# Extraversion and adaptive performance: Integrating trait activation and socioanalytic personality theories at work

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### ABSTRACT

Both trait activation and socioanalytic personality theories clarify the personality – performance relationship at work. We argue that extraversion needs to be interactively combined with both social competency (socioanalytic theory) and an activating context (trait activation theory) to demonstrate effects on a relevant type of work performance. Specifically, the aim of the present study was to examine extraversion's association with adaptive performance when combined with social competency and context (i.e., climate for personal initiative). Our results demonstrate that the three-way interaction (i.e., extraversion × social competency × climate for initiative) has a significant relationship with adaptive performance, such that the extraversion–performance association is strengthened when both social competency and climate for initiative are heightened. Our findings suggest that personality scholars should consider both socioanalytic and trait activation perspectives when investigating performance prediction. We discuss implications, strengths, limitations, and directions for future research.

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## 1. Introduction

Workplaces are becoming more and more dynamic, and employees need to manage uncertain and unpredictable work situations (Griffin, Neal, & Parker, 2007). Additionally, work routines and guidelines change nearly constantly (Bindl & Parker, 2011). Hence, the importance of employee adaptability is emphasized in our present research, because this is essential to meet the demands of a growing number of contemporary work environments (Parker, Bindl, & Strauss, 2010). Accordingly, research on the unique dimension of employee adaptive performance has become a valuable addition to the job performance literature (Jundt, Shoss, & Huang, 2015; Pulakos, Arad, Donovan, & Plamondon, 2000; Pulakos, Dorsey, & White, 2006).

Furthermore, being one of the five major traits of personality, extraversion has received attention in regards to work performance (Neal, Yeo, Koy, & Xiao, 2012; Penney, David, & Witt, 2011). In our study, given this changing nature of work, we indicate how extraversion relates to adaptive performance in a job involving interpersonal interactions and that faces changing and dynamic work conditions (i.e., nursing), expanding our understanding of the extraversion – performance relationship and enriching our understanding of how personality facilitates adaptability. Extraversion is particularly meaningful in the nursing context, since it has been related to

elevated status in groups (Anderson, John, Keltner, & Kring, 2001), to performance in professions involving a substantial degree of interactions with others (Mount, Barrick, & Stewart, 1998), and to adaptivity in nursing (Ellershaw, Fullarton, Rodwell, & McWilliams, 2016). Beyond previous research (e.g., Huang, Ryan, Zabel, & Palmer, 2014), we provide an integrated theoretical perspective on individual differences and work context that links extraversion to adaptive performance.

Specifically, guided by trait activation and socioanalytic theories of personality, two leading theoretical perspectives in the study of personality at work (Christiansen & Tett, 2013), we interactively combine extraversion with climate for personal initiative and social competency in the prediction of adaptive performance (Chen & Firth, 2014). Trait activation theory (Tett & Burnett, 2003) states that relevant situations stimulate personality into actions, and socioanalytic theory (Hogan & Shelton, 1998) argues that social competency guides and directs personality into effective actions observed by others. Thus far, personality researchers have used socioanalytic (Hogan & Blickle, 2013) and trait activation (Tett, Simonet, Walser, & Brown, 2013) theories either exclusively or additively. However, a main contribution of our study is that, both conceptually and systematically, we interactively combine socioanalytic and trait activation theories in the prediction of adaptive work performance.

## 2. Socioanalytic theory & trait activation of extraversion

Socioanalytic theory argues that extravert individuals have a propensity to strive for status and recognition (Hogan & Blickle, 2013).

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Consequently, this goal motivates people to translate this tendency into behaviors observed by others, and those with heightened social competency are better at this personality trait–other-observed behavior transfer (Hogan & Shelton, 1998). In addition, social competency has been argued to be important to personal adaptability (Pulakos et al., 2006). However, the situational context and the relevance of the criterion to extraversion are also crucial for its expression (Paunonen & Nicol, 2001), as indicated by trait activation theory (Tett & Burnett, 2003).

Trait activation theory argues that situations stimulate personality into action (Tett & Burnett, 2003), and Judge and Zapata (2015) showed that, in relevant contexts, the validities of extraversion roughly doubled. Context is vital to understanding organizational behavior (Johns, 2006) and to the activation of personality (e.g., extraversion; Tett & Burnett, 2003). Context is also highly relevant to adaptive performance (Jundt et al., 2015), and empirical studies have demonstrated situations to be important to the effects of individual differences on adaptive performance (e.g., Charbonnier-Voirin, Akremi, & Vandeberghe, 2010; Shoss, Witt, & Vera, 2012). Therefore, we contend that heightened extraversion needs not only enhanced social competency but also a relevant situation (i.e., three-way interaction) to demonstrate effects on performance.

Specific to our study, a climate for initiative, when combined with social competency, should activate extraversion's impact on adaptive performance. Climate describes the organizational context for employees' actions (Glick, 1985) that primarily concerns formal and informal interpersonal practices (Schneider, 1985). In a climate for personal initiative, the organization's practices support and assist employees in taking a proactive approach to work (Baer & Frese, 2003), and research has shown social competency to be important to personal initiative and proactivity at work (e.g., Grant, Parker, & Collins, 2009; Wihler, Blickle, Ellen, Hochwarter, & Ferris, 2017). Clearly, a climate for initiative will help employees to be more likely to innovate and better manage unanticipated situations at work, actions that are essential to adaptive performance.

Regarding our outcome, adaptive performance concerns the behaviors employees enact in response to or anticipation of changes relevant to their job (Jundt et al., 2015), and it has been operationalized as either adaptation within a specific domain or as "domain-general" adaptability (Baard, Rench, & Kozlowski, 2014). Given the rising importance of adaptive performance across many contemporary work contexts (e.g., nursing), to improve the generalizability of our research, we investigated general adaptivity, rather than "domain-specific" or one of the eight adaptive performance dimensions (see Pulakos et al., 2000).

In sum, we believe that only when extraversion, social competency, and perceived climate for initiative are interactively combined are they highly relevant to adaptive performance in the nursing context. Consequently, our study responds to earlier calls (Chen & Firth, 2014) by examining how climate for initiative, as joined with social competency and extraversion, will result in effective adaptive performance. Perceptions of the work context (climate for initiative) ignite extraversion (trait activation theory), while social competency (socioanalytic theory) gives direction to extraverted behavior, with their three-way interaction leading to effective adaptive performance.

**Hypothesis.** The relationship between extraversion and adaptive performance will be jointly moderated by employee social competency and perceived climate for personal initiative, such that adaptive performance will be highest when all three (i.e., extraversion, social competency, and climate for personal initiative) are high.

## 3. Method

### 3.1. Participants and procedure

Our study took place in the western part of Germany and focused on nurses in organizations specialized in taking care of people with physical or psychological handicaps and disabilities. We chose these organizations because they have come under large economic pressures and are required to work cost efficiently (Dulal, 2016). Further, nursing requires constant learning and adapting to changing medical care guidelines, health care demands, and administrative work environments (Amthor, 2003). Recent research has investigated personality as a predictor of nurse work performance (Ellershaw et al., 2016), albeit without advanced theoretical background, nor considering situational context.

We sampled employees that provide direct daily assistance to clients in caretaking facilities. Nursing occupations are a growing part of Germany's labor market (Allmendinger & Ebner, 2006), and, currently, a substantial part of the German work force (i.e., 14.5%) is employed in medical/healthcare occupations (Statistisches Bundesamt der Bundesrepublik Deutschland, 2016). These occupations are one of the fastest growing work fields in both Germany (German Federal Ministry of Health, 2015) and the United States (U. S. Department of Labor, 2015).

We invited participants via email, describing the study and providing information about how to contact the researchers. Study participation was voluntary. When the employees consented to participate, we sent them an access code to the online survey. After completion, the program tool asked employees to invite their immediate supervisor to participate in a short online survey as well. We matched both surveys with a pseudonymized code.

We contacted 535 employees. Of these, 337 followed the link to our survey and 306 completed it. Of the invited supervisors, 295 provided complete information. Thus, we were able to match 295 employee-supervisor dyads. However, we had to eliminate 6 other-ratings because raters indicated a role other than supervisor. 42 dyads had to be excluded because employees did not work in direct social contact with disabled individuals but rather in non-direct-care roles (e.g., kitchen or administrative work). Thus, our dataset consisted of 247 employee-supervisor dyads in social occupations equaling a response rate of 46.2%. Overall, performance ratings were provided by 48 supervisors rating an average of 5 employees ($SD = 4.66$).

Of the 247 employees in our sample, most were female (72.1%, $N = 178$). On average, participants were 43 years old ($SD = 10.75$) and had worked for 20 years ($SD = 10.87$). They held their current position for 8.49 years ($SD = 6.89$) and worked 33 h/week ($SD = 7.71$).

### 3.2. Measures

#### 3.2.1. Extraversion

To assess targets' extraversion, we applied the short version of the Big Five inventory (BFI-K; Rammstedt & John, 2005). The BFI-K was developed as a quick to answer questionnaire, measuring extraversion with 4 items answered on a 5-point Likert scale from *very inaccurate* to *very accurate*. Rammstedt and John (2005) established validity between the BFI-K and the NEO-PI-R (Costa & McCrae, 1992). The author's results show that correlational patterns between the extraversion dimension of the BFI-K and the NEO-PI-R were comparable to the patterns between the Big Five Inventory (BFI; John, Naumann, & Soto, 2008) and the NEO-PI-R. Thus, although shortened, the extraversion dimension of the BFI-K assesses comparable content to the BFI. Sample items for extraversion are "I generate a lot of enthusiasm" and "I am outgoing, sociable". Cronbach's alpha was $\alpha = 0.80$.

#### 3.2.2. Social competency

To assess social competency, we applied the (German) four items by Ferris et al. (2008) of the interpersonal influence dimension of the political skill inventory (PSI; Ferris et al., 2005). Prior research (i.e., Wihler et al., 2017) used these German items across three studies. Items are answered on a 7-point Likert scale ranging from *strongly disagree* to *strongly agree*. A sample item is "I am able to communicate easily and effectively with others". Cross-cultural studies in