Personality Traits and Ambidextrous Work Environments in IT Organizations – A Person-Job Fit Perspective

Kristina Kusanke
University of Hagen
kristina.kusanke@fernuni-hagen.de

Janna Behnke
Eindhoven University of Technology
j.behnke@tue.nl

Till J. Winkler
University of Hagen
Copenhagen Business School
till.winkler@fernuni-hagen.de

Abstract

Driven by dynamic competitive conditions, companies' information technology (IT) functions adopt agile practices and build ambidextrous organizational structures, which, in turn, affect the work environment of individual IT employees. Based on the fundamental assumption of person-environment fit theory that people seek out environments which allow them to behaviorally manifest their traits, this research aims to shift the focus in organizational design choices towards an individual-level perspective. We study whether and how personality traits and work environment characteristics, measured at the individual level of ambidexterity, relate and impact person-job fit (P-J fit). The results of a survey of 279 IT workers show that personality traits (operationalized by the Five Factor Model) significantly differ across exploitative and explorative work environments. Furthermore, the data suggests that the relationship between extraversion, conscientiousness and openness to experience on P-J fit is moderated by the level of ambidexterity.

Keywords: Ambidexterity, Personality, Work Environments, Bi-modal IT, Person-Job Fit

1. Introduction

Driven by the dynamic competitive conditions of today's business environment, an increasing number of firms are experimenting with new, and what they hope will be more dynamic, organizational structures for their IT functions. They adopt agile practices and build ambidextrous work environments that simultaneously focus on exploration and exploitation (Leonhardt et al., 2017), which is often referred to as bimodal IT (Haffke et al., 2017).

Scholars who have studied bimodal IT and ambidextrous IT work environments have worked predominantly at the organizational level, neglecting the individual level of the employee (Kusanke & Winkler, 2022). This is surprising given that the two different modes (exploitative vs. exploratory) require entirely different skills and mindsets (Haffke et al., 2017). Going further, these two modes differ not only in their project management approach, but are also embedded in different cultures, are based on different strategic and operational management styles, and fulfill unique objectives (Haffke et al., 2017). Ultimately, they represent opposing job characteristics (e.g., process-centered vs. human-centered) (Gerster et al., 2018). Therefore, people with different personality traits might be necessary within exploratory vis-à-vis exploitative work environments.

The match between employees and their work environments is a widely researched topic in organizational behavior (e.g., Kristof-Brown et al., 2005). The psychology and social science literature stress the importance of the interplay of personality, a stable pattern of psychological processes, characteristics (Mayer, 2005), and job characteristics (Erhart, 2006). According to the assumptions of the person-environment-fit theory (P-E fit) (Kristof-Brown et al., 2005), which encompasses the person-job fit (P-J fit) perspective, people seek out (work) environments that allow them to behaviorally manifest their traits (e.g., dominant individuals seek leadership positions). Furthermore, the extent to which one fits their (work) environments has significant consequences for positive work-related outcomes, such as satisfaction, performance, and productivity (e.g., Rounds & Tracey, 1990). In the context of career intervention, P-E fit is essential for career planning, decision making, and adjustment (Su et al., 2015). In addition, meta-analytic evidence has shown that fit perceptions are more predictive than objective fit assessments for almost all work-related outcomes (Kristof-Brown et al., 2005).

While recent Information Systems (IS) research has shown that the aforementioned changes in work environments have an influence on the skillset needed

(e.g., Michalczyk et al., 2021; Merchel et al., 2021) authors call for more research studying the relevance of personality traits (Bui, 2017). Personality is acknowledged to be relevant in IS (Maier, 2012) and to have influence in the new work context (Kok & Helms, 2016). Previous research regarding personality focused on agile work environments and was of qualitative nature studying, for example, personality traits of those fulfilling Scrum roles (Baumgart et al, 2015), software developers (e.g., Balijepally et al., 2006), and software engineers (Capretz, 2003). Other studies focus on the personality traits at the IT team level (Strode, 2016). To the best of our knowledge, there is no study that assess individual personality traits among IT employees in explorative versus exploitative work environments.

Addressing the lack of knowledge on personality in today's IT work environments, this research aims to shift the focus in organizational design choices towards an individual-level perspective. While most ambidexterity research has focused on the organizational level it is seen as a multilevel phenomenon that is also driven upwards by individuals (Good & Michel, 2013). The individual-level perspective can help IT professionals and organizations better understand the areas in which IT workers are likely to have the best individual fit. We see relevance for further research, especially in light of the current shortage of IT workers and their high replacement cost. (Joseph et al., 2007). Acknowledging the fact that attracting, motivating, and retaining workers hinges on fulfilling their needs at work (Prasad et al. 2007) it is important to assess the underlying psychological characteristics and tendencies which can be used to determine individual commonalities and differences, part of which are determined by personality traits (Mayer, 2005).

We aim to contribute to the existing knowledge base by studying whether and how individual personality traits relate to different work environments and affect an individual's P-J fit. Thus, we formulate the following research questions:

RQ 1: How do personality traits differ between IT employees in explorative and exploitative work environments?

RQ 2: Does the work environment influence the relationship between personality traits and P-J fit?

To this end, this paper first explains the theoretical foundations of ambidextrous work environments and the chosen model of personality traits. We then explain our methods and results. We finally discuss our findings and close with the limitations and potential further research directions emerging from this study.

2. Theoretical Background

2.1. Ambidextrous Work Environments

Today's business world is affected by continuous changing market demands and changes in technology. Therefore, organizations face increasing pressure to become more adaptable, agile and dynamic (Ravichandran, 2018). As a result, companies adopt and scale agile capabilities to account for the demand to deal competitively with changes at increased levels of speed and flexibility (Kohli & Melville, 2018). This corresponds with the observation that companies have sought bimodal forms of organization for their IT functions that provide both, explorative and exploitative capabilities (Haffke et al, 2017). While exploration refers to activities associated with terms such as experimentation and innovation, exploitation refers to activities associated with terms such as efficiency and execution (March, 1991). Both of them are seen as indispensable for achieving organizational ambidexterity (March, 1991). Consequently, while (organizational) ambidexterity is defined as simultaneously – and equally successfully – pursuing exploitative and explorative activities, individual ambidexterity represents the ability to flexibly engage in both modes (Mu et al., 2022).

These, explorative and exploitative work environments in IT not only differ in their project management approach, but they are also embedded in different cultures, based on, and steered by different strategic and operational management styles, and they aim at fulfilling unique objectives (Haffke et al., 2017). Within the exploitative mode, the focus mostly lies on individual work, where the process flow is predominantly consecutive with strong emphasis on documentation. It is associated with a work environment that places emphasis on experience, routine and present knowledge (Mom et al., 2009). Thus, within an IT context, it is often used for mission and business-critical information systems and the operation of a company's core processes (Horlach et al., 2017). This side of a bimodal organization is responsible for minimizing operational risk, often using sequential project management methods, such as waterfall methodologies (Haffke et al., 2017). Within this environment, management promotes a risk averse culture, accentuating safety and accuracy (Haffke et al., 2017) wherein roles and tasks of each individual are clearly defined and relatively constant (Balijepally et al., 2006). In contrast, the explorative work environment, focuses on customer experience and business outcomes driven by rapidly changing market needs (Zhen et al., 2021). It is associated with work environments that put an emphasis on searching for

new possibilities, evaluating diverse options, adaptability and new skills (Mom et al., 2009). Such explorative activities are usually employed for projects with less certain outcomes, targeting at short release cycles and choosing iterative project management styles, such as Scrum (Haffke et al., 2017). The culture in explorative work environments tends to be driven by the principles of agility and speed and is characterized by self-organizing teams and teamwork (Haffke et al., 2017). In contrast to exploitative work environments, explorative work environments and associated project methods often demand frequent deliveries of work results, constant close collaboration with the customer, an openness to changing requirements, and an avoidance of excessive planning and documentation (Tripp et al., 2016). From a management perspective, the shift to flat hierarchies with trust-based collaboration and self-organization changes the role of supervisors to a more coordinating and mentoring role (Balijepally et al., 2006). In summary, adopting practices that are associated with exploration have far-reaching implications especially at the level of the individual, and, their roles and responsibilities (Gerster et al., 2018).

While work environments can combine elements of both, exploration and exploitation, one of the two modes typically prevail in a given IT context. In this work we therefore conceptualize work environments dichotomously to be either more explorative or more exploitative.

2.2. Personality

Personality is defined as a stable pattern of characteristics and tendencies (Mayer, 2005). They are commonly seen as context-free and relatively enduring characteristics that are not easily changed with behavioral training (Kichuk & Wiesner, 1997). Consequently, personality changes little over time and influences various aspects of an individual's perceptions and behaviors (Pfluegner et al., 2021). Individual personality traits are of interest to organizations both for their effect on an individual task or role and on team processes and outcomes (Balijepally et al., 2006). Previous research has also demonstrated the relevance of personality traits in various IS domains. It has been shown to be an important variable to many facets of one's (work) life; proneness to technostress, job satisfaction (Pfluegner et al., 2021), influence on innovation and performance (Eshet & Harpaz, 2021), career choices (Warren et al., 2012), and IT addiction (Vaghefi & Qahri-Saremi, 2018). An overview of personality in IS literature was published by Maier (2012).

The Five Factor Model of Personality (or Big-Five Personality) is one of the most common methods to analyze and describe a person's distinct personality. It has been well researched by personality psychologists and is accepted as providing substantial evidence of its merits as a measure of individual personality and personality differences (McCrae and John, 1992; John et al., 2008). The Five Factor Model is a hierarchical organization of personality traits in terms of five basic dimensions: neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness (McCrae & John, 1992). These dimensions have been found to demonstrate convergent and discriminant validity across instruments and observations have also been shown to be stable over time and generalizable across cultures (McCrae & John, 1992; Balijepally et al, 2006). The Big Five structure does not imply that personality differences can be reduced to only five traits, but these five traits represent personality at the broadest level of abstraction, and each dimension summarizes a large number of distinct, more specific personality characteristics (John & Srivastava, 1999). The five traits thus provide a holistic picture of an individual's personality.

Neuroticism is a measure of affect and emotional control. It indicates the level of personal adjustment to and tolerance for stress. Individuals that score low on this dimension exhibit higher emotional stability and are better prepared to cope with stressful situations, whereas those with high levels of neuroticism are reactive and more easily troubled by stimuli in their environment. They more frequently become unstable, worried, temperamental and sad (McCrae and John, 1992). *Extraversion* is a measure of the degree of sociability and gregariousness. People scoring high on this dimension tend to be more outgoing and enjoy interacting with others (McCrae & John, 1992). The extraversion dimension contrasts an outgoing character, with associated adjectives such as talkative, rapid personal tempo, gesturally expressive, assertive behavior with a withdrawn nature (Warren et al., 2012). Those with high extraversion are perceived as attention-seeking and domineering while those with low extraversion are reserved and reflective (Warren et al., 2012; McCrae & John, 1992). *Openness to experience* is a measure of the tendency to prefer new experiences over routines (Pflügner et al, 2021) and indicates being open to new ideas. Individuals scoring high on this dimension show tendencies of inquisitiveness and creativity with adjectives commonly associated with openness, curiousness, imaginativeness, and originality (McCrae et al. 1987). *Agreeableness* measures friendliness and the degree of trust exhibited by individuals. People high on this

dimension tend to be trusting and cooperative, and are moved by the needs of others (Pflügner et al., 2021; McCrae & John, 1992). Adjectives commonly associated with agreeableness include appreciative, forgiving, generous, kind, sympathetic, non-critical, and trusting (McCrae et al. 1987). *Conscientiousness* measures the level of organization, commitment and persistence exhibited by individuals. It describes the tendency to act in a planned and duty-oriented manner and is manifested in qualities such as self-discipline and goal orientation. Adjectives that are generally associated with conscientiousness include organized, efficient, planned, reliable, responsible, and thorough (McCrae et al., 1987).

3. Hypothesis Development

Based on the presented literature, we develop our hypotheses about the relationship of personality traits among IT workers in explorative versus exploitative work environments and their relationships with P-J fit.

As theorized above, individual exploration entails activities with regards to new or alternative knowledge and skills, while individual exploitation entails activities comprising existing experience and present knowledge that help optimize existing job tasks (Mu et al., 2022)

The neuroticism trait is associated with affect and emotional control. While people with high levels of neuroticism are reactive and more easily bothered by stimuli in their environment, those with lower levels tend to have high levels of personal adjustment and tolerance for stress (McCrae & John, 1992). Since, in explorative environments, employees are confronted and expected to deal with fast changing environments, seeking out new possibilities, and measures to enhance the speed and flexibility of organizations, we posit the following hypothesis:

H1: The level of neuroticism is higher for employees in exploitative work environments compared to those in explorative work environments.

Extraversion is associated with sociability and gregariousness as well as the desire to seek out new opportunities and excitement (McCrae & John, 1992). Explorative environments encourage the search for new possibilities and new skills (Mom et al., 2009), while exploitative environments focus more on individual work using existing knowledge and routines (Mom et al., 2009). Therefore, we posit the following hypothesis:

H2: The level of extraversion is higher for employees in explorative work environments compared to those in exploitative work environments.

Agreeableness encompasses the lower-level trait of trust, so that those who are high agreeable tend to

be trusting and cooperative (Balijepally et al., 2006). In explorative environments, collaborative team decision-making devolves down to teams and even individual level and a team is jointly responsible for work outcomes (Balijepally et al., 2006). Thus, an essential requirement for effective collaboration is trust and goodwill among team members. Management control shifts to trust based collaboration and self-organization (Balijepally et al., 2006). In exploitative environments management control tends to be executed through plans, processes and verification, so we therefore posit the following hypothesis:

H3: The level of agreeableness is higher for employees in explorative work environments compared to those in exploitative work environments.

Conscientiousness is associated with organization and persistence tends to be and indicator of competence, order, dutifulness, achievement striving, self-discipline, and deliberation. Therefore, high conscientious people prefer order and planning to spontaneity. They prefer to work in highly-structured environments with clear lines of responsibility and authority (Shropshire et al., 2017). In explorative environments, teams operate under a smaller set of guidelines and are allowed and required to adapt to changing demands by encouraging behavior that includes searching for alternatives and disengagement from the current task (Laureiro-Martinez et al., 2010). Consequently, an absence of rules to deal with every possible situation could be discomforting to those who prefer a more orderly work environment. Therefore, we posit the following hypothesis:

H4: The level of conscientiousness is higher for employees in exploitative work environments compared to explorative work environments.

Openness to experience is associated with a tendency to prefer new experiences over routines (Pflügner et al., 2021) and indicates being open to new ideas. People with high levels of "openness to new experiences" tend to show curiosity and creativity. In explorative environments, employees refine themselves constantly, deal with new technologies and react to changing market demands, often by experimenting with new alternatives (March, 1991). In contrast, exploitative work environments are stable, routine-based operations that build upon experience and present knowledge (Mom et al., 2009). Therefore, we posit the following hypothesis:

H5: The level of openness to experience is higher for employees in explorative work environments compared to those in exploitative work environments.

Following the assumption that people seek out (work) environments that allow them to behaviorally manifest their traits, we hypothesized in which

environment (exploitation vs. exploration) employees score higher on each of the five traits (H1-H5). Moreover, fit theory proposes that outcomes are most optimal when environmental and personal attributes are compatible (van Vianen, 2018). While outcomes show at all levels of fit, they are optimal when individuals experience fit on high personal attributes, and fit at higher levels of an attribute is superior to fit at lower levels (van Vianen, 2018). Following the above-mentioned research findings and the fundamental assumptions of the P-J fit theory. we assume that certain personal characteristics fit better with certain work environments. Thus, we expect:

H6: The relationship between extraversion, agreeableness, and openness to experience and P-J fit is stronger in more explorative work environments.

H7: The relationship between neuroticism and conscientiousness and P-J fit is stronger in more exploitative work environments

4. Research Method

4.1. Sample and Procedure

To test our hypotheses, we conduct an online survey and collected data in Germany in April and May 2022. A pre-test (n=12) was conducted. Survey data was collected through a market research company. Participants were part of an online panel and compensated by the market research institute. They were pre-selected, and confirmed that they work in the IT department of a company, are involved in IT projects, or are employed or self-employed as an IT professional. At the beginning of the questionnaire, we guaranteed confidentiality to reduce social desirability biases. After the data collection, we applied data-cleaning procedures. All incoming datasets were filtered according to a) speeding (all respondents whose processing time was lower than half of the pre-test processing time of 20 minutes) and b) for data quality based on consistency checks in respondents' answering behavior. From the total data set (n = 553), 49.6% of the responses (n = 274) were removed due to insufficient data quality. The vast majority of the respondents that were removed (94%) had spent less than 10 minutes on the questionnaire which, according to our pre-test, we regarded as below the minimum threshold for the survey. Of the 279 participants that were included in the analysis, 169 were male (60.57%) and 110 were female (39.43%). The ages of the participants ranged from 21 to 70 years, with a mean of 46 years and a standard deviation of 11.66 years. The participants came from a variety of industries, including professional services (18%), public services (12%), and electronics and high-tech (10%). Their

length of employment at the company was more than 5 years for over 50% of the respondents.

4.2. Measures

We measured personality with the Big Five Inventory 2 (BFI-2) developed by Soto and John, (2007). The BFI-2, which assesses the prototypical features of each of the Big Five domains (i.e., conscientiousness, neuroticism, extraversion, openness to experience, and agreeableness), is based on the Big Five Inventory (BFI), (John and Srivastava, 1999). The BFI-2 is seen to provide greater bandwidth, fidelity, and predictive power than the original BFI questionnaire (Soto & John, 2007). It consists of 60 items that offer a general measure of the Big Five personality factors. Each factor is assessed using 12 items that describe a person's habitual behavior. In this survey, the respondents were asked to indicate the extent to which they agree or disagree with a given statement. We use the German BFI-2 instrument by Danner et al. (2019), who translated the items from English into German and established factor reliability (extraversion ά=.86, agreeableness ά=.80, consciousness ά=.89, neuroticism (ά=.88), openness to experience ά=.84).

In order to measure work environment ambidexterity, we use the two seven-item scales from Mom et al. (2009), who had validated these scales in the financial services industry (exploration ά=.85 and exploitation ά=.81). The authors developed a measure of exploration and exploitation at the manager level that consists of exploration activity items and exploitation activity items. Thus, we asked the respondents to what extent they engage in certain work-related activities (e.g., activities of which a lot of experience has been accumulated). We measured the answers on a five-point scale ranging from 1 (= never) to 5 (= always). We translated the items from English to German in a collaborative, iterative procedure as proposed by Douglas and Craig (2007) and tested their applicability to the level of an IT employee. This approach is superior to the method of backtranslation, accounting also for issues of conceptual equivalence (Douglas and Craig, 2007). To determine the work environment mode, in line with our dichotomous conceptualization, we calculated the levels of exploration (x) and exploitation (y) and assessed whether an employee's work environment rather tended towards exploration (x>y) or towards exploitation (x<y).

We measured person-job fit *(ά=.89)* with a scale developed by Lauver and Kristof-Brown (2001). The items contained questions about fit with the job in terms of skills (e.g., "My abilities fit the demands of

this job," and personality/temperament (e.g., "I am the right type of person for this type of work"). Respondents indicated their level of agreement with each statement on five-point Likert scales ranging from strongly disagree to strongly agree.

In order to check for common method variance, a Harman's single-factor test was applied. The results of the factor analysis (33.9%) is below the threshold of 50%, which suggest that common method bias is not an issue in our data.

5. Results

First, we present descriptive statistics in Table 1, for each of the investigated constructs.

Table 1. Descriptive Statistics

	Min	Max	Mean	SD
Neuroticism	1.00	4.42	2.33	.68
Extraversion	1.67	4.92	3.36	.67
Agreeableness	2.00	4.92	3.82	.54
Conscientiousness	2.00	5.00	3.96	.65
Openness to Experience	1.75	5.00	3.76	.66
P-J fit	2.20	5.00	4.36	.64
Level of exploration	1.00	5.00	3.29	.72
Level of exploitation	2.14	5.00	3.86	.56

Hypotheses 1-5 predicted that the level of the personality traits is higher in one environment and lower in another. We calculated the means for each personality trait per work environment subgroup and tested the hypotheses through independent t-tests. The results are reported in Table 2.

Table 2. Independent Samples t-Test

Trait	Work-Environment	Mean	SE	t
Neuroticism (N)	Explorative	2.42	.08	1.42*
	Exploitative	2.29	.04	
Extraversion (E)	Explorative	3.45	.07	1.40*
	Exploitative	3.32	.04	
Agreeableness (A)	Explorative	3.75	.07	-1.37*
	Exploitative	3.85	.03	
Conscientiousness (C)	Explorative	3.91	.08	-0.67
	Exploitative	3.98	.04	
Openness to experience (O)	Explorative	3.75	.07	0.05
	Exploitative	3.75	.05	

*p<.1

We see that trait levels for neuroticism, extraversion, and agreeableness are significantly different for employees in explorative and exploitative work environments. However, while the difference for extraversion (H2) is as was hypothesized (i.e., higher for employees in explorative work environments), it is

reversed for neuroticism (H1) (i.e., higher in explorative environments) and also reversed for agreeableness (H3) (i.e., higher in exploitative work environments). This means only H2 is supported.

Further, H6 and H7 predicted that the relationships of the examined personality traits on person-job fit depend on the work environment.
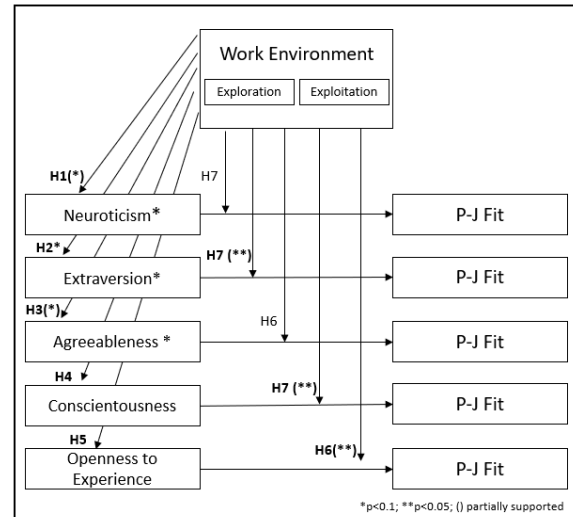

Figure 1. Research Model

To examine the question whether personality traits influence P-J fit in different work environments, calculations with the PROCESS macro available for SPSS (Hayes, 2013) were performed. PROCESS has become widely used by researchers interested in testing hypotheses about moderation (Hayes & Rockwood, 2017). The method of testing each relation separately, rather than with a hierarchical regression analyses, was used because of insufficient support from prior findings to indicate the precedence of one trait over another in predicting work outcomes (Lounsbury et al., 2007).

We calculated the individual mean values for the items measuring each personality trait and person-job fit. Work environment was again operationalized as a dichotomous variable. First, Figure 1 shows that all personality traits have a significant effect on person-job fit (coefficients N=-.41, E=.28, A=.37, C=.36 and O=.27) with significant levels p<.01.

Significant moderation effects were only found for extraversion (.21), conscientiousness (.26), and openness to experience (.24). For these three moderated relationships, we observed the same direction of effects: The relationship between extraversion and P-E fit increases from .22 in exploitative environments to .45 in explorative environments. The relationship between conscientiousness and P-E fit increases from .28 in

exploitative environments to .54 in explorative environments. The relationship between openness to experience and P-E fit increases from .19 in exploitative environments to .44 in explorative environments. Thus, while H6 is partially supported for extraversion and openness to experience, the direction of the moderation of the conscientiousness-PE-fit relationship (H7) is reverse to what was hypothesized.

We controlled for potential biases of age and gender within the analyses. Gender and age did not significantly relate to P-E fit in our analyses.

6. Discussion, Limitations and Outlook

Ambidexterity and personality as a phenomenon and research object have already been addressed in IS research. While previous studies that investigate both constructs together were mostly of qualitative nature and primarily focused on the explorative side of ambidexterity, or on specific roles within IT organizations (e.g., Balijepally et al., 2006; Capretz, 2003), our research broadens this scope. Accordingly, we first look to validate the relationship of the level of certain personality traits of employees in ambidextrous IT work environments, such as those typically found in bimodal IT organizations (H1-H5) (Haffke et al., 2017). Second, we study the moderating effect of the potential relationship of personality traits on person-job fit in explorative and exploitative work environments (H6-H7). Consequently, the insights derived from this study are twofold.

First, our study indicates that the levels of extraversion, agreeableness, and neuroticism are significantly different for employees working in mostly explorative vs. exploitative work environments. In line with the person-job fit theory (Kristof-Brown et al., 2005), which postulates that people seek out (work) environments that allow them to behaviorally manifest their traits, the results of this study lead to the assumption that the personality of an IT employee does indeed differ depending on their work environment. For the extraversion trait, the data supports the hypothesis that IT workers in explorative work environments tend to score higher than those in exploitative environments (H2). The underlying explanation is straightforward. While the dimension of extraversion is associated with being outgoing, enjoying interaction with others, and seeking out new opportunities and excitement (McCrae & John, 1992), explorative work environments are often characterized by collaborative teamwork emphasizing the search for new possibilities and the adoption of new skills (Mom et al., 2009).

Although we see that IT workers' level of agreeableness significantly differs across ambidextrous work environments, the data implies that, contrary to our hypothesis, the level of agreeableness is higher for people in exploitative environments. While agreeableness is a measure of the degree of being trusting and cooperative, it is also associated with being non-critical (McCrae et al., 1987). The results may lead to the assumption that, in a work-related context, this dimension might be reflected in not striving to challenge the status quo and rather emphasizing experience, routine and present knowledge (Mom et al., 2009). Consequently, IT workers scoring higher in agreeableness might tend to seek exploitative environments. Finally, we see that, although IT workers' level of neuroticism significantly differs across ambidextrous work environments, the data surprisingly implies that the level of neuroticism is higher for people in explorative environments. One explanation could be the level of abstraction in our research and that, within our research context, the neuroticism trait needs to be studied as one constituent feature of personality profiles, rather than as an individual trait (Pfluegner et al., 2021).

Second, our motivation to shift the focus in organizational design choices towards an individual-level perspective is rooted in sensitizing IT professionals and organizations to the areas of IT in which IT workers are likely to have the best individual fit. Understanding person-job fit, as one aspect of the person-environment fit, is important because it influences outcomes at each phase of an employee's organizational life cycle (Su et al., 2015). Therefore, insights on fit perceptions, and the influence thereof, can be meaningful to both theory and practice. The data does indeed show that the there is a difference in magnitude which personality traits impact person-job fit depending on the work environment. The data suggests that the work environment, in terms of exploration and exploitation, moderates the relationships of extraversion, conscientiousness, and openness to experience on person-job fit. The effect of these traits on person-job fit increases in explorative environments and decreases in exploitative environments. While we see that the levels of conscientiousness and openness to experience are not significantly different between the examined work environments per se (H4-H5 n/s), work environment moderates the relation between these traits and P-J fit. From this we might infer that these traits do not necessarily prompt people to seek out certain work environments but nonetheless impact their perceived job fit with all the attributed consequences of fit and misfit (Follmer et al., 2018). These results might add

groundwork that can be further developed into insights that answer calls for measures that counteract the resignation of employees (Prommegger et al., 2019).

Additional noteworthy observations can be derived from the descriptive statistics. Our sample of IT workers score rather low on neuroticism, with a mean of 2.3 and a median of 2.2. In a recent study of the effects of personality traits on digital transformation, Diller et al. (2020) show a correlation of neuroticism with the level of overall digitization and business transformation. Thus, we might infer that, within an IT context, the obvious high levels of digitization and contact points with transformative topics lead to attracting a workforce scoring rather low on neuroticism. Moreover, the personality trait with the highest score is conscientiousness (M=4.0). This can be seen as a desirable outcome, as conscientiousness is commonly reported to be the most reliable predictor of job performance (e.g., Barrick et al., 1991). The level of conscientiousness might also add to the explanation of high person-job fit level (M=4.4). Due to the tendencies associated with this trait, highly conscientious employees should be likely to seek a thorough understanding of potential employers and job offers, to ensure that they will fit in and be successful (Resick et al., 2007).

Our analysis makes theoretical and practical contributions in the field of individual ambidexterity. While organizational structures, such as bimodal IT departments and companies, may support ambidexterity (Haffke et al., 2017), research indicates that ambidexterity also depends on individuals who are able to combine exploration and exploitation, and thus engage in individual ambidexterity (Raisch et al., 2009). Our results regarding the fit between personality and work environment characteristic can inform managers and HR departments about the specific profiles that may be needed in different IT roles. For example, recruiters could advertise IT jobs in exploitative working environments more explicitly by alluding to the agreeableness of the applicant and focus their attention on this personality trait when recruiting, in order to improve the likelihood of a good person-job fit.

This study does not come without limitations. Our analysis has neglected the potential interactive nature of coexisting personality profiles (Pflügner et al., 2021). In addition, we follow the assumption that personality is a stable and enduring pattern of characteristics and tendencies (Mayer, 2005). Nevertheless, recent studies have implied that people change their Big-Five traits across their life span, even in adulthood, and that work environment and experiences are factors in driving this evolution (Wu, 2016).

Consequently, future research might further investigate in which ways work environments influence personality traits in fit and misfit scenarios. Moreover, further research should presume a more granular view on levels of ambidexterity and account for potential interaction effects of personality traits by incorporating personality profiles. In addition, the research model should include more variables that could potentially impact the relationship between personality traits, ambidexterity and P-J fit, such as organizational IT set up, job position, leadership style, and account for more control variables, such as performance.

7. Conclusion

IT functions adopt agile practices and build ambidextrous organizational structures which, in turn, affect the work environment of individual IT employees. Based on person-environment fit theory, we studied whether and how personality traits of IT employees and work environment characteristics, measured at the individual task-related level of ambidexterity, relate and affect person-job fit (P-J fit). These findings contribute to existing research by demonstrating that IT employees' personalities indeed differ depending on their work environment. In addition, our data suggests that the work environment, in terms of exploration and exploitation, moderates the relationships between extraversion, conscientiousness, and openness to experience on person-job fit, and that their effects increase in explorative work environments.

8. References

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