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Interpersonal Dynamics in Assessment Center Exercises: Effects of Role Player Portrayed Disposition

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Although interpersonal interactions are the mainstay of many assessment center exercises, little is known about how these interactions unfold and affect participant behavior and performance. More specifically, participants interact with role players who have been instructed to demonstrate behavior reflecting specific dispositions as part of the exercise. This study focuses on role player portrayed disposition as a potentially important social demand relevant to participant behavior and performance in interpersonal simulations. We integrate interpersonal theory and trait activation theory to formulate hypotheses about the effects of role player portrayed disposition on participant behavior and performance in 184 interpersonal simulations. A significant effect of portrayed disposition was found for participant relationship building and directive communication behavior. Furthermore, portrayed disposition moderated the relationship between participant use of these behaviors and performance ratings. Conceptually, this study sheds light on the complementary mechanisms and social demands that produce participant performance differences across exercises. At a practical level, this study provides valuable evidence-based guidance for developing interpersonal simulations.

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In the assessment center (AC) process, assessors evaluate participants' job-relevant behavioral skills (i.e., dimensions) across various job-related situational demands (i.e., exercises). Meta-analyses of AC validity have produced coefficients ranging from 0.25 to 0.39 (Arthur, Day, McNelly, & Edens, 2003; Gaugler, Rosenthal, Thornton, & Bentson, 1987; Hermelin, Lievens, & Robertson, 2007). Three components are vital to understanding AC validity: assessors, dimensions, and exercises. Over the past 30 years, a large number of studies have focused on the first two components (assessors and dimensions) to better understand and improve ACs (for reviews, see Lievens, 1998; Woehr & Arthur, 2003). Yet, AC exercises themselves have received relatively little research attention (for an exception, see Schneider & Schmitt, 1992).

The limited research into AC exercises is surprising because a vast body of research has revealed that the largest portions of variance in dimension ratings across exercises in ACs can be attributed to participant performance differences across exercises (also referred to as exercise effects; Kuncel & Sackett, 2014; Lance, Lambert, Gewin, Lievens, & Conway, 2004; Putka & Hoffman, 2013), even though some recent studies also found sizable portions of dimension variance (Hoffman, Melchers, Blair, Kleinmann, & Ladd, 2011; Monahan, Hoffman, Lance, Jackson, & Foster, 2013). In addition, there is now relative consensus that this substantial exercise variance does not represent measurement bias but true cross-situational performance differences of participants across exercises (Lance, 2008; Lance, Hoffman, Gentry, & Baranik, 2008; Lievens, 2002; Lievens, Dilchert, & Ones, 2009). This is because AC exercises present different situational demands to participants, thereby producing variability in performance across exercises (Gibbons & Rupp, 2009; Howard, 2008; Putka & Hoffman, 2013).

This has led to important practical and theoretical developments. At a practical level, one such development is the emergence of task-based ACs as an alternative to traditional dimension-based ACs. Task-based ACs are composed of several work simulations in which dimensions are removed and general exercise performance is scored (Jackson, Ahmad, Grace, & Yoon, 2011). At a theoretical level, repeated calls have been made to deepen our conceptual insight into the reasons behind participant performance variability across exercises and therefore to examine which exercise-based factors might predict this variability on theoretical grounds (Brummel, Rupp, & Spain, 2009; Gibbons & Rupp, 2009; Howard, 2008; Lance, 2008; Lievens, Tett, & Schleicher, 2009). A recent example of the plea for more fine-grained research on the reasons behind participant performance differences across exercises was given by Putka and Hoffman when they encouraged "future researchers concerned with coming to a better understanding of AC functioning . . . to isolate the more nuanced components of assessees' performance . . . and begin to explore factors that affect their magnitude [emphasis added]" (2013: 127).

In light of these developments, this study aims to advance our understanding of participant performance variability across exercises by focusing on the interpersonal dynamics at work in ACs. We chose this focus because a distinctive feature of the AC exercise is the

interaction of multiple individuals in simulations (Klimoski, Friedman, & Weldon, 1980). Basically, interpersonal AC simulations, such as role plays, oral presentations, fact-findings, group discussions, and business games, represent a complex microworld of humans interacting with each other. Therefore, our general premise is that the interpersonal dynamics at play in those interpersonal exercises could produce new insights into the variability of participant behavior and performance across exercises. Our focus on social demands and interpersonal dynamics also makes sense in light of the broader social psychological research on cross-situational behaviors. One of the common threads running through this large body of research is that social demands are key psychological contextual features invoking cross-situational (in)consistency in behavior (Mischel & Shoda, 1995). Similarly, research by Higgins and colleagues (Higgins, 1981; McCann & Higgins, 1988) reveals that the context of social interactions shapes cognitions, judgments, and behavior.

At this time however, our knowledge about the interpersonal dynamics that occur in interpersonal AC simulations is still limited. This study aims to integrate two theoretical frameworks (interpersonal theory and trait activation theory) to shed light on AC exercise interpersonal dynamics by testing specific predictions about what kind of interactional patterns might occur. This also advances our conceptual knowledge and understanding of the determinants of the large variability in participant performance across exercises. Illuminating AC interpersonal dynamics is also of practical importance as such knowledge could guide AC exercise design. For instance, if the effects of social demands in AC exercises were better understood, then it should be possible to design exercises that directly cue specific job-relevant interpersonal behaviors from participants.

To increase our understanding of the impact of interpersonal dynamics on participant performance, this study concentrates on one interpersonal AC simulation (role play) and two key interpersonal dimensions (relationship building and directive communication). We focus on the most popular specific interpersonal AC simulation (i.e., the role play; Krause & Thornton, 2008) to keep the exercise format constant (see the results of Schneider & Schmitt, 1992). Within the role play, this study manipulates a key, albeit yet unexplored, interpersonal factor that we expect to account for substantial variance between interpersonal exercises, namely, role player portrayed disposition (Thornton & Mueller-Hanson, 2004).

This study is situated in veterinary medicine role plays conducted for developmental purposes. Role plays in health profession contexts (i.e., objective structured clinical examinations) are similar to the common managerial role plays found in the AC literature (for a review of health profession role plays, see Vu & Barrows, 1994). Both require the participant to interact with a standardized role player, and both often assess interpersonal dimensions; however, in health profession contexts, the role play is designed to simulate the same interpersonal task (i.e., in all role plays, the task consists of conducting an interview with a client/patient), whereas in typical AC contexts, the role play is designed to simulate one of a range of interpersonal tasks (e.g., coaching a direct report, meeting with a potential customer, presenting a strategy to management).

Given that the interpersonal task is held constant across role plays, this health profession context provides an ideal setting for an experimental design to isolate the effects of exercise-based factors and to investigate whether (1) role player portrayed disposition affects the behavioral frequency of participant interpersonal behaviors and (2) role player portrayed disposition affects the relationship between interpersonal behaviors and performance ratings.

Furthermore, we believe that the effects demonstrated here are relevant to managerial interpersonal simulations because differences in social demands across managerial exercises will contribute to the behavioral variance typically observed across exercise ratings.

Role Player Portrayed Disposition

Darley and Fazio (1980) described interactions as consisting of a sequence of actions, perceptions, and expectancies that direct the interaction in a specific, reciprocal way. In AC interpersonal simulations such as role plays, these interactions typically involve candidates and role players. The most recent guidelines suggest that trained role players should play their role objectively and consistently in interactive exercises (International Task Force on Assessment Center Guidelines, 2009). To this end, in current AC practice, the role players are given specific information about their character's disposition to direct their behavior consistently across participants (Thornton & Mueller-Hanson, 2004).

Role player portrayed disposition can be defined as the personality of the role player's character behaviorally manifested through various trait-relevant actions and emotional expressions through both verbal and nonverbal communication. Along these lines, Thornton and Mueller-Hanson (2004) outlined several common types of role player portrayed dispositions. Examples are the whiner, the antagonist, the emotional wreck, or the slacker. In addition, Schollaert and Lievens (2011, 2012) focused on one aspect of role player portrayed disposition, namely, the verbal and nonverbal statements of role players, and found that their use increased the corresponding behavior in participants.

The common assumption in AC practice is that specific role player portrayed dispositions will cause participants to respond with particular job-relevant behaviors (Thornton & Mueller-Hanson, 2004). Role players typically portray the same disposition consistently within a specific exercise, whereas they might consistently incarnate another disposition in another exercise. Accordingly, participants are confronted with a variety of different social demands that mirror those faced on the job. For example, in one interpersonal simulation, an argumentative portrayed disposition might evoke interpersonal behavior for managing conflict. Conversely, in another interpersonal simulation, a lazy and listless portrayed disposition might evoke participants to demonstrate interpersonal behavior for motivating the role player. In other words, demonstration of different role player portrayed dispositions should evoke different interpersonal behaviors across exercises. Indirect evidence for this comes from research on interpersonal simulations in the educational and health literature that found exactly the same exercise effects as in AC exercises (e.g., Cohen, Colliver, Robbs, & Swartz, 1997; Guiton, Hodgson, Delandshere, & Wilkerson, 2004; Hodges, Turnbull, Cohen, Bienenstock, & Norman, 1996). As the interpersonal task is held consistent across simulations in this literature, these findings suggest that diverging role player behavior across exercises may have contributed to participants' exercise-specific behavior (Boulet, McKinley, Whelan, & Hambleton, 2003; Hodges et al., 1996).

Taken together, the portrayed disposition of role players seems to be a salient social demand within interpersonal simulations that is well established in practice. However, various pressing questions remain. First, the role player portrayed dispositions listed in Thornton and Mueller-Hanson (2004) are derived from best practices but are based on neither sound theory nor specific expectations about what participant behavior should be evoked. Second, we do not know

whether cross-exercise differences in portrayed disposition can indeed account for the variance of participant behavior and contribute to performance ratings, as is assumed by best practice.

The current study aims to contribute to the extant knowledge related to these key issues. To this end, we rely on an established framework (interpersonal theory; Horowitz & Strack, 2011; Sullivan, 1953) to develop different types of role player portrayed dispositions. Specifically, we design the role player portrayed disposition with specific information that distinguishes the character's disposition along the lines of interpersonal theory. In the next sections, we describe and integrate the person-situation conceptual frameworks of interpersonal theory and trait activation theory to formulate hypotheses about the effect of the portrayed disposition on participant interpersonal behavior and performance.

Interpersonal Theory

Interpersonal theory (Horowitz & Strack, 2011; Sullivan, 1953) provides a framework for understanding how the portrayed disposition of role players can affect participant behaviors within an interpersonal simulation. Interpersonal theory posits that all interpersonal interactions can be largely understood through two dimensions: *affiliation* and *control* (Kiesler & Auerbach, 2003). Affiliation is a tendency to be caring, friendly, and build meaningful connections with others. It spans from low affiliation (i.e., cold, disagreeable) to high affiliation (i.e., agreeable, warm). In contrast, control is a tendency to act autonomously, take charge, and lead others. It spans from low control (i.e., following, submissive) to high control (i.e., dominant, leading). When individuals interact with each other, they continually adjust for two critical relationship issues: how agreeable or disagreeable they will be with each other and how much they will control the interaction with others. Several empirical studies have found that affiliation and control provide the content and structure to meaningfully measure the full range of interpersonal behavior (Markey, Funder, & Ozer, 2003; Moskowitz, 1994) and personality traits (Costa & McCrae, 2011; Wiggins, 1979).

Another advantage with interpersonal theory is that the framework can also be used to conceptualize interpersonal situations in general (Fournier, Moskowitz, & Zuroff, 2008; Kiesler & Auerbach, 2003). Interpersonal theory proposes that the behavior from one individual invites the other individual to respond with a *complementary* class of behaviors (Tracey, 2004). For affiliation, complementarity operates through *correspondence* (i.e., high affiliation behaviors from one individual elicit high affiliation behaviors from the other individual, or low affiliation behaviors from one individual elicit low affiliation behaviors from the other individual). For control, complementarity operates through *reciprocity* (i.e., high control behaviors from one individual elicit low control behaviors from the other individual, or low control behaviors from one individual elicit high control behaviors from the other individual). These complementary behavioral patterns have been generally supported in numerous empirical studies (Fournier et al., 2008; Tracey, 2004).

Applied to the current study, interpersonal theory can be used to operationalize role player portrayed dispositions. In addition, the complementary behavioral patterns established in interpersonal theory can serve as a basis for making predictions about participant behaviors as a response to these portrayed dispositions (see hypotheses below). Unfortunately, interpersonal theory focuses exclusively on the social demands from others in predicting behavior while not explicitly accounting for other situational demands (i.e., task, organizational) that are present in work contexts.

Trait Activation Theory

In addition to interpersonal theory, trait activation theory (Tett & Burnett, 2003) provides a framework for understanding how AC participant behavior can be affected by situational demands, such as the role player portrayed disposition. Hence, previous studies have applied trait activation theory to explain between-exercise variance in participant behavior (Haaland & Christiansen, 2002; Lievens, Chasteen, Day, & Christiansen, 2006). According to trait activation theory, the effect of situational demands (i.e., organizational, social, and task cues) on behavior can be understood based on two factors: *situation strength* and *situation relevance*. Situation strength refers to the clarity of a situational demand (Tett & Burnett, 2003). A strong situation produces similar behavioral responses across virtually all individuals and negates the effects of individual differences on behavior (Meyer, Dalal, & Hermida, 2010; Mischel, 1973). Situation relevance refers to the qualitative feature of situational demands that increase the likelihood that individuals will demonstrate more of a particular behavior over other behaviors (Tett & Burnett, 2003).

One caveat is necessary prior to formulating hypotheses derived from integrating these two theories. Interpersonal theory makes specific hypotheses based on the social demands from social interactions, but this theory does not focus on interactions in the workplace. In contrast, trait activation theory includes not only social demands but also task and organizational demands, which focus on behaviors and performance in a work context. Yet, trait activation theory does not provide specific hypotheses for how particular social demands will affect workers' behavior and performance. For example, if a worker is placed in a situation with a loud obnoxious coworker, it is not clear what behavior the coworker is likely to produce. As a result, given the absence of a strongly delineated theory to predict how the interactional patterns will unfold in interpersonal simulations, we integrated both theories to develop our hypotheses.

The following example attempts to illustrate the challenges with integrating both theories. Let us take a social gathering or party (high situation strength for social demands). A person arriving at the party encounters an old acquaintance who is cold to her. The principle of correspondence from interpersonal theory predicts that her response will be equally cold. As long as one knows the initiating behavior, specific hypotheses can be made. If we take the same situation and indicate that the party is work related and the acquaintance is an old client whom the person would like to win back (high situation strength for task demands), then the corresponding cold behavior is likely to be muted because even though the person would like to respond similarly, she knows that this is likely to negatively affect her work goal. In other words, the task demand was stronger than the social demand. This example shows that our predictions about expected interpersonal participant behaviors drawn from interpersonal theory should also factor in the situational relevance of situational demands other than social demands as well as their situational strength (as delineated by trait activation theory).

Integrating Interpersonal and Trait Activation Theories

Hypotheses related to behavior. To facilitate developing the hypotheses based on trait activation and interpersonal theory, it is important to describe the context of the veterinarian participant—client interactions. In a health profession context, one of the dominant goals of the client interview is to be client focused and build a strong relationship with the client (Silverman, Kurtz, & Draper, 2005). Just as it is expected that a customer service employee will be

friendly to the rudest of customers, one might expect that participants would demonstrate relationship building regardless of the portrayed disposition of the role player (i.e., high or low affiliation). In other words, when providing a service to customers or clients, the organizational context specifies that rude behavior on the part of the service provider is inappropriate.

Despite the strong situational demand for client focus, it was predicted that participant use of relationship building behavior would still vary within this medium-to-high range depending on the level of affiliation portrayed by the role player. However, given the high situational strength of the task and organizational demand to be client focused, we expected that the correspondence principle for affiliation would not be observed. Instead, in line with trait activation theory, it was predicted that a low affiliation role player portrayed disposition would produce more relationship building behavior from the participant than a high portrayed disposition. This is because a low affiliation role player portrayed disposition should present participants with more social demands to improve rapport than would be presented by a high affiliation portrayed disposition. Thus,

Hypothesis 1: Participants will demonstrate more relationship building behaviors in exercises with a low affiliation role player portrayed disposition than in exercises with a high affiliation portrayed disposition.

A second aspect of the client interview is the need to gather the client's perspective on health-related matters because a health issue is the basis for the meeting. Two behaviors important to achieving this objective are appropriate use of open- and close-ended questions and summarizing information that the client has shared (Schirmer et al., 2005). These behaviors direct the client to elaborate on relevant details and are representative of high control behaviors, such as leading and taking charge of an interaction (Kiesler & Auerbach, 2003). Thus, we classify these behaviors as *directive communication*. Applying the reciprocity principle of interpersonal theory to this study suggests that low control behaviors from the role player (e.g., acting timid, unforthcoming with information) should elicit more directive communication (i.e., high control behavior) from participants, whereas high control behaviors from the role player (e.g., taking charge of the agenda, being quick to give their opinions) would evoke less directive communication (i.e., low control behaviors) from participants.

In contrast to relationship building, it was expected that the situation of a client interview would not present participants with a strong situational demand for directive communication because directive communication is not always regarded as the most appropriate behavior during the client interview. When a client is not discussing relevant information, there is more of a need for a participant to use directive communication in order to gather the client's information thoroughly and efficiently (Silverman et al., 2005). However, once the client is discussing health issues, there is more of a need for the participant to allow the client to explore his or her most relevant feelings, ideas, and thoughts. Thus, within a client interview, there is not a strong task demand for participants to consistently act with low or high control (i.e., directive communication), and the social demand for reciprocity in interpersonal theory should apply. Therefore,

Hypothesis 2: Participants will demonstrate more directive communication behaviors in exercises with a low control role player portrayed disposition than in exercises with a high control portrayed disposition.

Hypotheses related to performance. Apart from informing interpersonal theory with the notion of situational strength, trait activation theory also complements interpersonal theory by hypothesizing that the relationship between work behavior and performance is moderated by situational demands. According to trait activation theory, job demands act as a reference point to increase the value of some work behaviors over others (Tett & Burnett, 2003). For job demands that more strongly cue an opportunity to improve a performance outcome, the most valued work behaviors should be the behaviors that are expected to contribute the most to performance outcomes within the context of the social interaction. Thus, a role player's portrayed disposition represents a social job demand that will make particular interpersonal behaviors more valued and moderate the relationship between these behaviors and performance in interpersonal simulations.

In general, medical care clients are more satisfied and have more positive health outcomes when they have a strong interpersonal relationship with their medical practitioner (Kiesler & Auerbach, 2003). As a result, a low affiliation portrayed disposition signals that there is a greater need to build rapport, motivate the client, and understand the client's perspective, than for a high affiliation portrayed disposition. Thus, we expected that participant relationship building behavior would be more relevant to performance in low affiliation interpersonal simulations than in high affiliation interpersonal simulations. Therefore,

Hypothesis 3: The positive relationship between participant relationship building behavior and performance will be significantly greater in exercises with a low affiliation role player portrayed disposition than exercises with a high affiliation portrayed disposition.

As reviewed by Kiesler and Auerbach (2003), there are mixed findings for the relationship between health practitioner directive communication behavior and role player outcomes. These mixed findings suggest that role player portrayed disposition may moderate the relationship between participant control and performance outcomes. A high control portrayed disposition of the role player (client) can direct the interview toward nonrelevant or redundant issues. This creates a greater need for the participant to direct the interview back to issues that are relevant to understanding the role player's health situation. In contrast, for a low control portrayed disposition in which the role player is submissive and follows the participant's initial prompts to disclose relevant issues, there is less need for the participant to continually use directive communication. Thus, we expected that participant directive communication would be more relevant to performance in high control interpersonal simulations than in low control ones. Therefore,

Hypothesis 4: The positive relationship between participant directive communication and performance will be significantly greater in exercises with high control role player portrayed disposition than exercises with a low control portrayed disposition.

Method

Participants

The sample was obtained from a single cohort of 117 first-year students in the doctor of veterinary medicine program at a Canadian university. The cohort was required to perform in

	Role Player Portrayed Affiliation				
Role Player Portrayed Control	Low (i.e., cold, frustrated)	High (i.e., warm, trusting)			
Low (i.e., submissive, follow the conversation)	Simulation 1 Simulation 5	Simulation 2 Simulation 3			
High (i.e., assertive, lead the conversation)	Simulation 4 Simulation 8	Simulation 6 Simulation 7			

Table 1
Role Player Portrayed Dispositions Across Simulations

two video recorded interpersonal simulations as part of a course assignment designed to develop their interpersonal skills when interacting with clients. This assignment (skills lab) was part of their education. Thus, participants were highly motivated to perform well in the interpersonal simulations. Prior to performing in the interpersonal simulations, 107 of the participants consented to release their data for the purposes of this study. Of these participants, 85 (79.4%) were female, with a mean age of 23.6 years (SD = 0.4).

Experimental Design: Role Player Portrayed Disposition

Eight interpersonal simulations (i.e., role play scenarios) were designed as simulated client interviews. Role player portrayed disposition was varied across the eight interpersonal simulations with a 2 × 2 design. As noted above, we drew upon interpersonal theory to develop the role player portrayed disposition with specific information to delineate either low or high affiliation and low or high control (see Table 1). Of the eight interpersonal simulations, two were developed with a low affiliation / low control portrayed disposition, two were developed with a high affiliation / low control portrayed disposition, and two were developed with a high affiliation / high control portrayed disposition.

We refined role player exercise instructions initially developed by Adams and Ladner (2004) to reinforce the role player portrayed disposition both at the beginning of the interpersonal simulation and as the interpersonal simulation progressed (see Appendix). For the beginning of the interpersonal simulation, the instructions described the role player's portrayed disposition, initial thoughts and feelings, initial actions, nonverbal communications, and an initial statement for the role player to use as the interaction with the participant began. Following this, details of the character's underlying thoughts and feelings—and corresponding behavioral responses—were described for later progressions of the simulation.

For all eight interpersonal simulations, the role players represented characters who were clients for veterinary services. The role players were former veterinary practitioners, local actors, or individuals with prior experience as role players in health profession simulations. Each role player was recruited to be the *sole* role player for one of the eight simulations. Although animals were the topic of discussion, no animals were present. All role players met individually for 90 minutes with one of the researchers to discuss the details of the case and to practice their roles.

Procedure

Participants were randomly assigned to perform in two of the eight interpersonal simulations over a 2.5-week period. Prior to performing in an interpersonal simulation, participants had approximately 5 minutes to review a one-page outline of their scenario. The outline included a brief overview of the participant's role (i.e., veterinary assistant conducting a preappointment interview with a client) and detailed the purpose of their interaction with the role player (i.e., to gather information, build rapport). After their 5-minute review of the scenario, participants entered the room where the role player was waiting and the simulation commenced. Simulations were approximately 15 minutes in duration and were videotaped.

As the purpose of the interpersonal simulation was developmental, a coach was present during each session. Coaches were either current or former veterinary practitioners. During the interpersonal simulation, the coach was available to consult with the participant by using a *time-out*, which temporarily paused the interaction between the role player and the participant. This gave the participant an opportunity to reflect on his or her performance and to consider what approach to try when the interpersonal simulation resumed. During the time-out, the coach was meant to guide the participant's reflection through questioning and not provide a directive set of instructions for what the participant should do next. Either the coach or the participant could call a time-out.

Assessors and Assessor Training

Eleven undergraduate psychology students served as assessors. Ten of the 11 assessors were female (91%) and their average age was 21.6 years. All assessors participated in 24 hours of training over a 3-week period. Frame of reference training was used following steps outlined by Sulsky and Day (1992). These included reviewing the rating measures, reading interview transcripts, and calibrating ratings with 6 to 10 training videos. At the end of the training period, the two-way random effect intraclass correlation was satisfactory (i.e., greater than .70) for all rating measures across raters.

To reduce common method variance, assessors completed only one measure for each video. Specifically, seven assessors rated role player affiliation and control behaviors (see manipulation check below). Another four assessors rated participant interpersonal behaviors (see additional details for interpersonal measure below). In addition, all assessors were unaware of the hypotheses for the study.

Interpersonal Behavior Ratings

As often done in ACs, assessors were given a checklist to make notes of participant interpersonal behavior. To measure the frequency that participants used relationship building and directive communication, we adapted a well-established checklist called the Measure of Patient-Centered Communication (MPCC; Brown, Stewart, & Ryan, 2001). The MPCC has been found to have good interrater reliability (range = .80–.83) and to be strongly related (r = .85) to scores of physicians' interpersonal skills (Brown et al., 2001; Stewart et al., 2000).

The utility of the MPCC is that it assesses participant interpersonal behavior across a range of issues (i.e., lines of inquiry) relevant to a client's perspective (Noguira, Adams, Bonnett, Shaw, & Ribble, 2010), such as understanding their illness, exploring their feelings

and beliefs about the illness/situation, assessing their environment, and finding common ground. Participants were rated on their use of relationship building and directive communication behaviors once or more than once per line of inquiry (i.e., zero behaviors, one behavior, and two or more behaviors).

First, assessors observed the videos in pairs and completed independent ratings on the MPCC. Next, the assessors discussed their ratings and created a consensus rating. We calculated overall ratings of relationship building and directive communication behavior by averaging the consensus ratings across all inquiry lines (relevant to either relationship building or directive communication). Ratings for zero behaviors were scored 0, ratings for one behavior were scored 0.5, and ratings for two or more behaviors were scored 1 (producing a value from 0 to 1). Although the analyses used consensus ratings, we also computed the reliability of the individual ratings. The one-way random effect intraclass correlations between assessors' independent ratings were .77 and .82 for relationship building and directive communication, respectively.

Performance Outcome Measure

In health profession contexts, the client typically assesses performance either through the quality of service delivery (Leatherman & Sutherland, 2003), client satisfaction (Sitzia & Wood, 1997), or both (Hall, Roter, & Katz, 1988). Client/customer service ratings have also been used as criteria in organizational psychology (e.g., multisource feedback, situational judgment tests; Weekley & Jones, 1999). Therefore, the client (in this case the role player) was used to evaluate participant performance instead of the assessor. This also mitigates potential common method variance concerns (related to our last set of hypotheses) as the assessors already provided the interpersonal behavior ratings. The role player assessed participant performance outcomes immediately after the role play.

The performance measure evaluated role player perceptions of how well participants achieved three performance objectives deemed to be most important in a client interview situation (Silverman et al., 2005). A 13-item scale was developed that included items relevant to these objectives: (1) their understanding of any action plan from the interview (e.g., "I understood the participant's definition of the problem"), (2) their perception of whether they were able to communicate their issues (e.g., "I was able to discuss all my relevant thoughts, feelings, and ideas about my situation"), and (3) their perception of whether the participant developed rapport (e.g., "I feel the participant cared about me as a person"). The role player rated each item on a 9-point Likert scale (1 = disagree, 9 = agree). The internal consistency of this measure was .92. Thus, in line with research on the dimensionality of job performance (Viswesvaran, Schmidt, & Ones, 2005), these results suggest that it was most meaningful to use a single performance score in our analyses.

Control Measures

Four control measures were used. First, we controlled for gender as women have been found to demonstrate more relationship building in client interviews (Kiesler & Auerbach, 2003). We used dummy coding to code participants as female (1) or male (0). Since participants can learn from participating in exercises (Halman & Fletcher, 2000), we controlled for whether it was the participant's first or second interpersonal simulation (i.e., simulation

	Simulations											
Role Player Portrayed	Low						High					
Dispositions	Scenario	n	M	SD	t	d	Scenario	n	М	SD	t	d
Affiliation	1	22	4.82	0.23	-3.68**	-1.61	2	24	5.55	0.32	8.16***	3.40
	4	20	2.92	0.53	-17.45***	-7.80	3	23	4.94	0.28	-1.10	-0.47
	5	27	5.04	0.20	1.11	0.44	6	23	5.55	0.33	6.89***	2.98
	8	22	4.58	0.43	-4.40***	-1.92	7	22	5.34	0.30	5.37***	2.34
	Total	91	4.41	0.34			Total	92	5.35	0.31		
Control	1	22	4.63	0.64	-2.71*	-1.18	4	20	6.53	0.91	7.53***	3.37
	2	23	5.27	0.92	1.41	0.60	6	23	6.12	0.75	6.96***	3.46
	3	23	3.32	0.66	-11.97***	-5.10	7	22	6.46	0.47	14.58***	6.36
	5	27	4.67	0.19	-3.04**	-1.19	8	22	6.77	0.46	17.48***	7.63

Table 2

Comparison of Role Player Portrayed Dispositions of Affiliation and Control by Simulation

Note: One-sample t test and effect size d values analyzed against the null hypothesis (i.e., a neutral rating of 5). *p < .05, two-tailed.

Total

87

6 46 0 64

Total

order). It was also anticipated that the coach could have influenced participant behavior and performance in the simulations. Therefore, a third control variable was the number of time-outs that were called during a simulation. As a fourth control, we accounted for whether the coaches used a directive coaching style to tell participants what they should do (e.g., "Try to use more empathy" or "Now you can use more close-ended questions") versus helping participants to reflect what they should do next (e.g., "How do you think the interview is going?" or "What do you want to try to do next?"). To measure coaching style, one of the assessors observed the time-outs for all of the video recorded simulations and rated the coach's style on a 5-point Likert scale with *directive coaching* as 1 and *reflective coaching* as 5.

Manipulation Check of Interpersonal Simulations

95 4.48 0.58

As noted above, 7 of the 11 assessors observed the videos and rated the role players' behavior. This was done to check whether the role players' behavior reflected the purported portrayed disposition conditions (see Table 1). Assessors rated the role player on two items: affiliation and control. Each item was represented by a Likert scale that ranged from 1 (*low*) to 9 (*high*), with 5 as *neutral*. Each role player was rated by a minimum of two assessors. The one-way random effects intraclass correlations between assessors were .87 and .90 for affiliation and control, respectively. Therefore, ratings from all assessors were averaged.

Table 2 presents means, standard deviations, t values, and effect sizes for role player behavior conditions categorized by role player condition and scenario. A one-way between measures analysis of variance found that there were significant differences in role player behavior between scenarios for the affiliation condition, F(1, 182) = 80.66, p < .001, and the

^{**}p < .01, two-tailed.

^{***}p < .001, two-tailed.

Table 3

Descriptive Statistics and Correlations of Study Variables

Variables	M	SD	1	2	3	4	5	6	7	8	9	10
Control Variables												
1. Age	23.62	0.40										
2. Gender	0.80	0.40	15*									
3. Simulation Order	1.27	0.84	04	.06								
4. Number of Time-Outs	1.84	1.06	.04	09	08							
5. Coaching Style	3.26	1.08	02	.21**	.16*	30***						
Mean Role Player Behavior												
6. Control	5.42	1.31	03	.15*	.32***	18**	.15*					
Affiliative	4.87	0.82	.05	.05	06	28***	.05	19**				
Interpersonal Behaviors												
8. Directive Communication		0.16	04	.08	24**	02	.06	20**	.23**	14		
Relationship Building	0.25	0.15	06	.22**	.09	.09	.13	01	30***	.04	.24*	
Performance												
10. Performance Outcomes	3.16	0.94	.06	.17*	.23**	21**	.15*	.13	.36***	.13	.07	05

Note: Within-participant correlations across videos are displayed in boldface for participants who completed two exercises.

control condition, F(1, 182) = 233.27, p < .001. One-sample t tests were conducted for each of the eight scenarios to verify whether the role player's mean affiliation and control behaviors were significantly different from the null hypothesis (i.e., a neutral rating of 5). For role player portrayed affiliation and portrayed control, mean differences from the null hypothesis were found in the expected direction in all but three scenarios. Specifically, Scenario 2 (low control) was not included in the analyses related to control and Scenarios 3 (high affiliation) and 5 (low affiliation) were not included in the analyses related to affiliation since the manipulation test was not supported for these scenarios. With these scenarios removed from their respective analyses, the manipulation check was satisfied for six scenarios for portrayed affiliation and for seven scenarios for portrayed control.

Results

From the total of 214 exercises performed by participants, 184 of these exercises were analyzed in this study. Table 3 presents the means, standard deviations, and correlations from the study variables. In addition, within-participant correlations across videos are displayed in boldface for participants who completed two exercises. Correlations between the two

^{*}p < .05, two-tailed.

^{**}p < .01, two-tailed.

^{***}p < .001, two-tailed.

	Step	Step	
Predictor Variable ($n = 133$)	1	2	
1. Control Variables			
Gender	0.09	0.14	
Simulation Order	0.14	0.14	
Coaching Time-Outs	0.23*	0.12	
Coaching Style	0.20*	0.19*	
2. Exercise Effect			
Affiliative Portrayed Disposition		-0.34***	
R	.32	.45	
R^2	.10	.20	
ΔR^2		.10***	

Table 4
Multiple Regression Results for Relationship Building

Note: Main effects presented as betas.

exercises completed by the same participant were small for relationship building (r = .24, p < .05), and nonsignificant for directive communication (r = .14, ns) and role players' ratings of participant performance (r = .05, ns). These correlations suggest that participant use of interpersonal behaviors and participant performance were affected by differences between exercises. Thus, consistent with the AC literature, there was evidence of exercise effects.

Hierarchical regression analyses tested role player portrayed disposition on participant use of interpersonal behaviors.² In Step 1, gender, simulation order, the number of coaching time-outs, and coaching style were all entered as control variables. In Step 2, role player portrayed disposition was entered to test the main effect. Thus, the portrayed affiliation condition was entered for predicting participant use of relationship building, and the portrayed control condition was entered for predicting participant use of directive communication.

Table 4 presents the results for H1, which stated that participants would demonstrate more relationship building in exercises with a low affiliation portrayed disposition than in exercises with a high affiliation portrayed disposition. Consistent with H1, role player portrayed affiliation was a significant predictor of participant use of relationship building ($\Delta R^2 = .10$, p < .001). That is, participants demonstrated more relationship building behavior in exercises with a low affiliation portrayed disposition than a high affiliation portrayed disposition ($\beta = -0.34$, p < .001).

Table 5 presents the results for H2, which stated that participants would demonstrate more directive communication in exercises with a low control role player than in exercises with a high control portrayed disposition. Role player portrayed control was a significant predictor of participant use of directive communication ($\Delta R^2 = .11$, p < .001). Participants demonstrated more directive communication in exercises with a low control role player than in exercises with a high control role player ($\beta = -0.36$, p < .001). Thus, H2 was supported, as participant use of directive communication tended to be affected by role player portrayed control in a reciprocal pattern.

^{*}p < .05, two-tailed.

^{***}p < .001, two-tailed.

	Step	Step	
Predictor Variable ($n = 160$)	1	2	
1. Control Variables			
Gender	0.05	0.10	
Simulation Order	-0.23	-0.13	
Coaching Time-Outs	0.01	-0.05	
Coaching Style	0.06	0.07	
2. Exercise Effect			
Control Portrayed Disposition		-0.36***	
R	0.24	0.41	
R^2	0.06	0.16	
ΔR^2		0.11***	

Table 5
Multiple Regression Results for Directive Communication

Note: Main effects presented as betas.

Three-step hierarchical regression analyses were conducted to test the hypotheses relating to the moderating effect of role player portrayed disposition on the relationship between participant interpersonal behavior and performance ratings. As recommended by Aiken and West (1991), participant interpersonal behaviors were centered and the interaction terms were computed based on these centered scores. For Step 1, control variables were entered. The centered interpersonal behaviors (i.e., relationship building or directive communication) and exercise portrayed disposition condition were entered for Step 2, with the respective interaction term entered for Step 3.

Table 6 presents the results for the effect of affiliation portrayed disposition conditions and participant relationship building accounting for variance in participant performance. H3 stated that the positive relationship between relationship building and performance would be significantly greater in exercises with a low affiliation portrayed disposition than exercises with a high affiliation portrayed disposition. Consistent with H3, there was a significant interaction between relationship building and portrayed affiliation condition ($\beta = -0.22$, p < 0.25.05). To examine the nature of this interaction, we followed Aiken and West (1991) and plotted separate regression lines at two levels of relationship building behavior: at 1 SD below the mean and at 1 SD above the mean. The effect of relationship building on performance outcome is presented in Figure 1. The graph illustrates a significant positive slope for participants interacting with low affiliation portrayed role players ($\beta = 0.30$, t = 2.55, p < .05), whereas the slope for participants interacting with high affiliation portrayed role players was not significant ($\beta = -0.02$, t = -0.13, ns). Thus, H3 was supported, as participants who demonstrated more relationship building were more likely to perform effectively if they were in an exercise with a role player with low affiliation portrayed disposition, but usage of relationship building had no effect on performance for participants who interacted with role players with a high affiliation portrayed disposition.

Table 6 also presents the results for the effect of control portrayed disposition conditions and participant usage of directive communication on performance. H4 stated that the positive

^{***}p < .001, two-tailed.

Table 6

Multiple Regression Results for Participant Performance

		Step	Step	Step	
Criterion	Predictor Variable	1	2	3	
Performance Across	1. Control Variables				
Affiliative Portrayed	Gender	0.17	0.09	0.09	
Disposition	Simulation Order	0.19*	0.16*	0.15	
(n = 133)	Coaching Time-Outs	-0.18*	-0.07	0.08	
	Coaching Style	0.09	0.07	0.08	
	Affiliative Portrayed Disposition (APD)		0.44***	0.40***	
	Relationship Building (RB)		0.17	0.31**	
	3. APD \times RB			-0.22*	
	R	.39	.55	.57	
	R^2	.15	.30	.32	
	ΔR^2		.15***	.02*	
Performance Across	1. Control Variables				
Control Portrayed	Gender	0.09	0.06	0.07	
Disposition	Simulation Order	0.27**	0.26**	0.26**	
(n = 160)	Coaching Time-Outs	-0.15*	-0.13	-0.13	
	Coaching Style	0.05	0.04	0.04	
	Control Portrayed Disposition (CPD)		0.15	0.15	
	Directive Communication (DC)		0.18*	-0.07	
	3. $CPD \times DC$			0.33**	
	R	.36	.40	.46	
	R^2	.13	.16	.21	
	ΔR^2		.03	.05*	

Note: Effects presented as betas.

relationship between participant use of directive communication and performance would be significantly greater in exercises with high control portrayed disposition than exercises with a low control portrayed disposition. Consistent with H4, there was a significant interaction between participant directive communication and performance ($\beta = 0.33$, p < .01).

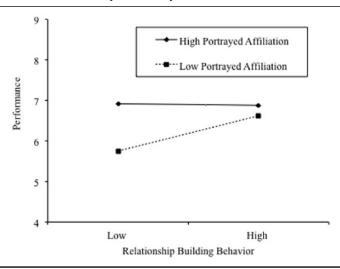
The effect of directive communication on performance outcome is presented in Figure 2. The graph illustrates the significant positive slope found for participants interacting with high control portrayed role players ($\beta = 0.39$, t = 3.88, p < .001), whereas the slope for participants interacting with low control portrayed role players was not significant ($\beta = -0.04$, t = -0.32, ns). Thus, H4 was supported, as participants who demonstrated more directive communication were more likely to perform effectively if they were interacting with a high control role player, but participant usage of directive communication had no significant effect on performance for participants who interacted with role players with a low control portrayed disposition.

^{*}p < .05, two-tailed.

^{**}p < .01, two-tailed.

^{***}p < .001, two-tailed.

Figure 1
Performance Outcome by Participant Relationship Building Moderated by Role
Player Portrayed Affiliation



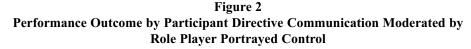
Discussion

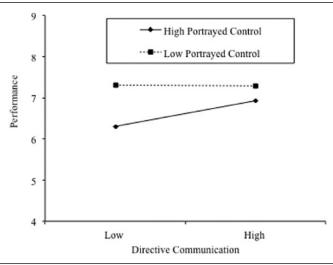
More than a decade ago, Lievens and Klimoski stated that adopting an interpersonal lens might be fruitfully used to deepen our insight of participant behavior and performance in ACs because ACs "are essentially dealing with 'social' information, gathered in social or interpersonal settings [emphasis added]" (2001: 271). Surprisingly, virtually no studies have focused on the interpersonal dynamics at work in AC exercises. In the current study, we aimed to unravel the role of social demands (role player portrayed disposition) in explaining the variability in participant behavior and performance across interpersonal simulations. Moreover, integrating interpersonal theory and trait activation theory enabled us to make predictions as to how the interactional patterns between role players and participants might unfold.

Main Conclusions

In line with the exercise effects found in the AC, education, and medical literatures (e.g., Guiton et al., 2004; Hodges et al., 1996; Lance et al., 2004; Putka & Hoffman, 2013), the substantial variability in participant performance across exercises was confirmed in the current study as there was considerable variance in interpersonal behavior for participants who completed two exercises. The correlation of participant use of relationship building across the two exercises was small, and there was a nonsignficant correlation for participant use of directive communication across exercises.

In the current study, we were able to illuminate part of the reason behind participant performance differences across exercises. Social demands explained significant portions of





variance in participant behavior and performance across exercises. This was evidenced by two key findings. First, the portrayed disposition accounted for variance in participant use of interpersonal behaviors (relationship building and directive communication). The findings of role player effect on participant behavior are consistent with recent findings from Schollaert and Lievens (2012), who found that a role player's more consistent use of particular behavior-relevant statements (i.e., prompts) led to the increased observability of relevant behaviors. The current study extends these findings by demonstrating that the underlying disposition portrayed by the role player, manifested through nonverbal communication, emotional reactions, and statements, can be incorporated into an interpersonal simulation to create a relatively strong situational demand. In turn, this demand affects the frequency that participants demonstrate the relevant behaviors being assessed in the interpersonal simulation. For example, participants were much more likely to use relationship building skills in scenarios with role players who demonstrated a high amount of frustration and indifference than scenarios with role players who demonstrated more friendliness and warmth. These findings suggest that affiliation and control portrayed dispositions were both distinct and meaningful social demands in the current interpersonal simulations.

Second, the role player portrayed disposition not only affected participant use of interpersonal behaviors but also moderated the effectiveness of those behaviors. One of the strongest relationships observed in the current study was that participant performance was significantly higher for simulations with a high portrayed affiliation than a low portrayed affiliation (r = .36, p < .001; see Table 3). This finding suggests that the high affiliation role player was a much easier simulation (i.e., rapport could be established with ease), so that the use of interpersonal behavior was less important to participant performance in these simulations.

Behavior and performance were positively related only in the exercises when the role player portrayed disposition made it challenging for participants to achieve particular outcomes relevant to performance.

Additionally, when participants interacted with a role player who did not readily accept rapport (i.e., low affiliation portrayed disposition; see Appendix), participants who used more relationship building behaviors were better able to establish rapport. Furthermore, when participants interacted with a role player who directed the conversation away from a discussion of relevant health issues (i.e., high control portrayed disposition; see Appendix), participants who used more directive communication were more effective at guiding the role player to discuss more relevant issues. Thus, consistent with interactionist theories, such as trait activation theory, when the portrayed disposition made particular interpersonal behaviors more relevant, it was found that there was a significant positive relationship between participant use of the valued behavior and their subsequent performance. In other words, higher performance evaluations were given when participant behavior fit with the situational demands. This moderation effect is important in light of the exercise effect as it demonstrates that interpersonal behavioral variability (instead of consistency) across different situations results in more effective performance evaluations.

Implications for Theory and Future Research

The current study integrated interpersonal theory and trait activation theory to help guide predictions related to how social demands influence interactional patterns and variability in interpersonal simulations. Through the rule of complementarity, interpersonal theory provides a specific set of predictions for how individuals tend to respond to social demands in typical interpersonal interactions. However, there can be times when role player portrayed disposition is not the strongest situational demand within an exercise. As an example, in the health practitioner setting of the current study, when participants interacted with a low affiliation role player, the task demand of "building rapport with the role player" appears to have been stronger than the social demand of responding with correspondingly low affiliation behavior. Importantly, this finding suggests that integrating the rule of complementarity for predicting workplace behavior and performance should be done in concurrence with consideration of the situational strength and relevance of other task and organizational demands within a situation. Overall, trait activation theory complements interpersonal theory by including (1) situational demands (task and organizational) other than social demands, (2) the notion of situational strength, and (3) situational demands as moderators of the relationship between behavior and performance.

This integration of interpersonal theory and trait activation theory provides various intriguing avenues for future research. One such direction consists of building situational demands in AC exercises through careful planning of both role player *and* task instructions. This may lead to even stronger prediction of the variance in participant behavior and performance outcomes. Although previous studies have found that differing task instructions across interpersonal simulations does not lead to variance in participant behavior (Schneider & Schmitt, 1992; Schollaert & Lievens, 2012), role player and task instructions in combination may create a stronger situational demand. For example, requiring a participant to complete a

competitive task (i.e., negotiating with low goal interdependence) with a low affiliation role player might increase the likelihood that participants would demonstrate more low affiliation behavior. Likewise, participants may be less likely to question a role player with a high control portrayed disposition when participating in a task in which the role player is positioned as the participant's manager.

Another avenue for future studies deals with the influence of coaches on participant behavior and performance in developmental ACs. The coach and the accompanying coaching tips might be considered relatively strong situational demands for steering the interactions in AC exercises. However, in this study, the number and type of coaching interventions did not exert significant effects on the hypothesized interactions. That said, a more reflective coaching style was negatively related to the number of coaching time-outs (r = -30, p < .001), and both were related to participant performance (r = .15, p < .05 and r = -.21, p < .01), respectively; see Table 3). In addition, participant performance improved in their second role play (r = .23, p < .01); see Table 3). It is possible this performance improvement was due to time-out frequency and coaching style, but it is also possible that participant performance influenced time-out frequency and coaching style. Clearly, more theory-driven research on the effects of coaching on participant performance during interpersonal simulations is needed, particularly in the context of developmental ACs.

Implications for Practice

Generally, the ability of AC exercises to encourage unique and interesting behavioral variance across exercises is one of their potential benefits. That is, instead of getting a generic sense of one's behavioral tendencies (as accomplished by personality inventories), AC exercises can (drawing from relevant theory) be systematically designed to evoke certain critical behaviors within critical job-relevant situations. Clearly, the more theory that can be brought to bear to understand the contextual forces that are likely to influence specific behaviors, the better off AC designers will be.

One practical implication from the current study suggests that more careful design of role player portrayed disposition can account for the variance of participant use of particular behaviors. For the current study, it was found that the role player portrayed disposition is a particularly strong situational demand within role plays, which causes participants to elicit a range of different interpersonal patterns across exercises, even when they are completing the same task across role plays. At a practical level, our results suggest that presenting participants with different role player portrayed dispositions might enable practitioners to assess the much needed interpersonal adaptability of today's and tomorrow's employees (Pulakos, Arad, Donovan, & Plamondon, 2000).

This study also demonstrated that interpersonal simulations can be designed with role player portrayed dispositions that are interpreted consistently by participants and assessors. This outcome needs to be qualified by the fact that for three of the eight exercises, the role player portrayed dispositions were not consistently demonstrated. For example, the role players' own personalities dominated their behavior in the exercise, and this was incongruent with the portrayed disposition required (e.g., being extroverted when the portrayed disposition was low control). These issues suggest that interpersonal simulations should be pilot tested to ensure that role player portrayed dispositions are being consistently demonstrated as well as congruent with the task and situation demands.

An additional implication for practitioners deals with the development of alternate forms of AC exercises. When alternate forms of exercises are designed for the assessment, certification, or selection of many applicants (Brummel et al., 2009), high consistency between exercises is critical. When the creation of alternate forms is the central goal, our study suggests that keeping the role player's portrayed disposition consistent across interpersonal simulations would allow for more reliable ratings between exercises. However, since participants in the current study completed only one or two exercises, future research should be conducted in which participants complete multiple interpersonal simulations in order to directly test whether controlling for role player portrayed disposition can increase the reliability between parallel forms of an interpersonal simulation.

A more general implication suggested by the results of this study is that an individual's performance is contingent on a fit between the individual's interpersonal skills, the social demands within the work context, and interpersonal behavior. This finding lends further empirical support to the conceptualizations of interpersonal skills and interpersonal performance as a function of individuals' adaptability (e.g., Klein, DeRouin, & Salas, 2006; Pulakos et al., 2000). The framework of adaptability has several implications for how performance should be evaluated and how employee development can be supported. One example is that the accuracy of job performance ratings or the utility of developmental feedback could be increased if it was noted whether employees demonstrated key behaviors within a particular job-relevant situational context (e.g., communication in a situation of high uncertainty).

Limitations

A first limitation is related to the sample of this study. The participants, as first-year doctor of veterinary medicine students, were relative novices at conducting client interviews. Therefore, the interpersonal simulations were designed to minimize participant stress. As a result, role players were instructed to direct their low affiliation behaviors to external factors (e.g., disagreement with a spouse) rather than at the participant (e.g., blame participant for health issues). This may have led to less disagreement and conflict than could be experienced in actual client interviews, thereby increasing the usage of relationship building. Although this suggests that the interpersonal simulations induced a strong context for showing relationship building, situational strength was not directly measured. One approach that future research could use to directly test the effect of situational strength on complementarity would be to assess situational strength by asking participants to evaluate the importance of skills within each exercise (Kleinmann, 1993; Meyer et al., 2010).

A second limitation relates to potential concerns about the generalizability to managerial selection contexts. Any generalization of results across situations will require a clear understanding of the situational factors (task, social, and organizational) and their consistency between exercises. Although the task demands were consistent across this study's interpersonal simulations (i.e., to gather information from the role player), participant behavior varied based on the social demands (affiliation and control) presented by the role player. This suggests that the results should generalize to other contexts (e.g., business) with similar situational demands, particularly if the task demands are of a customer/client service nature (e.g., a business professional providing advice to a client). That said, managerial settings have more diverse task demands that will need to be explored through research to fully understand their effects. For

example, managers giving instructions to their subordinate may require a different set of behavioral patterns than those observed in this study, particularly if it is an emergency situation where the subordinate needs to act immediately and poor execution is not acceptable.

A final limitation is that we focused on only one type of interpersonal simulation (role play) and assessed only two key interpersonal behaviors (i.e., relationship building and directive communication). Future research should examine whether our results generalize to other interpersonal behaviors (Klein et al., 2006) and a broader set of performance tasks and contexts. An aspect in favor of generalizability is that role player portrayed dispositions are structural components of a variety of interpersonal simulations (e.g., role plays, oral presentations, fact findings, and sometimes even group discussions) and that such simulations are the mainstay of ACs. In addition, such interpersonal simulations are also used in performance assessment outside the employment context (e.g., teacher assessment, attorney bar assessment).

Conclusion

As a predictive methodology, AC exercises assess actual job-relevant behavior across a range of job-relevant situational demands (Thornton & Rupp, 2006). Thus, in order to design the most predictive ACs, the challenge for researchers and practitioners consists of understanding the interacting relationship between person and situation (Lievens, Tett, & Schleicher, 2009). This study sought to account for some of this interaction by focusing on the interpersonal dynamics at work in interpersonal simulations and exploring the effect of role player portrayed disposition on participant behavior as well as on performance outcomes. By integrating concepts from interpersonal theory and trait activation theory, this study formulated predictions about participant interpersonal behaviors across exercises and accounted for significant cross-exercise variance in behavior and performance due to the role player portrayed disposition. Conceptually, this study therefore shed light on the complementary mechanisms and social demands that produce participant performance differences across exercises. At a practical level, this study provided valuable evidence-based guidance for developing more effective interpersonal simulations.

Appendix *Examples of Portrayed Disposition Exercise Instructions*

Portrayed Disposition	Opening Statement	Initial Nonverbals	Initial Thoughts	Reaction During the Interaction
High Affiliation	"Oh. It must be very interesting working as a veterinary assistant. What a great experience!"	Greet the veterinary assistant with a wide smile and warm face. Show openness and friendliness in your body language.	The veterinary assistant will remind you of your own daughter, and you are eager to learn about how much she enjoys working at the clinic.	talking about the pigs, speak

(continued)

Appendix (continued)

Portrayed Disposition	Opening Statement	Initial Nonverbals	Initial Thoughts	Reaction During the Interaction
Low Affiliation	"Actually, I'm here again with this rabbit. I'm getting very tired of running here with all of its problems. The darn thing is such a pain and takes up way too much time!"	Sit in a chair, arms folded. Your facial expressions will be cold and tense. Speak in short and terse sentences.	You are having an especially stressful day today, and waiting 30 minutes to see someone has compounded the problem.	If you do not feel that the student understands your position, or does not care about you as a person, you will become more agitated and distraught. Your negative emotions should be continually expressed to the student in your verbal (e.g., tone of voice) and nonverbal communication (e.g., facial expressions, body language).
High Control	"You know I just got back from Haiti. The land there was beautiful; it reminds me a lot of how the farms were here 20 or 30 years ago!"	Stand by your chair when the student walks into the room. Give a firm confident handshake. Speak in a long-winded manner.	You have not had the chance to talk about your family and farm for quite some time, so you feel a strong need to talk to somebody and share your opinion.	If you find that you are talking for long periods of time, you will allow for a lull in the conversation, or an opportunity for the student to engage more in the conversation.
Low Control	"I'm new to this pig farm work but I'll help you any way I can."	Sit in the chair. Speak softly and look down towards the ground to avoid making much eye contact.	You want to be of assistance, but since you are new to your position and organization, you are not sure whether you have too much useful information to share.	You are reluctant to discuss the farm in detail because you are insecure about your own level of knowledge and having a low skill set. You will only be willing to talk about these issues if the student makes you feel more confident in your knowledge and abilities to do your job.

Notes

1.Not all exercises could be analyzed as there were technical problems in videotaping 24 exercises, and ratings were incomplete for another 6 exercises. As a result, the data in this study were from 81 participants who completed 2 exercises and 22 participants who completed 1 exercise.

2. There was dependency in the data as the data were analyzed for each of a single participant's two interpersonal simulations. Hierarchical linear modeling was also performed to account for this dependency in the data. The results from the hierarchical linear modeling analyses were consistent with the hierarchical regression analyses for all of the current study's hypotheses and can be obtained from the second author.

References

Adams, C. L., & Ladner, L. 2004. Implementing a simulated client program: Bridging the gap between theory and practice. *Journal of Veterinary Medical Education*, 31: 138-145.

Aiken, L. S., & West, S. G. 1991. *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.

- Arthur, W., Day, E. A., McNelly, T. L., & Edens, P. S. 2003. A meta-analysis of the criterion-related validity of assessment center dimensions. *Personnel Psychology*, 56: 125-154.
- Boulet, J. R., McKinley, D. W., Whelan, G. P., & Hambleton, R. K. 2003. Quality assurance methods for performance-based assessments. Advances in Health Sciences Education, 8: 27-47.
- Brown, J. B., Stewart, M., & Ryan, B. L. 2001. Assessing communication between patients and physicians: The Measure of Patient-centered Communication (MPCC). Working paper no. 95-92, The University of Western Ontario, London, ON, Canada.
- Brummel, B. J., Rupp, D. E., & Spain, S. M. 2009. Constructing parallel simulation exercises for assessment centers and other forms of behavioral assessment. *Personnel Psychology*, 62: 137-170.
- Cohen, D. S., Colliver, J. A., Robbs, R. S., & Swartz, M. H. 1997. A large-scale study of the reliabilities of checklist scores and ratings of interpersonal and communication skills evaluated on standardized-patient examination. *Advances in Health Sciences Education*, 1: 209-213.
- Costa, P. T., & McCrae, R. R. 2011. The five-factor model, five-factor theory, and interpersonal psychology. In L. M. Horowitz & S. Strack (Eds.), Handbook of interpersonal psychology: Theory, research, assessment, and therapeutic interventions: 91-106. Hoboken, NJ: John Wiley & Sons.
- Darley, J. M., & Fazio, R. H. 1980. Expectancy confirmation processes arising in the social interaction sequence. American Psychologist, 35: 867-881.
- Fournier, M. A., Moskowitz, D. S., & Zuroff, D. C. 2008. Integrating dispositions, signatures, and the interpersonal domain. *Journal of Personality and Social Psychology*, 94: 531-545.
- Gaugler, B. B., Rosenthal, D. B., Thornton, G. C., & Bentson, C. 1987. Meta-analysis of assessment center validity. Journal of Applied Psychology, 72: 493-511.
- Gibbons, A. M., & Rupp, D. E. 2009. Performance consistency as an individual difference: A new (old) perspective on the assessment center construct validity debate. *Journal of Management*, 35: 1154-1180.
- Guiton, G., Hodgson, C. S., Delandshere, G., & Wilkerson, L. 2004. Communication skills in standardized-patient assessment of final-year medical students: A psychometric study. Advances in Health Sciences Education, 9: 179-187.
- Haaland, S., & Christiansen, N. D. 2002. Implications of trait-activation theory for evaluating the construct validity of assessment center ratings. *Personnel Psychology*, 55: 137-163.
- Hall, J. A., Roter, D. L., & Katz, N. R. 1988. Meta-analysis of correlates of provider behavior in medical encounters. Medical Care, 26: 657-675.
- Halman, F., & Fletcher, C. 2000. The impact of development centre participation and the role of individual differences in changing self-assessments. *Journal of Occupational and Organizational Psychology*, 73: 423-442.
- Hermelin, E., Lievens, F., & Robertson, I. P. 2007. The validity of assessment centers for the prediction of supervisory ratings: A meta-analysis. *International Journal of Selection and Assessment*, 15: 405-411.
- Higgins, E. T. 1981. The communication game: Implications for social cognition and persuasion. In E. T. Higgins, C. P. Herman, & M. P. Zanna (Eds.), *Social cognition: The Ontario Symposium*, vol. 1: 343-392. Hillsdale, NJ: Erlbaum.
- Hodges, B., Turnbull, J., Cohen, R., Bienenstock, A., & Norman, G. 1996. Evaluating communication skills in the objective structured clinical examination format: Reliability and generalizability. *Medical Education*, 30: 38-43.
- Hoffman, B. J., Melchers, K. G., Blair, C. A., Kleinmann, M., & Ladd, R. T. 2011. Exercises and dimensions are the currency of assessment centers. *Personnel Psychology*, 64: 351-395.
- Horowitz, L. M., & Strack, S. 2011. *Handbook of interpersonal psychology: Theory, research, assessment, and therapeutic interventions*. Hoboken, NJ: John Wiley & Sons.
- Howard, A. 2008. Making assessment centers work the way they are supposed to. *Industrial and Organizational Psychology: Perspectives on Research and Practice*, 1: 98-104.
- International Task Force on Assessment Center Guidelines. 2009. Guidelines and ethical considerations for assessment center operations. *International Journal of Selection and Assessment*, 17: 243-253.
- Jackson, D. J. R., Ahmad, M. H., Grace, G., & Yoon, J. 2011. An alternative take on AC research and practice: Task-based assessment centers. In N. Povah & G. C. Thornton, III (Eds.), Assessment centres and global talent management: 33-46. Surrey, England: Gower.
- Kiesler, D. J., & Auerbach, S. M. 2003. Integrating measurement of control and affiliation in studies of physicianpatient interaction: The interpersonal circumplex. Social Science and Medicine, 57: 1707-1722.

- Klein, C., DeRouin, R. E., & Salas, E. 2006. Uncovering workplace interpersonal skills: A review, framework, and research agenda. In G. P. Hodgkinson & J. K. Ford (Eds.), *International review of industrial and organiza*tional psychology, vol. 21: 80-126. New York: John Wiley & Sons.
- Kleinmann, M. 1993. Are rating dimensions in assessment centers transparent for participants? Consequences for criterion and construct validity. *Journal of Applied Psychology*, 78: 988-993.
- Klimoski, R. J., Friedman, B. A., & Weldon, E. 1980. Leadership influence in the assessment of performance. Personnel Psychology, 33: 389-401.
- Krause, D. E., & Thornton, G. C. 2008. A cross-cultural look at assessment center practices: Survey results from Western Europe and North America. Applied Psychology, 58: 557-585.
- Kuncel, N. R., & Sackett, P. R. 2014. Resolving the assessment center construct validity problem (as we know it). Journal of Applied Psychology, 99: 38-47.
- Lance, C. E. 2008. Why assessment centers don't work the way they are supposed to. *Industrial and Organizational Psychology: Perspectives on Research and Practice*, 1: 84-97.
- Lance, C. E., Hoffman, B. J., Gentry, W. A., & Baranik, L. E. 2008. Rater source factors represent important subcomponents of the criterion construct space, not rater bias. *Human Resource Management Review*, 18: 223-232.
- Lance, C. E., Lambert, T. A., Gewin, A. G., Lievens, F., & Conway, J. M. 2004. Revised estimates of dimension and exercise variance components in assessment center post-exercise dimension ratings. *Journal of Applied Psychology*, 89: 377-385.
- Leatherman, S., & Sutherland, K. 2003. The quest for quality in the NHS: A mid-term evaluation of the 10-year quality agenda. London: TSO.
- Lievens, F. 1998. Factors which improve the construct validity of assessment centers: A review. *International Journal of Assessment and Selection*, 6: 141-152.
- Lievens, F. 2002. Trying to understand the different pieces of the construct validity puzzle of assessment centers: An examination of assessor and assessee effects. *Journal of Applied Psychology*, 87: 675-686.
- Lievens, F., Chasteen, C. S., Day, E. A., & Christiansen, N. D. 2006. Large-scale investigation of the role of trait activation theory for understanding assessment center convergent and discriminant validity. *Journal of Applied Psychology*, 93: 247-258.
- Lievens, F., Dilchert, S., & Ones, D. S. 2009. The importance of exercise and dimension factors in assessment centers: Simultaneous examinations of construct-related and criterion-related validity. *Human Performance*, 22: 375-390.
- Lievens, F., & Klimoski, R. J. 2001. Understanding the assessment center process: Where are we now? In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology*, vol. 16: 245-286. Chichester, England: John Wiley & Sons.
- Lievens, F., Tett, R. P., & Schleicher, D. J. 2009. Assessment centers at the crossroads: Toward a reconceptualization of assessment center exercises. In J. J. Martocchio & H. Liao (Eds.), Research in personnel and human resources management: 99-152. Bingley, England: JAI Press.
- Markey, P. M., Funder, D. C., & Ozer, D. J. 2003. Complementarity of interpersonal behaviors in dyadic interactions. Personality and Social Psychology Bulletin, 29: 1082-1090.
- McCann, C. D., & Higgins, E. T. 1988. Motivation and affect in interpersonal relations: The role of interpersonal orientations and discrepancies. In L. Donahew, H. E. Sypher, & E. T. Higgins (Eds.), Communication, social cognition and affect: 53-80. Hillsdale, NJ: Erlbaum.
- Meyer, R. D., Dalal, R. S., & Hermida, R. 2010. A review and synthesis of situational strength in the organizational sciences. *Journal of Management*, 36: 121-140.
- Mischel, W. 1973. Toward a cognitive social learning reconceptualization of personality. *Psychological Review*, 80: 252-283.
- Mischel, W., & Shoda, Y. 1995. A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, 102: 246-268.
- Monahan, E., Hoffman, B. J., Lance, C. E., Jackson, D. J. R., & Foster, M. R. 2013. Now you see them, now you don't: The influence of indicator-factor ratio on support for assessment center dimensions. *Personnel Psychology*, 66: 1009-1047.
- Moskowitz, D. S. 1994. Cross-situational generality and the interpersonal circumplex. *Journal of Personality and Social Psychology*, 66: 921-933.
- Noguira, L. J., Adams, C. L., Bonnett, B. N., Shaw, J. R., & Ribble, C. S. 2010. Use of the Measure of Patient-centered Communication to analyze euthanasia discussions in companion animal practice. *Journal of American Veterinary Medical Association*, 237: 1275-1287.

- Pulakos, E. D., Arad, S., Donovan, M. A., & Plamondon, K. E. 2000. Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology*, 85: 612-624.
- Putka, D. J., & Hoffman, B. J. 2013. Clarifying the contribution of assessee-, dimension-, exercise-, and assessor-related effects to reliable and unreliable variance in assessment center ratings. *Journal of Applied Psychology*, 98: 114-133.
- Schirmer, J. M., Mauksch, L., Lang, F., Marvel, M. K., Zoppi, K., Epstein, R. M., Brock, D., & Pryzbylski, M. 2005. Assessing communication competence: A review of current tools. *Medical Student Education*, 37: 184-192.
- Schneider, J. R., & Schmitt, N. 1992. An exercise design approach to understanding assessment-center dimension and exercise constructs. *Journal of Applied Psychology*, 77: 32-41.
- Schollaert, E., & Lievens, F. 2011. The use of role-player prompts in assessment center exercises. *International Journal of Selection and Assessment*, 19: 190-197.
- Schollaert, E., & Lievens, F. 2012. Building situational stimuli in assessment center exercises: Do specific exercise instructions and role-player prompts increase the observability of behavior? *Human Performance*, 25: 255-271.
- Silverman, J. D., Kurtz, S. M., & Draper, J. 2005. Skills for communicating with patients (2nd ed.). Oxford: Radcliffe Publishing.
- Sitzia, J., & Wood, N. 1997. Patient satisfaction: A review of issues and concepts. Social Science Medicine, 45: 1829-1843.
- Stewart, M., Brown, J. B., Donner, A., McWhinney, I. R., Oates, J., Weston, W. W., & Jordan, J. 2000. The impact of patient-centered care on outcomes. *Journal of Family Practice*, 49: 796-804.
- Sullivan, H. S. 1953. The interpersonal theory of psychiatry. New York: Norton.
- Sulsky, L. M., & Day, D. V. 1992. Frame-of-reference training and cognitive categorization: An empirical investigation of rater memory issues. *Journal of Applied Psychology*, 77: 501-510.
- Tett, R. P., & Burnett, D. D. 2003. A personality trait-based interactionist model of job performance. *Journal of Applied Psychology*, 88: 500-517.
- Thornton, G. C., III, & Mueller-Hanson, R. A. 2004. Developing organizational simulations: A guide for practitioners and students. Mahwah, NJ: Erlbaum.
- Thornton, G. C., III, & Rupp, D. R. 2006. Assessment centers in human resource management: Strategies for prediction, diagnosis, and development. Mahwah, NJ: Erlbaum.
- Tracey, T. J. 2004. Levels of interpersonal complementarity: A simplex representation. Personality and Social Psychology Bulletin, 30: 1211-1225.
- Viswesvaran, C., Schmidt, F. L., & Ones, D. S. 2005. Is there a general factor in ratings of job performance? A meta-analytic framework for disentangling substantive and error influences. *Journal of Applied Psychology*, 90: 108-131.
- Vu, N. V., & Barrows, H. S. 1994. Use of standardized patients in clinical assessments: Recent developments and measurement findings. *Educational Researcher*, 23: 23-30.
- Weekley, J. A., & Jones, C. 1999. Further studies of situational tests. Personnel Psychology, 52: 679-700.
- Wiggins, J. S. 1979. A psychological taxonomy of trait-descriptive terms: The interpersonal domain. *Journal of Personality and Social Psychology*, 37: 395-412.
- Woehr, D. J., & Arthur, W., Jr. 2003. The construct-related validity of assessment center ratings: A review and meta-analysis of the role of methodological factors. *Journal of Management*, 29: 231-258.