Do Individual Differences in Perceiving Situational Demands Moderate the Relationship Between Personality and Assessment Center Dimension Ratings?

Anne Jansen  
*Universität Zürich*

Filip Lievens  
*Ghent University*

Martin Kleinmann  
*Universität Zürich*

This study contributes to research on assessment centers’ (AC) external construct-related validity by investigating a potential moderator of the relationship between personality and AC dimension ratings. On the basis of recent insights in person-situation contingencies we hypothesized that individual differences in people’s perception of situational demands moderate the relationship between personality and conceptually related AC dimension ratings. The hypotheses were tested with 108 individuals in two leaderless group discussion exercises. Results confirmed the hypotheses for two of the three traits (i.e., Agreeableness and Conscientiousness). In particular, people high on these traits who identified the situational demands received higher AC dimension ratings. People high on these traits who did not identify the situational demands received lower AC dimension ratings.

Assessment centers (AC) are a popular method for personnel selection due to their focus on actual behavior and their good criterion-related validity evidence (e.g., Arthur, Day, McNelly, & Edens, 2003). Yet the debate about their construct-related validity is still ongoing (Bowler & Woehr, 2006; Lance, 2008; Lievens & Conway, 2001; Woehr & Arthur, 2003). The majority of construct-related validity studies concentrate on AC’s internal construct-related validity and typically use multitrait-multimethod approaches (e.g., Bowler & Woehr, 2006; Lance, Lambert, Gewin, Lievens, & Conway, 2004; Lievens & Conway, 2001). In this stream of research, postexercise dimension ratings have been used and the relevance of dimension effects versus exercise effects has been examined (Bing, Whanger, Davison, & VanHook, 2004; Bowler & Woehr, 2006; Lance et al., 2004; Lievens & Conway, 2001).

Correspondence should be sent to Anne Jansen, Department of Psychology, University of Zurich, Binzmühlestrasse 14/12, CH-8050 Zurich, Switzerland. E-mail: a.jansen@psychologie.uzh.ch, or to Filip Lievens, Department of Personnel Management and Work and Organizational Psychology, Ghent University, Henri Dunantlaan 2, 9000 Ghent, Belgium. E-mail: filip.lievens@ugent.be
Another approach to determine AC’s construct-related validity focuses on the relationship between final dimension AC ratings and external constructs such as personality or cognitive ability (Dilchert & Ones, 2009; Goffin, Rothstein, & Johnston, 1996; Meriac, Hoffman, Woehr, & Fleisher, 2008). Although this external validation approach has been recommended in recent years (e.g., Arthur, Day, & Woehr, 2008), the results of research into AC dimensions’ nomological network have not been consistent across the literature. In fact, some studies have concluded that the relationship between personality and AC ratings is close to zero (e.g., Goffin et al., 1996), whereas other studies have yielded much larger correlations (e.g., Collins et al., 2003). Due to the large variability in the correlations found, it is important to examine the relationship between personality and AC dimension ratings to shed further light on AC’s external construct-related validity. To date, we know little about which factors might moderate how personality is related to AC dimension ratings.

This study draws on recent insights in person–situation contingencies (Mischel & Shoda, 1995, 1998) to shed light on the relationship between personality and AC dimension ratings. We posit that individual differences in perceiving the situation will moderate the personality–AC performance dimension rating relationship. As argued next, effective performance on AC dimensions is contingent upon individuals having read the demands of the situation so that relevant trait-related behavior is activated.

THEORETICAL BACKGROUND

The Relationship Between Personality and AC Dimension Ratings

To establish evidence for AC’s external construct-related validity, the relationship between personality and AC ratings has been scrutinized (e.g., Collins et al., 2003; Goffin et al., 1996; Hoeft & Schuler, 2001; Meriac et al., 2008). Earlier studies focused on the overall assessment rating (OAR). For example, Collins et al. (2003) meta-analytically investigated the relationship between the OAR and the Big Five personality dimensions. They reported correlations between $\rho = .17$ and $\rho = .50$ for the personality dimensions Agreeableness, Openness, Emotional Stability, and Extraversion and AC performance. In another meta-analysis that also examined the nomological net of the OAR (Hoeft & Schuler, 2001), much lower correlations with the personality traits of Agreeableness ($\rho = -.07$), Conscientiousness ($\rho = -.06$), Openness ($\rho = .07$), Extraversion ($\rho = .14$), and Emotional Stability ($\rho = .15$) were found. As both studies relied on the OAR, they failed to examine the relationships among different AC dimensions and personality dimensions. Accordingly, a reason for these differing results may lie in the use of different AC dimensions that were aggregated. As a result, we do not know whether some AC dimensions are more related to specific personality traits than others (cf. Meriac et al., 2008). Thus, for construct-related validity purposes it is important to consider the dimension (i.e., construct) level.

Therefore, more recent studies have analyzed results at the AC dimension level. Meriac et al. (2008) reported meta-analytic data on the intercorrelations between the Big Five personality traits and AC dimensions based on the taxonomy by Arthur et al. (2003). The relationships between personality traits and AC dimensions were only modest in size ($\rho$s ranging from $-.09$ to $.24$). In an earlier study, Goffin et al. (1996) found that relations between AC dimensions and personality dimensions (dominance, achievement, and exhibition) were also rather small ($rs$ between $-.02$
and .17; with an exception of .24 between the AC dimension willingness to learn and achievement). Contrary to these results, Dilchert and Ones (2009) found much higher intercorrelations between personality traits and the AC dimensions identified by Arthur et al. (2003). For example, they reported sizable relationships between Conscientiousness and organizing and planning of $r = .24$ (compared to $\rho = .06$; Meriac et al., 2008), between Agreeableness and consideration of others of $r = .27$ (compared to $\rho = .05$, Meriac et al., 2008), and between Extraversion and the AC dimension influencing others of $r = .27$ (compared to $\rho = .17$; Meriac et al., 2008).

Taken together, in previous studies the relationships between AC dimensions and personality traits vary considerably. This variability in results mirrors the mixed findings regarding the link between personality and performance (Barrick, Parks, & Mount, 2005; Hough & Oswald, 2005; Murphy & Dzieweczynski, 2005; Ones, Viswesvaran, & Dilchert, 2005). Similar to research that has begun to examine moderators of the personality–performance relationship (e.g., Barrick et al., 2005; George & Zhou, 2001; Witt, 2002; Witt, Burke, Barrick, & Mount, 2002; Witt & Ferris, 2003), research about moderators of the personality–AC dimensions relation may help to clarify AC’s link with personality as part of AC’s external construct-related validity.

Situation Perception as a Moderator of the Personality–AC Dimension Relationship

The current study investigates individual differences in situation perception as a potential moderator that may affect the relationship between personality and AC dimensions. In research on individual differences in situation perception, it is pivotal to differentiate between “nominal” situations and “psychological” situations (Block & Block, 1981). Nominal situations (also known as canonical or consensual situations; Block & Block, 1981) denote the stimulus context as generally understood. In other words, they refer to situational attributes that are relevant to people in general as they are defined independently from any person (e.g., by aggregating perceptions of the demand qualities of a situation across a large number of experienced observers; Reis, 2008). This consensually defined situation contrasts with the psychological situation (also known as the functional situation), which is defined as the demands or properties of the situation as defined and construed by a particular individual (Block & Block, 1981; Reis, 2008). Thus, this psychological situation reflects the stimulus context as registered and understood by a particular individual (“What does the individual make of the situation?”).

The importance of a particular individual’s construal of the situation is well reflected in the Cognitive-Affective Personality System (CAPS) theory (Mischel & Shoda, 1995, 1998). This comprehensive theory posits that nominal features of situations activate a series of mental representations (both cognitive and affective). On the basis of the particular interconnected and interacting CAPS units being activated (e.g., encodings), behavioral scripts are triggered (“If . . . then” patterns). The key implication of the CAPS theory for this study is that it provides one way of understanding the linkages between situations as they are nominally perceived and situations as they are understood and experienced by individuals. It is this psychological situation that is the focus of the present research.

In particular, this study aims to shed light on the personality–AC dimension link by focusing on a key cognitive unit of the CAPS theory. Specifically, we not only measure individuals’ standing on personality traits but also map how individuals construed the situation (which demand qualities did they perceive?). By making a distinction between nominal and psychological situational aspects in general and by measuring individuals’ perception of the situation in particular,
we aim to better understand how personality traits are expressed in behavior. Our focus on individuals’ particular cognitive construal might then explain how nominal situational aspects generate different behavioral options across individuals. Indeed, AC exercises, and more generally many of today’s work situations, are characterized by a high degree of ambiguity about what behavior is targeted. In those settings, effective performance is critically dependent upon people perceiving what behavior is required. Depending on their perception of the same nominal situation, their behavioral expressions might be different and the trait-dimension relationship might be less or more pronounced. For example, let us assume two individuals have the same standing on an underlying personality trait (Agreeableness). Both participate in a group discussion exercise that requires behavior related to this trait because the assessors rate participants’ behavior on the AC dimension consideration of others (nominal situation). These individuals will perform differently depending on how they perceive that situation (psychological situation). That is, one individual might interpret the group discussion to be competitive, whereas the other individual might perceive the discussion as cooperative. Undoubtedly, on the basis of their differing interpretations of the situational demands, their behavioral expressions might be different and the relationship between Agreeableness and performance on consideration of others might be less or more pronounced.

Individual Differences in Situation Perception

A key implication of CAPS theory is that individuals differ not only in terms of their standing on traits but also in how they select, encode, and process social information. As Mischel and Shoda (1995) noted, “Individuals differ in how they selectively focus on different features of situations, how they categorize and encode them cognitively and emotionally, and how those encodings activate and interact with other cognitions and affects” (p. 252). Along these lines, research has found that some people are better able to discriminate among situations than other people (Cheng, Chiu, Hong, & Cheung, 2001; Chiu, Hong, Mischel, & Shoda, 1995; Mischel, 1973; Shoda, Mischel, & Wright, 1993). These interindividual differences in sensitivity to subtle situational demands have also been referred to as individual differences in discriminative facility. Chiu et al. (1995) found that people high in discriminative facility take account of the important psychological features of social situations and therefore are able to activate more competent and effective behavior in interpersonal situations. Hence, discriminative facility was conceptualized as a cognitive “style” and an integral aspect of social competence (Cheng et al., 2001).

Similar conclusions about the critical role of social competence in trait–behavior relationships have been drawn in the recent literature on social effectiveness constructs. Ferris, Perrewé, and Douglas (2002) conceptualized social effectiveness as a “broad, higher-order, umbrella term which encapsulates a number of moderately-related, yet conceptually-distinctive, manifestations of social understanding and competence” (p. 50). These social effectiveness constructs have a long history in psychology (e.g., Argyle, 1969; Thorndike, 1920), known under various aliases such as social skill, social competence, and social intelligence. A common thread running through social effectiveness constructs is that they refer to individual differences in how people “read” interpersonal situations and adapt their interpersonal behavior to the situational demands gathered. According to R. Hogan and Shelton (1998), social effectiveness is posited to moderate the personality–performance relationship because it enables people to translate their intentions into
behavioral actions, which in turn might provide them with better evaluations. Thus, this literature suggests that it is not enough to possess the relevant personality traits, as people also need to “effectively read, understand, and control social interactions” (Witt & Ferris, 2003, p. 811).

Taken together, these two lines of evidence (on discriminative facility and social effectiveness) have drawn similar conclusions about the role and nature of individual differences in perceiving situations. Apart from these conceptual parallels, there are differences in how these constructs are measured. Whereas social effectiveness has been measured via self-report (cf. Ferris et al., 2002), discriminative facility has been typically measured with a test wherein people’s ratings of situations were matched with predetermined criteria on the basis of theory or consensus (e.g., Cheng et al., 2001). That is, people received high discriminative facility scores when their psychological situational perceptions matched the consensually defined perceptions.

In this study, we examine how individual differences in perceiving the demands of the situation moderate the personality–AC dimension rating relationship. An important contribution is that we focus on individual differences in perceiving the situation (psychological situation) as a moderator. In addition, we used a recently developed measure of situation perception (König, Melchers, Kleinmann, Richter, & Klehe, 2007) that has the advantage of not being a self-report measure like measures of social effectiveness (cf. Ferris et al., 2002). In this measure, participants are asked to assess the demand qualities on which they think they are being evaluated in a specific situation. Similar to the measurement of discriminative facility, their answers are then matched to the consensually defined situational demand qualities, making it possible to tell whether they correctly “read” the social situation. Prior research on the construct-related validity of this measure showed that it was moderately related to cognitive ability, especially verbal cognitive ability (König et al., 2007; Melchers et al., 2009), self-reported social skill (Schollaert & Lievens, 2008), and performance in assessment centers (Kleinmann, 1993) and interviews (Melchers et al., 2009).

Hypotheses

On the basis of our aforementioned conceptual arguments, our general moderator hypothesis is that individual differences in the perception of situational demands will moderate the relationship between personality traits and AC dimension ratings. We examine the moderating effect of individual differences in the perception of situational demands across two leaderless group discussion exercises that measured three AC dimensions: (a) consideration and awareness of others, (b) organizing and planning, and (c) influencing others. These dimensions are conceptually related to Agreeableness, Conscientiousness, and Extraversion, respectively (Lievens, Chasteen, Day, & Christiansen, 2006). Next we posit specific hypotheses about the relationship of these personality traits with performance on each of these three dimensions. As a common thread running through the hypotheses, we posit that the trait-relevant behavioral manifestations will be different (the “Then” component in the CAPS theory) depending on the psychological perception of the situation (the “If” component in the CAPS theory).

Our first hypothesis deals with the link between Agreeableness and performance on the dimension of consideration of others. People high on Agreeableness can be described as cooperative, trustful, altruistic, likeable, and modest (Costa & McCrae, 1985). In addition, Agreeableness has been shown to be an important predictor of performance in tasks where getting along with others is required (J. Hogan & Holland, 2003). As previously noted, meta-analytic research found that
the relationship between Agreeableness and AC ratings on consideration of others is rather nonexistent (Meriac et al., 2008, but also see Dilchert & Ones, 2009) because demands for consideration of others might be overshadowed by the demand to influence others in such group discussions. We hypothesize that agreeable individuals who do pick up demands related to consideration of others in the situation (despite the overshadowing demand to influence others) are likely to activate behavior related to that trait, leading to better performance on this dimension. Conversely, without perceiving that consideration of others is a situational demand, highly agreeable people will not be able to express behavior related to that trait or will activate behavior related to another trait and may therefore receive lower AC ratings on that dimension. We therefore posit the following:

**H1a:** Individual differences in situation perception regarding consideration of others will moderate the Agreeableness–consideration of others relationship such that Agreeableness will be more strongly related to AC ratings on consideration of others for people perceiving that the situation requires consideration of others than for people who do not.

Second, we hypothesize that individuals high on Conscientiousness and who perceive demands related to organizing and planning in the situation are likely to activate behavior related to that trait, leading to better performance on this dimension. In fact, Conscientiousness “describes socially prescribed impulse control that facilitates task- and goal-directed behavior, such as thinking before acting, delaying gratification, following norms and rules, and planning, organizing, and prioritizing tasks” (John & Srivastava, 1999, p. 121). However, as previously noted, meta-analytic research has shown that the relationship between Conscientiousness and performance on organizing and planning is rather nonexistent (Meriac et al., 2008, but also see Dilchert & Ones, 2009). In this study, we hypothesize that this might be due to the fact that highly conscientious people do not activate behavior related to that trait or activate behavior related to another trait when they do not perceive that organizing and planning is a situational demand, leading to lower performance on organizing and planning. Alternatively, when their definition of the psychological situation includes planning and organization as a situational demand, they will activate behavior related to Conscientiousness, resulting in better performance on organization and planning. So, we posit the following:

**H1b:** Individual differences in situation perception regarding organizing and planning will moderate the Conscientiousness–organizing and planning relationship such that Conscientiousness will be more strongly related to AC ratings on organizing and planning for people perceiving that the situation requires organizing and planning than for people who do not.

Our third hypothesis refers to the link between Extraversion and performance on influencing others in group discussions. People high on Extraversion can be described as active, assertive, and gregarious (Costa & McCrae, 1985). As already reported, prior meta-analyses have documented a positive relationship between Extraversion facets and performance on influencing others (Meriac et al., 2008, but also see Dilchert & Ones, 2009). In line with our first two hypotheses, we posit that this relationship will be even more pronounced when people perceive influencing others as a situational demand. Specifically, we hypothesize that extraverted individuals who perceive that influencing others behaviors are being evaluated are likely to activate relevant behavior
(e.g., lead the group and influence the group’s results) and may therefore receive higher AC ratings. Conversely, without perceiving that influencing others is a situational demand, highly extraverted people will not activate behavior related to that trait or activate behavior related to another trait and may therefore receive lower AC ratings. Thus, we posit the following:

**H1c:** Individual differences in situation perception regarding influencing others will moderate the Extraversion–influencing others relationship such that Extraversion will be more strongly related to AC ratings on influencing others for people perceiving that the situation requires influencing others than for people who do not.

### METHOD

**Participants**

Data were gathered in leaderless group discussion exercises that were part of a 1-day AC. Study participation was voluntary. Participants were 108 advanced undergraduate and graduate students. Of these, 66 (61.1%) were female, and their average age was 27.9 years ($SD = 4.36$). Almost half of them (45.4%) had already received their master’s degree. Most of them (93.5%) reported having experience with job interviews. About 47% of the participants majored in humanities, 33.3% in economic sciences, and 9.3% in law. All other participants majored in subjects other than psychology. All participants were currently applying for jobs or reported planning to do so in the near future. Individuals participated because they were interested in receiving feedback on their performance. To cover part of the costs, participants were also required to pay a small fee.

**Assessment Center**

The aim of the AC was to simulate key tasks of a management trainee position, as described in a fictitious job ad. Although in ACs there is pressure on all candidates to perform well, the situation can be considered psychologically weak, as there is a high degree of ambiguity about what behavior to show in the complex interpersonal interactions of the exercises (McFarland, Yun, Harold, Viera, & Moore, 2005). Apart from taking part in two leaderless group exercises (see next), participants also completed a cognitive ability test, a personality inventory, and a structured interview. After each group discussion exercise, participants received a short questionnaire that assessed their perception of the situational demands. After participants completed the AC exercises, assessors discussed their ratings when these differed by 2 or more points. In the meantime, participants answered demographic questions and were asked questions concerning the perceived realism of the simulation on four items (e.g., “Did you perceive the assessment center simulation to be realistic?”). More than 85% of the candidates rated the simulation as realistic. Afterward, participants received feedback on their AC performance.

**AC Exercises**

Both AC exercises were leaderless group discussions without assigned roles that were run in groups of four to six people. The first group discussion exercise represented a hidden profile
task (i.e., a task with an asymmetrical distribution of information; Schulz-Hardt, Mojzisch, & Brodbeck, 2006). Participants received the resumes of eight fictitious job candidates together with sheets that contained different parts of information regarding the requirements of the vacant job position. To find the correct solution (i.e., the best job candidate) participants had to discuss their different pieces of information. All participants had the same chances to express behavior as the pieces of information they held were equally important for finding the correct solution. Preparation time for each candidate to read through the material was 20 min; the discussion lasted about 30 min.

The second group discussion exercise was a business game that was run on a computer. Participants’ task was to increase a company’s capital during 20 simulated months. To provide all candidates with the same chances to contribute, the computer was run by a not-involved person who followed only the group’s instructions. The computer screen was projected on the wall so that each candidate had a good view of all information. Accordingly, all participants had the same access to information. Prior to the discussion, participants received a short introduction to the business game. The discussion lasted about 45 min.

In both AC exercises, seating arrangements were such that candidates were placed around a round table so that no candidate got the head of table position and had no advantages due to their seating position. Participants in the groups rotated so that the composition of the groups was not the same across the discussions.

**AC Dimensions**

In both AC exercises, the aforementioned three dimensions were assessed. Organizing and planning was defined as prioritizing tasks, making plans for tasks, and working in a well-structured way. Influencing others was defined as taking on responsibility for tasks and people, coordination of the group, and arguing one’s point of view within the group. Finally, consideration of others was defined as considering needs of others, arbitrating between different points of view, and agreeing on a compromise. Participants were not told which dimensions would be assessed.

**Assessors**

The performance for each participant in the group discussion exercises was rated by two assessors on the aforementioned dimensions. Twenty-two industrial and organizational psychology master’s students (13 female; average age = 26.4 years) served as assessors. Assessors rotated across the group discussion exercises. They were trained in a 1-day training session wherein they were introduced to the group discussions, the dimensions, and the use of the rating sheet that gave behavioral examples of the dimensions. During training, the assessors also participated in the group discussion exercises themselves and discussed their ratings afterward to achieve a consistent frame-of-reference (Woehr & Huffcutt, 1994). In addition, they learned about typical rating effects and received information about how to conduct the feedback session. The assessors did not receive any information about the objectives of the study.
Measures

**AC Dimension Ratings**

Given the well-known reliability problems of within-exercise dimension ratings (Brannick, 2008; Lance, 2008), final dimension ratings were made. Upon completion of the exercises, assessors gathered to discuss their behavioral observations and independently rated the participants on the three dimensions on a 5-point scale, ranging 1 (poor performance) to 5 (excellent performance). Each candidate was rated by two assessors, and ratings from both assessors were averaged. To assess interrater agreement, we calculated intraclass correlations (ICC 3,2) between the ratings of the two assessors. The average interrater agreement was .85. In addition, we calculated an overall AC rating across all exercises and all dimensions.

**Personality**

We used Borkenau and Ostendorf’s (1993) German version of the NEO-FFI (Costa & McCrae, 1992), which assesses the Big Five personality dimensions with 60 items. Participants were asked to answer the items honestly. In our sample the coefficient alphas for the traits were .74 (Emotional Stability), .76 (Extraversion), .63 (Openness to Experience), .77 (Agreeableness), and .84 (Conscientiousness).

**Cognitive Ability**

We used the verbal reasoning module of a widely used German cognitive ability test, the IST 2000 (Amthauer, Brocke, Liepmann, & Beauducel, 1999). This module contains three 20-item subtests (Sentence Completion, Analogies, and Similarities) and proved to have good criterion-related validity (Hülsheger, Maier, Stumpp, & Muck, 2006). Amthauer et al. (1999) reported a coefficient alpha of .88.

**Measure of Nominal Situation**

As just noted, nominal situations constitute demands or properties of the situation that are consensually and reliably defined by observers aggregating across many individual perceptions of the situation (Block & Block, 1981; Reis, 2008; Shoda et al., 1993; Wright & Mischel, 1987). To determine the situational demands of the two leaderless group discussions (i.e., the AC dimensions) 10 experienced master’s-level students in IO-Psychology with substantial knowledge about AC exercises inspected the documents relating to these AC exercises and rated how well the exercises (and their instructions) evoked the three targeted dimensions in contrast to various other dimensions. The dimensions organizing and planning, consideration of others, and influencing others were rated as the most likely ones to be perceived. Hence, these three dimensions were considered to reflect the demands of the nominal situation.
Measure of Psychological Situation (Situation Perception)

Participants’ particular perceptions of situational demands were measured similarly as described by Kleinmann et al. (2011). Participants had to fill out a questionnaire after each exercise. They received the following instructions: “In the previous exercise, you might have thought about what the observers were assessing. What assumptions did you have during the exercise about what the exercise was intended to assess?” Participants could write down three assumptions per exercise, corresponding to the number of dimensions assessed. At the end of the AC, participants received a list of six dimensions that are commonly assessed in group exercises together with behavioral examples for each dimension. Three of these dimensions were the consensually determined dimensions (see earlier) and three dimensions were distractor dimensions (drive, creativity, and communication). Participants were handed back the questionnaires with their previously written assumptions. Then, for each of their assumptions they had to rate the strength of the fit with one of the six dimensions on a scale from 1 (fits somewhat) to 4 (fits completely). Alternatively, participants could also indicate that an assumption did not correspond to any of the dimensions. ¹ To test our hypotheses, we concentrated on the dimensional level of situation perception. The following scoring rubric was used: If none of the assumptions were linked to the consensually determined dimensions (see previously), a score of 0 was assigned for situation perception. If an assumption was linked to a consensually determined dimension, we used participants’ ratings of the strength of the fit between their assumption and the dimension as their score on the perception of situational demands. In case of ties (several assumptions being linked to the same dimension), we used the highest strength of fit rating as the score. Thus, the situation perception scores per dimension could range between 0 (no match between the individual’s perceived situational demands and the consensually-determined situational demands, meaning poor situation perception) and 4 (perfect match between the individual’s perceived situational demands and the consensually-determined situational demands, meaning excellent situation perception).² Next, the situation perception scores per dimension were averaged across the two exercises.

To replicate previous findings (e.g., König et al., 2007), we also calculated an average situation perception score per participant across all exercises and dimensions. In previous research, this

¹ Although participants might be the best placed to rate the strength of fit of their assumptions with the dimensions (i.e., they know best the idiosyncrasies captured in their assumptions), the situation perception scores might also be inflated because of participants trying to make a good impression (Schlenker, 2003). Therefore, in addition to the participants’ ratings, two industrial and organizational psychology master’s students rated the strength of fit of the participants’ assumptions with the three targeted dimensions. The average intraclass correlation (ICC 3,2) between both raters was .92. Next, all analyses were conducted with these expert rating data. Results were similar to those presented.

² Let us suppose a participant assumed that in the first group discussion participants were evaluated on teamwork, creativity, and goal setting. Later (s)he rated the strength of fit between teamwork and consideration of others with a 4 because (s)he used teamwork as another word for consideration of others. (S)he rated the strength of fit between creativity and creativity with 4 because (s)he precisely used the same term. (S)he rated the strength of fit of goal setting and organizing and planning with 1 because goal setting is only one aspect of planning and organizing. In the second group discussion, this participant assumed that (s)he was evaluated on teamwork and leadership. Here, (s)he rated the strength of fit between teamwork and consideration of others again with 4 and the strength of fit between leadership and influencing others with 3 because (s)he did not have this particular facet of leadership in mind. We then averaged the ratings regarding the same dimension. Thus, this person received a situation perception score of 4 (consideration of others), 1 (organizing and planning), and 3 (influencing others).
measure demonstrated adequate convergent and divergent validity. Several studies showed that it did not capture merely cognitive ability as it was only moderately correlated with cognitive ability (Klehe, Hartstein, Kleinmann, König, & Melchers, 2007; König et al., 2007; Melchers et al., 2009). Furthermore, the measure showed cross-situational consistency and proved to be a valid predictor of performance across different selection procedures (König et al., 2007). Finally, situation perception was moderately correlated (.20) with self-reported social skill (Schollaert & Lievens, 2008) and with performance on a video-based test of social judgment (Kleinmann, 1997).

RESULTS

Descriptive Statistics

Table 1 presents the means, standard deviations, and correlations between the variables of this study. The mean score of the situation perception measure was $M = 1.24$ ($SD = 0.78$). As noted before, situation perception scores per dimension could range from 0 to 4. Thus, our results indicate that it was not straightforward for participants to read the situational demands. The standard deviations of the situation perception scores per dimension were also not negligible (varying from .92 to 1.38), indicating that the situation was ambiguous enough for individual differences in situation perception to occur.

As shown in Table 1, the mean situation perception score was significantly related to the OAR ($r = .23, p < .05$). Thus, those participants with excellent situation perception (i.e., whose perceived situational demands matched the consensually determined situational demands) performed better overall in the group discussion exercises. These results replicate the findings of prior studies by Kleinmann (1993) and König et al. (2007). Furthermore, mean situation perception and cognitive ability were only moderately related ($r = .14$), confirming that situation perception is different from cognitive ability.

Relationship Between Personality and AC Dimension Ratings

Table 1 also presents the correlations between personality traits and the AC dimension ratings. As expected, there was a positive correlation (.11) between Extraversion and its conceptually related dimension (influencing others). Also as expected, the correlations between the other two traits and their conceptually related dimensions were negative (Agreeableness and consideration of others correlated −.10, and Conscientiousness and organization and planning correlated −.06) as these results are in line with prior research on the relationship between personality and AC dimension ratings (Hoeft & Schuler, 2001; Meriac et al., 2008; but see Dilchert & Ones, 2009).

Test of Hypotheses

To test whether individual differences in the perception of situational demands would moderate the relationship between personality traits and AC dimension ratings we ran hierarchical regression analyses. In Step 1, cognitive ability was entered as a control variable. In the next step, the personality trait score and the related situation perception score were entered. Then, we entered
# TABLE 1
Descriptive Statistics and Intercorrelations of Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
<th>10.</th>
<th>11.</th>
<th>12.</th>
<th>13.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cognitive ability</td>
<td>101.04</td>
<td>8.21</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Agreeableness</td>
<td>3.87</td>
<td>0.48</td>
<td>- .07</td>
<td>- .07</td>
<td>- .01</td>
<td>- .15</td>
<td>.27**</td>
<td>.30**</td>
<td>- .06</td>
<td>.38**</td>
<td>- .06</td>
<td>.38**</td>
<td>- .01</td>
<td>.15</td>
<td>- .07</td>
</tr>
<tr>
<td>3. Conscientiousness</td>
<td>4.04</td>
<td>0.51</td>
<td>- .01</td>
<td>- .11</td>
<td>.16</td>
<td>- .04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Extraversion</td>
<td>3.68</td>
<td>0.47</td>
<td>- .02</td>
<td>.27**</td>
<td>.27**</td>
<td>.08</td>
<td>.27**</td>
<td>.30**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Emotional Stability</td>
<td>3.54</td>
<td>0.52</td>
<td>.22**</td>
<td>.22**</td>
<td>.22**</td>
<td>.08</td>
<td>.22**</td>
<td>.38**</td>
<td>.38**</td>
<td>.38**</td>
<td>.38**</td>
<td>.38**</td>
<td>.38**</td>
<td>.38**</td>
<td>.38**</td>
</tr>
<tr>
<td>6. Openness</td>
<td>3.82</td>
<td>0.42</td>
<td>.08</td>
<td>-.07</td>
<td>-.11</td>
<td>.16</td>
<td>-.04</td>
<td>.09</td>
<td>.04</td>
<td>.17</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. OAR</td>
<td>3.41</td>
<td>0.64</td>
<td>.14</td>
<td>-.19*</td>
<td>.00</td>
<td>.04</td>
<td>.17</td>
<td>.03</td>
<td>.03</td>
<td>.03</td>
<td>.03</td>
<td>.03</td>
<td>.03</td>
<td>.03</td>
<td>.03</td>
</tr>
<tr>
<td>8. Rating organizing and planning</td>
<td>3.56</td>
<td>0.77</td>
<td>.12</td>
<td>-.19*</td>
<td>-.06</td>
<td>-.09</td>
<td>.12</td>
<td>-.01</td>
<td>.84**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Rating consideration of others</td>
<td>3.53</td>
<td>0.68</td>
<td>.09</td>
<td>-.10</td>
<td>-.04</td>
<td>.06</td>
<td>.08</td>
<td>-.02</td>
<td>.68**</td>
<td>.44**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Rating influencing others</td>
<td>3.13</td>
<td>0.98</td>
<td>.11</td>
<td>-.16</td>
<td>-.07</td>
<td>.11</td>
<td>.18</td>
<td>.07</td>
<td>.84**</td>
<td>.55**</td>
<td>.31*</td>
<td>.31*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Average score of situation perception</td>
<td>1.24</td>
<td>0.78</td>
<td>.14</td>
<td>.08</td>
<td>-.03</td>
<td>.02</td>
<td>.08</td>
<td>.04</td>
<td>.23*</td>
<td>.25**</td>
<td>.20*</td>
<td>.20*</td>
<td>.20*</td>
<td>.20*</td>
<td>.20*</td>
</tr>
<tr>
<td>12. Situation perception (organizing and planning)</td>
<td>0.77</td>
<td>0.92</td>
<td>.05</td>
<td>.04</td>
<td>-.05</td>
<td>.13</td>
<td>.12</td>
<td>-.01</td>
<td>.18</td>
<td>.22*</td>
<td>.17</td>
<td>.06</td>
<td>.61**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Situation perception (consideration of others)</td>
<td>1.84</td>
<td>1.38</td>
<td>.09</td>
<td>.09</td>
<td>.03</td>
<td>.05</td>
<td>.07</td>
<td>.03</td>
<td>.12</td>
<td>.13</td>
<td>.13</td>
<td>.05</td>
<td>.79**</td>
<td>.30*</td>
<td>.30*</td>
</tr>
<tr>
<td>14. Situation perception (influencing others)</td>
<td>1.10</td>
<td>1.13</td>
<td>.14</td>
<td>.04</td>
<td>-.06</td>
<td>-.11</td>
<td>-.02</td>
<td>.05</td>
<td>.17</td>
<td>.17</td>
<td>.11</td>
<td>.12</td>
<td>.61**</td>
<td>.08</td>
<td>.18</td>
</tr>
</tbody>
</table>

*Note. N = 108. Rating scales ranged from 1 to 5 for Variables 2 to 10 and from 0 to 4 for Variables 11 to 14.

*p < .05. **p < .01, two-tailed test.
TABLE 2
Results of Hierarchical Regression Analyses of AC Ratings on Personality and Situation Perception

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Predictor</th>
<th>Step 1 β</th>
<th>Step 2 β</th>
<th>Step 3 β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating consideration of others</td>
<td>Cognitive ability</td>
<td>.09</td>
<td>.07</td>
<td>.08</td>
</tr>
<tr>
<td></td>
<td>Agreeableness</td>
<td>-.10</td>
<td>-.10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Situation perception</td>
<td>.13</td>
<td>.14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agreeableness × Situation</td>
<td></td>
<td></td>
<td>.24**</td>
</tr>
<tr>
<td></td>
<td>perception</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Model R²</td>
<td>.01</td>
<td>.03</td>
<td>.09**</td>
</tr>
<tr>
<td></td>
<td>Step ΔR²</td>
<td></td>
<td></td>
<td>.06**</td>
</tr>
<tr>
<td>Rating organizing and planning</td>
<td>Cognitive ability</td>
<td>.12</td>
<td>.11</td>
<td>.09</td>
</tr>
<tr>
<td></td>
<td>Conscientiousness</td>
<td>-.05</td>
<td>-.01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Situation perception</td>
<td>.22*</td>
<td>.21*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conscientiousness × Situation</td>
<td></td>
<td></td>
<td>.20*</td>
</tr>
<tr>
<td></td>
<td>perception</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Model R²</td>
<td>.01</td>
<td>.06</td>
<td>.10*</td>
</tr>
<tr>
<td></td>
<td>Step ΔR²</td>
<td></td>
<td></td>
<td>.04*</td>
</tr>
<tr>
<td>Rating influencing others</td>
<td>Cognitive ability</td>
<td>.11</td>
<td>.09</td>
<td>.10</td>
</tr>
<tr>
<td></td>
<td>Extraversion</td>
<td>.12</td>
<td>.11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Situation perception</td>
<td>.12</td>
<td>.13</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Extraversion × Situation</td>
<td></td>
<td></td>
<td>.12</td>
</tr>
<tr>
<td></td>
<td>perception</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Model R²</td>
<td>.01</td>
<td>.04</td>
<td>.05</td>
</tr>
<tr>
<td></td>
<td>Step ΔR²</td>
<td></td>
<td></td>
<td>.01</td>
</tr>
</tbody>
</table>

Note. N = 108.
* p < .05. ** p < .01.

the interaction term. As suggested by Aiken and West (1991), the variables were centered and the interaction terms were based on these centered scores. We employed both significance tests and effect sizes to assess the results found.

Table 2 summarizes the results of the hierarchical regression analyses. H1a posited that perception of situational demands would moderate the relationship between Agreeableness and AC performance on consideration of others. In line with this hypothesis, the interaction between Agreeableness and perception of situational demands was a significant predictor of AC performance on consideration of others, (ΔR² = .06, p < .01). Figure 1 shows the nature of this interaction:

Table 2 summarizes the results of the hierarchical regression analyses. H1a posited that perception of situational demands would moderate the relationship between Agreeableness and AC performance on consideration of others. In line with this hypothesis, the interaction between Agreeableness and perception of situational demands was a significant predictor of AC performance on consideration of others, (ΔR² = .06, p < .01). Figure 1 shows the nature of this interaction. We plotted three levels of situation perception: at 1 SD below the mean, at the mean, and at 1 SD above the mean (Aiken & West, 1991). As hypothesized, the relationship between Agreeableness and AC performance on consideration of others was positive only among people with excellent situation perception, whereas it was negative among people with poor situation perception.

H1b posited that perception of situational demands would moderate the relationship between Conscientiousness and AC performance on organizing and planning. Consistent with this hypothesis, results revealed a significant interaction between Conscientiousness and perception of situational demands in predicting AC performance on organizing and planning (ΔR² = .04, p < .03). The nature of this interaction was the same as the one of Agreeableness as shown...
in Figure 2. As we expected, only for individuals with excellent situation perception there was a positive relationship between Conscientiousness and AC performance on organizing and planning. For individuals with poor situation perception, there was a negative relationship between Conscientiousness and AC performance on organizing and planning.

Regarding H1c, there was no significant interaction between Extraversion and perception of situational demands in predicting AC performance on influencing others ($\Delta R^2 = .01, ns$). Thus, H1c was not supported.

To provide some evidence of divergent validity for our results, we also tested whether there were any significant interactions between traits and situation perception on AC performance on conceptually unrelated dimensions. For example, we tested the interaction between Conscientiousness and perception of situational demands in predicting AC ratings on consideration of others and on influencing others. None of these interactions were significant.

**DISCUSSION**

Few experienced assessors will deny that ACs enable the observation of behavioral tendencies that result from underlying personality traits. However, the majority of studies that have examined the link between AC ratings and personality in the context of AC’s external construct-related validity have found small to moderate relationships (Collins et al., 2003; Goffin et al., 1996; Hoeft & Schuler, 2001). One reason might be that many earlier studies focused on the OAR as an amalgam of various AC dimension ratings, making it conceptually difficult to interpret the
Our findings indicate that highly conscientious individuals were able to express their traits in behaviors only when they perceived that organizing and planning was demanded by the situation. The same was true for agreeable people with respect to the consideration of others dimension. When participants’ psychological situation did not converge with the nominal situation, the relationship between these two personality traits and the corresponding AC dimension ratings
was negative. How can this be explained? One explanation is that for people who did not read the situational demands, no trait activation occurred. These individuals might have perceived the situational cues differently (being assertive instead of being agreeable) and therefore might have behaved differently (e.g., insisting on their opinion instead of giving in). It is also possible that these people might have demonstrated alternative trait expressions. Ancillary analyses of the participants’ assumptions written down in the situation perception questionnaire suggest that the latter might have occurred. In particular, inspection of these notes revealed that those people high on Agreeableness and Conscientiousness but with poor situation perception assumed that communication (oral expression) was being evaluated. These people probably tried to activate behavior related to oral expression (e.g., being articulate, presenting their arguments well) instead of behavior related to Agreeableness (e.g., being considerate of others) or Conscientiousness (e.g., being organized).

It should be noted that the anticipated moderator effect was not found for the relationship between Extraversion and performance on influencing others. One explanation is that Extraversion is a very broad trait. Perhaps the effect might be found for the dominance facet of Extraversion. Another explanation might be that Extraversion is already the primary trait to be triggered by group discussions, as evidenced by the positive correlation between Extraversion and influencing others in meta-analytic research in group settings (see also Dilchert & Ones, 2009; Meriac et al., 2008).

Some limitations of this study should be noted. We examined the moderating role of individual differences in situation perception in AC group discussions, for three traits, and for three conceptually related AC dimensions. Our data were also obtained from a sample of students and the AC exercises were simulated. Although more than 85% of the participants rated the AC simulation as being realistic, further research is needed to examine this moderator effect in other samples, in other situations, for other dimensions, and for other traits.

An intriguing avenue for future research consists of examining whether individual differences in situation perception also moderate the link between personality and job performance. As pointed out previously, the complex interpersonal interactions of AC exercises typically include a substantial degree of ambiguity about what behavior is appropriate. On the one hand, one might argue that individual differences in perceiving situational cues might also be a key factor in moderating the expression of relevant traits toward performance in an actual organizational context as ambiguity is also inherent in many work situations in today’s organizations (Cascio, 1995; Ilgen & Pulakos, 1999). For example, ambiguous situations abound at both individual (e.g., tasks with competing pressures, ill-defined assignments), team (e.g., interdependent teams, role ambiguity), and organizational levels (e.g., reorganizations, fusions). Similarly, managerial work has traditionally been associated with dealing with hectic, fragmented, and ambiguous situations (Kotter, 1982; Mintzberg, 1975). In addition, people who make an effort to correctly perceive the job demands and use those cues for deciding on their actions might do so both as applicants and employees. Hence, our results might generalize to work situations with ambiguous behavioral expectations, requiring people to “read” the situation to perform well. On the other hand, one might also argue that AC exercises are more ambiguous situations than work situations as they present only partial information to candidates in a short time span. Conversely, in actual work situations, long-time employees might be relatively familiar with their task, social, and organizational context. Clearly, future research is needed to test which of these arguments is valid.
As another avenue for future research, we should take an integrative approach to investigating moderators of the personality–performance relationship. To this end, we believe the CAPS theory (Mischel & Shoda, 1995, 1998) might be particularly useful. In this study, we focused on one cognitive unit of the mental representations triggered by external situations. To “get inside the head of people” and examine how traits translate into behavior, future research might investigate other cognitive and affective units (e.g., expectancies, beliefs, constructs about the self and others, self-regulatory plans, goals, behavioral scripts).

Finally, we need studies that place individual differences in situation perception in a nomological network of related and distinct constructs. In this study, we posited that individual differences in situation perception were conceptually related to discriminative facility and social effectiveness constructs (e.g., social skill, self-monitoring). Previous experience might also play a role. Empirical research is needed to test these propositions. From a methodological point of view, it might be fruitful to take into account that social effectiveness has typically been measured via self-reports (the perceived ability to assess situational demands), whereas individual differences in situation perception have been measured with non-self-report measures (the actual ability to assess situational demands correctly). This might explain why prior research revealed at best moderate correlations between self-report measures of social effectiveness and the non-self-report measure used in this study (Schollaert & Lievens, 2008).

Taken together, this study tested theory-driven hypotheses about how personality might be related to AC dimension ratings to shed light on the variability in AC’s external construct-related validity results. The general hypothesis was that individual differences in the perception of the demands required by the situation enable people to activate trait-related behaviors into successful AC performance. Consistent with this general hypothesis, this study is the first to show that not only the situation itself but also individual differences in perceiving the situation moderate the relationship between two personality traits (Agreeableness and Conscientiousness) and corresponding AC dimension ratings.

ACKNOWLEDGMENTS

Anne Jansen and Filip Lievens contributed equally to this article; order of authorship was determined alphabetically. We thank Ralph Bossart and Gian-Andrea Kasper for their help with the data collection. We also acknowledge Murray R. Barrick, Robert P. Tett, and Frederik Anseel for their helpful comments and suggestions on previous drafts of this article.

REFERENCES


