career success research (Abele et al., 2011). However, Heslin (2005) criticized the operationalization of career success because it has been measured almost exclusively through salary and satisfaction previously. He also emphasized the need for improvements in conceptualization and comprehension for both objective and subjective success indicators.

To address the stated criticism and represent career success in its entirety, especially in new work environments, this study includes four measures of objective career success as well as a multidimensional subjective career success scale. Objective career success consists of scientifically established indicators: *salary* (Spurk et al., 2019), *bonus* (Bal et al., 2015), *leadership position* (Spurk et al., 2016), and *project responsibility* (Abele et al., 2016). In the NWW, these classic indicators are still important especially through project responsibility and bonuses (Mayrhofer et al., 2016). Subjective career success is often only represented through career satisfaction as an overall evaluation (e.g., Spurk et al., 2016). This sole approach has recently been reconsidered and adapted to the changing world of work via a range of indicators: recognition, quality work, meaningful work, influence, authenticity, personal life, growth and development, and satisfaction (Shockley et al., 2016).

2.3.2.2 Paradoxical personalities: Narcissism and humility

With the organizational setting becoming increasingly international, competitive, and vibrant, contrasting requirements have intensified (Zhang et al., 2015). Jobholders face challenges between local requirements on the one hand and the need to operate globally in a

progressively multinational setting contemporaneously. Leaders must assure decision-making control while maintaining autonomy. They are further torn between treating subordinates equally and embracing individualism. Meanwhile, individuals confront issues of balancing work and personal life or cooperation and competitiveness (Waldman et al., 2019). Scientists and practitioners are progressively applying a paradoxical lens to comprehend and clarify these emerging tensions (Smith & Lewis, 2011; Zhang et al., 2015). Following a common definition in the corresponding literature, a “paradox” comprises “contradictory yet interrelated elements that exist simultaneously and persist over time. Such elements seem logical when considered in isolation but irrational, inconsistent, and even absurd when juxtaposed” (Smith and Lewis, 2011, p.386). Hence, paradox theory proposes the coexistence of two opposing conditions that can promote beneficial outcomes (Zhang et al., 2017; Lewis, 2000; Eisenhardt, 2000; Owens et al., 2015).

Following the Yin-Yang philosophy, people are able to have paradoxical characteristics, and although seemingly irreconcilable, especially narcissism and humility can coexist in harmony (Zhang et al., 2017; Owens et al., 2015). Narcissism encompasses grandiosity, hostility, arrogance, a dysfunctional form of excessive self-confidence, and the demonstration of importance and superiority (Rosenthal & Pittinsky, 2006; Back et al., 2010; Emmons, 1987). Narcissists see life as an arena for accomplishing admiration, status, and success, all aimed to strengthen their self-concept (Campbell et al., 2005). Nevertheless, typical attributes describing narcissistic behavior can be positive, such as charisma and willingness to take risks (Hochwarter & Thompson, 2012). Moreover, various narcissists’ characteristics are leader-like (Grijalva et al., 2015), such as extraversion, self-efficacy, and self-esteem (Nevicka et al., 2011). Research further indicates that narcissistic personalities manage to emerge as leaders (Nevicka et al., 2011; Brunell et al., 2008). They are visionaries who can influence and inspire others, and their

followers see them as superhuman, blindly believe, and unconditionally follow them (Rosenthal & Pittinsky, 2006).

In contrast, the concept of humility originated in theology and philosophy (Owens et al., 2013) and is characterized “by low self-focus, genuine appreciation of others, accurate perspective of one's place in the world, and openness to new ideas” (Summerell et al., 2020, p.2). It has also been positively related to the willingness to admit wrongness (Fetterman et al., 2019) and prosocial behavior (Aghababaei et al., 2014). Humble individuals see their counterparts as important sources of learning by reflecting themselves and being transparent about strengths and limitations (Owens et al., 2013). Humility also includes gratitude (Emmons, 2007), the capability to admit one’s mistakes, limits, and imperfection (Tangney, 2000), and sharing the spotlight (Davis et al., 2010). Ironically, high levels of humility in self-reports indicate a lack of humility (Davis et al., 2010). Considering the aforementioned description of humility, this trait appears rather incompatible and conflicting with narcissism. However, humility can enhance the potentially positive effects of narcissism and mitigate negative outcomes; studies in leadership literature have shown that narcissism and humility can appear simultaneously and favor positive effects, e.g., more productivity and higher creativity (e.g., Owens et al.; 2015, Ou et al., 2014). One might doubt the existence of humble narcissist and even think that it is an oxymoron. In previous studies however, weak negative or insignificant correlations of humility and narcissism provide empirical evidence that this paradox personality combination may in fact exist (Zhang et al., 2017; Owens et al., 2015; Ou et al., 2014; Liu et al., 2021).

2.3.2.3 Paradoxical personalities and career success

Personality essentially shapes one's behavior in the workplace and has proven to be a significant predictor of work and career success (Wille et al., 2013b; Semeijn et al., 2020). Looking at the paradox personality combination of narcissism and humility in the workplace, outcomes have been described consistently as beneficial, yet these results have only been reported in the upper management context so far (e.g., Zhang et al., 2017). To understand the stated research outcomes of humble narcissism in leadership literature, the distinction between leadership emergence and leadership effectiveness should be mentioned when considering management qualities and particularly successful leaders (e.g., Grijalva et al., 2015): the former focuses on the process of people who are seen as leaders in others' perceptions, while the latter represents the actual performance of a leader in achieving goals. The effects of humble narcissism in top management might rather be counted as *leadership effectiveness*, such as firm innovation (Zhang et al., 2017), follower job engagement, and job performance (Owens et al., 2015). However, the present study investigates several indicators of objective and subjective career success, such as salary or project responsibility. These may precede leadership and could therefore more likely be associated with *leadership emergence*. Thus, humble narcissism might be beneficial for an organization when one has already reached the top management level (e.g., Zhang et al., 2017), yet the question arises whether these effects are easily transmissible to the broader workforce.

Considerable research efforts have already been made on narcissism and its impact on career success. Individuals with pure narcissistic characteristics tend to attain higher hierarchical and financial achievements (Wille et al., 2013a). More recently, Paleczek et al. (2018) showed that narcissism positively predicts leadership position and salary. Additionally, previous research has indicated a positive relationship with the objective career success indicator salary

but no relation to subjective success (Spurk et al., 2016; Bruk-Lee et al., 2009). A possible reason for these non-existing effects on subjective criteria could be that narcissistic employees believe that they deserve a superior workplace than they actually have (Hirschi & Jaensch, 2015; Mathieu, 2013). Altogether, narcissists feel that they have a right to succeed, they seem to have more confidence to overcome challenges in their careers, and they are more committed to proactively promoting and handling their careers (Hirschi & Jaensch, 2015). They can also demonstrate greater work investment and can achieve career success in terms of objective criteria, but they seem to have no relationship with subjective indicators.

Narcissists possess a pompous self-view (Morf & Rhodewalt, 2001) and feel they are superior to others (Twenge & Campbell, 2008). This characteristic likely assists in salary negotiations or in attaining project responsibilities. Contrarily, humble individuals embody a self-view that believes a power greater than the self exists (Ou et al., 2014). They do not attempt to under- or over-represent themselves because they embrace a balanced perception by correctly evaluating their own strengths and restrictions (Nielsen & Marrone, 2018, Morris et al., 2005). Studies have shown that several self-concepts exist simultaneously and can be evoked contextually (McConnell, 2011). Regarding objective career success aspects, pure narcissists have already proven to be successful. We suppose that people with both narcissism and humility cannot assert themselves well in situations where a pronounced narcissistic self-view might take them further. In contrast, when it comes to the evaluation of one's own career and achievement, the humble self-view could help to assess in an adequate and positive manner.

Taken together, we presume the combination of humility and narcissism will not be beneficial in terms of objective criteria. In contrast, we expect that through humility, the effect of narcissism on subjective career success becomes not only apparent but also positive. Hence, we assume:

Hypothesis 1: The interaction of narcissism and humility is negatively related to objective career success, namely (a) leadership position, (b) project responsibility, (c) salary, and (d) bonus but is positively related to (e) subjective career success.

2.3.2.4 Paradox personalities, new ways of working, and career success

As aforementioned, the way we work is steadily transforming. The impact of information and communication technology is changing the working environment, resulting in more flexibility in where and when to work (Kok et al., 2014; Gerdenitsch et al., 2015). Regulated and controlled work structures, rigid hierarchies, and a predetermined presence are increasingly becoming relics (Chudzikowski, 2012; Ten Brummelhuis et al., 2012). A concept that comprises these changes is entitled new ways of working (NWW) with its three key characteristics (Ten Brummelhuis et al., 2012): (a) timing, (b) place, and (c) new media technologies. In contrast to traditional nine-to-five employment, individuals achieve more autonomy in choosing their self-determined working time. Additionally, they also have a variety of options for where they work - be it at the office, at home, on the plane or elsewhere. Finally, this temporal and geographical flexibility is alleviated by the usage of media technologies, such as videoconferences or emails (Gerdenitsch et al., 2015). NWW represents a fairly young concept and multiple authors state that the scholarly literature on NWW remains rare (Gerards et al., 2018). While few dimensions of NWW have been investigated separately, e.g., employee worktime control, workplace flexibility or telecommuting, less empirical work has been conducted on NWW as a whole (Kotera & Correa Vione, 2020; Gajendran & Harrison, 2007; Nijp et al., 2012; Van Steenbergen et al., 2018; Schmoll & Süß, 2019). NWW is believed to enhance work autonomy (Van

Steenbergen et al., 2018) and to increase work engagement through effective and efficient communication (Ten Brummelhuis et al., 2012; Gerards et al., 2018). So, the concept has been associated with positive outcomes, but little consideration has been given to individual differences. Existing research has highlighted the importance of individual differences implying that some are more able to cope with transition processes to NWW compared to others (Van Steenbergen et al., 2018; Van den Heuvel et al., 2010).

In a new work environment based on freedom and mutual trust (Kok et al., 2014), narcissists cannot possibly succeed with their manipulative and exploitive character. Further, considering narcissism and their preferred work environments, it becomes apparent that narcissists clearly favor hierarchal structures due to the perceived opportunity to reach the top (Zitek & Jordan, 2016), whereas today's work setting is characterized by flattened hierarchies (Volmer & Spurk, 2011). For both objective and subjective career success criteria, we expect that individuals with high narcissism will not succeed. Thus, we postulate:

Hypothesis 2: In the NWW environment, narcissism is negatively related to objective career success, namely (a) leadership position, (b) project responsibility, (c) salary, (d) bonus, and (e) subjective career success.

People with a paradoxical personality offer the opportunity to generate new approaches (Waldman et al., 2019). Reflecting the upcoming paradoxes of the NWW, we assume that paradoxical personalities are able to deal with contradictory challenges and surroundings with the flexibility of when, how, and where to work. Again, in a new work environment based on freedom and mutual trust (Kok et al., 2014), humility seems to be the ideal companion for narcissism. Because of their self-awareness of playing a smaller part in a greater reality, humble

people carry a perspective that is increasingly necessary when working with different parties inside and outside an organization (Nielsen & Marrone, 2018; Morris et al., 2005). The tempering nature of humility is thereby needed to handle a narcissist's way in new work settings. Thus, we expect that negative effects for narcissism in new work settings can turn positive when humility is present contemptuously. In conclusion, referring to the described need for humility in the changing organizational environment, we expect the effect of humble narcissism to be positive for both objective and subjective career success there. We hypothesize:

Hypothesis 3: In the NWW environment, the interaction of narcissism and humility is positively related to objective career success, namely (a) leadership position, (b) project responsibility, (c) salary, (d) bonus, and (e) subjective career success.

2.3.3 Method

2.3.3.1 Sample and procedure

Dyadic data collection was performed online using a US-based panel provider (www.survata.com) during a six-week period. In exchange for financial compensation, 426 participants in 213 dyads joined the study, whereas 14 dyads (28 participants) were excluded due to careless check measures and missing data. The final sample comprised 199 dyads (398 participants) consisting 63.3% of females and an average age of 41.94 years ($SD = 12.63$). The participants were jobholders from different industries in the US. The majority worked in education and training (29%) and healthcare (27%).

For each dyad, there was a main subject and its assessor. The focus of this study was placed on the first person of the dyad, the main subject. The assessor's role was to provide third-

party information about the personality of the main subject. The main subject provided self-reported information about the variables of career success and NWW. Participants were asked to describe their relationship with each other. The majority were colleagues (42.2%), followed by friends (39.7%), partners (12.1%), relatives (5%), and others (2%). For the study, two different sets of surveys were used, managed in two consecutive parts: first, a survey for the main subject and, second, one for the assessor. Both parts of the dyad were present to conduct the study. The procedure ensured that the respective questionnaires were completed independently. The two study partners did not receive any knowledge about each other's assessments. The risk that shenanigans were committed in answering the questionnaires can never be ruled out. However, the panel provider and all participants assured that the two distinct persons completed their parts separately from each other. Nonetheless, to verify the quality of the data and to ensure the veracity of the other-report ratings, we also collected self-report data of the personality traits⁴ which not included in hypotheses testing.

2.3.3.2 Measures

Acknowledging the existence of the common method variance and the warning regarding humility and the validity of self-reports, we chose a dyadic approach to ensure other-report ratings of both personality traits. Narcissism and humility were measured as other-report ratings by the assessor. The remaining variables were self-reported.

⁴ Correlation of self-reports and other-report ratings for narcissism $r = ,642^{**}$ and humility $r = ,615^{**}$

Narcissism. A short version of the Narcissistic Personality Inventory (NPI-16) (Ames et al., 2006) was used to capture narcissism. Each of the 16 items of the NPI-16 provides two statements from which the participant must select the one that best describes him or her. For the purpose of other-report ratings, the NPI-16 was adapted to assess a third person. Sample items included: “He/she likes to be the center of attention” vs.” He/she prefers to blend in with the crowd.” The narcissistic statements were coded 1, and the non-narcissistic statements were coded 0, adding up to a total score between 0 and 16. Cronbach’s α was .867.

Humility. This construct was measured with other-report ratings of the Expressed Humility in Organizations scale (Owens et al., 2013). The scale contains nine items, for example, “This person takes notice of others’ strengths,” that are completed on a five-point Likert scale ranging from 1 (totally disagree) to 5 (totally agree). Cronbach’s α was .921.

New Ways of Working. The concept of NWW was collected by using the 12-item Flexible Autonomous Work Questionnaire (FAWQ) (Ten Brummelhuis et al., 2011). The FAWQ was designed to measure NWW in which jobholders have more control over different facets of their work. It comprises four subscales, namely control over work content, time, location, and communication, which are completed on a five-point Likert scale ranging from 1 (totally disagree) to 5 (totally agree). Sample items included “I can decide the content of my work,” “I can decide the time slots I work in,” “I can decide where I work,” and “I have the feeling of being in control over the communication I have for work.” Cronbach’s α was .914.

Objective career success. We presented objective career success in two ways: the more material indicators’ *salary* and *bonus* and the more organizational indicators’ *leadership position* and *project responsibility*. We assessed *salary* (“What is your monthly salary before taxes?” USD; (i.e., Spurk et al., 2016) and *bonus* (“What was your last bonus payment?” USD;

(i.e., Lyness & Thompson, 2000) each via one open self-reported question. *Leadership position* (“Are you currently holding a leadership position?”; (i.e., Spurk et al., 2016) and *project responsibility* (“Are you currently having project responsibility?”; (i.e., Abele et al., 2016) are both dichotomous measures with the categories “yes” or “no.”

Subjective career success. Subjective career success was collected using the Subjective Career Success Inventory (SCSI) (Shockley et al., 2016). The SCSI scale contains 24 items addressing eight dimensions that are completed on a five-point Likert scale ranging from 1 (totally disagree) to 5 (totally agree): quality work (“...I am proud of the quality of the work I have produced”), meaningful work (“...I think my work has been meaningful”), influence (“...decisions that I have made have impacted my organization”), authenticity (“...I have been able to pursue work that meets my personal needs and preferences”), personal life (“...I have been able to have a satisfying life outside of work”), growth and development (“...I have expanded my skill sets to perform better”), satisfaction (“...my career is personally satisfying”), and recognition (“...my supervisors have told me I do a good job”). The eight dimensions are combined into one overall subjective career success index.

Control Variables. The study controlled for age and gender.

2.3.4 Results

2.3.4.1 Descriptive statistics and correlations

Table 9 shows the bivariate correlations between the study’s control, independent, and dependent variables. Looking at the examined personality traits and career success indicators, narcissism was significantly positively correlated with leadership position ($r = .313, p < .01$), project responsibility ($r = .319, p < .01$), and salary ($r = .185, p < .01$). Humility showed

significant positive correlations with NWW ($r = .208, p < .01$), leadership position ($r = .105, p < .05$), and subjective career success ($r = .536, p < .01$). No significant relationships were indicated between narcissism and bonus payment ($r = .011, p = \text{n.s.}$) as well as with subjective career success ($r = .006, p = \text{n.s.}$).

2.3.4.2 Hypothesis testing

To test the predicted hypotheses, we performed five sets of hierarchical moderated multiple and logistic regression analyses based on recommendations by Cohen et al. (2003). The predictor variables were entered within four consecutive steps. Control variables (age and gender) were entered in step 1. In step 2, the main effects (narcissism, humility, and new ways of working) were entered. The two-way interaction terms (i.e., narcissism x humility, narcissism x new ways of working, humility x new ways of working) were included in step 3. Finally, the three-way interaction term (narcissism x humility x new ways of working) was included in step 4. To prevent multicollinearity between the predictor variables and the interaction terms, narcissism, humility, and new work environment were all centered by subtracting the means of each aforementioned variable from its scores (Aiken et al., 1991). The two-way and three-way interaction terms were then calculated by multiplying the mean-centered predictors.

Two-way interaction effects. As Table 10 further indicates, Hypotheses 1a–c can be supported. The interaction of narcissism and humility was negatively related to leadership position ($B = -.094, \text{Wald} = 3.461, p < .10$) and project responsibility ($B = -.103, \text{Wald} = 3.499, p < .10$) at the 10% level as well as to salary ($\beta = -.157, p < .05$) but showed no relation to bonus ($\beta = -.113, p = .116$) or subjective career success ($\beta = -.043, p = .430$). Considering the

interaction of narcissism and new ways of working, Hypothesis 2 cannot be supported. The interaction is not as predicted negatively but is positively related to bonuses ($\beta = .159, p < .05$). No relation was apparent to leadership position ($B = .055, \text{Wald} = 1.886, p = .170$), project responsibility ($B = .002, \text{Wald} = .002, p = .962$), salary ($\beta = .042, p = .569$), or subjective career success ($\beta = .032, p = .559$).

Three-way interaction effects. Table 10 shows that Hypothesis 3c can be supported. The three-way interaction between narcissism, humility, and NWW is positively associated with salary ($\beta = .200, p = .009$), but no relationship was apparent with leadership position ($B = .058, \text{Wald} = 1.929, p = .165$), project responsibility ($B = -.006, \text{Wald} = .018, p = .894$), bonus ($\beta = .093, p = .217$), or subjective career ($\beta = -.032, p = .572$). The significant three-way interaction is shown in Figure 2.



Figure 2. Interaction between Narcissism, Humility and NWW predicting Salary

Table 9. Means, standard deviations, and correlations for all study variables

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Age	41.82	12.57	1									
2. Gender ^a	0.70	0.46	-0.07	1.00								
3. Narcissism	6.69	4.50	-.220**	-.184**	1.00							
4. Humility	4.13	0.76	0.02	0.04	-0.07	1.00						
5. New Ways of Working	3.16	1.09	-0.09	-.166*	.249**	.208**	1.00					
6. Leadership position	0.52	0.50	-.186**	-.146*	.313**	.150*	.393**	1.00				
7. Project responsibility	0.59	0.49	-.276**	-0.10	.319**	0.10	.328**	.478**	1.00			
8. Salary	3421	11643	-0.09	-.213**	.185**	0.03	.202**	.243**	.211**	1.00		
9. Bonus	5684	6966	-0.14	-.164*	0.11	-0.03	0.10	.267**	.238**	.346**	1.00	
10. Subjective Career Success	3.96	0.79	0.10	-0.01	0.06	.536**	.524**	.311**	.259**	0.10	0.04	1

^aGender (male = 0; female = 1); * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 10. Hierarchical regression analysis for leadership position, project responsibility, salary, bonus and subjective career success

Variable	Leadership position					Project responsibility					Salary		Bonus		Subjective Career Success	
	B	SE	Wald	p	Exp(B)	B	SE	Wald	p	Exp(B)	β	p	β	p	β	p
<i>Step 1: Control variables</i>																
Age	-0.029	0.01	6.147	0.013	0.971	-0.044	0.01	12.823	0.000	0.957	-0.135	0.055	-0.092	0.185	0.098	0.170
Gender	-0.705	0.32	4.755	0.029	0.494	-0.529	0.33	2.512	0.113	0.589	-0.171	0.015	-0.218	0.002	-0.001	0.984
R ²	0.07					0.104					0.045		0.054		0.01	
<i>Step 2: Main effects</i>																
Narcissism (N)	0.123	0.04	9.289	0.002	1.131	0.127	0.04	9.554	0.002	1.136	0.032	0.671	0.107	0.148	0.019	0.735
Humility (H)	0.374	0.22	2.897	0.089	1.454	0.239	0.22	1.206	0.272	1.270	-0.034	0.641	0.018	0.797	0.439	0.000
New Ways of Working (NWW)	0.672	0.16	16.722	0.000	1.959	0.547	0.16	11.326	0.001	1.728	0.066	0.379	0.138	0.063	0.450	0.000
R ²	0.289					0.274					0.052		0.09		0.486	
<i>Step 3: Two-way interactions</i>																
N x H	-0.094	0.05	3.461	0.063	0.91	-0.103	0.06	3.499	0.061	0.902	-0.157	0.033	-0.113	0.116	-0.043	0.430
N x NWW	0.055	0.04	1.886	0.170	1.057	0.002	0.04	0.002	0.962	1.002	0.042	0.569	0.159	0.029	0.032	0.559
H x NWW	-0.035	0.23	0.023	0.881	0.966	0.181	0.24	0.574	0.449	1.199	0.030	0.674	0.094	0.182	-0.057	0.290
R ²	0.324					0.304					0.075		0.124		0.491	
<i>Step 4: Three-way interaction</i>																
N x H x NWW	0.058	0.04	1.929	0.165	1.059	-0.006	0.05	0.018	0.894	0.994	0.200	0.009	0.093	0.217	-0.032	0.572
R ²	0.334					0.304					0.107		0.131		0.492	

* p < .05, ** p < .01, *** p < .001.

2.3.5 Discussion

2.3.5.1 Theoretical implications

This study contributes to three literature streams. First, by extending earlier approaches in the leadership context and considering the position of the broader workforce, we contribute to the literature on paradoxes in the workplace. While positive outcomes of the paradoxical personalities have been identified only at the top managing level until now (e.g., Owens et al., 2015; Zhang et al., 2017), we can nevertheless show that this phenomenon cannot be transferred to the overall career success context. As expected, the interaction of narcissism and humility proved to be not beneficial in terms of objective career success. Except for *bonuses*, the results showed significant negative relationships throughout. Unexpectedly, even though humility shows significant positive relations with *subjective career success* on its own, this effect disappears when combined with narcissism. This result seems to be reasonable when considering that humble individuals can assess their own reality accurately (Nielsen & Marrone, 2018; Morris et al., 2005) and perhaps also appreciate what they have achieved so far. Further, this essentially also fits the belief that narcissists think they deserve a better job. This overestimating self-view seems to surpass the humble character aspect and makes reasonable consideration of one's career not possible (Mathieu, 2013). Altogether, humble narcissism might thereby be beneficial for an organization when one already reaches the top management level (e.g., Zhang et al., 2017) but not for the individual if they are still on the career path to get there.

Second, our study contributes to the literature on NWW by showing that the working environment is a crucial contextual factor impacting an employee's career. Previous studies have called for additional research on NWW (Gerards et al., 2018). The digitization of work is currently recognized as the world's greatest social and economic trend, which will lead to a fundamental transformation of the character of work, society, and the economy in the

future (Hirschi, 2018). To the best of our knowledge, no study has considered the changing working environment when exploring career success until now. We expected the interaction of humility and narcissism to be negative for objective career success and to be positive in new work settings. In fact, we showed that the outcomes of humble narcissism change when NWW come into play. In a modern working environment, the humble narcissist can be successful in terms of salary. Examining the new world of work further, narcissism is positively associated with bonuses, contrary to expectations. Consequently, it seems that narcissists are also establishing themselves well in the new working world. This might be possible due to the contextual reinforcement model of Campbell and Campbell (2009), which implies narcissists are highly adaptive in certain contexts, such as new and chaotic leadership situations (Campbell et al., 2011). Narcissists are driven to achieve success and use self-regulation strategies to enhance their self-esteem and maintain power and social status (Campbell et al., 2011), apparently also under new work conditions.

Third, this study contributes to a broader debate about what career success is and which factors need to be considered. For several decades of scientific research, career success has been measured almost exclusively through salary and satisfaction. Even though they still represent important indicators today, such attempts do not encompass the breadth of what individuals behold when they reflect on their professional lives (Mayrhofer et al., 2016). To consider NWW with all its facets and challenges, we operationalized career success extensively by adding numerous indicators for both objective and subjective success (e.g., Shockley et al., 2016). Our results indicate that the effects for humble narcissism change in terms of salary when incorporating new work settings. This may be due to different compensation systems or the way salary negotiations are conducted.

In terms of subjective career success, no relationships with a humble narcissist with or without involvement in the working environment were discernible. Non-existent effects

for narcissism on subjective success have already been observed in previous studies (e.g., Spurk et al., 2016). As described above, the overestimation of a narcissist (Mathieu, 2013) appears to outshine the humble facet here and makes the reasonable consideration of one's career impossible, no matter in which environment one is working.

2.3.5.2 Practical implications

Although humble narcissism is considered desirable in leadership (e.g., Owens et al., 2015), our results indicate that individuals who present with both narcissism and humility do not succeed right away in their careers. However, since previous studies have shown they can be more beneficial for firms in the long run (e.g., Zhang et al., 2017), organizations might be well-advised to pay more attention to the selection of their employees and prospective managers. Management should keep in mind that humble individuals may not be as conspicuous in hiring or salary negotiations. Moreover, in new work settings, our study results revealed that a paradox personality constellation is a proven advantage. As aforementioned, the issue is more relevant than ever. The COVID-19 pandemic and its lockdowns have accelerated the urgency of this matter drastically. Firms thus need to be aware of their prevailing corporate culture, their incentive system, and their leading principles because the work environment influences what personality types are successful. Considering individuals, we expect that paradoxical personalities will be even more important and successful in the future as the business world becomes more volatile and multidimensional, and working conditions will entail contradictory challenges to fulfill. It has long been assumed that personality is stable and unchangeable, yet findings show that personality varies over the life span and that these changes are partly generated by externally triggered life events (Specht et al., 2011). To prepare for the new working world, individuals

should be aware of their own personality. They should further acquire paradoxical ways of thinking with the help of personnel development through training or coaching programs.

2.3.5.3 Limitations and future research

The present research has some limitations. First, the chosen cross-sectional design did not permit causality statements. Longitudinal studies are needed for further investigation into illustrating developments over time, both in personality and career success. Additionally, our study was conducted solely in the US setting; however, the paradox approach originated in the Chinese Yin-Yang philosophy (Zhang et al., 2017), and most studies have actually been conducted in the Asian context (Owens et al., 2015; Ou et al., 2014). Concerning their cultural orientations, China represents a collectivist system, while the US is more individualistic society (Wang, 2014). It might therefore be of interest in future research to consider cultural aspects and social differences when examining paradoxes and career-related outcomes all over.

Additional, other paradoxical personality constellations could be particularly relevant for an investigation in a broader career context, such as humility combined with psychopathy and Machiavellianism or even with sadism as the fourth part of the Dark Tetrad (Thibault & Kelloway, 2020). Moreover, future research could investigate how they interact in different vocational settings, because narcissists, for example, have different preferences where they work (Kowalski et al., 2017). Other context variables could also be used for differentiated analyses (e.g., organizational culture, company size, corporate strategy).

Finally, the study considered common method variance and the difficulties of self-reports using two distinct data sources and other-referent statements. Still, the question remains to what extent a single informant's rating is accurate (Davis et al., 2010). Future

research might even go further and have one person assessed by several people. However, this raises the question of economic efficiency in scientific research.

2.3.6 References

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3 Discussion

3.1 Theoretical Implications

By applying a multi-layered perspective to examine the relation of different personality combinations and success criteria, this thesis contributes to six literature streams.

First, although strong research efforts have already been made concerning personality traits and its effects on career success, our findings contribute to existing knowledge of both bright and dark personality traits and career success. The Dark Triad have been associated to a series of negative outcomes (Boddy, 2017; Forsyth et al., 2012; Mathieu et al., 2014; O'Reilly III et al., 2018). And while individuals high on these traits are usually considered undesirable, the present studies have shown that psychopaths and especially narcissists can be quite successful in their professional life. Further, emotional stability and conscientiousness proved to be the relevant predictors, consistent with previous research when considering overall performance (Barrick, 2005; Smithikrai & Suwannadet, 2018). Second, additional to the important content-related insights, this thesis further contributes to an increasing body of research incorporating language and personality (Golbeck et al., 2011; Quercia et al., 2011). It encompasses a very first study that introduces artificial intelligence to the research stream of bright and dark sides of personality by using automated speech analysis technology. Third, we contribute to the literature on paradoxes in the workplace by enhancing previous leadership approaches and considering the position of the wider workforce. While positive effects of paradoxical personalities have so far only been found at the top management level (e.g., Owens et al., 2015), we demonstrate that this phenomenon cannot be converted to the general career success context. As expected, the combination of narcissism and humility did not prove conducive to objective career success. Surprisingly, even though humility shows significant positive relations with subjective career success on its own, this effect vanishes when combined with narcissism. Overall, humble narcissism

might be beneficial for an organization if one has already reached the top management level (e.g., Zhang et al., 2017) but not for the individual if he or she is still on the career path to get there. Fourth, by exposing that the working environment proves to be an essential contextual factor impacting an employee's career, we contribute to research on new ways of working. Prior studies have called for additional research on NWW (Gerards et al., 2018). To the best of our knowledge, the changing work environment has not been included in prior research on career success. In a new working environment, the humble narcissist can be successful in terms of salary. So, our findings show that the effects of humble narcissism change when NWW come into play. Fifth, by showing that a management specific GFP-E exists, we contribute to the pertinent leadership literature. Contrary to expectations, this GFP-E for executives is characterized by high agreeableness, which is not consistent with existing findings for senior management (Bono & Judge, 2004; Judge et al., 2002a). Thus, the presented GFP-E and the corresponding factor loadings only partially match the Big Five personality profiles of managers presented in the literature (Bono et al., 2014; Judge et al., 2002b). One possible reason for this could be the change in leadership culture. The additional requirements of the new working world associated with digitization mean that existing leadership concepts need to be adapted. These tend increasingly toward cooperation and participation and are associated with greater interaction between employees and managers (Lippold, 2019). It is worth mentioning in the contribution to leadership that in the analysis of gender dissimilarities, the results show significant differences where women have a higher GFP-E than male leaders. One reason for this could be that women in management positions have to demonstrate more GFP-E qualities in order to reach management positions in the first place. Further in this context, the present analysis has shown that the GFP-E is significantly positively correlated with narcissism and significantly negatively correlated with Machiavellianism and psychopathy. So, we sixthly contribute to prevailing knowledge

on the conceptualization of dark personalities. The positive correlation between the GFP-E and narcissism tends to indicate a positive importance of this trait at a leadership level. This correlation supports the assumption that narcissism in its traits has a much more positive effect on leaders than the other two dimensions. Thus, the concept of the Dark Triad needs to be questioned in its basic conceptualization (Erdle et al., 2010; Kowalski et al., 2016; Rauthmann & Kolar, 2012). In summary, these effects support the discussion of a dark dyad of Machiavellianism and psychopathy (e.g., Pailing et al., 2014).

3.2 Practical Implications

These findings imply several practical conclusions. Although individuals high on Dark Triad traits are usually considered as undesirable, the present studies have shown that psychopaths and especially narcissists can be quite successful professionally wise. HR professionals should nevertheless be aware of their long-term impact, especially on subordinates (Volmer et al., 2016). Our results further indicate that individuals who present with both narcissism and humility do not succeed right away in their careers. However, since previous studies have shown they can be more beneficial for firms in the long run (e.g., Zhang et al., 2017), organizations might be well-advised to pay more attention to the selection of their employees and prospective managers.

In new work settings, our study results revealed that a paradox personality constellation is a proven advantage. Organizations therefore need to be aware of their principal corporate culture, their incentive system, and their leading principles because the working environment may be related to which personality types are successful. Looking at individuals, the idea is that paradoxical personalities will be even more essential and successful in the future as the corporate world becomes more unpredictable and multidimensional, and working conditions will entail contradictory challenges to fulfill.

Personality has long been assumed to be stable and unchanging, but evidentially personality can change across the lifespan and that these changes are caused, e.g. by externally triggered life events. (Specht et al., 2011). To prepare for the new world of work, people must be sensitive of their own personality. Additionally they should acquire paradoxical ways of thinking by exercising personnel development through training or coaching programs.

From a methodological point of view, we have introduced the application of voice analysis in a work-related context and we can derive here from many possibilities, not only for science. It enables an objective, non-personal measurement of personality for a wide range of human resources responsibilities. It offers paths for both practitioners and companies. It even might someday replace traditional employment tests. Moreover, it allows a variety of supplementary information about individuals that might be noteworthy. With automated speech analysis, a methodological instrument is available that essentially expands the hitherto analysis horizon in management research.

3.3 Limitations and Directions for Future Research

Despite the above-mentioned theoretical and practical contributions, the present research has some limitations. First, all of the three studies are based on a cross-sectional design. They did not permit causality statements. Longitudinal studies are needed for further investigation into illustrating developments over time, both in personality and career success. Second, our studies were conducted either in Germany or in the US setting. The theoretical basis in Essay 3 encompasses the paradoxical approach, which has its origin in the Chinese yin-yang philosophy (Zhang et al., 2017), and most studies have actually been conducted in the Asian context (e.g., Ou et al., 2014). Concerning their cultural orientations, the US and Germany are more individualistic societies while China represents a collectivist system (Wang, 2014). It might therefore be of interest in future research to consider cultural

aspects and social differences when examining paradox personalities and career-related outcomes. Third, the scope of the research was already very broad by considering the Dark Triad as well as the Big Five and humility. Yet, other paradoxical personality constellations could be particularly relevant for an investigation in a wider career context, such as humility combined with psychopathy and Machiavellianism or with sadism as the fourth part of the Dark Tetrad (Thibault & Kelloway, 2020). Fourth, the thesis did not interrogate specific industries or sectors and did not distinguish between public and private sector. So future research could investigate how specific, even paradoxical traits, interact in different vocational settings because narcissists, for example, have different preferences where they work (Kowalski et al., 2017). Other context variables could also be used for differentiated analyses, e.g., organizational culture, company size, or corporate strategy. When it comes to careers, other attributes are increasingly being explored. Two concepts that are increasingly appearing include Protean and Boundaryless career attitudes (Kundi et al., 2020). These could be particularly relevant in future studies when combined with paradoxical personality traits. Lastly and methodologically, we have a whole new world of ways to measure personality using AI-based technologies. New methods like video-based personality recognition are opening up (Suen et al., 2019). It releases an additional and promising thread to discover human attributes beneath the possibilities of conventional survey research. We have already made use of some of these developments in Essay 1 by using voice and a psycholinguistic software. However, it would be essential to also be able to measure dark personality traits via automated speech analyses. There might a need to develop speech analysis technologies to measure personality traits beyond the Big Five traits.

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5 Appendix

KO-AUTORENERKLÄRUNGEN



KO-AUTORENERKLÄRUNG *DECLARATION OF CO-AUTHORSHIP*

(Für kumulative Dissertationen)

Name des Kandidaten:

(*Name of the candidate*)

Vivien Höflinger

Titel des Artikels (*Title of the article*):

Artificial Intelligence in personality and career success research

nicht eingereicht (*not submitted*)

eingereicht bei (*submitted to*):

Zur Veröffentlichung angenommen oder veröffentlicht in (*accepted for publication or published in*):

Arbeitsanteil des Kandidaten an vorgenanntem Artikel *Quantification of candidates contribution to the article (overall)*:

hat zur Arbeit beigetragen/has contributed to the work (<1/3)

hat wesentlich zur Arbeit beigetragen/has made a substantial contribution (1/3 to 2/3)

hat einen Großteil der Arbeit allein erledigt/did the majority of the work independently (>2/3)

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Hiermit bestätige ich die Richtigkeit des oben beschriebenen Arbeitsanteils des Kandidaten.

I hereby confirm the candidate's contribution as quantified above.

Stuttgart, 17.08.2021

Ort, Datum *Place, Date*

Unterschrift Ko-Autor *Signature Co-author*



KO-AUTORENERKLÄRUNG *DECLARATION OF CO-AUTHORSHIP*

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Titel des Artikels (Title of the article):

Der Generalfaktor der
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KO-AUTORENERKLÄRUNG DECLARATION OF CO-AUTHORSHIP

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KO-AUTORENERKLÄRUNG *DECLARATION OF CO-AUTHORSHIP*

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No benefits for paradox personalities? Narcissism and humility in new work careers

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