

# The interactive effects of conscientiousness, openness to experience, and political skill on job performance in complex jobs: The importance of context

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## Summary

Caveats concerning the ability of personality to predict job performance have been raised because of seemingly modest criterion-related validity. The goal of the present research was to test whether narrowing the context via the type of job (i.e., jobs with complex task demands) and adding a social skill-related moderator (i.e., political skill) would improve performance prediction. Further, along with political skill, a broad factor of personality (i.e., conscientiousness which had demonstrated in prior research to have the strongest criterion validity) was paired with a narrow construct (i.e., learning approach that is closely related to openness to experience) in a three-way interactive prediction of supervisor-rated task performance. With the employee-supervisor dyads among *professionals*, but not with the control group of *non-professional* employees, task performance was predicted by the three-way interaction, such that those high on all three received the highest performance ratings. Implications, strengths and limitations, and directions for future research are discussed. Copyright © 2012 John Wiley & Sons, Ltd.

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The Five-Factor Model of personality (FFM; Goldberg, 1990) has stimulated extensive research on the personality–job performance relationship over the past 20 years (Barrick, Mount, & Judge, 2001). Studies examining the relationship between personality and job performance assessments by supervisors have shown consistent but modest main effects in meta-analyses (Morgeson et al., 2007). However, several authors (e.g., Judge & Erez, 2007; Penney, David, & Witt, 2011; Tett & Burnett, 2003; Witt, Burke, Barrick, & Mount, 2002) have contended that the functioning of each trait partly depends on many factors.

First, as personality theory has evolved, it has been argued (i.e., Hofstee, de Raad, & Goldberg, 1992), and empirically supported (e.g., Johnson & Ostendorf, 1993), that personality traits occur in a circumplex with meaningful second-order loadings. Consequently, some researchers have examined the multiplicative interaction of personality traits on behavioral outcomes at work. Although only limited research exists on the interactive effects of two personality dimensions on job performance, empirical findings (e.g., Judge & Erez, 2007; Witt, 2002; Witt et al., 2002) tend to support this configural approach (Penney et al., 2011). Interactive effects have explained incremental variance in job performance ratings by supervisors above and beyond the main effects of each personality dimension, advancing the notion that the effect of one personality construct depends on the other.

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Also, for more than two decades, organizational behavior scholars have argued that the context is an essential, but often overlooked, feature of our research (e.g., Cappelli & Sherer, 1991; Griffin, 2007; Mowday & Sutton, 1993; Rousseau & Fried, 2001), and Johns (2006) outlined several specific ways how context can impact behavior in organizations. Correspondingly, some have contended that in order for personality traits to be expressed, they require situations that are trait relevant (e.g., Kenrick & Funder, 1988; Tett & Guterman, 2000). The idea that context activates traits (Tett & Burnett, 2003) is consistent with the notion of person–situation interaction theorists (e.g., Pervin, 1985) that the interpretation of behavior is context dependent. In other words, trait-relevant cues within situations produce trait activation.

In the present study, we selected the trait configuration of conscientiousness and openness to experience (i.e., learning approach) along with an established measure of social skill at the work place (i.e., political skill; Ferris, Treadway, Brouer, & Munyon, 2012), in a three-way interaction to predict task performance in jobs with high task complexity (Wood, 1986). Although conscientiousness has demonstrated the strongest prediction of performance of the FFM (Barrick et al., 2001), the motivational properties of openness to experience are not well known, likely, in part, because the trait has been understudied (Penney et al., 2011). But it has been suggested that its ability to predict is contingent on the outcome studied (Barrick, Parks, & Mount, 2005). Because openness has consistently demonstrated the lowest correlations with performance of any factor in the FFM, we choose a narrow, but related, construct (i.e., learning approach) that would be most relevant to a complex job to provide a more refined explanation of the openness–performance relationship (Paunonen, Rothstein, & Jackson, 1999).

Concerning political skill, it has been suggested that social skill translates intentions into action (Hogan & Shelton, 1998), that the criterion validity of social skill might depend on the context (Hochwarter, Witt, Treadway, & Ferris, 2006), and that social networks are especially helpful in complex work environments (Penney et al., 2011). Prior research has demonstrated interactions of social skill with personality, but the results across studies appear inconsistent. Thus, we also narrowed the bandwidth of our criterion (i.e., task performance) to that of a complex job, to make it more relevant to our predictors and to the context of our study. In sum, the present research helps to explain previous inconsistencies or gaps in knowledge regarding the personality–job performance relationship, and it contributes to our knowledge of personality and social skill predictors in jobs with high task complexity.

## Theoretical Background and Hypothesis Development

### *Conscientiousness and learning approach as predictors of job performance*

Individuals high on the conscientiousness dimension are considered to be careful, thorough, and persistent (Barrick et al., 2001), and those with high scores on the openness to experience dimension describe themselves as intellectual, curious, and imaginative.

Barrick and colleagues conducted a meta-analysis of 15 prior meta-analytic studies on the relationship between self-ratings of FFM personality traits (Goldberg, 1990) and dimensions of job performance. The best predictor of work performance was conscientiousness. The sample weighted mean estimate for the supervisor-rated work performance–conscientiousness relationship was  $r = .15$  (Barrick et al., 2001, Table 4). However, only 17 percent of the study variance could be accounted for, indicating substantial variability open to explanation.

Concerning openness to experience, researchers have suggested that its relationship with performance is inconclusive and possibly nonsignificant (e.g., Penney et al., 2011). In their recent review, Penney et al. (2011) discussed interactions of personality traits that involved each of the other four FFM factors, but chose to not include any that pertained to openness, arguing that its motivational properties and goals are not well known. Barrick et al. (2001) found that openness consistently demonstrated the lowest average true score correlations, along with agreeableness. In their meta-analysis, openness was most strongly related to training performance, with a sample weighted mean estimate of  $r = .14$ , and this could be partly due to such persons' motivational interest in novelty sparked by their

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3 intellectually curious nature (Penney et al., 2011). However, also with this criterion, variability in effect sizes still  
4 was considerable, suggesting that moderators may improve validity (Barrick et al., 2001, 2005).

5 The *Hogan Personality Inventory* (HPI; Hogan & Hogan, 2007) is similar to the FFM (Goldberg, 1990); but one  
6 distinction is that, contrary to the model of Costa and McCrae (1992), the HPI separates openness to experience into  
7 two personality dimensions, namely *inquisitive*, reflecting creativity and imagination, and *learning approach*,  
8 describing intellectual engagement and worldliness (Chernyshenko, Stark, & Drasgow, 2011; Kaiser & Hogan,  
9 2011). Hogan and Hogan's division of openness is similar to the characterization that others have made concerning  
10 the two aspects of openness (e.g., DeYoung, Quilty, & Peterson, 2007).

11 Hogan and Holland (2003) conducted a meta-analysis of the HPI personality–job performance relationship, and  
12 similar to the findings of Barrick et al. (2001) regarding openness, Hogan and Holland found that learning approach  
13 was related to training criteria. However, Hogan and Holland noted that, for appropriate outcomes, the HPI dimen-  
14 sions of inquisitive and learning approach should demonstrate zero-order correlations in the .30 range (e.g., Driskell,  
15 Hogan, Salas, & Hoskins, 1994; Gregory, 1992). However, we were able to locate only one study of the learning  
16 approach–job performance relationship. Hogan, Rybicki, Motowidlo, and Borman (1998) examined its (i.e., labeled  
17 school success) relationship with contextual performance and found a nonsignificant relationship with contextual  
18 performance in their sample of distribution workers and correctional officers.

19 As implied by Hogan and Holland (2003), these dimensions might be most predictive when the criteria involve  
20 continuous learning, and we believe that jobs high in task complexity are such positions. Consequently, we focus on  
21 the learning approach dimension, because, of the two, this one is most closely related to having an interest in learning  
22 and achievement (Hogan & Holland, 2003), which is key to success in complex jobs. However, in Hogan and Holland's  
23 meta-analysis, although aligning predictors and job performance criteria improved sample weighted mean estimate  
24 validities for conscientiousness ( $r = .20$ ) and learning approach ( $r = .15$ ), variance unexplained was 45 percent for  
25 conscientiousness and 66 percent for learning approach, indicating substantial variability remaining to be explained.  
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### 30 *Theoretical approaches to using personality to predict performance*

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32 As suggested by the research cited earlier, personality traits have demonstrated low, although somewhat consistent,  
33 predictive validity of performance-related criteria. Consequently, scholars called for measuring narrow traits when  
34 appropriate, to examine interactions/configurations of personality traits and to consider the context of the trait's  
35 manifestation (e.g., Barrick et al., 2001; Hough, 2003).

36 Personality and psychometric research has long debated the trade-off between bandwidth and fidelity in assess-  
37 ment (Cronbach, 1960). Many researchers (e.g., Murphy & Dzieweczynski, 2005; Paunonen et al., 1999; Schneider,  
38 Hough, & Dunnette, 1996) have advocated for the use of narrow personality traits in organizational research, arguing  
39 that, among other benefits, the use of narrow facets of personality provides greater explanatory value. The lack of a  
40 relationship between a broad personality factor and a criterion could be due to one facet, some facets, or all facets of  
41 the personality trait (Paunonen et al., 1999). As noted earlier, openness to experience is one such factor of personality,  
42 as it has consistently demonstrated small or nonsignificant relationships with job performance.

43 Some (e.g., Hogan, Hogan, & Roberts, 1996; Penney et al., 2011; Tett & Christiansen, 2007) have argued that we  
44 would obtain a better explanation of behavior by considering the joint influence of multiple traits, in part, because  
45 some items substantively load on secondary factors, suggesting non-orthogonality (Ones, Viswesvaran, & Dilchert,  
46 2005), and because of the potential benefits of the circumplex approach to personality (Hofstee et al., 1992). Thus, a  
47 few researchers have considered interactions (configurations) of personality traits in the prediction of job perfor-  
48 mance (e.g., Judge & Erez, 2007; Witt, 2002; Witt et al., 2002) and found incremental variance in prediction.  
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51 In recent years, organizational researchers have argued that the context of a study is often unrecognized or under-  
52 appreciated and that it can increase or decrease variation in constructs, potentially resulting in, for example, a change  
53 in the strength and direction of relationships (Griffin, 2007; Johns, 2006; Rousseau & Fried, 2001). Johns (2006) put  
54 forth an organizing framework that details the many ways in which context can be manifested in organizational  
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research, and he noted that the variation seen in research results from one study to another is likely due to a lack of appreciation for each study's situation. As characterized by Johns, context has both omnibus (i.e., *Who? Where? When? and Why?*) and discrete (i.e., task, social, and physical) aspects, and a particular attribute of context both can be seen across theoretical perspectives and can be operationalized at multiple levels of analysis. Context is an undervalued factor in organizational research that affects a variety of suppositions by, for example, impacting the base rate or the range of a studied variable, and context should influence how scholars design and measure, analyze, and report research (Johns, 2006).

In relation to personality's prediction of job performance, scholars (e.g., Hough & Oswald, 2005) have argued for the consideration of the influence of situations, contending that the expression of personality traits requires situations relevant to those traits (Kenrick & Funder, 1988; Tett & Burnett, 2003; Tett & Guterman, 2000). Many have taken an interactionist approach (see, for review, Tett & Burnett, 2003; Tett & Guterman, 2000), suggesting that personality expression varies by the context.

Consequently, Tett and Burnett (2003) and Tett and Guterman (2000) proposed a model of trait activation, arguing that trait-relevant differences among situations influence the expression of traits as behaviors. A trait that is present will be dormant unless a situation stimulates it to action, giving it predictive utility. Further, two situations might not share many characteristics in common, but trait expression may be consistent if the cues relevant to that trait are similar in both contexts. Similar to Johns' (2006) description of context, Tett and Burnett classify trait-relevant cues at the organizational, social, and task levels, but they also recognized that these categories are not entirely distinct from one another. Although Tett and Burnett provide many more details to their model, one additional element deserves attention in the context of the present study. Tett and Burnett's model of trait activation argues that elements of the context decide the value of a behavior and that the value placed on a particular behavior determines how it relates with judgments of performance.

Findings across a range of studies have demonstrated that context is important to organizational behavior and personality trait expression. For instance, research in the areas of citizenship (Dierdorff, Rubin, & Bachrach, 2012), the performance–turnover relationship (Sturman, Shao, & Katz, 2012), and presenteeism (Johns, 2011) have benefited by appreciating the context of the studies. Also, in 2007, the *Journal of Organizational Behavior* devoted a special issue to the role of context. Specific to the personality–performance relationship, Kell, Rittmayer, Crook, and Moto-widlo (2010) demonstrated that the validity of personality tests varied by within-job situations. Finally, in reviewing meta-analytic evidence of the FFM prediction of job performance, Tett and Christiansen (2007) found that the specificity of the situation is an important aspect of the relationship of each trait with job performance.

Given the undeniable importance of context to personality–performance relationships, the present study not only assesses the effect of a configuration of individual characteristics on job performance but also narrows the context of the study to employees facing complex job demands, which we believe addresses, in part, an occupational omnibus contextual element (Johns, 2006). In addition, we utilize the broad factor of personality that has demonstrated the strongest relationship with performance across a range of criteria and occupations (i.e., conscientiousness; Barrick et al., 2001) along with a more narrow aspect of personality (i.e., learning approach) that is related to a broad factor of personality (i.e., openness), which has received relatively little attention in regard to performance and, generally, has been argued to demonstrate equivocal results (Penney et al., 2011). We believe job complexity to be a particularly relevant situational feature for our predictors, but prior to discussing context as it relates to our predictors, a review of political skill and research on the social/political skill–personality interaction on performance will help to illuminate the importance of context to our study.

### *Political skill as a predictor of job performance*

Politically skilled individuals possess the ability to accurately observe and interpret the behavior of others, and they can calibrate and adjust their behavior to different and changing contexts (Ferris, Treadway, et al., 2005). They have a subtle, yet convincing, interpersonal style that is able to effectively influence others (Treadway, Ferris,



Duke, Adams, & Thatcher, 2007). These employees also appear sincere, which helps to gain the trust and confidence of those with whom they interact. This set of mutually reinforcing competencies allows politically skilled individuals to develop large and diverse networks of contacts they can leverage to assist in goal accomplishment (Ferris et al., 2007).

Political skill has demonstrated both main and interactive effects on performance (e.g., Blickle et al., 2008; Jawahar, Meurs, Ferris, & Hochwarter, 2008; Liu et al., 2007; Meurs, Perrewé, & Ferris, 2011). A recent meta-analysis (i.e., Bing, Davison, Minor, Novicevic, & Frink, 2011) found that political skill was a valid predictor of both task and contextual performance. Although the results showed that political skill was a better predictor of contextual performance, the authors noted that the social demands of a job increased the strength of the relationship with task performance, and they suggested that other moderators of the political skill–performance relationship be examined.

Research has demonstrated inconsistent results regarding the moderation by social skill-related constructs on the conscientiousness–performance and openness–performance relationships. Witt et al. (2002) found across five of their seven samples that agreeableness made the positive relationship between conscientiousness and performance stronger; but they did not find such a relationship in the two samples where the job did not involve substantial social interaction. Douglas, Frink, and Ferris (2004) demonstrated that emotional intelligence strengthened the positive conscientiousness–performance relationship for those high on emotional intelligence. However, for those low on emotional intelligence, conscientiousness had a negative relationship with performance. Somewhat contrary to the research mentioned earlier, the results of a study by Blickle et al. (2008) showed that conscientiousness was associated with higher levels of performance for those with a moderate degree of political skill. For those with high political skill, conscientiousness was negatively related to performance.

Moreover, Barrick et al. (2005) found that self-monitoring moderated the conscientiousness–performance relationship when performance was measured by peers, but not when performance was assessed by supervisors. In the same study, openness to experience interacted with self-monitoring in the prediction of supervisory ratings of interpersonal performance. Their results led the authors to suggest that it might be too early to discern whether conscientiousness and openness to experience are traits that could be expected to interact with self-monitoring in future studies. Finally, the results of one study (i.e., Blickle et al., 2010) found that openness did not have an interaction with social skill on sales performance, and the authors speculated that one reason could have been because openness might be better measured via the two facets advocated by the HPI (i.e., inquisitive and learning approach; Hogan & Hogan, 2007). Q3

### *Our predictors in context*

In sum, a range of evidence indicates that context is important in performance prediction for our chosen personality constructs and for political skill: (i) Our predictors have demonstrated either small or moderate main effects in performance prediction in prior research; (ii) the interactions of conscientiousness/openness with social skill-related constructs appear inconsistent in the strength and direction of its relationship with job performance across various studies; (iii) the calls of many researchers to examine moderators of these constructs' effects on performance; (iv) and the theoretical support from three bodies of research (i.e., trait bandwidth, trait configuration, and the importance of context) for examining the moderators and contextual boundaries of these constructs.

In addition, we believe that a number of prior empirical studies of our predictors indicate the importance of context. Concerning openness to experience, Barrick et al. (2005) labeled it a “contingent predictor” (p. 748), because they argued that the relevance it has to job performance is likely to depend on job demands, and Raja and Johns (2010) found that openness' effect on creativity was influenced by job scope, which could be considered an aspect of discrete, task context in Johns' (2006) framework. Moreover, after studying the dimensionality of openness and its relationship with performance, Mussel, Winter, Gelléri, and Schuler (2011) noted that future research should examine situational moderators of the relationship that subdimensions of openness have with performance.

In regard to conscientiousness, as noted earlier, the meta-analytic results of Barrick et al. (2001) and Hogan and Holland (2003) indicate that, after considering direct effects, substantial variance remains in the conscientiousness–performance relationship, suggesting the importance of moderators. Additionally, expectancy has been meta-analytically demonstrated to be important to the conscientiousness–performance relationship (Judge & Ilies, 2002), and this role of expectancy also suggests the importance of context in this association. Thus, narrowing the context (e.g., complex jobs) appears to be of substantial importance to the learning approach–performance and conscientiousness–performance relationships.

Penney et al. (2011) argued that a complex work environment would affect the validity of FFM traits, and we contend that high levels of conscientiousness and learning approach are particularly beneficial when in a complex job. As noted earlier, learning approach is associated with a desire to learn, a drive to achieve, and an involvement in continuous learning (Hogan & Holland, 2003), and these self-motivating characteristics would be particularly valuable in a complex job, because such situations encourage greater intrinsic motivation to perform (Oldham & Cummings, 1996). Similarly, the results of Mussel et al. (2011) indicated that, of the two subdimensions of openness, only epistemic openness, which, similar to learning approach, is characterized by openness to ideas and action, was related to achievement striving, competence, job performance, and academic performance; perceptual openness, which comprised openness to fantasy, esthetics, and feelings, was not related to these outcomes. Further, Hogan and Holland (2003) implied that outcomes involving continuous learning would be those most relevant to the HPI dimension of learning approach, and an important aspect of complex jobs is the need for recurrent learning. Proactivity and adaptability also are likely to be highly valuable to performance in a complex job, and Neal, Yeo, Koy, and Xiao (2012) found that openness was related to these two individual work role behaviors. Finally, a recent study demonstrated that, for teams with a high team-level average of openness, task conflict had a positive relationship with team performance (Bradley, Klotz, Postlethwaite, & Brown, 2012). As jobs high on task complexity are also likely to have increased task conflict and openness has been related to approaching, rather than avoiding, conflict (Antonioni, 1998), we believe that these results suggest the importance of openness to individuals in complex jobs.

Regarding conscientiousness, Barrick and Mount (1993) found that job autonomy, which is likely an aspect of a complex job, interacted with conscientiousness to improve its prediction of performance. The results of a meta-analysis by Meyer, Dalal, and Bonaccio (2009) suggested that the ability of conscientiousness to predict job performance is higher in occupations with decreased situational strength. Several of the items used to describe less strong occupations (e.g., making decisions, solving problems, thinking creatively, unstructured work) also could be used to describe a complex job, indicating that conscientiousness is especially relevant to performance in the occupational context of our study. Further, the results of a study by Chen, Casper, and Cortina (2001) showed that conscientiousness had a stronger relationship with performance in a complex job. Also, Le et al. (2011) found a curvilinear relationship between conscientiousness and performance, and their results also demonstrated that the inflection point after which the relationship disappeared was higher for highly complex jobs than for low-complexity positions, suggesting that high levels of conscientiousness are more helpful in highly complex job contexts. We believe that these results clearly show that conscientiousness particularly helps performance in complex jobs. Finally, after studying the moderation by work experience of the relationship between creative process engagement (i.e., problem identification, information seeking, and idea generation; elements that could be argued to be demands of a complex job) and performance, Zhang and Bartol (2010) suggested that future research should consider the influence of conscientiousness and learning goal orientation, and the present study could be characterized as partially attending to this suggestion.

Specifically, concerning how these traits (i.e., learning approach and conscientiousness) interact within the context of a complex job, research has demonstrated that conscientiousness can have a negative or nonsignificant effect on performance in some situations, such as a learning context (see, for review, Yeo & Neal, 2004). The ability to learn is likely important to performance in the context of a complex job. However, some results (i.e., Colquitt, LePine, & Noe, 2000; Yeo & Neal, 2004) suggest that when those high on conscientiousness spend more time devoted to learning or to transferring their learning into job performance, their performance in a learning-oriented situation can surpass those low on conscientiousness. We believe that if they are also high on learning approach, those high on conscientiousness would be stimulated by their interest in learning to dedicate themselves

to improve the learning facets of their performance when in a complex job, thus leading to, at least partly, improved task performance.

Zhang and Bartol's (2010) finding of moderation by work experience also indicates that work-relevant knowledge, skill, and behaviors are important to the prediction of performance in complex jobs, in addition to individual differences. Further, Neal et al. (2012) found individual openness to be negatively related to team and organizational proficiency, which, as the authors argued, suggests that it may constrain cooperative workplace behaviors. These results could indicate the importance of interpersonal skill to those high on openness, such that they are viewed not only as proactive and adaptive but also as proficient. Additionally, political skill has been argued to clarify expectancy (Brouer, Harris, & Kacmar, 2011), and thus, the importance of expectancy to the conscientiousness–performance relationship (Judge & Ilies, 2002) suggests that political skill could be especially helpful for those high on conscientiousness.

Moreover, the role of social and political skill to workplace performance has been demonstrated by much prior theoretical (e.g., Ferris et al., 2007; Hogan & Shelton, 1998) and empirical (e.g., Bing et al., 2011; Ferris, Treadway, et al., 2005) research, including when coupled with personality (e.g., Barrick et al., 2005; Meurs et al., 2011). Consequently, we believe that it is important to include this construct when assessing the task performance of those in a complex job. Conceptually, as a social competence and behavior, political skill could be thought of as a moderator of the influence of personality on performance, because it promotes the application of personality to behavior (Hogan & Shelton, 1998).

Hochwarter et al. (2006) suggested that the relevance of social skill to job performance might depend on the context, and some of the political skill research clearly signals the importance of situational moderators of political skill. Ferris et al. (2002) called for research to examine how context influences the relationships of political skill with outcomes, and Andrews, Kacmar, and Harris (2009) investigated how justice conditions moderated the relationships of political skill with performance and organizational citizenship behaviors. Additionally, a recent study found that perceptions of organizational politics, a feature of the social context, moderated the relationship between political skill and job performance (Kapoutsis, Papalexandris, & Nikolopoulos, 2011).

Specifically concerning complex jobs, an individual's ability to adapt to an ever-changing context has been shown to be important to performance (Pulakos, Arad, Donovan, & Plamondon, 2000), and part of a job's complexity is likely due to the many different situations that the employee will encounter. Persons high on political skill have a powerful ability to adapt their behavior to a variety of contexts (Ferris, Treadway, et al., 2005), and thus, are better able to meet these adaptive demands of a complex job. Moreover, two studies (i.e., Blickle, Kramer, et al., 2009; Blickle et al., 2012) that examined political skill's relationship with performance considered the occupational context, and the results from both indicated that political skill was a stronger predictor in complex occupations. Similarly, Sturman (2003) demonstrated that in complex jobs, experience becomes a stronger predictor of performance over time, which indicates the importance of work-related skills (e.g., political skill) in complex job contexts. In a recent study, Farh, Seo, and Tesluk (2012) found that the context of high managerial demands (i.e., requiring management of diverse individuals, functions, and lines of business) strengthened the positive relationship emotional intelligence had with performance, and emotional intelligence is moderately correlated with political skill (Ferris, Davidson, and Perrewé, 2005). In addition, Penney et al. (2011) noted that a strong social network might be especially helpful in complex work environments, and, among other characteristics, persons high on political skill have well-developed social networks (Ferris et al., 2007). In sum, our study furthers this emerging body of research, by examining political skill's interactive relationship with personality on performance within the context of a complex job. Therefore, we hypothesize the following:

*Hypothesis 1:* In jobs with complex task demands, the relationship between conscientiousness and task performance will be moderated by learning approach and political skill (i.e., a three-way interaction on task performance). Political skill and learning approach will moderate the relationship between conscientiousness and performance, such that those high on all three (i.e., conscientiousness, political skill, and learning approach) will receive the highest performance evaluations.

## Method

### *Procedure and participants*

On the basis of the International Standard Classification of Occupations (ISCO-88, International Labour Office (ILO), 1988), our target participants were those in professional occupations (i.e., jobs in ISCO-88, Group 2, professionals possessing higher education) working in an industrial region in the western part of Germany. ISCO-88 uses the degree of task complexity necessary for competent performance to aggregate occupations into broadly similar categories at different levels in a mono-hierarchical classification, with only Group 1 (i.e., senior managers) having greater job complexity than Group 2 of the nine total groups. In Germany, those considered to be professionals have more than 18 years of general and academic education, obtaining at least a bachelor's or master's degree (Werner, König, Bennett, & Scott-Leuteritz, 2004), and they could be employed in any of a variety of occupations (e.g., business, engineering, physical science, or social science).

In the German labor force, a person's educational level is known to almost everyone in the work place. For example, the business card typically notes educational degree, and for professional jobs, a bachelor's or master's degree is legally required. Thus, individuals readily provide this information (Obschonka, Silbereisen, & Wasilewski, 2012), and employees with at least a bachelor's or master's degree (or equivalent) were sought for this study. We targeted professional employees as opposed to *self-employed* professionals because we assessed job performance via supervisor ratings. Participants were personally approached, were invited by colleagues or peers, or were contacted via human resources department and invited to participate in the study.

Upon agreement, they received an e-mail including a link to an online questionnaire as well as a randomly generated password code. After completing the questionnaire, participants received a second e-mail with the randomly generated password code and were asked to forward this e-mail, which contained the supervisor questionnaire, to their supervisor. Additionally, we used a paper and pencil survey for some participants. After data collection, we checked whether participants met the inclusion criterion, namely working as an employee and holding at least a bachelor's or master's degree (or equivalents). Thus, we found that some people who had agreed to participate in the study passed their access code to non-professionals or otherwise involved non-professional employees in the study. Subsequently, we used the data of these non-professionals as a control group.

Overall, 891 employees were invited to participate in the study. Of these employees, 502 (56 percent) returned their questionnaire. Additionally 462 (52 percent) other-ratings were provided. Of these responses, a total of 439 dyads could be matched. After deletion of 147 cases, which involved (i) other-ratings not from supervisors, (ii) only supervisor or target information, and (iii) incomplete or implausible information, there were 196 professional and 96 non-professional employees, equaling a usable return rate of 33 percent.

In the professional group, 196 supervisor–employee dyads could be matched. As some supervisors assessed several employees, we had a hierarchical data structure. In sum, 151 supervisors rated 1.30 subordinates ( $SD = 0.85$ ) in the professional group. In contrast to the professional group, all 96 non-professional employees had 13 years of general education or less. Table 1 provides an overview of the characteristics of both groups. T1

To additionally ensure that we sampled employees working in jobs with complex task demands, we administered a short version of the *Environment-Structure Test* (Umwelt-Struktur-test; Bergmann & Eder, 1992; Blickle, Momm, et al., 2009). The test measures Holland's (1997) six general occupational job demands (i.e., realistic, investigative, artistic, social, enterprising, and conventional). As expected, investigative job demands (e.g., closely observing something, analyzing something, and investigating the causes of a problem) were highest in the professional sample. The investigative job demands differed significantly from enterprising ( $t(195) = 10.31, p < .01$ ), social ( $t(195) = 15.41, p < .01$ ), and all other job demands (i.e., realistic, artistic, and conventional) in the sample of professionals. Additionally, the enterprising demands differed significantly from the social demands ( $t(195) = 6.14, p < .01$ ), and all other job demands (i.e., realistic, artistic, and conventional) in the sample of professionals. Finally, in the professional sample, investigative job demands were significantly higher than in the non-professional control sample ( $t(290) = 2.02, p < .05$ ).



Table 1. Comparison between professional and non-professional group

Variable	Professional group	Non-professional group
<i>N</i>	196	96
<i>N</i> female	69	54
<i>N</i> male	127	42
Age (mean and <i>SD</i> in years)	39.97 (9.15)	39.05 (11.42)
Job tenure (mean and <i>SD</i> in years)	7.20 (6.68)	7.83 (8.54)
Education		
Bachelor, master, PhD	100%	0%
Only 13 years at school or less	0%	100%
Industries		
Business consulting industry	18%	6.3%
Chemical industry	6.6%	2.2%
Computer and electronic industry	12%	7.3%
Engineering	10%	4.2%
Higher education	1.0%	14%
Insurance business	10%	3.1%
Media	5.1%	9.3%
Medical sector	4.1%	10.4%
Non-profit sector	6.1%	5.4%
Public administration	13%	17%
Others	14.1%	20.8%
Difference between groups:	Fisher's exact test = 58.74, <i>N</i> = 286, <i>p</i> < .01	
Environment-structure test		
Investigative (mean, <i>SD</i> )	3.38 (.72)	3.19 (.80) <sup>b</sup>
Enterprising (mean, <i>SD</i> )	2.60 (.91) <sup>a</sup>	2.56 (.93)
Social (mean, <i>SD</i> )	2.12 (1.02) <sup>a</sup>	2.48 (1.19)

Note: Other industries include for example automotive, banking, nature protection, trade, and public relations business. *SD* in parentheses.

<sup>a</sup>Difference to professional-investigative significant at *p* < .01.

<sup>b</sup>Difference between professional and non-professional group significant at *p* < .05.

The two samples differed in reference to the prevalence of industries (Fisher's exact test = 58.74, *N* = 286, *p* < .01). It seems that in the higher education and medical sectors, professionals tended to pass their invitation to participate in our study to non-professionals from the support staff such as librarians, computer experts, technicians, and nurses, thereby reducing the incidence of these sectors in the professional sample and increasing the incidence in the non-professional sample.

In sum, participating professional employees had high levels of education and worked in jobs with high investigative and enterprising job demands (Holland, 1997) in a broad variety of industries. Therefore, it can be concluded that we sampled professional employees active in jobs with high cognitive and interpersonal task complexity (Wood, 1986). Additionally, we sampled a control group of non-professional employees, which we subsequently used as comparison group, thus increasing the distinctiveness of the study design.

## Measures

### Learning approach

To assess learning approach, we used the International Personality Item Pool (IPIP) equivalent of the HPI-Scale Learning Approach (Quickness; Goldberg, 1999). Two American professors of industrial and organizational psychology back translated the items in English and checked by comparing them with the original IPIP items. This translation-back translation procedure was performed with each item until full equivalence was reached (Hambleton, 2005). The scale comprises 10 items, which were developed to parallel the respective HPI facet. The convergent validity

between the original HPI learning approach scale and its IPIP equivalent is  $r = .81$  when corrected for scale unreliability. Items (<http://ipip.ori.org/ipip/newHPIKeys.htm>) are “I read quickly; I like to read; I have a rich vocabulary; I am quick to understand things; I catch on to things quickly; I can handle a lot of information” and “I read slowly; I skip difficult words while reading; I have a poor vocabulary; I don’t understand things,” the last four being reverse coded. The items are answered on a 5-point Likert-type scale from 1 (*very inaccurate*) to 5 (*very accurate*). In the sample of professionals, the Cronbach’s alpha internal consistency is  $\alpha = .79$ ; in the sample of non-professionals, it is  $\alpha = .80$ .

The HPI learning approach scale shows convergent validity with cognitive ability tests (*General Aptitude Test Battery*,  $r = .30$ ,  $p < .01$ ) as well as with other personality inventories. It correlates with the subscale Reasoning of the 16-PF ( $r = .38$ ,  $p < .01$ ), the subscale Intellectual Efficiency of the *California Personality Inventory* ( $r = .48$ ,  $p < .01$ ), and the subscale Complexity of the *Jackson Personality Inventory* ( $r = .30$ ,  $p < .01$ ; Hogan & Hogan, 2007). Learning approach also correlates with the dimension Investigative ( $r = .34$ ,  $p < .01$ ) of Holland’s (1997) occupational characteristics and job demands.

### Conscientiousness

We measured conscientiousness by using the German version (Borkenau & Ostendorf, 1993) of the *NEO-FFI* (Costa & McCrae, 1992). The 12 self-report items are answered on a 5-point Likert-type scale from 1 (*very inaccurate*) to 5 (*very accurate*). The Cronbach’s alpha internal consistency in the sample of professionals is  $\alpha = .78$ ; in the sample of non-professionals, it is  $\alpha = .76$ .

### Political skill

To assess participant’s political skill, we used the German version (Ferris, Blickle, et al., 2008; Ferris, Munyon, et al., 2008) of the *Political Skill Inventory (PSI)* (Ferris, Davidson, and Perrewé, 2005). The PSI comprises 18 items, [Q6](#) which are answered on a 7-point, Likert-type scale. In different studies, the PSI showed satisfactory psychometric properties (e.g., Blickle et al., 2008, 2011; Ferris, Blickle, et al., 2008; Ferris, Davidson, & Perrewé, 2005; Ferris, Munyon, et al., 2008; Ferris, Treadway, et al., 2005). Sample items are “I am particularly good at sensing the motivations and hidden agendas of others” and “I spend a lot of time and effort at work networking with others.” The Cronbach’s alpha internal consistency in the sample of professionals is  $\alpha = .91$ ; in the sample of non-professionals, it is  $\alpha = .90$ .

### Task performance

To assess task performance (TP) in job with high complexity, we selected a scale by Ferris, Witt, and Hochwarter (2001). The German version has been validated by Blickle et al. (2011). Because these items were designed for computer programmers, Blickle et al. (2011) had adapted the items to be slightly more general and thus more applicable for a broad range of jobs with high task complexity. For example, the item “This person finds resourceful and creative solutions to complex technical problems” was changed to “This person finds resourceful and creative solutions to complex problems.” Additional items were “This person proposes superior solutions to accomplish higher ranking objectives,” “This person applies the highest levels of skill in completing work requirement,” “This person constantly seeks professional growth-development through self-teaching,” and “This person produces quality work, even under stress caused by time pressure.” Supervisors rated their subordinates on the following scale: 1 (*weak*), 2 (*fair*), 3 (*satisfactory*), 4 (*well*), and 5 (*great*). In our study, the Cronbach’s alpha internal consistency in the sample of professionals is  $\alpha = .85$ ; in the sample of non-professional, it is  $\alpha = .84$ .

### Control variables

Because research has shown that gender (i.e., men might receive better performance ratings than women; Bowen, Swim, & Jacobs, 2000), age (i.e., younger professionals might get better performance ratings than older professionals; Waldman & Avolio, 1986), and job tenure (i.e., longer job tenure might associate with better performance ratings; Schuler, Funke, Moser, & Donat, 1995) can influence job performance ratings, we controlled for these variables in the data analysis. Additionally, we included the variable *time known by the supervisor* to control for halo

effect-related distortions in ratings (Ferris et al., 2001; Witt & Ferris, 2003) by asking the supervisors to indicate how long they had known their subordinates.

### Statistical analyses

Our dependent variable was the rating of task performance by supervisors. Because some supervisors rated several employees, the data structure was nested. Therefore, a hierarchical moderated regression analysis, with two data levels (i.e., random versus fixed effects level), was conducted (Snijders & Bosker, 1999). We built five models using full-maximum-likelihood functions (Cohen, Cohen, West, & Aiken, 2003). Age, gender, job tenure, time known by supervisor, learning approach, conscientiousness, political skill, and the interaction terms were entered sequentially as fixed parameters on the individual level. On the basis of the recommendations by Cohen et al. (2003), the learning approach, conscientiousness, and political skill variables were grand-mean-centered to avoid multicollinearity.

Model 1 tested the influence of the different supervisors on the dependent variable. Model 2 tested the effects of the control variables. Model 3 tested the incremental effects of learning approach, conscientiousness, and political skill. Model 4 tested the incremental effects of the two-way interactions between the grand-mean-centered variables learning approach, conscientiousness, and political skill. Model 5 tested the effect of the three-way interaction between conscientiousness, learning approach, and political skill. The interaction was graphically displayed according to Cohen et al. (2003) by using a tool provided by Preacher, Curran, and Bauer (2006). The hypothesis could be accepted if the  $\gamma$ -weight of the three-way interaction was significant and positive in Model 5, thereby adding incremental variance explained in the criterion. In the control group sample of non-professionals, we did not expect to find a significant three-way interaction between learning approach, conscientiousness, and political skill because of the different job context (i.e., lower job complexity).

## Results

Table 2 presents means, standard deviations, correlations, and internal consistency reliability estimates of the variables in the sample of professionals and non-professionals.

In the sample of professionals, learning approach was unrelated to task performance but associated with conscientiousness ( $r = .31, p < .01$ ) and political skill ( $r = .19, p < .01$ ). To assure that the predictor variables are distinct from each other, we conducted a confirmatory factor analysis (Jöreskog & Sörbom, 2002). We compared a one-factor model and a three-factor model. In the three-factor model, all items loaded significantly on their respective factors. The goodness of fit improved significantly from a one-factor model to a three-factor model ( $\Delta\chi^2 = -662.17, \Delta df = 3, p < .0001$ ). These findings strongly supported the uniqueness of the three predictor scales in the sample of professionals. In the sample of non-professionals, neither conscientiousness nor political skill associated with task performance; however, learning approach associated with task performance ( $r = .22, p < .05$ ).

Table 3 shows the results of the multilevel analyses of task performance in the sample of professionals. Model 1 revealed an ICC1 of 0.23, indicating that about 23 percent of the variance resided between supervisors. As can be seen in Model 4, the conscientiousness  $\times$  political skill interaction slightly failed to reach significance ( $\gamma = .24, p < .10$ ). In line with our hypothesis, the three-way interaction between learning approach, conscientiousness, and political skill entered in Model 5 showed a significant effect on task performance ratings ( $\gamma = .64, p < .05$ ). We computed pseudo- $R^2$ -values for each model by using the formula provided by Snijders and Bosker (1999). The three-way interaction explained 2 percent additional variance ( $\Delta R_x^2 = .02$ ) and 7 percent overall variance ( $R_x^2 = .07$ ) showing a better fit than the prior models (Model 2,  $R_x^2 = .01$ ; Model 3,  $R_x^2 = .02$ ; Model 4,  $R_x^2 = .04$ ).

Table 2. Means, standard deviations, and correlations of the study variables among professionals and non-professionals

	<i>N</i>	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1 Gender	196	1.65	0.48								
	96	1.44	0.50		.20*	.06	-.01	-.01	-.30**	-.21*	.02
2 Age	196	39.97	9.15	.10							
	96	39.05	11.42			.73**	.43**	-.14	-.12	-.06	-.09
3 Job tenure	196	7.20	6.68	.16*	.61**						
	96	7.83	8.54				.54**	-.14	-.08	-.10	-.07
4 Time known by supervisor	196	4.46	4.28	.03	.46**	.38**					
	96	4.75	4.89					-.22*	-.08	-.13	-.11
5 Conscientiousness	196	4.03	0.42	-.06	-.15*	-.11	-.05	(.78)			
	96	3.91	0.44					(.76)	.28**	.25*	.20 <sup>†</sup>
6 Learning approach	196	3.84	0.49	-.13 <sup>†</sup>	-.03	-.10	-.06	.31**	(.79)		
	96	3.89	0.54						(.80)	.27**	.22*
7 Political skill	196	5.02	0.72	.04	.13 <sup>†</sup>	.05	.05	.27**	.19**	(.91)	
	96	5.04	0.70							(.90)	.10
8 Task performance	196	3.83	0.63	.02	-.08	-.06	.04	.04	.07	.02	(.85)
	96	3.88	0.61								(.84)

Note: Correlations in the group of professionals under the diagonal ( $N=196$ ), and correlations in the group of non-professionals ( $N=96$ ) above the diagonal; Cronbach's alpha reliabilities in the diagonal; gender: 1=female, 2=male; job tenure and time known by supervisor in years. \* $p < .05$ ; \*\* $p < .01$ .

The form of the three-way interaction was illustrated according to the procedure proposed by Cohen et al. (2003). Therefore, we plotted the conscientiousness learning  $\times$  approach interaction at different values of political skill. As recommended by Cohen et al. (2003), we chose values of predictor and moderators at one standard deviation above mean and at one standard deviation below mean. Figure 1 presents the conscientiousness  $\times$  learning approach interaction at both high and low values of political skill (i.e., 1 *SD* above mean, 1 *SD* below mean). **F1**

As expected, increases in conscientiousness at high levels of learning approach and political skill lead to significantly higher ratings of task performance, as indicated by the significant simple slope ( $\beta = .39, p < .05$ ). By contrast, at low levels of learning approach and high levels of political skill, increases in conscientiousness were not associated with changes in task performance ratings ( $\beta = -.17, ns$ ). Again as expected, at low levels of political skill and low learning approach, increases in conscientiousness were not associated with changes in ratings of task performance ( $\beta = .02, ns$ ).

Regarding the sample of the non-professionals, contrary to the zero-order correlations, learning approach did not predict task performance when entered into the regression together with the control variables, conscientiousness, and political skill. We should not expect to find a significant three-way interaction between learning approach, conscientiousness, and political skill in the control group because of the lower task complexity in this group than in the group of the professionals. As expected, we did not find a significant three-way interaction in the group of non-professionals. In fact, the three-way interaction did not even approach significance ( $\beta = .12, p < .34$ ).

Overall, the expected significant and positive three-way interaction in the group of professionals and the nonsignificant three-way interaction in the group of non-professionals (control group) strongly supported our research hypothesis.

## Discussion

### *Contributions of the research*

We tested the hypothesis that employees high on conscientiousness, political skill, and learning approach will be perceived as more effective in jobs with complex task demands, and our results supported our hypothesis. Task



Table 3. Fixed effects estimates (top) and variance-estimates (bottom) for models of the predictors of task performance (supervisor) in the group of professionals

Parameter	Task performance				
	Model 1	Model 2	Model 3	Model 4	Model 5
Fixed effects					
	$\gamma$ (SE)	$\gamma$ (SE)	$\gamma$ (SE)	$\gamma$ (SE)	$\gamma$ (SE)
Intercept	3.82** (0.05)	4.01** (0.27)	4.01** (0.27)	3.98** (0.27)	3.93** (0.27)
Age		-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)
Gender		0.04 (0.09)	0.05 (0.10)	0.05 (0.10)	0.08 (0.10)
Job Tenure		0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Time known by supervisor		0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Conscientiousness (C)			-0.01 (0.12)	0.04 (0.12)	-0.02 (0.12)
Learning approach (LA)			0.10 (0.10)	0.08 (0.10)	0.00 (0.11)
Political skill (PSI)			0.02 (0.07)	0.03 (0.07)	0.00 (0.07)
C × LA				0.05 (0.22)	0.12 (0.22)
C × PSI				0.24 <sup>†</sup> (0.14)	0.18 (0.14)
LA × PSI				0.02 (0.15)	0.08 (0.15)
C × LA × PSI					0.64* (0.30)
Random parameters					
Level 2					
Intercept/intercept	0.09 <sup>†</sup> (0.05)	0.09 <sup>†</sup> (0.05)	0.09 <sup>†</sup> (0.05)	0.07 (0.05)	0.06 (0.05)
Level 1					
Intercept intercept	0.31** (0.05)	0.30** (0.05)	0.30** (0.05)	0.31** (0.06)	0.31** (0.06)
-2 * log likelihood	371.59	369.07	367.86	363.93	359.47
$\Delta R^2_x$		.01	.01	.02	.02
$R^2_x$		.01	.02	.04	.07

Note:  $N = 196$ . Gender: 1 = female, 2 = male; job tenure and time known by supervisor in years. Standard errors are in parentheses. C, LA, and PSI were grand-mean-centered.

<sup>†</sup> $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ .

performance in complex jobs strongly rose when high conscientiousness was combined with high learning approach and high political skill. Under these conditions, the regression slope of task performance on conscientiousness was at  $\beta = .39$  ( $p < .05$ ). This finding strongly supports the important role of context in organizational behavior (Johns, 2006) and, in particular, personality (Tett & Burnett, 2003), demonstrating the importance of the presence of all three of these constructs (i.e., conscientiousness, learning approach, and political skill) in order for employees to succeed in complex jobs.

The nonsignificance of the other slopes of our three-way interaction also supports our contention that conscientiousness alone is insufficient to increasing task performance in complex jobs. In such occupations, a configural approach to personality and social skills (e.g., political skill) might be especially helpful (Penney et al., 2011). Job performance appears to benefit from the utilization of a range of individual resources to meet the high demands of decision-making, problem-solving, creative thinking, and individual autonomy that are present in complex occupations (Meyer et al., 2009).

### Theoretical and practical implications

The results of our study indicate three primary theoretical implications. First, our research supports the notion that context is important to performance prediction. We sampled employees with a high educational level working in

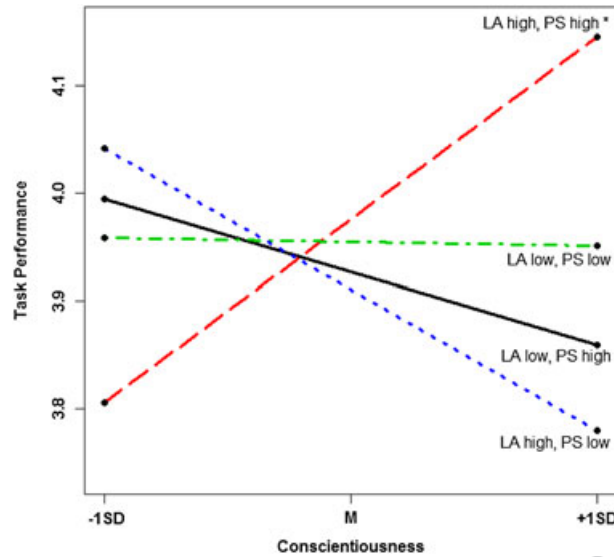


Figure 1. Regression of task performance ratings by supervisor on conscientiousness as moderated by learning approach and political skill

jobs with complex task demands and chose a task performance scale specifically developed for jobs with high task complexity. As context influences the strength and direction of relationships between individual differences and performance (Johns, 2006; Meyer et al., 2009; Rousseau & Fried, 2001), we chose predictors that we believed would be especially relevant within the context of a complex job. Further, our results demonstrated that a construct (i.e., learning approach) that could be considered akin to a narrower facet of one labeled a “contingent predictor” (i.e., openness to experience, Barrick et al., 2005, p. 748) joined conscientiousness in that interactive relationship, suggesting that the contingency of its significance, at least in part, also rests on the job context. Thus, our findings join those of other studies demonstrating the importance of the context of organizational behavior research when aligning predictors and criteria.

Second, our findings provide additional evidence that personality scholars should consider the relevance of the predictor to the criterion (Hogan et al., 1996), the bandwidth of the constructs in use (Murphy & Dziewieczynski, 2005; Paunonen et al., 1999), and the context of their research when seeking the *activation* of personality (Tett & Burnett, 2003). Our predictors and criterion were chosen because of their particular relevance to one another. Further, we chose to combine the broad factor of conscientiousness, which has shown to be the strongest predictor of performance across a variety of occupations and criteria (Barrick et al., 2001), with the narrow and potentially conditional predictor of learning approach in an interactive relationship. Thus, although our study reinforces the preeminent role of conscientiousness in prediction of task performance, a more unique finding is the criterion validity of the openness factor obtained by both narrowing the construct (i.e., learning approach) and placing it in a particular context (i.e., complex job and with moderators) where it could be activated. However, in the present study, our personality interaction (i.e., conscientiousness and learning approach) was nonsignificant, suggesting that although it seems helpful to consider the interaction of personality traits on performance, it might be not sufficient for performance prediction in all contexts.

Thus, the final theoretical implication is that the relationship between personality and performance can benefit from the inclusion of the application of personality to successful behavior (i.e., social skill). Social skill facilitates the transformation of intentions to actions perceived by others (Hogan & Shelton, 1998), and a number of studies

have demonstrated that political skill is relevant to performance. However, the strength of its relationship might depend on contextual cues (Hochwarter et al., 2006) or the occupation (Bing et al., 2011). Our results suggest both that political skill helps to convert personality into action and also that the context of political skill is relevant to its validity.

From a practical perspective, as noted by Dierdorff, Rubin, and Morgeson (2009), contemporary managers likely face greater complexity, increased boundary-spanning activities, and a higher amount of information to manage than professionals of the past. These conditions likely make intellectual curiosity and efficiency, political skill, and conscientiousness of great importance, and our results suggest that such is the case. Organizations should seek to not only hire individuals with these desirable traits but also recognize that the cultivation of certain skills (e.g., political skill) can occur during an individual's organizational tenure (Ferris, Davidson, and Perrewé, 2005). In addition, individuals also can seek work situations that are most conducive to the beneficial expression of their traits and skills, allowing them to take full advantage of the situational resources at their disposal.

Contrary to caveats by Morgeson et al. (2007) of the utility of self-ratings of personality in selection, the present research shows that self-ratings of traits can have acceptable validity, without extensive corrections, if used in combination with a second trait and a valid measure of social skill in the workplace. However, although across many studies personality and social skill have been demonstrated to be related to job performance, the present study and other similar studies have left a large amount of the variance in task performance unexplained (i.e., 93 percent of the variance is unaccounted for in the present study), and there is variation in personality's relationship with performance across studies (Barrick et al., 2001). Consequently, when a more complete explanation of variation in performance is particularly helpful (e.g., making administrative or developmental decisions), organizations also should consider other, widely supported methods of performance prediction, such as general mental ability (GMA) tests (Schmidt, 2012) or assessment centers (Meriac, Hoffman, Woehr, & Fleisher, 2008).

### *Strengths and limitations*

One strength of our study is its testing of several theories and perspectives in one model. Behavior within organizations is multifaceted, and thus, a single theoretical explanation of such behavior is likely underappreciating this inherent complexity in the workplace (Johns, 2006). Additionally, job stress has been shown to vary by occupation (Xie & Johns, 1995), with professional and managerial stress emanating from job complexity (i.e., overstimulation and elevated responsibility; Johns, 2006). Consequently, our selection of complex jobs likely taps into the jobs that reflect professionally challenging positions. Also, we collected data from both supervisors and employees, minimizing common method bias concerns (Podsakoff, Mackenzie, & Podsakoff, 2012). The sample was fairly large for dyadic research and directly tapped the focal groups of interest, namely employees with high educational level working in complex jobs. Moreover, our control group of non-professional employees working in jobs with less complex tasks did not find the hypothesized relationships to be significant. In addition, data were analyzed with advanced analytical strategies (i.e., multilevel analysis), thereby providing greater statistical power (Cohen, 1992). Finally, our control variables (i.e., gender, age, years of job tenure, and time supervisors have known employees) excluded alternative explanations of findings.

Concerning our limitations, GMA has been shown across many studies to be a strong predictor of job performance (Schmidt, 2012), and because we did not measure GMA in our research, we cannot completely exclude the possibility that it had an unmeasured influence in our study. Another limitation of the present research is the cross-sectional design of the study, which does not allow a clear temporal ordering of the causal variables. Also, the supervisor–employee dyads were from different organizations, and thus, unknown organizational contextual variables (e.g., organizational culture) could not be held constant. On the other hand, sampling supervisor–employee dyads from a broad range of organizations ensures a high degree of variability in the study variables, rendering high power to the statistical analyses, and as noted by Barrick et al. (2005) concerning self-monitoring, having a sample that included a range of occupations prevents our social skill measure (i.e., political skill) from being range restricted

because of the social demands of one organization and/or one job. However, the sample size of our control group was not as large as the professional sample, potentially limiting statistical power. Last, one limitation of our research is that our use of subjective evaluations of performance (i.e., supervisor ratings) precludes generalization of our findings to objective task performance outcomes. The relationship of our predictors with objective performance criteria could be addressed in future studies.

### *Directions for future research*

Some previous research has focused on the relationships between personality traits, political skill, and individual reputation (e.g., Liu et al., 2007). A positive reputation at work results in broader decision latitude and more power deferred to that employee (Zinko, Ferris, Blass, & Laird, 2007). In the long-term, all three (i.e., a positive and strong reputation, increased decision latitude, and augmented power) should result in enhanced job performance ratings (Hogan & Blickle, ). We suggest that future research consider the long-term outcomes for employees that possess the constellation of traits (i.e., highly eager to learn, highly conscientious, and highly socially skilled), which lead to distal outcomes of enhanced reputation, job autonomy, and increased power.

As noted earlier, our study was unable to control for organizational context, and it did not measure the effect of other omnibus (e.g., time) and discrete (e.g., physical) aspects of the context (Johns, 2006). Thus, in line with the conceptualization of trait activation (Tett & Christiansen, 2007), future research could examine how the influence of personality and political skill on performance are influenced by other aspects of the task, social, and organizational contexts. Examining such facets of the context concurrently might provide an even greater contribution to organizational research. Additionally, given a different context, future research should consider which personality traits and social skills are most beneficial to that situation.

### *Conclusion*

The goal of the present research was to improve job performance predictability on the basis of a sound theoretical foundation of context, personality activation, and social skill utilization. As theorized, cross-sectional task performance predictability in complex jobs by the personality trait of conscientiousness strongly rose when combined with both high learning approach and high political skill in a three-way interaction. We encourage future research to attend to the context of organizational behavior, especially when it pertains to constructs (e.g., openness to experience) that heretofore have been underappreciated regarding their effects on important workplace outcomes (e.g., job performance).

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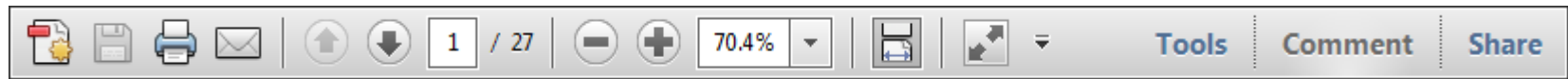
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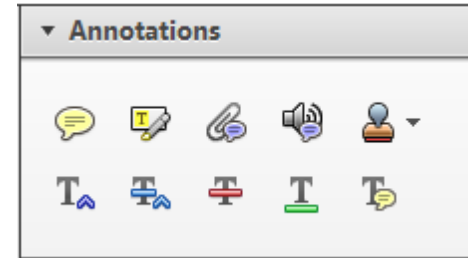
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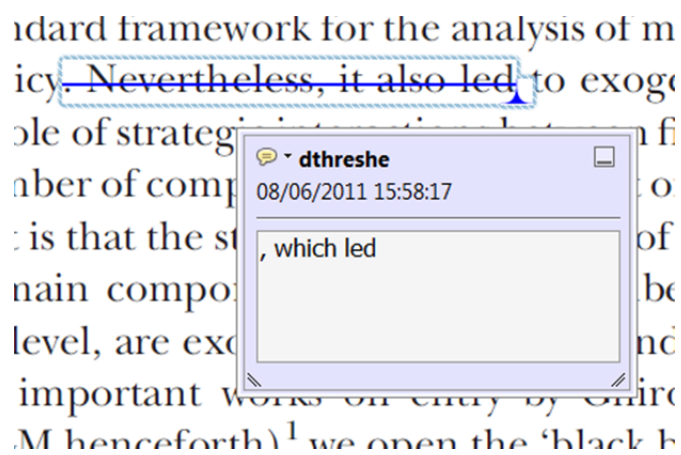
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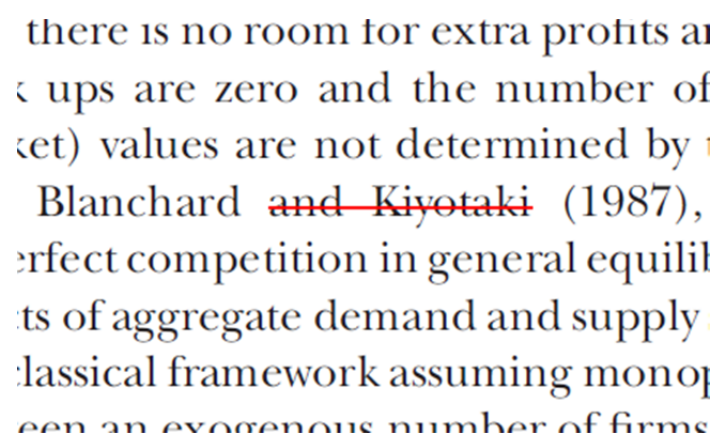
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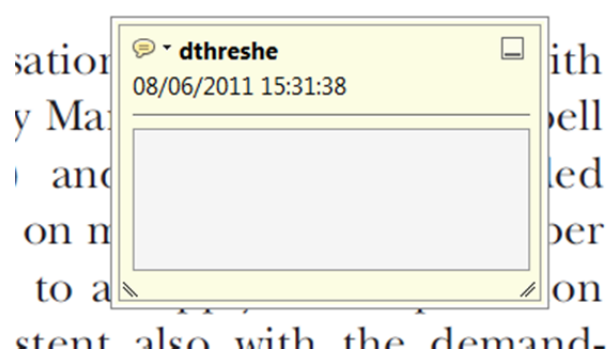


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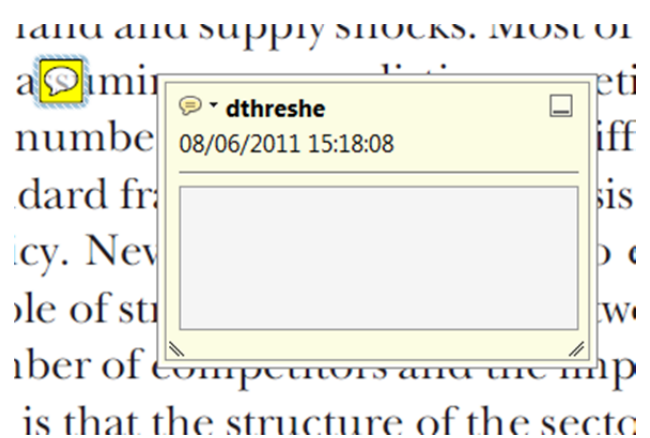
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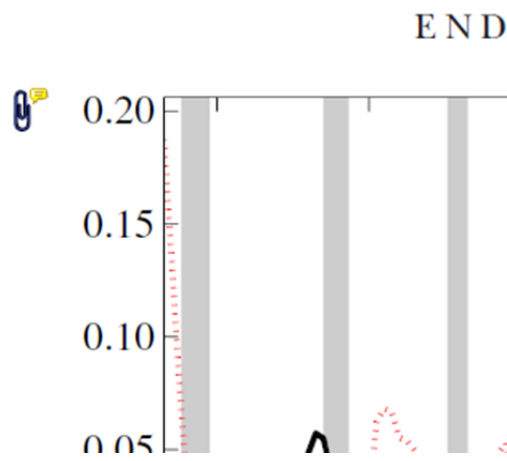
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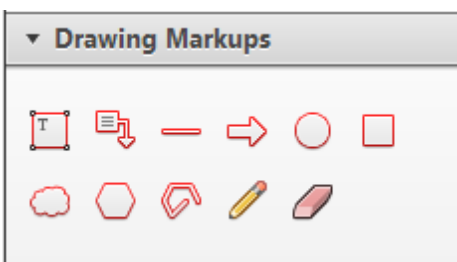


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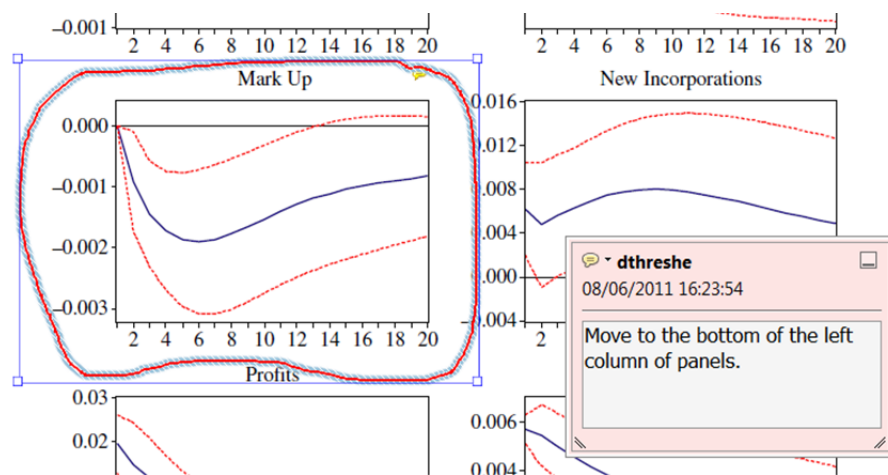


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