Chapter 6
Contextual and Trait Specificity in Personality Measurement: Improving the Prediction of Work Criteria
Abstract

Contextual and Trait Specificity in Personality Measurement: Improving the Prediction of Work Criteria*

The purpose of the present study was to improve the prediction of work criteria by personality measurements. We investigated (1) contextual specificity by adding a situational context to non-contextualized personality items and (2) trait specificity by comparing the predictive strength of narrow traits with those of the traditional broad traits. Relations of Conscientiousness and Integrity with job performance, OCB, and CWB were explored. Results indicate that the predictive validity of personality improves when a relevant context is added to the personality items and increases even more when the focus is on the narrow traits. In order to improve the prediction of important work criteria, the present study accentuates the importance of combining contextual specificity with trait specificity in personality measurements.

* This chapter is submitted for publication as:
The study in this chapter was also presented at the 15th conference of the European Association of Work and Organizational Psychology, Maastricht, The Netherlands, May 2011.
Employees show all kinds of productive and less productive behaviors at work. Three of these behaviors have been widely studied in personnel psychology: (1) overall job performance, (2) organizational citizenship behavior (OCB), such as helping a coworker with personal issues, and (3) counterproductive work behavior (CWB), such as neglecting to follow work instructions (Rotundo & Sackett, 2002; Viswesvaran & Ones, 2000). Numerous previous studies have demonstrated that personality can contribute to the prediction of these three work criteria. However, the use of personality tests has led to questions concerning characteristics that may positively or negatively influence the predictive validity of such instruments. One characteristic that may positively influence the predictive validity is the specificity of a personality measurement. Some scholars relate specificity to contextual specificity, i.e., specificity of the situational context to which test takers refer when filling out the personality inventory, such as the home, school or work context (e.g., Lievens, De Corte, & Schollaert, 2008). Other scholars imply another type of specificity, namely trait specificity, i.e., using narrow traits rather than the traditional broad personality traits (e.g., Paunonen & Ashton, 2001a). In order to examine the relevance of both approaches, the present study investigates the nature of contextual and trait specificity, as well as their effects on the prediction of important work outcomes (i.e., job performance, OCB, and CWB).

**Contextual and trait specificity**

It has been argued that the predictive strength of personality may be improved when people are given a specific context, a so-called frame-of-reference, when completing a personality inventory. The notion of a frame-of-reference effect is grounded in the theory of conditional dispositions (Wright & Mischel, 1987), which claims that “individuals may behave consistently and predictably within similar situations, but do not necessarily behave consistently across different situations” (Bing, Whanger, Davison, & VanHook, 2004, p. 150-151). In a traditional, non-contextualized personality inventory, a respondent may think of a work situation when responding to one item and of a home situation when responding to the next item. Since people do not necessarily behave similarly across situations, such different interpretations may result in within-person inconsistency when giving answers to personality items (Lievens et al., 2008). In support of this notion, Lievens et al. (2008) showed that providing a context helped respondents to be more consistent when filling out a personality test, thus reducing within-person inconsistency and resulting in higher reliabilities and predictive validities.

Various studies prior to Lievens et al. (2008) experimented with the use of more contextualization in items. Schmit, Ryan, Stierwalt, and Powell (1995) for instance added a specific context to each personality item. For example, the item “I strive for excellence in everything I do” was changed into “I strive for excellence in everything I do at school”. Such contextual specificity led to less measurement error (cf., Holtz, Ployhart, & Dominguez, 2005; Robie, Schmit, Ryan, & Zickar, 2000) and improved predictive validities.
Moreover, subsequent research found that contextualized personality scales directly affected the predictive validity for performance criteria over and above the effects of cognitive ability and non-contextualized personality scales (Bing et al., 2004; Hunthausen, Truxillo, Bauer, & Hammer, 2003). It was argued that the use of context led to higher reliabilities and predictive validities as a result of a reduction in *between-person variability*. Without a frame-of-reference, different test participants will complete the same scale from different perspectives. One respondent, for instance, may think of a home situation whereas another will have a work situation in mind. Hence, adding a frame-of-reference to personality items helps to avoid irrelevant score differences between respondents.

Lievens et al.’s (2008) study made an important contribution to this traditional explanation that inserting a context to personality items reduces between-person variability. They argued that increased predictive validity results not only from the answers *between* individuals being more consistent with each other, but also - as mentioned above - from the fact that each individual is more likely to answer the personality items consistently *within* him or herself. Additionally, Lievens et al. showed that using a frame-of-reference which is conceptually irrelevant to the criterion resulted in lower predictive validities. Thus the specific context added to the personality items is only useful when it is conceptually relevant to the criterion.

The predictive validity of personality measurement may be improved not only by adding a relevant context to each personality item, but also by focusing on more specific, so-called narrow personality traits. This issue refers to a debate commonly known as the bandwidth-fidelity dilemma (Cronbach & Gleser, 1965), which involves the relative predictive power of broad versus narrow personality traits. According to broad bandwidth proponents, broad traits, such as the Big Five personality domains, are better able to capture variance associated with multidimensional criteria, such as overall job performance (Ones & Viswesvaran, 1996). In contrast, narrow bandwidth proponents argue that narrow traits in combination, such as the facets of the Big Five dimensions, are likely to outperform broad bandwidth traits in the prediction of important broad criteria (Ashton, 1998; Paunonen & Ashton, 2001a; Paunonen, Rothstein, & Jackson, 1999; Schneider, Hough, & Dunnette, 1996). The rationale behind this is that broad traits with a high bandwidth may offer lower fidelity, whereas narrow traits with a low bandwidth may offer high fidelity and may therefore have more explanatory power. Especially when one specific narrow trait is positively related to a criterion while another narrow trait, belonging to the same broad trait, is negatively related or unrelated the criterion, the broad trait will have a lower level of predictive validity than the narrow traits combined. Evidence so far seems to support the position of narrow bandwidth proponents. Several studies have shown that narrow traits belonging to the same broad trait revealed different correlations with several criteria, which indicates that important, meaningful relations
Personality in relation to work criteria
Several studies have demonstrated that personality can play an important role in the prediction of work criteria. In the area of job performance, the meta-analysis by Barrick and Mount (1991) revealed that of the Big Five personality dimensions, Conscientiousness was positively and consistently related to all performance criteria for all occupational groups. Other personality dimensions sometimes showed significant relations, depending on the specific performance criterion and occupation. These results are in line with those of other meta-analytic studies (e.g., Hurtz & Donovan, 2000; Salgado, 1997). At the same time, it has been found that Integrity is a positive predictor of job performance as well (Ones, Viswesvaran, & Schmidt, 1993); it was even able to explain more variance in job performance than did Conscientiousness (Schmidt & Hunter, 1998), although the tests used in those studies were mostly overt integrity tests. Such overt integrity measurements are distinguished from personality-oriented tests in that they directly measure attitudes relating to dishonest behavior (e.g., Berry, Sackett, & Wiemann, 2007). In recent years, however, the development of a separate personality dimension for Integrity has been an important topic of research. This dimension has been labeled Honesty-Humility and forms the additional sixth dimension of the HEXACO personality model. It epitomizes individual differences in tendencies to be honest, genuine, and modest as opposed to insincere, greedy, and arrogant (Ashton & Lee, 2007; Ashton et al., 2004; Lee & Ashton, 2008).

Studies have found that overt Integrity and Honesty-Humility are comparable constructs (Lee, Ashton, & De Vries, 2005; Marcus, Lee, & Ashton, 2007). Therefore, in the present study, it may be expected that the personality traits of Conscientiousness and Integrity are positive predictors of job performance (note that the terms Honesty-Humility and Integrity will be used interchangeably from this point onwards).

Whereas job performance refers to obligatory behavior related to the job’s requirements (Campbell, 1990), OCB refers to behavior that, while not part of an employees’ formal job description, is nevertheless beneficial to the organization (Organ, 1988). Coleman and Borman (2000) examined the entire OCB domain and concluded that OCB consists of three basic elements: (1) interpersonal support, for instance helping colleagues without being asked, (2) organizational support, for example supporting the organization’s mission, and (3) job-task conscientiousness, which refers to effort and persistence. Studies involving meta-analytic research frequently display results concerning the relations between personality and OCB. Not surprisingly, among the Big Five traits, especially Conscientiousness has been shown to be important for OCB (e.g., Borman, Penner, Allen, & Motowidlo, 2001; Ilies, Fulmer, Spitzmuller, & Johnson, 2009; Lapierre & Hackett, 2007; Organ & Ryan, 1995; Podsakoff, MacKenzie, Paine, & Bachrach, 2000). To our knowledge, the relation between the Honesty-Humility/Integrity dimension and OCB
has not been investigated previously. Yet integer employees are honest, sincere, and not arrogant, and such traits may be important for showing behaviors that are not obligatory but nevertheless have a positive influence on the effectiveness and efficiency of work teams and organizations. Therefore, the current study expects positive relations between OCB and both Conscientiousness and Integrity.

The final work criterion we will focus on, CWB, refers to intentional or unintentional actions which harm an organization or members of an organization (Spector, 1997; Sackett & DeVore, 2001) and which may violate significant organizational norms (Robinson & Bennett, 1995). CWB includes behaviors such as absenteeism, alcohol abuse, theft, aggression against coworkers, poor-quality work, and vandalism. These forms of counterproductive behavior may lead to ineffective job performance, job turnover, and accidents, and cost organizations billions each year (Bennett & Robinson, 2000). Previous studies have reported negative relations between Conscientiousness and deviant behaviors at work such as employee absence (Conte & Jacobs, 2003) and alcohol consumption (Hong, Paunonen, & Slade, 2008; Paunonen, 2003). Moreover, distinct from the other Big Five dimensions, Conscientiousness has been found to be the best (negative) predictor of overall counterproductive work behavior (Fallon, Avis, Kudisch, Gornet, & Frost, 2000; Salgado, 2002). Besides Conscientiousness, Honesty-Humility as the additional sixth personality dimension has also been shown to be important in the prediction of counterproductive behaviors in work settings (Ashton & Lee, 2008; Lee, Ashton, & De Vries, 2005; Lee, Ashton, & Shin, 2005). Therefore, in line with the aforementioned findings, we expect negative relations between CWB and both Conscientiousness and Integrity.

Specificity, personality, and work criteria
With respect to contextual specificity, research on the frame-of-reference effect emphasizes the positive effects of providing a specific context in a personality test. In an educational setting, Bing et al. (2004) showed that adding the tag “at school” to Conscientiousness items increased the prediction of grade point average (GPA). Lievens et al. (2008) produced similar results, but also found that Conscientiousness items with an irrelevant “at work” tag displayed lower predictive validities in the prediction of GPA. In the area of work criteria, as far as we know Hunthausen et al. (2003) and Pace and Brannick (2010) are the only studies examining the frame-of-reference effect in predicting ratings of job performance. However, Hunthausen et al. only used instruction-level manipulations, i.e., respondents received instructions to complete the personality scales with a specific frame-of-reference in mind. Using only instruction manipulations has been found to produce less positive effects than adding context tags after each item (Davison & Bing, 2009). Pace and Brannick in turn only investigated the relation between Openness to Experience and creative performance. Recently, Heller, Ferris, Brown, and Watson (2009) showed that a more contextualized work-role-based measure of personality work
personality was a better predictor of job satisfaction than both global and other-role (i.e., home) measured personality.

Nevertheless, studies examining the frame-of-reference effect in work settings are few and far between. In line with the increasing awareness of the importance of contextual specificity in personality measures, the present study will therefore attempt to improve the prediction of three important work criteria: job performance, OCB, and CWB. In addition to the acknowledged personality predictor Conscientiousness, we will also focus on the personality dimension of Integrity. We expect that work-specific Conscientiousness and Integrity scales have stronger relations with job performance, OCB, and CWB than non-contextualized and (conceptually irrelevant) home-specific Conscientiousness and Integrity scales (Hypothesis 1a). Further, as Lievens et al. (2008) showed that the use of an incorrect frame-of-reference decreased validity, we hypothesize that home-specific Conscientiousness and Integrity scales have weaker relations with job performance, OCB, and CWB than their corresponding non-contextualized personality scales (Hypothesis 1b).

In contrast to most earlier studies, the present study investigates not only the effects of contextual specificity but also those of trait specificity. With respect to this latter type of specificity, the results of studies investigating the predictive validity of the narrow facets are encouraging: Facet-level traits have been found to offer higher predictive validities of important work outcomes than factor-level traits (e.g., Denis, Morin, & Guindon, 2010; Dudley, Orvis, Lebiecki, & Cortina, 2006). With regard to Conscientiousness for instance, the narrow traits of achievement, dependability, order, and cautiousness showed improved validity over overall Conscientiousness for job performance (Dudley et al., 2006). To our knowledge, only one previous study has explicitly examined narrow facets of the personality trait Integrity in relation to job performance. Van Iddekinge, Taylor, and Eidson (2005) found that a summation of facet scores to obtain a broad trait of Integrity masked important relations between Integrity and performance. Interestingly, the two facets showing the highest predictive validity were (a) general dishonesty norms (beliefs about the frequency with which people engage in general dishonest behaviors) and (b) honesty image (the perception of one’s own integrity). Taken together, these facets had a multiple correlation three times higher than the validity coefficient of the broad scale itself. Although we are unacquainted with any similar publications in the domain of OCB, with respect to the area of counterproductive behaviors, De Vries, De Vries, and Born (2011) found that narrow traits of diligence, need for rules and certainty, and fairness were the Conscientiousness and Integrity facets most strongly associated with such counterproductive behavior. Furthermore, De Vries et al. concluded that the narrow traits of Conscientiousness and Integrity were more strongly related to important criteria than the broad traits themselves.

Based on the studies reported above, we argue that the predictive validity of Conscientiousness and Integrity improves by adding a relevant context to each personality
item as well as by focusing on their narrow personality traits. Therefore we predict that work-specific scales of the narrow traits of Conscientiousness and Integrity have stronger relations with job performance, OCB, and CWB than work-specific scales of the broad traits Conscientiousness and Integrity (Hypothesis 2). In this study, we will test these hypotheses using same-source data. Although some scholars may argue that the use of same-source criteria may prevent generalization to different-source (e.g., supervisor) criteria, the main aim of this study was not to test whether predictor–criterion relations are present, as many studies have done before, but whether there are differences in the validity of personality predictors, depending on the specific frame-of-reference used. That is, if there are no differences in validity when using same-source criteria, differences in validity are probably even less likely to occur when using different-source criteria. As such, confirming the hypotheses may be considered a ‘sine qua non’ of finding similar effects in different-source data.

Method

Participants and procedure

We collected data during the first months of 2010, recruiting participants through the Internet by posting advertisements on websites such as LinkedIn. Requirements for participation were (1) presently being employed and (2) having at least one year of work experience. Respondents who agreed to cooperate were provided with a link to access a questionnaire consisting of several personality scales. After one week, participants received a link to a second questionnaire, measuring background variables and self-reported job performance, OCB, and CWB. As a reward for participation, four gift coupons were raffled. 289 employees filled out all questionnaires ($M_{age} = 37.9, SD = 14.1, 77.9\%$ female). Participants reported the following educational degrees: 0.7\% junior high school, 6.6\% high school, 1.4\% lower-level occupational training, 19.7\% middle-level occupational training, 34.6\% higher-level occupational training, and 37.0\% university degree. Respondents worked in a variety of work sectors, such as the health and social sector, the educational sector, and the business services sector. The average number of working hours per week was $29.9 (SD = 12.9)$.

Design

In line with previous studies (Bing et al., 2004; Lievens et al., 2008), the present study employed a within-subject design. All participants completed 168 personality items: 56 non-contextualized items, 56 work-specific items, and 56 home-specific items. With regard to the non-contextualized items, participants received the standard instructions and were asked to indicate the extent to which each statement applied to them. Also in line with earlier studies (e.g., Bing et al., 2004; Lievens et al., 2008; Robie et al., 2000; Schmit et al., 1995), the work-specific personality scales were designed by adding the tag “at work” to each item. For example, the item “I keep things tidy” was altered to “I keep
things tidy at work”. After adding such context tags, all items still made sense, so it was not necessary to rewrite them. The home-specific personality scales were designed in the exact same way as the work-specific scales. To prevent order effects, respondents were randomly assigned to two different versions of the questionnaire. Both versions started with the non-contextualized items. However, in the first version the items with the “at work” tag were offered after the non-contextualized items and were then followed by the items with the “at home” tag. In the second version, the order of the contextualized question sets was reversed. Paired-sample t-tests indicated that the different order of the question sets did not result in personality score differences (results can be obtained from the first author). Therefore, we merged the two versions for all subsequent analyses.

**Measures**

**Personality.** In line with several previous studies (e.g., Lievens et al., 2008; Robie et al., 2000), we limited the length of the personality inventory and only measured the personality scales relevant to our hypotheses. To this end, a combination of the Conscientiousness and Integrity scales of the Multicultural Personality Test - Big Six (MPT-BS; NOA, 2009) was used. The MPT-BS measures six personality scales based on the six main lexical personality dimensions (Ashton & Lee, 2007; Lee & Ashton, 2008), namely Emotional Stability, Conscientiousness, Extraversion, Agreeableness, Openness, and Integrity. The MPT-BS Conscientiousness scale consists of 32 short self-descriptive statements distributed over the following four facets: Need for Rules and Certainty, Orderliness, Perseverance, and Achievement Motivation. The Integrity scale consists of 24 items and contains the following three facets: Honesty, Sincerity, and Greed Avoidance. Participants completed the MPT-BS in the Dutch language. Responses were assessed with a Likert scale from 1 (disagree strongly) to 5 (agree strongly). Previous research by De Vries et al. (2011) has shown adequate alpha reliabilities for the MPT-BS scales Conscientiousness (α = .90) and Integrity (α = .81). To ascertain the construct validity of both scales, the MPT-BS was validated with the NEO Personality Inventory - Revised (NEO-PI-R; Costa & McCrae, 1992) and the HEXACO Personality Inventory (HEXACO-PI and HEXACO-PI-R; De Vries, Ashton, & Lee, 2009; Lee & Ashton, 2004, 2006). The construct validity of the MPT-BS Conscientiousness scale with the corresponding scales of the NEO-PI-R and the HEXACO-PI was .79 and .85 respectively. The construct validity of the MPT-BS Integrity scale with the corresponding Honesty-Humility scale of the HEXACO-PI was .61.

**Job performance.** Self-reported job performance was measured by means of three questions, partly based on the items used by Van Scotter and Motowidlo (1996). First, employees were asked to report on a 5-point scale how supervisors had judged their job performance over the last 12 months. In other words, they had to report whether, according to their supervisors, their performance had exceeded, met, or failed to meet standards for job performance. Second, employees had to rate their job performance
themselves on a scale from 1 to 10. Third, employees were asked to rate on a 5-point scale whether they operated at a low, average, or high performance level in comparison to colleagues in the same function. In this study, the alpha reliability of these three items was .70.

**OCB.** Based on the structure of the OCB domain examined by Coleman and Borman (2000), a combination of three scales was used in order to measure OCB. The first scale (seven items) measured self-reported interpersonal facilitation, meaning helpful, considerate, and cooperative acts. An example item is: “I help someone without being asked”. The second scale (eight items) assessed self-reported job dedication, which refers to effort, persistence, and self-discipline. An example item is: “I work harder than necessary”. Both scales were adapted from Van Scotter and Motowidlo (1996). The third scale (six items) measured self-reported organizational support, meaning favorably representing the organization by defending and promoting it, as well as supporting the organization's mission and objectives (Borman, Buck, et al., 2001). An example item is: “I support the organization’s mission and objectives”. With regard to the various aspects of OCB measured by the three scales, a recent meta-analysis concluded that "current operationalizations of OCB are best viewed as indicators of a general OCB factor. As such, there is likely little to be gained through the use of separate dimensional measures as opposed to an overall composite measure" (Hoffman, Blair, Meriac, & Woehr, 2007, p. 562). Therefore, based on this conclusion and that of LePine, Erez, and Johnson (2002), suggesting that the dimensions of OCB have identical relations with predictors, the current study considered OCB as one construct. All original items were in English. For the purpose of this study, items were translated in Dutch and back translated by two of the authors. Any disagreement on the final form of the items was resolved through discussion. In order to use all items together, the original instructions and answer scales were modified. We asked respondents to consider the behavior described in the item and indicate how frequently they had shown this behavior at work in the last 12 months. The items were answered on a Likert scale from 1 (never) to 5 (always). In this study, the alpha reliability of the 21 OCB items was .90 and the intercorrelation between OCB and job performance was .56 (p < .01).

**CWB.** In order to measure CWB, we combined 19 items from the Interpersonal and Organizational Deviance Scale (Bennett & Robinson, 2000) with eight items from the Workplace Behavior Questionnaire (see Ashton, 1998). The Interpersonal and Organizational Deviance Scale consists of two scales: seven items measuring self-reported deviant behaviors directly harmful to other individuals within the organization (interpersonal deviance) and 12 items measuring self-reported deviant behaviors directly harmful to the organization (organizational deviance). Examples of items are: “I made fun of someone at work” and “I took property from work without permission”. The Workplace
Behavior Questionnaire measures workplace delinquency, behavior like unnecessary absenteeism, vandalism, and alcohol use. An example item is: “I consumed alcohol or have been at least somewhat under the influence of alcohol during work shift”. In order to strengthen the representation of all kinds of counterproductive behaviors at the workplace, we combined the two questionnaires. The translation of the original English items into Dutch, and the modification of the instruction and answer scales were conducted in the same way as with the OCB items. Respondents were asked to indicate how frequently they had displayed the behavior described at work in the last 12 months, using the following scale: 1. Never considered it; 2. Considered it, but did not do it; 3. 1-2 times; 4. 3-5 times; 5. 6-10 times; 6. More than 10 times. In this study, the alpha reliability of the 27 OCB items was .82. Furthermore, the intercorrelation of CWB with job performance was -.24 (p < .01) and with OCB -.18 (p < .01).

Results
Descriptive analyses
Table 1 presents the alpha reliabilities, means, and standard deviations of the personality scales under all conditions (work-specific, non-contextualized, and home-specific). Alpha reliabilities of the domains ranged from .82 to .92, and of the facets from .62 to .84. In line with Lievens et al. (2008), we used Feldt’s (1980) test to examine whether the alpha reliabilities of the domain and facet scales were similar across conditions. While Lievens et al. found that the scales with the relevant frame-of-reference had higher alpha reliabilities, our results were inconsistent. With respect to Conscientiousness, there were significantly higher differences in alpha reliabilities for the work-specific scale of Orderliness (.84 vs. .81 and .82) and significantly lower differences for the home-specific scale of Achievement Motivation (.70 vs. .81 and .82). With respect to Integrity, the work-specific scale of Integrity (.86 vs. .83 and .82) and the non-contextualized scale of Greed Avoidance (.82 vs. .79 and .79) showed significantly higher differences in alpha reliabilities. The other scales showed no differences in alpha reliabilities across conditions.

Furthermore, in order to compare the means of the work-specific, non-contextualized, and home-specific personality scales, we used GLM for ANOVA’s of repeated measures (resulting in F-values) and we computed standardized effect sizes (d-values; Cohen, 1988). Conscientiousness showed a significantly higher scale score in the work-specific condition than in the non-contextualized (d = .50, p < .01) and home-specific condition (d = .90, p < .01). In the home-specific condition Conscientiousness showed a significantly lower scale score than in the non-contextualization condition (d = .40, p < .01). These results were replicated in the facet scales. Especially the higher scale scores in the work-specific condition were in line with the results of other studies (e.g., Lievens et al., 2008; Schmit et al., 1995), suggesting that work-specific Conscientiousness items overall result in more positive responses.
Table 1

Reliabilities (α), means (M), and standard deviations (SD) of the personality scales (N = 289)

<table>
<thead>
<tr>
<th></th>
<th>Work-specific</th>
<th>Non-contextualized</th>
<th>Home-specific</th>
<th>F</th>
<th>d_{1.2}</th>
<th>d_{1.3}</th>
<th>d_{2.3}</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>α</td>
<td>M₁</td>
<td>SD₁</td>
<td>α</td>
<td>M₂</td>
<td>SD₂</td>
<td>α</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>.92ₐ</td>
<td>3.86</td>
<td>0.41</td>
<td>.9₁ₐ</td>
<td>3.65</td>
<td>0.43</td>
<td>.9₁ₐ</td>
</tr>
<tr>
<td>Orderliness</td>
<td>.8₄ₐ</td>
<td>3.85</td>
<td>0.55</td>
<td>.8₁ₐ</td>
<td>3.61</td>
<td>0.62</td>
<td>.8₂ₐ</td>
</tr>
<tr>
<td>Need for Rules and Certainty</td>
<td>.7₈ₐ</td>
<td>3.87</td>
<td>0.47</td>
<td>.8₀ₐ</td>
<td>3.62</td>
<td>0.53</td>
<td>.7₇ₐ</td>
</tr>
<tr>
<td>Achievement Motivation</td>
<td>.8₃ₐ</td>
<td>3.78</td>
<td>0.53</td>
<td>.8₁ₐ</td>
<td>3.65</td>
<td>0.54</td>
<td>.7₀ₐ</td>
</tr>
<tr>
<td>Perseverance</td>
<td>.8₃ₐ</td>
<td>3.93</td>
<td>0.46</td>
<td>.8₂ₐ</td>
<td>3.72</td>
<td>0.53</td>
<td>.8₂ₐ</td>
</tr>
<tr>
<td>Integrity</td>
<td>.₈₆ₐ</td>
<td>3.75</td>
<td>0.41</td>
<td>.₈₃ₐ</td>
<td>3.53</td>
<td>0.39</td>
<td>.₈₂ₐ</td>
</tr>
<tr>
<td>Honesty</td>
<td>.₆₇ₐ</td>
<td>3.95</td>
<td>0.41</td>
<td>.₆₂ₐ</td>
<td>3.79</td>
<td>0.39</td>
<td>.₆₂ₐ</td>
</tr>
<tr>
<td>Sincerity</td>
<td>.₇₇ₐ</td>
<td>3.52</td>
<td>0.56</td>
<td>.₇₄ₐ</td>
<td>3.42</td>
<td>0.53</td>
<td>.₇₆ₐ</td>
</tr>
<tr>
<td>Greed Avoidance</td>
<td>.₇₉ₐ</td>
<td>3.80</td>
<td>0.58</td>
<td>.₈₂ₐ</td>
<td>3.38</td>
<td>0.62</td>
<td>.₇₉ₐ</td>
</tr>
</tbody>
</table>

Notes: α’s with different subscripts in the same row indicate significant differences across conditions at p < .05, computed on the basis of Feldt’s (1980) test; positive d_{1.2}-values and d_{1.3}-values indicate higher scale scores for the work-specific condition; positive d_{2.3}-values indicate higher scale scores for the non-contextualized condition.

** p < .01
Further, Integrity in the work-specific ($d = .55, p < .01$) and the home-specific ($d = -.78, p < .01$) condition, as well as all the facets in both conditions, yielded significantly higher scale scores than in the non-contextualized condition. The home-specific condition even demonstrated higher scale scores than the work-specific condition ($d = -.20, p < .01$). In sum, adding either a work or a home context to Integrity items seems to result in more positive answers.

Finally, with regard to the convergent correlations, Table 2 shows that the non-contextualized scale of Conscientiousness correlated .73 with the work-specific scale and .76 with the home-specific scale, while the latter two correlated .52. With respect to Integrity, the non-contextualized scale correlated .80 with the work-specific scale and .75 with the home-specific scale. The work- and home-specific Integrity scale correlated .77 with each other.

Table 2
**Correlations among work-specific, non-contextualized, and home-specific personality scales (N = 289)**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work-specific</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Conscientiousness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Integrity</td>
<td>.38**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-contextualized</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Conscientiousness</td>
<td>.73**</td>
<td>.28**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Integrity</td>
<td>.25**</td>
<td>.80**</td>
<td>.25**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home-specific</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Conscientiousness</td>
<td>.52**</td>
<td>.32**</td>
<td>.76**</td>
<td>.27**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Integrity</td>
<td>.29**</td>
<td>.77**</td>
<td>.29**</td>
<td>.75**</td>
<td>.33**</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes: Convergent correlations are shown in boldface.

** $p < .01$

**Tests of contextual specificity effects**

To investigate the relations of Conscientiousness and Integrity with job performance, OCB, and CWB, we used correlational analyses. In addition, to compare the correlation coefficients across the conditions, Steiger’s (1980) method was used, which results in $\chi^2$-values (i.e., an omnibus test of the differences in multiple correlations) and in $z$-values (i.e., a pairwise test of the difference between two correlations). Furthermore, we conducted relative weight analyses (Johnson, 2000) instead of traditional regression analyses. The method of relative weight analysis assesses the relative contribution to $R^2$ (that is, the percentage of explained variance) of each personality scale in predicting the criterion variable by considering the unique contribution of each predictor as well as the contribution of each predictor when combined with other predictors (for information on how the relative weights are estimated, see Johnson, 2000; LeBreton & Tonidandel, 2008).
### Table 3
**Correlations (r) and relative weights (rw) of the personality scales in relation to job performance (N = 289)**

<table>
<thead>
<tr>
<th></th>
<th>Work-specific</th>
<th>Non-contextualized</th>
<th>Home-specific</th>
<th>( \chi^2 )</th>
<th>( z_{1.2} )</th>
<th>( z_{1.3} )</th>
<th>( z_{2.3} )</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Domains</strong></td>
<td>( r_1 )</td>
<td>( rw ) (%)</td>
<td>( r_2 )</td>
<td>( rw ) (%)</td>
<td>( r_3 )</td>
<td>( rw ) (%)</td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>.44**</td>
<td>95.7</td>
<td>.25**</td>
<td>93.0</td>
<td>.07</td>
<td>60.1</td>
<td>47.51**</td>
</tr>
<tr>
<td>Integrity</td>
<td>.12*</td>
<td>4.3</td>
<td>.09</td>
<td>7.0</td>
<td>.06</td>
<td>39.9</td>
<td>6.83*</td>
</tr>
<tr>
<td><strong>R(^2)/total rw (%)</strong></td>
<td>.20**</td>
<td>100</td>
<td>.07**</td>
<td>100</td>
<td>.00</td>
<td>100</td>
<td>4.65**</td>
</tr>
<tr>
<td><strong>Facets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need for Rules and Orderliness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certainty</td>
<td>.19**</td>
<td>3.5</td>
<td>.05</td>
<td>2.6</td>
<td>.00</td>
<td>4.3</td>
<td>15.60**</td>
</tr>
<tr>
<td>Orderliness</td>
<td>.37**</td>
<td>17.7</td>
<td>.25**</td>
<td>19.7</td>
<td>.10</td>
<td>9.2</td>
<td>25.91**</td>
</tr>
<tr>
<td>Achievement Motivation</td>
<td>.48**</td>
<td>44.3</td>
<td>.33**</td>
<td>45.7</td>
<td>.03</td>
<td>1.0</td>
<td>49.07**</td>
</tr>
<tr>
<td>Perseverance</td>
<td>.39**</td>
<td>19.9</td>
<td>.15*</td>
<td>4.5</td>
<td>.07</td>
<td>3.3</td>
<td>34.60**</td>
</tr>
<tr>
<td>Integrity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honesty</td>
<td>.20**</td>
<td>3.5</td>
<td>.11</td>
<td>2.5</td>
<td>.10</td>
<td>9.5</td>
<td>5.45†</td>
</tr>
<tr>
<td>Sincerity</td>
<td>.17**</td>
<td>6.4</td>
<td>.21**</td>
<td>20.7</td>
<td>.18**</td>
<td>46.1</td>
<td>2.02</td>
</tr>
<tr>
<td>Greed Avoidance</td>
<td>-.06</td>
<td>4.7</td>
<td>-.07</td>
<td>4.4</td>
<td>-.10</td>
<td>26.5</td>
<td>5.70†</td>
</tr>
<tr>
<td><strong>R(^2)/total rw (%)</strong></td>
<td>.29**</td>
<td>100</td>
<td>.16**</td>
<td>100</td>
<td>.06**</td>
<td>100</td>
<td>3.43**</td>
</tr>
</tbody>
</table>

Notes: Positive \( z_{1.2} \)-values and \( z_{1.3} \)-values indicate stronger relations with job performance for the work-specific condition; positive \( z_{2.3} \)-values indicate stronger relations with job performance for the non-contextualized condition.

† \( p < 0.10; \) * \( p < 0.05; \) ** \( p < 0.01\)
Table 4

Correlations (r) and relative weights (rw) of the personality scales in relation to OCB (N = 289)

<table>
<thead>
<tr>
<th>Domains</th>
<th>Work-specific</th>
<th>Non-contextualized</th>
<th>Home-specific</th>
<th>(\chi^2)</th>
<th>(z_{1-2})</th>
<th>(z_{1-3})</th>
<th>(z_{2-3})</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(r_1)</td>
<td>(rw) (%)</td>
<td>(r_2)</td>
<td>(rw) (%)</td>
<td>(r_3)</td>
<td>(rw) (%)</td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>.52**</td>
<td>94.5</td>
<td>.36**</td>
<td>92.9</td>
<td>.25**</td>
<td>85.1</td>
<td>27.01**</td>
</tr>
<tr>
<td>Integrity</td>
<td>.17**</td>
<td>5.5</td>
<td>.13*</td>
<td>7.1</td>
<td>.13*</td>
<td>14.9</td>
<td>4.94†</td>
</tr>
<tr>
<td>R²/total rw (%)</td>
<td>.27**</td>
<td>100</td>
<td>.13**</td>
<td>100</td>
<td>.07**</td>
<td>100</td>
<td>4.08**</td>
</tr>
</tbody>
</table>

Facets

Conscientiousness

- Need for Rules and Certainty
  - .30** | 6.3
  - .18** | 4.5
  - .18** | 10.2
  - 7.81* | 2.50**
  - 2.47** | 0.07

- Orderliness
  - .39** | 12.1
  - .28** | 13.5
  - .22** | 13.7
  - 9.95** | 2.58**
  - 3.13** | 1.60

- Achievement Motivation
  - .54** | 47.9
  - .42** | 60.2
  - .20** | 15.3
  - 30.07** | 3.16**
  - 5.47** | 3.92**

- Perseverance
  - .46** | 20.7
  - .23** | 7.2
  - .21** | 12.7
  - 27.51** | 4.85**
  - 4.66** | 0.33

Integrity

- Honesty
  - .33** | 10.4
  - .21** | 6.9
  - .22** | 23.8
  - 9.12* | 2.82**
  - 2.28* | -0.26

- Sincerity
  - .14* | 1.5
  - .17** | 6.9
  - .18** | 15.9
  - 0.71 | -0.71
  - -0.73 | -0.17

- Greed Avoidance
  - .00 | 1.2
  - -.02 | 0.9
  - -.05 | 8.4
  - 5.02† | -0.51
  - -1.19 | -0.72

R²/total rw (%) | .34** | 100
- .19** | 100
- .09** | 100
- 3.59** | 5.26**
- 3.00**

Notes: OCB = organizational citizenship behavior; positive \(z_{1,r}\)-values and \(z_{2,3}\)-values indicate stronger relations with OCB for the work-specific condition; positive \(z_{2,3}\)-values indicate stronger relations with OCB for the non-contextualized condition.

† \(p < 0.10\); * \(p < .05\); ** \(p < .01\)
Table 5
Correlations ($r$) and relative weights ($rw$) of the personality scales in relation to CWB ($N = 289$)

<table>
<thead>
<tr>
<th>Domains</th>
<th>Work-specific</th>
<th>Non-contextualized</th>
<th>Home-specific</th>
<th>$\chi^2$</th>
<th>$z_{1-2}$</th>
<th>$z_{1-3}$</th>
<th>$z_{2-3}$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$r_1$</td>
<td>$rw$ (%)</td>
<td>$r_2$</td>
<td>$rw$ (%)</td>
<td>$r_3$</td>
<td>$rw$ (%)</td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>-.45**</td>
<td>58.1</td>
<td>-.32**</td>
<td>54.0</td>
<td>-.16**</td>
<td>17.0</td>
<td>30.95**</td>
</tr>
<tr>
<td>Integrity</td>
<td>-.40**</td>
<td>41.9</td>
<td>-.30**</td>
<td>46.0</td>
<td>-.29**</td>
<td>83.0</td>
<td>38.14**</td>
</tr>
<tr>
<td>$R^2$/total $rw$ (%)</td>
<td>.27**</td>
<td>100</td>
<td>.15**</td>
<td>100</td>
<td>.09**</td>
<td>100</td>
<td>3.66**</td>
</tr>
<tr>
<td>Facets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>Need for Rules and Certainty</td>
<td>-.36**</td>
<td>11.2</td>
<td>-.29**</td>
<td>21.3</td>
<td>-.18**</td>
<td>12.3</td>
</tr>
<tr>
<td>Orderliness</td>
<td>-.50**</td>
<td>31.0</td>
<td>-.31**</td>
<td>24.7</td>
<td>-.16**</td>
<td>9.7</td>
<td>41.12**</td>
</tr>
<tr>
<td>Achievement Motivation</td>
<td>-.19**</td>
<td>3.6</td>
<td>-.12**</td>
<td>2.6</td>
<td>.01</td>
<td>10.3</td>
<td>8.93*</td>
</tr>
<tr>
<td>Perseverance</td>
<td>-.43**</td>
<td>18.0</td>
<td>-.26**</td>
<td>13.4</td>
<td>-.17**</td>
<td>9.4</td>
<td>25.59**</td>
</tr>
<tr>
<td>Integrity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honesty</td>
<td>-.47**</td>
<td>23.8</td>
<td>-.28**</td>
<td>13.2</td>
<td>-.27**</td>
<td>30.0</td>
<td>25.48**</td>
</tr>
<tr>
<td>Sincerity</td>
<td>-.29**</td>
<td>6.8</td>
<td>-.20**</td>
<td>7.4</td>
<td>-.20**</td>
<td>10.3</td>
<td>21.80**</td>
</tr>
<tr>
<td>Greed Avoidance</td>
<td>-.23**</td>
<td>5.7</td>
<td>-.21**</td>
<td>17.5</td>
<td>-.19**</td>
<td>18.0</td>
<td>3.61</td>
</tr>
<tr>
<td>$R^2$/total $rw$ (%)</td>
<td>.35**</td>
<td>100</td>
<td>.18**</td>
<td>100</td>
<td>.13**</td>
<td>100</td>
<td>4.24**</td>
</tr>
</tbody>
</table>

Notes: CWB = counterproductive work behavior; positive $z_{1-2}$-values and $z_{1-3}$-values indicate stronger relations with CWB for the work-specific condition; positive $z_{2-3}$-values indicate stronger relations with CWB for the non-contextualized condition.

* $p < .05$; ** $p < .01$
With regard to the first type of specificity, that is contextual specificity, this section first focuses on job performance, subsequently reports findings for OCB, and concludes with the results related to CWB. We expected that the work-specific Conscientiousness and Integrity scales had stronger relations with job performance, OCB, and CWB than did the non-contextualized and home-specific Conscientiousness and Integrity scales (Hypothesis 1a). Further, we hypothesized that the home-specific Conscientiousness and Integrity scales had weaker relations with job performance, OCB, and CWB than did their corresponding non-contextualized personality scales (Hypothesis 1b).

With regard to job performance, especially the results of the domain scale Conscientiousness confirmed our expectations, with substantial differences in correlations across the conditions: work-specific \( r = .44, p < .01 \), non-contextualized \( r = .25, p < .01 \), and home-specific \( r = .07, ns \). The work-specific Conscientiousness scale displayed a significantly stronger relation with job performance than did the corresponding non-contextualized and home-specific scales (see Table 3 for \( \chi^2 \) and z-values). Furthermore, the correlation of the home-specific Conscientiousness scale was significantly weaker than that of the corresponding non-contextualized personality scale. Integrity was unrelated to job performance in the non-contextualized \( r = .09, ns \) and home-specific \( r = .06, ns \) conditions. Even though the work-specific Integrity scale revealed a significant correlation with job performance \( r = .12, p < .05 \), this correlation was not significantly different from the correlations of the non-contextualized and home-specific scales. Table 3 also provides the results of the relative weight analysis of the personality scales in relation to job performance. Mostly due to Conscientiousness, both personality domain scales explained significant variance in job performance: 7% in the non-contextualized condition and a significantly higher percentage of 20% in the work-specific condition (see Table 3 for z-values). The home-specific condition did not explain a significant amount of variance in job performance.

Second, Table 4 shows that in all three conditions Conscientiousness was significantly and positively related to OCB. In line with Hypothesis 1a, the work-specific Conscientiousness scale \( r = .52, p < .01 \) correlated significantly more strongly with OCB than the non-contextualized \( r = .36, p < .01 \) and the home-specific \( r = .25, p < .01 \) corresponding scales (see Table 4 for \( \chi^2 \) and z-values). In line with Hypothesis 1b, the home-specific Conscientiousness scale showed a significantly weaker relation with OCB than did the non-contextualized Conscientiousness scale. Integrity was also significantly and positively related to OCB across all three conditions (work-specific, non-contextualized, and home-specific), although the correlations were not strong (respectively \( r = .17, p < .01; r = .13, p < .05; r = .13, p < .05 \) and did not significantly differ from each other. Conscientiousness and Integrity together accounted for 27% variance in the prediction of OCB in the work-specific condition, 13% variance in the non-contextualized condition, and 7% variance in the home-specific condition. Together,
Conscientiousness and Integrity explained significantly more variance in the work-specific condition than in the non-contextualized and home-specific condition, and accounted significantly less in the home-specific condition than in the non-contextualized condition.

Third, with regard to the last work criterion, CWB, Table 5 reveals that the domain scale Conscientiousness correlated significantly and negatively with CWB in the work-specific \( r = -.45, p < .01 \), non-contextualized \( r = -.32, p < .01 \), and home-specific \( r = -.16, p < .01 \) conditions. As expected, compared to the non-contextualized and home-specific scales, the correlation of the work-specific scale was significantly stronger (see Table 5 for \( \chi^2 \) and z-values). In addition, the correlation of the home-specific scale was significantly weaker than that of the non-contextualized scale. Integrity also showed significant and negative correlations with CWB in the work-specific \( r = -.40, p < .01 \), non-contextualized \( r = -.30, p < .01 \), and home-specific \( r = -.29, p < .01 \) conditions. While the non-contextualized and home-specific scales displayed similar correlations with CWB, the work-specific scale had a significantly stronger relation with CWB. Together, Conscientiousness and Integrity followed the expected pattern, explaining 15% variance in CWB in the non-contextualized condition, 9% variance in the home-specific condition (significantly less than in the non-contextualized condition), and 27% variance in the work-specific condition (which is significantly more than in the non-contextualized and home-specific condition).

To sum up, the overall results show that the work-specific Conscientiousness and Integrity scales together explained significantly more variance in the prediction of job performance, OCB, and CWB than did the corresponding non-contextualized and home-specific personality scales, thus confirming Hypothesis 1a. Note that although the work-specific Integrity scale showed significant relations with job performance and OCB, these relations were small and not significantly stronger compared to those of the non-contextualized and home-specific Integrity scales. Together, the home-specific personality scales of Conscientiousness and Integrity together explained significantly less variance in the prediction of job performance, OCB, and CWB than did the non-contextualized personality scales of Conscientiousness and Integrity, supporting Hypothesis 1b. However, on its own, the home-specific Integrity scales did not display the expected pattern.

**Tests of trait specificity effects**

In line with the trait specificity hypothesis, we examined whether the work-specific scales of the narrow traits of Conscientiousness and Integrity had stronger relations with job performance, OCB, and CWB than did the work-specific scales of the broad traits Conscientiousness and Integrity (Hypothesis 2). To this end, we examined the variance explained by the facets and compared the results with the variance explained by the domains Conscientiousness and Integrity.

First, Table 3 shows that almost all work-specific facet scales proved to be important predictors of job performance. Among these, the Conscientiousness facets
Achievement Motivation (r = .48, p < .01), Perseverance (r = .39, p < .01), and Orderliness (r = .37, p < .01), and the Integrity facet Honesty (r = .20, p < .01) showed the strongest relations to job performance. Taken together, all facets of Conscientiousness and Integrity explained a significant amount of variance (\( R^2 = .29, p < .01 \)) in the prediction of job performance. This percentage of variance compares favorably with the 20% explained by the domain scales Conscientiousness and Integrity. An F-test was used to assess whether the facets were more strongly related to job performance than the domain scales. The results indeed revealed that the narrow facets of Conscientiousness and Integrity explained significantly more variance in job performance than did the broad domains (F (5, 281) = 7.12, p < .01).

Second, in the work-specific condition, all facets of Conscientiousness and Integrity, with the exception of Greed Avoidance (r = .00), were significantly and positively related to OCB (see Table 4). Again, the Conscientiousness facets Achievement Motivation (r = .54, p < .01), Perseverance (r = .46, p < .01), and Orderliness (r = .39, p < .01), and the Integrity facet Honesty (r = .33, p < .01) were the strongest correlates of OCB. Together, the facets of Conscientiousness and Integrity added significant variance to the prediction of OCB (\( R^2 = .34, p < .01 \)), namely 34%, in contrast to the 27% of the variance explained by the domain scales Conscientiousness and Integrity. Further analyses showed that the narrow traits were significantly more strongly related to OCB than the broad traits (F (5, 281) = 5.96, p < .01).

Third, CWB was predicted by all work-specific facet scales of Conscientiousness and Integrity (see Table 5), with the strongest correlations for Orderliness (r = -.50, p < .01), Perseverance (r = -.43, p < .01), and Honesty (r = -.47, p < .01). In contrast to job performance and OCB, Greed Avoidance was also a significant correlate of CWB (r = -.23, p < .01). Overall, a total of 35% of variance was explained by all facets together, which is significantly more than the total of 27% explained by the domains themselves (F (5, 281) = 6.92, p < .01).

In sum, the results confirmed Hypothesis 2 and suggest that the work-specific scales of the narrow traits of Conscientiousness and Integrity have stronger relations with job performance, OCB, and CWB than the work-specific scales of the broad traits Conscientiousness and Integrity. Indeed, work-specific facets of Conscientiousness and Integrity appear to contribute uniquely to the prediction of work criteria.

**Discussion**

The prediction of productive and less productive behavior at work is the core of research in personnel psychology, and three of the most important and often-discussed criteria are job performance, OCB, and CWB. One key predictor of these criteria is personality. The findings of the present study highlight the significance of earlier work showing the importance of specificity in personality measurements in improving the prediction of work criteria. Our study investigated two types of specificity, namely (1) contextual specificity
by adding a situational context to personality items and (2) trait specificity by focusing on the more specific, so-called narrow personality traits. We will discuss the results of contextual and trait specificity in turn.

With respect to contextual specificity, it has been argued that the predictive strength of personality may be improved when people are given a specific context, a so-called frame-of-reference, when completing a personality inventory. However, studies examining this frame-of-reference effect in work settings are relatively scarce. The current study finds considerable support for the hypothesis that adding a relevant context to personality items improves the predictive validity of three important work criteria (i.e., job performance, OCB, and CWB). In particular, work-specific Conscientiousness and Integrity scales together are more strongly related to work criteria than non-contextualized and (conceptually irrelevant) home-specific Conscientiousness and Integrity scales. In line with Lievens et al. (2008), who showed that the use of an incorrect frame-of-reference decreased validity, our study demonstrates that home-specific Conscientiousness and Integrity scales together have a weaker relation with work criteria than the corresponding non-contextualized personality scales. Thus, the most important conclusion is that non-contextualized (or inappropriately contextualized) personality scales yield less information about the kinds of behavior employees are likely to show in real-life work situations than appropriately contextualized personality scales. In our study the contextualized personality scales were designed by adding a tag, for example “at work”, to each item. However, Lievens et al. argued that inserting a tag is only a first step towards improved contextual specificity. Butter and Born (in press) for instance developed a personality questionnaire with a higher degree of contextualization by employing items entirely derived from the relevant context. Nevertheless, the question remains open whether a higher degree of contextualization also results in higher predictive validities.

With respect to trait specificity, some scholars have argued that broad traits may be better predictors of broad criteria than narrow traits (Ones & Viswesvaran, 1996). The current study, however, indicates that narrow traits of Conscientiousness and Integrity explain more criterion variance than the broad traits themselves. While the aforementioned findings suggest that the predictive validity of the broad traits improves when a relevant context is added to the personality items, the predictive validity increases even more when the focus is on the narrow traits. The results show that the Conscientiousness facets Achievement Motivation, Perseverance, and Orderliness, and the Integrity facets Honesty and Sincerity, are the personality traits most strongly associated with both job performance and OCB. Interpretation of these relations indicates that in general higher levels of overall job performance as well as more OCBs, such as supporting the organization’s mission and helping a colleague with personal issues, are shown by employees who strive to deliver the best possible job performance, keep going until they have achieved their professional goals, adopt a neat and structured style of work, present themselves to colleagues as they really are, and are honest in dealing with their work
environment. To our knowledge, this study is the first to indicate a positive relation between Honesty and Sincerity on the one hand and positive work criteria on the other.1 Interestingly, whereas the broad trait of Integrity displays a relatively weak relation with job performance, its narrow traits Honesty and Sincerity show stronger relations. Limiting one’s focus to broad traits may thus conceal stronger relations between personality facets and criterion measures. With respect to CWB, more facets of Conscientiousness and Integrity appear to be important. The Integrity facet Greed Avoidance, which was not related to job performance and OCB, does show a relation with CWB, suggesting that employees who are especially motivated by monetary or social-status considerations are more likely to show CWBs, such as making fun of someone at work or taking property from work without permission. The fact that OCB, in contrast to CWB, displays no relation with Greed Avoidance seems to indicate that OCB and CWB have different correlates with personality traits. Some scholars have argued that OCB and CWB are best viewed as behaviors located on a single continuum (Bennett & Stamper, 2001). However, several studies showed a modest negative relationship between both criteria and found that OCB and CWB had a number of different personality correlates (Dalal, 2005; Sackett, Berry, Wiemann, & Laczo, 2006). This suggests that OCB and CWB represent two distinct constructs instead of a single continuum.

In the last twenty years, the Big Five model (or Five Factor Model) has become the main paradigm in personality research. Our study follows the recent modification of this paradigm by including Integrity as a separate personality dimension. This dimension, which has also been labeled Honesty-Humility, constitutes an additional sixth dimension in the HEXACO personality model (Ashton & Lee, 2007; Ashton et al., 2004; Lee & Ashton, 2008). Prior studies have shown that the HEXACO model, due to the inclusion of Honesty-Humility, is able to outperform five-dimensional personality models not only in the prediction of Sensation Seeking, Egoism, Psychopathy, Machiavellianism, and Narcissism (De Vries, De Vries, De Hoogh, & Feij, 2009; De Vries, De Vries, & Feij, 2009; Lee & Ashton, 2005; Lee, Ogunfowora, & Ashton, 2005), but also in the prediction of unethical business decisions and employee integrity (Ashton & Lee, 2008; Lee & Ashton, 2008). The present study makes an important contribution to these earlier results by showing that Integrity (cf., Honesty-Humility), and in particular its narrow traits, is also meaningfully correlated with job performance, OCB, and CWB. Some scholars have argued that the predictive validity of Integrity is hardly surprising because Integrity and Conscientiousness are almost indistinguishable (e.g., Schmidt & Hunter, 1998). However, others reasoned that this notion may be based on a misinterpretation of previous findings due to the differentiation between overt and personality-based integrity tests (e.g., De Vries et al., 2011; Lee,

---

1 Please note that Johnson, Rowatt, and Petrini (2011) recently were the first to show that the additional sixth personality dimension, Honesty-Humility, is significantly and positively related to job performance. However, Johnson et al.’s finding was based on a sample consisting of employees exclusively working in a care-giving occupation.
Ashton, & De Vries, 2005). Conscientiousness has frequently been found to correlate with personality-based Integrity (e.g. Schmidt & Hunter, 1998), whereas Honesty-Humility (cf., Integrity) is weakly related to personality-based Integrity, but strongly associated with overt Integrity (Lee, Ashton, & De Vries, 2005). Moreover, there is not much evidence in support of a strong conceptual overlap between Conscientiousness and Honesty-Humility within the HEXACO model (e.g., Ashton & Lee, 2007).

A number of findings are worth mentioning in light of the ongoing discussion about the frame-of-reference effect. In line with other studies (e.g., Lievens et al., 2008; Schmit et al., 1995) and in contrast to the non-contextualized scales, our participants scored higher on almost every work-specific factor and facet scale. This may be seen as an indication of a socially-desirable response pattern, which may in turn restrict the range of scores and result in lower predictive validity. However, we found that the work-specific personality scales were in fact the best predictors of work criteria. Thus, it seems unlikely that social desirability had a detrimental effect on the scale scores. According to Schmit et al. (1995), “if participants present themselves in a positive light, but they do so inaccurately, that is social desirability........ If individuals present themselves positively and accurately because they have a frame-of-reference, then validity should increase.” (p. 617). It thus seems plausible that adding a relevant context to personality items, instead of leading to socially-desirable response patterns, helps respondents to present themselves more accurately.

The question remains why the work-specific items result in more positive responses for Conscientiousness. A possible explanation is that the Conscientiousness domain provides an overview of the extent to which a person is disciplined and able to adapt to the demands of the environment. People with high average scores on the components of Conscientiousness are willing to adhere to rules established by the majority, and exhibit less undesirable behavior. These characteristics are far more important in a work context, where many rules and restrictions apply, than in a home context, where there are fewer consequences when someone is undisciplined or where rules are less likely to be strict. Thus, it seems plausible that people are indeed on average more conscientiousness in a work environment than in a home situation. In addition, our results also reveal that adding a work or a home context to Integrity items results in more positive answers. The Integrity domain provides an overview of the extent to which a person is honest and sincere. People with high average scores on the components of Integrity consider honesty as a very important characteristic, and they do not pretend to be anything but themselves. Modern family life is by-and-large based on characteristics such as honesty and sincerity, and violations of trust through dishonest behaviors may have severe repercussions on the fabric of family life. Although strong correlations are observed between the Integrity scale in the home and work context, it is notable that the mean scale score of Integrity in the work context is lower than in the home context. The specific ‘group’ frame-of-reference employed may explain these findings, with higher
levels of Integrity in the in-group (family) than in out-groups (work and other contexts) due to the higher level of reciprocal altruism that is expected of family members than of members of other groups. This explanation seems plausible given that in the HEXACO model Honesty-Humility (cf., Integrity) is explained in terms of biologists’ constructs of reciprocal altruism (Ashton & Lee, 2007).

The most important limitation of our study is the use of same-source predictors and criteria. As argued before, the most important aim of this study was to establish whether there are differences in the validity of personality predictors when different frame-of-references are used. Given the fact that cross-source validities are generally lower than same-source validities (Spector, 2006), not finding any differences in validities in same-source data will very likely result in a lack of finding validity in differences in cross-source data as well. Yet, these first findings are supportive, so future studies may benefit from using external measurements, for instance ratings of job performance and OCB by supervisors, and official records of CWB such as ratings of absence. Nevertheless, Ilies et al. (2009) argued that OCB ratings by supervisors are less accurate, while self-report measurements take into account a broader range of OCBs, and that OCB ratings by supervisors are more range-restricted than self-ratings. In the case of CWB, official records may provide an incomplete picture because not every counterproductive behavior can be registered (Ones et al., 1993). Furthermore, studies have shown that self-reported non-productive behaviors are meaningfully related to objective measures of counterproductive behaviors (Nicol & Paunonen, 2002); therefore self-reported non-productive behaviors are often used as a proxy of counterproductive behaviors.

Our findings indicate that contextual specificity leads to improved criterion validity. Interestingly, cross-cultural research has revealed that western versus non-western groups self-report differently depending on the context provided. Westerners generally have no problems describing themselves without any specific context, whereas the self-concept of non-Westerners is often much more contextualized (e.g., Cousins, 1989). Therefore, an interesting topic for future research will be to examine whether contextualizing items of a personality inventory (at school, at work, at home, in my free time...), will have an even stronger differentiating effect between contexts for non-Western ethnic minority people than for ethnic majorities.

In sum, the purpose of the present study was to improve the prediction of job performance, OCB, and CWB by means of personality measures. One important conclusion is that non-contextualized (or inappropriately contextualized) personality scales yield less information about the kinds of behavior employees show in real-life work situations than contextualized scales. Inserting a specific, relevant context to personality items may help respondents to present themselves more accurately and results in higher predictive validities. The present study also indicates that combining contextual specificity with trait specificity may increase the predictive validity of personality measurements even further.
Knowledge of which work-specific narrow traits are relevant in work settings may play a significant role in offering information about causes of work success and failure.