

SEEING YOU FROM YOUR POINT OF VIEW: PERSPECTIVE-TAKING AND
FIRST IMPRESSION ACCURACY

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ABSTRACT

This study assessed whether perspective-taking (considering another's perspective, thoughts, and feelings; Davis, 1983) causes greater distinctive accuracy (judging another's unique traits), normative accuracy (judging another as similar to the average person and positively), and distinctive assumed similarity (judging another's personality as similar to one's own personality) in first impressions of personality. College students ($N = 429$) received either perspective-taking instructions or no specific instructions before watching videos of seven individuals (targets) answering getting-to-know-you questions. Participants then rated each target's personality. Taking the targets' perspectives did not improve distinctive accuracy or distinctive assumed similarity. However, participants who reported actively trying or being able to take the targets' perspectives rated those targets more positively (with greater normative accuracy). Thus, perspective-taking does not result in more accurate impressions or greater perceived similarity, but it may lead to more positive impressions for those who try or are able to take another's perspective.

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CHAPTER I

INTRODUCTION

Forming impressions of others is a part of everyday life, and one's first impression of another person can guide one's behaviors toward and future interactions with that person. Because of the ubiquity of interpersonal interactions in everyday life, accurately perceiving others is important for successful social functioning. For instance, accurate first impressions are influential when deciding whether to pursue a friendship with a new acquaintance or when an employer must judge whether a job candidate will be hard-working and reliable. If these initial impressions are inaccurate, new friendships may not be as successful as predicted or new employees may fail to meet their employer's expectations. Indeed, accurately perceiving others can have positive social consequences including influencing the development of social relationships (Human, Sandstrom, Biesanz, & Dunn, 2013; Luo & Snider, 2009) and occupational success (Kristof-Brown, Barrick, & Franke, 2002). Moreover, the ability to form accurate interpersonal perceptions is associated with a number of positive intrapersonal correlates, including greater social and emotional competence (Hall, Andrzejewski, & Yopchick, 2009) and higher cognitive ability (Christiansen, Wolcott-Burnam, Janovics, Burns, & Quirk, 2005). Overall, accurately perceiving others is associated with positive inter- and intrapersonal functioning.

Definitions of perceptual accuracy vary based on the content being perceived and assessed, and there are distinct types of accuracy skills (Schlegel, Boone, & Hall, 2017). When

perceiving others, people can accurately judge another individual's emotional state (emotion recognition; e.g., Lyusin & Ovsyannikova, 2016), feelings and thoughts (empathic accuracy; e.g., Zaki, Bolger, & Ochsner, 2008), intentions and beliefs (mental state attribution; e.g., Brüne, Abdel-Hamid, Lehmkämpfer, & Sonntag, 2007), and personality (judgmental accuracy; e.g., Funder, 1995). This study examines accurate personality impressions and the distinct characteristics and processes that facilitate judgmental accuracy, which requires the interpretation of cues to form judgments about stable, trait-level characteristics. Personality judgments involve both a target (the individual whose personality is judged) and a perceiver or judge (the individual forming the personality judgment). This study is designed to assess the utility of perspective-taking (i.e., considering another person's perspective and thoughts/feelings) as a method to improve a perceiver's ability to form accurate personality judgments.

Personality Judgments in First Impressions

Forming Accurate Personality Judgments

Both the target and the judge influence the process of forming an accurate personality judgment. According to the Realistic Accuracy Model (RAM; Funder, 1995), accurate impressions require a four-stage process. First, a target must produce a behavior that is *relevant* to a trait. Second, that relevant behavior must be made *available* to the judge. Third, the judge must *detect* the relevant and available behavior and, fourth, the judge must correctly *utilize* the relevant, available, and detected behavior. These steps are multiplicative (as opposed to additive), such that each step is required for an accurate judgment to be made (Funder, 1995). If any step in the RAM process does not occur, then an accurate judgment cannot be formed.

Defining Accuracy

Personality judgment accuracy has been defined in a number of ways, and there are three primary theoretical conceptualizations of accuracy: pragmatic, constructivist, and realistic (Funder & West, 1993). From a pragmatic approach, a personality judgment is accurate if it leads to successful social interactions (Swann, 1984). In other words, personality impressions are accurate in as much as they result in better social functioning for the perceiver. For example, Patrick may perceive that his friend Jane likes to be punctual and on time. Because of this, Patrick is always on time when he meets Jane, and this allows Patrick to have successful interactions with Jane. Conversely, from a constructivist approach, personality judgments are considered accurate if there is consensus between judges (Kruglanski, 1989). If numerous people agree about a personality judgment, such as the judgment that Jane is conscientious, then that judgment is considered accurate. However, high inter-judge consensus does not equate to high judgmental accuracy (Blackman & Funder, 1998). Thus, at issue with both the pragmatic and constructivist approaches to personality judgments is that what is defined as an accurate judgment may not represent an individual's true personality. That is, even if people are in wide agreement that Jane is conscientious (constructivist approach) and this judgment allows people to successfully interact with Jane (pragmatic approach), it does not necessarily follow that Jane is actually conscientious. Consequently, the pragmatic and constructivist definitions of accurate personality judgments do not fully capture accuracy in terms of understanding an individual's personality.

Alternatively, the realistic approach described in RAM (Funder, 1995), argues that personality traits are actual characteristics of individuals (as opposed to consensus or an appraisal that allows for successful social functioning). According to RAM, a personality

judgment is accurate if it corresponds to multifaceted realistic criteria for what the target is actually like, such as the target's self-reported personality, actual behavior, and ratings of the target's personality given by knowledgeable informants such as friends or family members (Funder, 1995). Given that there is no single best source of information about an individual's personality, it is ideal to combine multiple sources. In fact, self-reports of personality may be biased in that individuals may inaccurately report their personality either due to a lack of knowledge or purposefully, such as reporting their personality in a socially desirable way (Paulhus, 1984). In using both self-reports and reports from knowledgeable informants, researchers can determine a realistic estimate of an individual's personality that may be more reliable and accurate than an estimate based only on an individual's self-reported personality. In fact, knowledgeable informants can provide unique insight into a person's personality that may not be captured in that person's self-reported personality (Vazire & Mehl, 2008). Therefore, from a realistic perspective, personality judgments about Jane would be accurate if they map onto Jane's report of her own personality, Jane's actual behaviors, and friends or family members' reports of Jane's personality. The present study uses a realistic approach to personality within the RAM (Funder, 1995) framework.

Statistically Assessing Accuracy

There are two primary approaches to statistically assessing accurate personality judgments: trait and profile approaches. In trait-centered approaches, researchers examine accuracy in judging a single attribute across many people, such as examining whether people typically understand how agreeable others are. Alternatively, in profile approaches, researchers examine accuracy in judging the pattern of multiple attributes within an individual (Furr, 2008).

Patrick may accurately judge Jane's personality profile if he perceives that Jane is higher in conscientiousness than extraversion, but lower in neuroticism compared to agreeableness. Importantly, normativity (similarity to the average personality) must be accounted for in profile approaches. Individual personality profiles tend to reflect the average personality profile because, by definition, the majority of people's personalities will be similar to the average personality (Furr, 2008; Rogers, Wood, & Furr, 2018). Moreover, perceivers can form accurate judgments on average simply by rating each target as similar to the average person (Edwards, 1957). To correct for and assess this issue, personality profile accuracy can be measured by separating normative and distinctive components (Biesanz, 2010; Rogers et al., 2018).

Normative accuracy refers to the extent to which a perceiver views an individual as similar to the average person (Biesanz, 2010). Thus, Patrick's impression of Jane is normatively accurate if it corresponds to the average person's personality profile. An estimate of the average personality profile can be attained by averaging responses across self-reported personality (e.g., Rogers & Biesanz, 2015), thereby creating normative means for each personality trait. Because this average personality profile is positive (i.e., people are typically more caring than aggressive) and highly socially desirable (Borkenau & Liebler, 1995; Edwards, 1957; Wood, Gosling, & Potter, 2007), normative accuracy can signify the positivity of an impression. In other words, viewing a target normatively indicates a positive impression of that target. In sum, if Patrick views Jane with high normative accuracy, he is viewing her as similar to the average person and, thus, positively.

Distinctive accuracy refers to the degree with which a perceiver's impression of an individual agrees with that individual's unique and distinctive traits after accounting for the average person's personality profile (Biesanz, 2010; Rogers et al., 2018). As such, distinctive

accuracy also involves judging how an individual's personality is different from other people's personalities and the average person's personality (Biesanz, 2010; Biesanz & Human, 2010; Furr, 2008; Human & Biesanz, 2012). Patrick's impression of Jane is distinctively accurate if his impression corresponds to the unique and distinct components of Jane's personality profile after accounting for the average personality profile. Distinctive accuracy and normative accuracy operate independently of one another; perceivers' judgments can be high in distinctive accuracy but low in normative accuracy or low in distinctive accuracy but high in normative accuracy (Biesanz, 2010). Thus, if Patrick forms a distinctly accurate impression of Jane that reflects her unique personality, this has no effect on how positively he may view her.

In addition to accuracy, biases such as that of assumed similarity can exist in realistic personality judgments and can influence personality impressions. Assumed similarity refers to perceiving one's own characteristics in others (Cronbach, 1955) and has been referred to as a "self-based heuristic." When there is a lack of trait-relevant cues and the trait is difficult to rate (such as when judging a target's levels of neuroticism), the perceiver may use information about their own personality to form a judgment about the target (Ready, Clark, Watson, & Westerhouse, 2000). Specifically, distinctive assumed similarity refers to perceiving others as having one's own unique, distinguishing pattern of traits (Human & Biesanz, 2012). If Patrick, who is more trustworthy than he is talkative, views Jane as also being more trustworthy than talkative, then his impression of Jane displays distinctive assumed similarity. Typically, measures of distinctive assumed similarity control for the average personality profile and the actual similarity between the perceiver and the target (e.g., Human & Biesanz, 2011b; Human & Biesanz, 2012). For individual traits, impression accuracy and assumed similarity have an inverse relationship such that assumed similarity tends to be low when the impression is accurate

(Beer & Watson, 2008; Human & Biesanz, 2012; Watson, Hubbard, & Wiese, 2000). However, across perceivers and dyads (i.e., perceiver and target pairs), assumed similarity and accuracy are independent of one another (Human & Biesanz, 2012). As a result, it is possible for perceivers to form accurate impressions of a target’s personality profile regardless of whether or not the perceiver views the target as having a similar pattern of traits to themselves. Overall, distinctive and normative accuracy and distinctive assumed similarity are three components of impressions used to assess personality judgments and are depicted in the social accuracy model (Biesanz, 2010) in Figure 1.

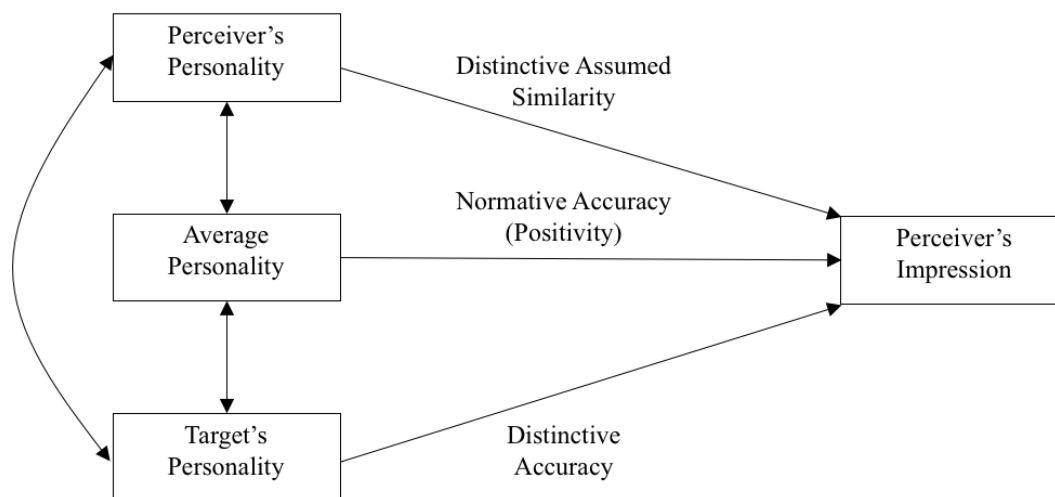


Figure 1 Distinctive accuracy, normative accuracy, and distinctive assumed similarity in the social accuracy model

Individual Differences in Accuracy

Individuals differ in their ability to be judged accurately and to form accurate judgments in first impressions. Expressive accuracy refers to the ability to be easily understood by others and accurately judged across different perceivers (Biesanz, 2010). Individuals high in expressive accuracy, or “good targets,” make trait-relevant cues available to perceivers by providing high

quality information about their personality (Letzring & Human, 2014) and about their less observable traits (Human & Biesanz, 2011a). For instance, Jane, who is more agreeable than neurotic, has high expressive accuracy if she provides cues that she is very cooperative, helpful, and interested in others and is not often moody or easily worried. Expressive accuracy is thought to be associated with greater psychological adjustment, higher social status, and socialization (Human & Biesanz, 2013). Indeed, good targets behave in line with their unique and distinctive personality traits, and individuals who are well-adjusted, high in self-esteem, less shy, and highly expressive and sociable tend to be higher in expressive accuracy (Ambady, Hallahan, & Rosenthal, 1995; Human, Biesanz, Finseth, Pierce, & Le, 2014). Good targets also tend to be more engaging and elicit more attention from perceivers (Human et al., 2014). Overall, research suggests a wide range of individual differences associated with high expressive accuracy.

On the other hand, perceptive accuracy refers to the ability to understand others and accurately judge others' personality characteristics across different targets (Biesanz, 2010). The "good judge" is someone high in perceptive accuracy. For example, a good judge is able to detect that Jane is cooperative and helpful but not moody or worrisome and can correctly interpret those cues to mean that Jane is more agreeable than neurotic. A judge's ability to form accurate personality impressions can be influenced by his/her motivation (Biesanz & Human, 2010), cognitive ability (Christiansen et al., 2005), and knowledge of personality and its manifestation in behavior (Funder, 1995; Rogers & Biesanz, 2018). Individuals tend to differ less in perceptive accuracy than they do expressive accuracy (Biesanz, 2010), and previous research does not clearly depict the defining characteristics of the good judge. Past research suggests that individuals high in perceptive accuracy demonstrate good social skills such as maintaining eye contact and expressing warmth and sympathy, and good judges tend to be interpersonally

oriented, motivated to foster close relationships, psychologically adjusted, and agreeable (Letzring, 2008; Vogt & Colvin, 2003). However, these studies do not isolate or assess the distinctive and normative components of judgmental accuracy, and past research suggests that there are different characteristics associated with being a good distinctive judge versus a good normative judge.

In fact, within perceptive accuracy, there is evidence of greater individual differences in the ability to form normatively accurate judgments compared to individual differences in the ability to form distinctively accurate judgments (Human & Biesanz, 2011b). Psychologically well-adjusted perceivers tend to demonstrate greater normative accuracy but not greater distinctive accuracy (Human & Biesanz, 2011b). Females tend to make more normatively accurate judgments, but gender does not play a role in distinctively accurate judgments (Chan, Rogers, Parisotto, & Biesanz, 2011). Additionally, the good normative judge tends to be high in agreeableness, but the Big Five personality traits are not associated with the good distinctive judge (Letzring, 2015). Notably, one individual difference associated with both normative and distinctive accuracy is empathy. In a study by Colman, Letzring, and Biesanz (2017), participants completed the Interpersonal Reactivity Index (Davis, 1983), a measure of empathic tendencies, before watching videos that depicted target individuals engaged in a conversation. Participants who self-reported higher levels of the empathic tendencies of perspective-taking, empathic concern, and fantasy made more normatively *and* distinctively accuracy impressions of the targets' personalities. That is, perceivers with these greater empathic tendencies tended to accurately judge targets' unique personalities while also viewing targets positively. Overall, the modest individual differences associated with perceptive accuracy can vary at both the

distinctive and normative accuracy levels, but characteristics such as empathy are associated with both types of accuracy.

Improving Accuracy

Past research suggests that perceptive accuracy can be improved through experience and training. Professional job recruiters are more accurate in judging applicants' personalities compared to college students with less experience in making such judgments (Schmid Mast, Bangerter, Bulliard, & Aerni, 2011), and interviewers are better than strangers in accurately judging the personality of applicants (Barrick, Patton, & Haugland, 2000). Moreover, judges who are trained to utilize and interpret personality-relevant behavioral cues tend to increase their perceptive accuracy (Powell & Bourdage, 2016). Yet, research on improving perceptive accuracy through experience and training has only examined accuracy using overall profile correlations, which can be contaminated by normative responses, without separately assessing both the normative and distinctive components of personality judgments. Thus, it is unclear how experience and training affect both normative accuracy and distinctive accuracy in first impressions.

Additionally, experimental manipulations can influence perceptive accuracy. Biesanz and Human (2010) experimentally manipulated participants' motivation to form accurate impressions (thereby influencing both the detection and utilization stages of RAM) by providing them with an explicit social goal to form an accurate first impression or providing them with no explicit goal. Those who were provided with the goal were told that it was important they "form the most accurate impression possible for each person." Participants who were motivated to make accurate impressions formed more distinctively accurate but *less* normatively accurate (positive)

impressions compared to individuals who were not motivated to be accurate. As such, further research is necessary to determine if there are methods (such as brief instructions that alter how a perceiver approaches understanding a target) that could easily be implemented in any interpersonal interaction to improve distinctive accuracy without diminishing normative accuracy; that is, methods for everyday interpersonal interactions that allow perceivers to understand a target's unique personality without losing impression positivity.

Improving Impression Accuracy Through Perspective-Taking

Perspective-taking could be a straightforward method that allows perceivers to improve their perceptive accuracy (both distinctive and normative accuracy) in various interpersonal contexts. Perspective-taking occurs when an individual considers the world from another's viewpoint and tries to understand another's thoughts, motives, and/or feelings (Davis, 1983; Galinsky, Ku, & Wang, 2005; Parker, Atkins, & Axtell, 2008). Perspective-taking is a cognitive component of empathy, which refers to the process of how individuals react to and understand their observations of others' experiences and mental states (Davis, 1983; Smith, 2006). As opposed to affective empathy, which involves the sharing of emotions through automatic, unconscious processes (Smith, 2006; Trent, Park, Bercovitz, & Chapman, 2016), cognitive empathy involves interpreting and understanding another person's experiences, thoughts, and feelings (Davis, 1980; Smith, 2006). As such, perspective-taking as a form of cognitive empathy involves the detection and interpretation of another individual's cues to his/her thoughts and feelings.

Perspective-taking can be conceptualized as a trait or a situation-specific cognitive state (Duan & Hill, 1996). Typically, perspective-taking research focuses on either measuring

perspective-taking as a trait or manipulating perspective-taking as a state. However, past research has not labelled these two conceptualizations of perspective-taking. To provide clarity to the present study, the two conceptualizations of perspective-taking are termed *trait* perspective-taking and *state* perspective-taking. These terms are not present in existing perspective-taking literature, but they are used here to provide a distinction between the two perspective-taking processes. First, individuals have trait-level perspective-taking tendencies in which they have a greater or lesser tendency to spontaneously take the perspective of others in interpersonal interactions (trait perspective-taking). Research on trait perspective-taking would measure this as an individual difference (e.g., Colman et al., 2017; Galinsky, Maddux, Gilin, & White, 2008; Ku, Wang, & Galinsky, 2010). Second, individuals can be instructed to actively take the perspective of another person either during an interaction with that person or when perceiving that person in a video, picture, or text (state perspective-taking). Research examining state perspective-taking would manipulate perspective-taking by providing individuals with instructions to perspective-take (e.g., Galinsky & Ku, 2004; Galinsky & Moskowitz, 2000; Sun, Zuo, Wu, & Wen, 2016; Todd, Galinsky, & Bodenhausen, 2012). Thus, while both trait and state perspective-taking involve adopting another person's perspective, trait perspective-taking refers to the generalized tendency to do so at any given time, while state perspective-taking refers to actively perspective-taking at a specific time.

A relationship exists between trait perspective-taking and perceptive accuracy. Individuals higher in trait perspective-taking (those who are more likely to take others' perspectives) tend to more accurately match target's own self-descriptions of their personality (Bernstein & Davis, 1982). Moreover, individuals high in trait perspective-taking tend to form more distinctively and normatively accurate impressions of targets' personalities and tend to

display greater assumed similarity with targets compared to individuals low in trait perspective-taking (Colman et al., 2017). In other words, individuals who report that they tend to take others' perspectives are likely to form accurate judgments that align with others' distinct pattern of traits as well as the average personality, and their judgments of others tend to be similar to their own personality. Thus, trait perspective-taking is reliably associated with perceptive accuracy, but the causal relationship between perspective-taking and perceptive accuracy has yet to be established.

Perspective-taking may cause improved perceptive accuracy, or there might be other characteristics associated with perspective-taking tendencies that contribute to the relationship between trait perspective-taking and perceptive accuracy. Trait perspective-taking is associated with healthy interpersonal functioning and a higher sensitivity to others' feelings and reactions (Davis, 1983), and these characteristics may contribute to greater perceptive accuracy.

Alternatively, it may be that individuals high in trait perspective-taking are already high in perceptive accuracy, and having the ability to consistently form accurate personality judgments has improved their ability to see others' points of view. Due to the alternative explanations for this relationship, it is necessary to establish if perspective-taking actually causes improved perceptive accuracy, and this can be determined by examining the relationship between state perspective-taking and the three previously discussed components of impressions: distinctive accuracy, normative accuracy, and distinctive assumed similarity.

Distinctive Accuracy

Given that perspective-taking involves the detection and interpretation of another individual's cues regarding his/her thoughts and feelings (Davis, 1980; Smith, 2006), perspective-taking may enhance both the detection and utilization stages of RAM (Funder, 1995)

when forming personality judgments. Specifically, state perspective-taking could theoretically influence distinctive accuracy by improving a perceiver's ability to detect target cues through increased attention and improving a perceiver's ability to utilize target cues through increased cognitive complexity. The following paragraphs discuss how increased attention and increased cognitive complexity should improve distinctive accuracy.

Attention

One way in which state perspective-taking could improve a judge's ability to detect target cues is through increased attention, and paying more attention to an individual is associated with greater distinctive accuracy. Judges tend to pay more attention to attractive and engaging targets and, as a result tend to make more distinctively accurate impressions of those targets (Human et al., 2014; Lorenzo, Biesanz, & Human, 2010). Research on attention and impressions has focused on how target characteristics influence the detection stage of interpersonal impressions by increasing the attention of the judge. However, state perspective-taking could be a method that allows for increased attention of the judge toward the target without relying on a target with attention-getting characteristics.

State perspective-taking should theoretically direct more of the perceiver's attention towards the target. Indeed, being able to take another's perspective requires effortful attention; that is, perceivers cannot take a target's perspective unless they are first paying attention to the target (Lin, Keysar, & Epley, 2010). Logically, in order to form a concept of another individual's unique perspective, thoughts, and feelings, a perceiver must first direct his/her attention toward that individual. As a result, the perceiver should be able to detect more of the relevant cues to a target's unique personality, a crucial step toward forming distinctively accurate personality

judgments. However, according to the multiplicative nature of RAM (Funder, 1995), increased attention alone is not enough to form an accurate personality judgment. For increased attention to improve distinctive accuracy in impressions, the target's cues must also be correctly utilized and interpreted.

Cognitive Complexity

Cognitive complexity refers to the capacity to perceive, differentiate, and integrate information in one's social environment (Bowler, Bowler, & Cope, 2012; Ku, Wang, & Galinsky, 2015). Greater cognitive complexity allows individuals to perceive more elements in their social environment and better organize and interpret those elements (Bowler, Bowler, & Phillips, 2009). Funder (1995) argues that judgmental abilities such as cognitive complexity can improve a judge's ability to detect and correctly utilize cues. In fact, cognitive complexity is a fundamental effect of perspective-taking, such that after taking another person's perspective, perceivers demonstrate greater cognitive complexity (Ku et al., 2015). The very act of considering a target's perspective leads individuals to deviate from their default mental routines and use more cognitively demanding information processing that allows them to perceive and integrate a broader range of information in their social environment (Ku et al., 2015; Todd et al., 2012). This enhanced ability to differentiate and integrate social information should aid a perceiver in correctly utilizing a target's cues.

Plentiful research provides evidence of increased cognitive complexity as a result of state perspective-taking. State perspective-taking reduces the fundamental attribution error (Hooper, Erdogan, Keen, Lawton, & McHugh, 2015), and individuals who engage in state perspective-taking recall more stereotype-inconsistent behaviors and display less confirmatory thinking by

seeking more hypothesis-inconsistent information (Todd et al., 2012). Moreover, perspective-taking reduces reliance on default cognitive processes such as stereotyping. State perspective-taking weakens stereotype maintenance processes such as information solicitation and behavior explanation (Todd et al., 2012). Additionally, state perspective-taking consistently decreases stereotyping, prejudice, and intergroup bias associated with the target and the target's group (Batson, Early, & Salvarani, 1997; Galinsky & Ku, 2004; Galinsky & Moskowitz, 2000; Vescio, Sechrist, & Paolucci, 2003) as well as creating positive evaluations of a target's group (Vescio et al., 2003). In fact, perspective-taking reduces both positive *and* negative stereotyping. In a study examining perspective-taking and stereotyping, perceivers who took the perspective of a doctor subsequently judged the doctor as being less stereotypically analytic and smart (a positive stereotype), and perceivers who took the perspective of a laborer judged the laborer less in line with the negative stereotype of not being analytic and smart (Wang, Ku, Tai, & Galinsky, 2014). Overall, these findings suggest that individuals who take the perspective of a target rely less on default mental processes, use more effortful information processing, and demonstrate an improved ability to utilize cues relevant to a target.

When forming an impression, an increased ability to interpret information should allow state perspective-takers to better utilize the trait-relevant cues and form more accurate personality judgments. Moreover, this theoretical increase in cognitive complexity should allow judges to recognize the target's unique and distinctive traits as well as understand how the target's range of traits compares to the average person's personality. However, according to RAM (Funder, 1995), increased cognitive complexity will only facilitate distinctive accuracy if the perceiver is first able to detect the target's cues. Overall, state perspective-taking could improve distinctive accuracy if it is associated with perceivers paying more attention to the target

(detecting more cues) or demonstrating greater cognitive complexity to better utilize trait-relevant cues in their judgments of the target's personality.

Normative Accuracy

The judgment process outlined in RAM (Funder, 1995) makes predictions only for distinctively accurate judgments (Rogers & Biesanz, 2018). That is, the theoretical increase in attention and cognitive complexity that may facilitate the detection and utilization stages for distinctive accuracy are not predicted to influence normative accuracy. Rather, because normatively accurate judgments index the positivity of an impression, state perspective-taking may theoretically increase normative accuracy due to increased liking for the perspective-taking target. Davis, Conklin, Smith, and Luce (1996) found that perceivers who took the perspective of a target depicted in a scripted video interview liked the target more than perceivers who did not take the target's perspective. Moreover, individuals who take the perspective of a stereotyped target tend to form more positive evaluations of that target (Galinsky & Moskowitz, 2000). Because state perspective-taking promotes liking and positive evaluations, state perspective-taking should result in more positive, normatively accurate impressions of the target. Indeed, greater liking is associated with greater normative accuracy (Human et al., 2013). Moreover, while previous research suggests that factors such as motivation actually decrease normative accuracy and positive impressions (Biesanz & Human, 2010), state perspective-taking could be a method to improve distinctive accuracy without losing impression positivity.

Distinctive Assumed Similarity

In addition to influencing impression accuracy, state perspective-taking should also influence impressions by increasing distinctive assumed similarity in perceivers' judgments. Specifically, state perspective-taking should theoretically influence distinctive assumed similarity by increasing the perceived self-other overlap between a perceiver and a target as the cognitive representations of the self and the target overlap (Davis et al., 1996). This merging of self and other occurs in both directions, with the target becoming more "self-like" (Davis et al., 1996; Galinsky & Moskowitz, 2000) and the self becoming more "other-like" (Galinsky, Maddux, et al., 2008). In other words, after perspective-taking, the perspective-taker sees more of their own characteristics in the target while at the same time seeing more of the target's characteristics in themselves (Galinsky et al., 2005; Ku et al., 2010). In a study by Galinsky, Wang, and Ku (2008), participants listened to an audio interview of a college professor (a stereotypically analytical target) and were instructed to either take the professor's perspective during the interview or listen to the interview objectively. Participants who took the perspective of the professor performed better on an analytic reasoning task compared to those who did not take the professor's perspective, illustrating increased self-other overlap as perspective-takers applied the target's stereotypical traits to themselves. Increased self-other overlap should result in greater levels of distinctive assumed similarity in perceivers' personality judgments as judges apply their own characteristics to the targets. Because this bias operates independently of distinctive accuracy (e.g., Human & Biesanz, 2012), increased self-other overlap will not play a role in the distinctive or normative accuracy of perceivers' judgments.

The Potential for Decreased Accuracy

A number of factors may inhibit state perspective-taking's beneficial effects on personality judgments. First, the increased self-other overlap resulting from perspective-taking may result in judgments that are too similar to the perceiver's own personality. Perspective-takers may over-apply their own self-concept and personality characteristics to the target and, as a result, may not perceive the target's unique and distinct traits. While this may increase distinctive assumed similarity and positivity, it could also decrease distinctive accuracy if taken to the extreme.

Second, perceiver characteristics may alter the way in which perspective-taking improves cognitive complexity and, consequently, distinctive accuracy. Perspective-taking's effects on stereotyping are not consistently positive, and some individuals do not exhibit greater cognitive complexity after taking another's perspective. State perspective-taking is not as effective in reducing stereotyping for individuals who are naturally low in self-esteem or manipulated to feel lower in self-esteem (Galinsky & Ku, 2004). Additionally, individuals who have fewer prejudicial attitudes tend to view outgroup members less positively after taking outgroup members' perspectives compared to individuals with greater prejudicial attitudes (Vorauer, Martens, & Sasaki, 2009). Consequently, various perceiver characteristics may influence a perceiver's ability to deviate from their default cognitive processing, and this could influence their ability to utilize cues and form distinctively accurate personality judgments.

Third, perspective-taking may play no role in improving accuracy if the judge and the target are already very similar. Recent research suggests that in order for perspective-taking to be impactful the target must be sufficiently recognized as distinct from the self (Sassenrath, Sassenberg, & Scholl, 2014; Todd, Hanko, Galinsky, & Mussweiler, 2011). If the judge

perceives the target to be someone very similar to him/herself, adopting the target's perspective may not provide any new information to the perceiver to utilize when forming their judgment. In this case, state perspective-taking may play no role in the perceiver's judgment.

Finally, recent findings suggest that perspective-taking does not improve perceivers' accuracy in judging other individuals' thoughts, emotions, or attitudes (Eyal, Steffel, & Epley, 2018), suggesting that the top-down approach of perspective-taking may not be as effective in understanding another's thoughts and feelings compared to a more bottom-up approach (such as directly asking a person about their perspective). However, judging personality is not the same as judging emotions or intentions (Schlegel et al., 2017). Moreover, in the research conducted by Eyal and colleagues (2018), interpersonal accuracy was estimated using brief, standardized measures, an assessment approach that is different from assessing the realistic accuracy of personality judgments. As such, while perspective-taking may not improve emotion recognition, empathic accuracy, or mental state attribution, this does not indicate that perspective-taking should not improve personality judgment accuracy. The findings of the present study will contribute to understanding the effectiveness of top-down processes such as perspective-taking in facilitating various types of interpersonal accuracy.

Conclusion and Hypotheses

Given the importance of accurate personality impressions to successful social functioning, it is beneficial to determine if perspective-taking can improve both the distinctive and normative components of perceptive accuracy across perceivers. While trait perspective-taking is reliably associated with accurate personality judgments (Bernstein & Davis, 1982; Colman et al., 2017), this study is designed to determine if state perspective-taking causes

improved perceptive accuracy. Prompting a perceiver to take the perspective of a target should theoretically lead the perceiver to devote more attention to the target and should improve the perceiver's cognitive capacity to perceive, discriminate, and integrate trait-relevant information. This effect should allow the perceiver to form impressions that are accurate in terms of the target's unique and distinctive traits, thereby increasing distinctive accuracy. Additionally, just as trait perspective-taking is associated with increased normative accuracy and distinctive assumed similarity (Colman et al., 2017), it is expected that these relationships will be replicated with state perspective-taking. State perspective-taking should theoretically result in increased liking for the target, contributing to more positive (normatively accurate) impressions. State perspective-taking should also produce greater self-other overlap, thereby affecting the process through which personality impressions are formed and resulting in increased distinctive assumed similarity.

Compared to methods that improve distinctive accuracy but reduce normative accuracy, such as increasing accuracy motivation (Biesanz & Human, 2010), state perspective-taking may be a method that improves both types of accuracy. Improving both components of accuracy is beneficial as distinctive accuracy will facilitate accurate impressions for specific individuals, and normative accuracy will promote impression positivity. It is also beneficial to determine methods that increase distinctive assumed similarity given that greater perceived similarity between a perceiver and target is associated with beneficial interpersonal outcomes such as positive relationship development (Sunnafrank & Ramirez, 2004) and greater friendship intensity (Selfhout, Denissen, Branje, & Meeus, 2009). State perspective-taking could easily be implemented by individuals in various interactions such as employment hiring situations or when

deciding whether to pursue a new friendship as a simple method to improve first impression accuracy, positivity, and perceived similarity.

In addition to furthering research on impression accuracy, examining how state perspective-taking influences impressions contributes to the literature on the consequences of perspective-taking. The majority of research on perspective-taking has examined its positive and negative outcomes usually using a single target and measuring a single consequence, such as stereotyping. This study examines the objective outcome of impression accuracy using numerous items and multiple targets. As such, the current study aims to produce more reliable effects of perspective-taking and greater ecological validity. Moreover, while previous perspective-taking research has used a social cognitive approach to perceptions by examining specific characteristics of individuals (such as whether they are analytic or passionate; e.g., Wang et al., 2014), the present study uses a naturalistic, personality approach to understanding perceptions.

An additional consideration for the effectiveness of state perspective-taking on perceptive accuracy is the potential moderating role of trait perspective-taking. Compared to perceivers who report being low in trait perspective-taking, those who report being high in trait perspective-taking will likely have more experience in taking others' perspectives, may simply be better at perspective-taking, and may find it easier or less cognitively demanding to perspective-take. Additionally, for those high in trait perspective-taking, state perspective-taking may promote the feeling of authenticity and being true to one's own personality (e.g., Lenton, Bruder, Slabu, & Sedikides, 2013). These factors may result in state perspective-taking being more effective in improving perceptive accuracy for those high in trait perspective-taking. Alternatively, it is possible that directing purposeful attention to state perspective-taking may feel foreign to those higher in trait perspective-taking as it is something they already do implicitly. This could

potentially result in state perspective-taking being less effective in improving perceptive accuracy for those higher in trait perspective-taking.

In the present study, participants received either perspective-taking instructions or no specific instructions before perceiving targets depicted in videos. I hypothesized that perceivers who received perspective-taking instructions would form impressions that were more distinctively and normatively accurate and would display greater levels of distinctive assumed similarity compared to perceivers who did not receive perspective-taking instructions. Additional exploratory analyses examined the general relationship between trait perspective-taking and impressions and assessed whether the relationship between state perspective-taking and impressions is moderated by trait perspective-taking; that is, if state perspective-taking is most effective in increasing distinctive accuracy, normative accuracy, and distinctive assumed similarity for those higher in trait perspective-taking. No a priori hypotheses were proposed for these exploratory analyses.

CHAPTER II

METHODOLOGY

Overview

Participants completed the study in small groups and viewed videos of individuals answering basic getting-to-know-you questions. After each video, participants rated the personality of the individual in the video. Participants also reported their own personality and demographics information. Sessions were randomly assigned to either a perspective-taking or a control condition.

Participants

Participants included 429 students (334 women, 93 men, 2 other) from the University of Tennessee at Chattanooga who were recruited through an online recruitment system ($n = 328$) and from courses ($n = 101$). A sample size of at least 400 ensures the ability to detect small to moderate effect sizes. Participants' ages ranged from 18 to 51 ($M_{age} = 19.70$ years, $SD_{age} = 3.15$). 71.1% were White/Caucasian, 13.5% Black/African American, 5.1% Hispanic, 3.7% Asian, 4.4% other, and 2.1% unknown. Participants received extra course credit for their voluntary participation and were also entered into a drawing to win one of 15 \$20 gift cards.

Materials

Target Videos

Seven target videos depicted seven unique targets (6 female, ages 18-22, $M_{age} = 19.43$, $SD_{age} = 1.62$) answering typical getting-to-know-you questions such as what they enjoy doing, their plans for the future, and their biggest accomplishments. Each video ranged from 39 s to 2 min 40 s in length ($M = 1 \text{ min } 42 \text{ s}$, $SD = 40.37 \text{ s}$). The target videos were previously included in a piloting process in which numerous perceivers rated each target's personality (Warner, 2018). Peer and parent reports of each target's personality were obtained in this pilot study in order to have a reliable measure of each target's personality. The piloting process also determined that each target was high in expressive accuracy, indicating that the targets in these videos provide adequate trait-relevant cues and, as a result, are likely to be judged accurately in perceivers' first impressions of the targets. This characteristic was used because perceivers are able to accurately judge a target's personality only if that target displays relevant cues to his/her personality (Rogers & Biesanz, 2018), and using good targets allows for greater variability in perceptive accuracy. Additionally, using target videos rather than face-to-face interactions allows for the direct examination of state perspective-taking's influence on a perceiver's perceptive accuracy with little situational variability. While judges can influence the relevance or availability of a target's cues in face-to-face interactions, any association between perspective-taking and the relevance/availability stages of RAM can be controlled when using a video impressions paradigm. That is, a video impressions paradigm allows for a focus specifically on the association between perspective-taking and the detection and utilization stages of RAM.

Perspective-Taking Manipulation

Previous research has primarily used two methods to instruct participants to actively take the perspective of a target: (1) the individual can consider/imagine the target's perspective and what the target is thinking and/or feeling (imagine-other instructions) or (2) the individual can imagine how he/she would think or feel in the target's position (imagine-self instructions; Batson et al., 1997; Myers, Laurent, & Hodges, 2014). Imagine-other instructions were used in the present study as opposed to imagine-self instructions based on several considerations. First, research on perspective-taking typically adjusts the perspective-taking instructions to the domain of interest (Ku et al., 2015). In examining first impressions of personality, paradigms are designed to direct the judge's attention toward the target. In fact, imagine-self instructions lead to more self-related thoughts than imagine-other instructions, and imagine-other instructions lead to more target-related thoughts than imagine-self instructions (Davis et al., 2004). Therefore, imagine-other instructions were used to direct perceivers' attention toward the targets rather than toward themselves.

Second, most research regarding the differing outcomes of imagine-self and imagine-other perspective-taking instructions has examined self-other overlap, with some studies indicating increased self-other overlap for both instructions (Davis et al., 1996) and others indicating differing effects on self-other overlap for the different instructions (Batson et al., 1997; Myers et al., 2014). These inconsistencies may be due to methodological differences, with some studies depicting targets in photographs, video tapes of scripted interviews, or audio recordings. However, given the differences in paradigms used in previous research with those used in this study, the findings regarding perspective-taking instructions and self-other overlap are not as relevant in determining which instructions are best to improve impression accuracy.

As such, the most applicable findings are those of Davis et al. (2004), who examined the frequency of target- and self-related thoughts and who used a similar paradigm to the current study in which participants watched a video of a target. Thus, the present study used imagine-other instructions in order to decrease self-related thoughts and increase target-related thoughts.

Participants in the perspective-taking condition received the following instructions: *“When watching each interview, take the perspective of the person being interviewed. That is, try to imagine how the person is feeling and what the person is thinking. In your mind’s eye, try to visualize clearly and vividly how they feel during the interview and how they feel and think during their day.”* These perspective-taking instructions were adapted from those used by Galinsky, Wang, et al. (2008), as they are effective in producing perspective-taking effects ($d = 1.05$) and are comparable in content to previously used imagine-other instructions (e.g., Davis et al., 2004). Similar perspective-taking instructions have been used in studies examining state perspective-taking’s effects on empathy, stereotypical behavior, and target- and self-related thoughts in which targets are presented through audio tapes and videos as having stereotypical characteristics or having experienced difficult circumstances (e.g., Batson et al., 1997; Davis et al., 2004; Galinsky, Wang, et al., 2008). Additionally, the perspective-taking instructions emphasized thoughts and feelings because distinctive accuracy tends to increase when interaction partners are instructed to talk about their thoughts and feelings in various situations, and normative accuracy also tends to increase as the amount of information about thoughts and feelings available during an interaction increases (Letzring & Human, 2014).

Personality Measure

Participants self-reported their personality using Saucier's mini-marker scale (Saucier, 1994; see Appendix B). This 40-item scale measures the Big Five personality traits of openness, agreeableness, extraversion, emotional stability, and conscientiousness. Each trait was measured using an 8-item subscale, and responses were measured on a 7-point Likert scale ranging from 1 (*disagree strongly*) to 7 (*agree strongly*). Descriptive statistics for this measure are presented in Table 1.

Participants rated each target's personality using the same 40 items and responded to nine additional items measuring other aspects that play an important role in interpersonal interactions, including two items measuring attention, two items measuring liking, and one item measuring perceived closeness (see Appendix C). Because perceived closeness and self-other overlap are highly related (Aron, Aron, & Smollan, 1992), and because state perspective-taking most strongly affects the perceived closeness factor of self-other overlap (Myers & Hodges, 2012), perceived closeness was used in this study to provide a measure of self-other overlap. Past perspective-taking research has measured self-other overlap using the Inclusion of Self in Other scale in which participants are presented with seven pairs of circles that increase in the amount they overlap (Aron et al., 1992). This study measured perceived closeness with a modified version of this item, in which the seven pairs of circles moved further apart rather than closer together (responses were reverse-coded such that higher values indicated greater perceived closeness).

Trait Perspective-Taking

Participants self-reported their trait perspective-taking tendencies using the Interpersonal Reactivity Index (IRI; Davis, 1980; see Appendix D). This 28-item scale measures four domains of empathy: perspective-taking, fantasy, empathic concern, and personal distress. Each domain was measured using a 7-item subscale, and responses were measured on a 7-point Likert scale ranging from 1 (*does not describe me well*) to 7 (*describes me very well*), with higher scores indicating higher empathic tendencies and higher trait perspective-taking. Because past research has operationalized trait perspective-taking with the IRI perspective-taking subscale (e.g., Colman et al., 2017), this subscale was examined for the present study. Descriptive statistics for the IRI are presented in Table 1.

Table 1 Descriptive Statistics for Self-Report Measures

Self-Report Measure	Mean	SD	Reliability (α)
Saucier's Mini-Markers			
Openness	5.30	1.31	0.77
Agreeableness	5.74	1.19	0.80
Extraversion	4.54	1.61	0.86
Emotional Stability	4.35	1.55	0.80
Conscientiousness	5.25	1.36	0.83
IRI			
Perspective-Taking	5.16	1.46	0.79
Fantasy	4.88	1.78	0.81
Empathic Concern	5.58	1.38	0.81
Personal Distress	3.46	1.64	0.80

Manipulation Check

To determine the effectiveness of the perspective-taking manipulation, after watching all seven target videos, participants responded to two items. The first item (referred to as the “Try” item) asked: “*As you were watching the videos, how much did you try to adopt the perspective of*

the individuals being interviewed?” The second item, (referred to as the “Able” item) asked: “*In general, to what extent were you able to adopt the perspective of the individuals being interviewed?*” Responses to these items were measured on a 5-point Likert scale ranging from 1 (*not at all*) to 5 (*very much*), and higher scores on these items indicate greater effectiveness of the perspective-taking manipulation for participants in the perspective-taking condition. Descriptive statistics for the manipulation check items are presented in Table 2. Similar manipulation checks have been used in previous research on perspective-taking, and findings in these studies suggest that individuals do generally have insight into their perspective-taking efforts (e.g., Dovidio et al., 2004; Eyal et al., 2018; Sun et al., 2016).

Table 2 Descriptive Statistics for Manipulation Check Items

Manipulation Check Items	<i>Mean</i>	<i>SD</i>
“Try” Item		
Both Conditions	4.18	0.89
Control	3.92	1.04
Perspective-Taking	4.45	0.63
“Able” Item		
Both Conditions	3.62	0.88
Control	3.49	0.97
Perspective-Taking	3.75	0.76

Demographics

Participants completed a 5-item demographics questionnaire asking about their age, gender, ethnicity, major, and class rank (see Appendix E). This demographic information was used to descriptively understand the makeup of the sample.

Procedure

This study was a between-subjects experimental design. Participants completed the study in groups of one to 21 ($Mdn = 2$, $IQR = 1-3$) in one hour sessions. There were a total of 155 groups of participants. 377 participants completed the study materials using tablets, 31 used paper and pencil, and 21 used classroom computers. Each session was randomly assigned to either a perspective-taking condition or a control condition. After providing informed consent, participants reported their own personality and trait perspective-taking and answered the demographics questions. Next, participants watched seven target videos (video block). Before the video block began, all participants in both conditions received the same general instructions that they would be watching videos clips of seven people answering questions about themselves and that after each video clip they would complete questionnaires about the person they had just seen. After these initial instructions, participants in the perspective-taking condition received the perspective-taking instructions, and participants in the control condition did not receive any additional instructions. In this way, any differences in impressions between the control and perspective-taking conditions can be attributed to this difference in additional instructions. After watching each video, participants rated the personality of each target. Participants in the perspective-taking condition were reminded of the perspective-taking instructions before the fourth video. Once participants finished watching the target videos, they responded to the manipulation check questions. Finally, participants were debriefed and thanked for their participation.

Prior to analyzing the data, participants' impressions data was removed if they either knew the target in the video ($n = 134$ impressions, 4.51% of impressions) or if their responses to the personality impressions items for a target did not vary ($SD = 0$; $n = 0$). Additionally,

unexpected technical problems with the target videos and tablets resulted in data from five participants being excluded from the analyses. As a result, 420 participants were included in the final analysis, and the total number of impressions (number of targets rated) for each participant ranged from one to seven ($Mdn = 7$).

Data Analytic Procedure

Data were analyzed using the social accuracy model (SAM; Biesanz, 2010), a crossed-random effects model which allows for the examination of perceptive and expressive accuracy across many traits. The analytic model to estimate distinctive and normative accuracy and distinctive assumed similarity across perceivers is represented in Equation 1.1:

$$Y_{ijk} = \beta_{0ij} + \beta_{1ij}TVal_{jk} + \beta_{2ij}Norm_k + \beta_{3ij}PSelf_{ik} + \epsilon_{ijk} \quad (1.1)$$

$$\beta_{0ij} = \beta_{00} + \beta_{01} + u_{0i} + u_{0j}$$

$$\beta_{1ij} = \beta_{10} + \beta_{11} + u_{1i} + u_{1j}$$

$$\beta_{2ij} = \beta_{20} + \beta_{21} + u_{2i} + u_{2j}$$

$$\beta_{3ij} = \beta_{30} + \beta_{31} + u_{3i} + u_{3j}$$

Here, Y_{ijk} is perceiver i 's rating of target j on item k . $TVal_{jk}$ is the validity measure composite of self-, peer-, and parent reports (obtained in the previous pilot study; i.e., Warner, 2018) for target j on item k and is deviated from the normative profile. $Norm_k$ is the normative mean (participants' average self-report) for item k and is grand mean centered. $PSelf_{ik}$ is perceiver i 's self-report on item k and is deviated from the normative profile.

β_{1ij} is the distinctive accuracy for perceiver i 's rating of target j while holding the average personality profile ($Norm_k$) constant. Distinctive accuracy refers to the

correspondence between the target's personality and the perceiver's ratings of the target's personality.

β_{2ij} captures normative accuracy for perceiver i 's rating of target j and refers to the correspondence between the perceiver's ratings of the target's personality and the average personality profile.

β_{3ij} is the level of distinctive assumed similarity for perceiver i 's rating of target j , and refers to the correspondence between the perceiver's ratings of the target's personality and the perceiver's own self-reported personality while controlling for the average personality profile and actual similarity between the perceiver and the target.

State Perspective-Taking and Perceptive Accuracy

To address the main hypothesis and determine if state perspective-taking improves distinctive accuracy, normative accuracy, and distinctive assumed similarity, each of the coefficients from Equation 1.1 were decomposed into their own regression equations represented in Equation 1.2. In these functions of fixed and random effects, the perspective-taking experimental manipulation (PT_i) was dummy coded as 0 = no perspective-taking instructions (control) and 1 = perspective-taking instructions.

$$\beta_{0ij} = \beta_{00} + \beta_{01}PT_i + u_{0i} + u_{0j} \quad (1.2)$$

$$\beta_{1ij} = \beta_{10} + \beta_{11}PT_i + u_{1i} + u_{1j}$$

$$\beta_{2ij} = \beta_{20} + \beta_{21}PT_i + u_{2i} + u_{2j}$$

$$\beta_{3ij} = \beta_{30} + \beta_{31}PT_i + u_{3i} + u_{3j}$$

The primary coefficients of interest are illustrated in Figure 2. β_{10} , β_{20} , and β_{30} represent the average levels of distinctive accuracy, normative accuracy, and distinctive assumed similarity,

respectively, across all perceivers and targets for perceivers in the control condition (no perspective-taking instructions). β_{11} , β_{21} , and β_{31} are interactions that capture the difference between the control condition and the perspective-taking condition for distinctive accuracy, normative accuracy, and distinctive assumed similarity, respectively.

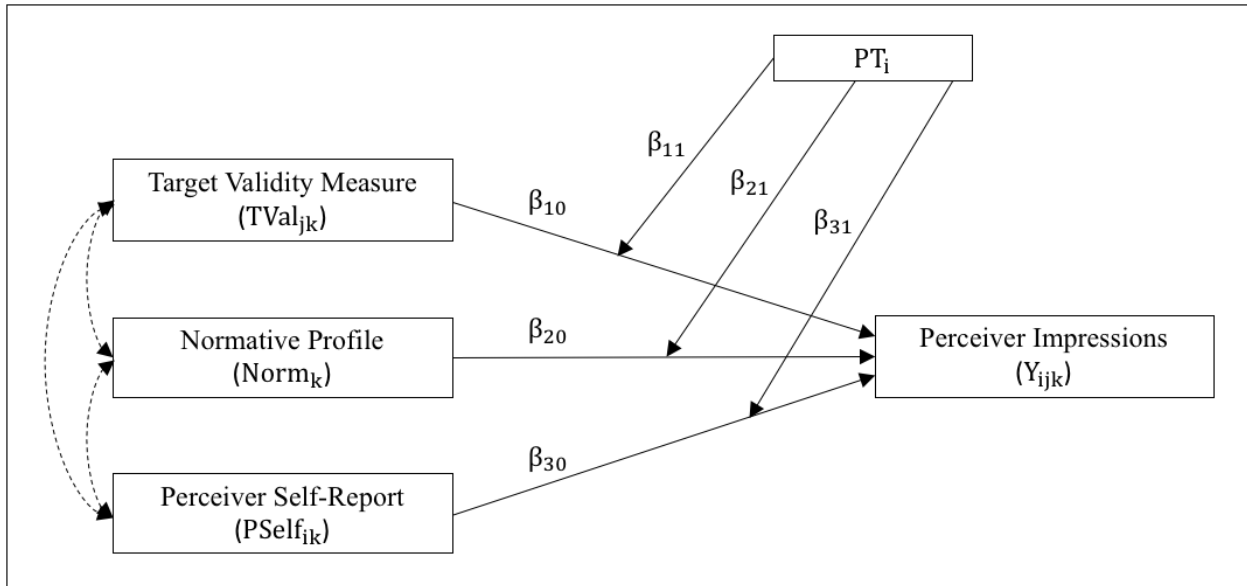


Figure 2 The social accuracy model extended to include perspective-taking as a moderator of distinctive accuracy (β_{11}), normative accuracy (β_{21}), and distinctive assumed similarity (β_{31})

Exploratory Analyses

Two different analyses were employed to assess the moderating role of trait perspective-taking in impressions. First, to determine whether trait perspective-taking moderates the relationship between state perspective-taking and distinctive accuracy, normative accuracy, and distinctive assumed similarity, trait perspective-taking (each perceiver’s mean score on the perspective-taking subscale of the IRI; TPT_i) was grand-mean centered and added as a second

moderator to Equation 1.2. The functions of fixed and random effects for this analysis are represented in Equation 1.3.

$$\beta_{0ij} = \beta_{00} + \beta_{01}PT_i + \beta_{02}TPT_i + \beta_{03}PT_i * TPT_i + u_{0i} + u_{0j} \quad (1.3)$$

$$\beta_{1ij} = \beta_{10} + \beta_{11}PT_i + \beta_{12}TPT_i + \beta_{13}PT_i * TPT_i + u_{1i} + u_{1j}$$

$$\beta_{2ij} = \beta_{20} + \beta_{21}PT_i + \beta_{22}TPT_i + \beta_{23}PT_i * TPT_i + u_{2i} + u_{2j}$$

$$\beta_{3ij} = \beta_{30} + \beta_{31}PT_i + \beta_{32}TPT_i + \beta_{33}PT_i * TPT_i + u_{3i} + u_{3j}$$

Here, β_{13} represents the three-way interaction between state perspective-taking, trait perspective-taking, and distinctive accuracy and assesses whether trait perspective-taking moderates the relationship between state perspective-taking and distinctive accuracy. β_{23} captures the three-way interaction between state perspective-taking, trait perspective-taking, and normative accuracy and measures whether trait perspective-taking moderates the state perspective-taking and normative accuracy relationship. β_{33} represents the three-way interaction between state perspective-taking, trait perspective-taking, and distinctive assumed similarity and estimates how trait perspective-taking moderates the relationship between state perspective-taking and distinctive assumed similarity.

Second, to determine whether trait perspective-taking is associated with greater distinctive accuracy, normative accuracy, and distinctive assumed similarity (thereby replicating findings by Colman et al., 2017), the following analyses were first conducted collapsed across both conditions and then separately for perceivers in the control condition and perceivers in the perspective-taking condition. Each of the coefficients from Equation 1.1 were decomposed into their own regression equations represented in Equation 1.4. In these functions of fixed and random effects, trait perspective-taking was introduced as a moderator (TPT_i).

$$\beta_{0ij} = \beta_{00} + \beta_{01}TPT_i + u_{0i} + u_{0j} \quad (1.4)$$

$$\beta_{1ij} = \beta_{10} + \beta_{11} \text{TPT}_i + u_{1i} + u_{1j}$$

$$\beta_{2ij} = \beta_{20} + \beta_{21} \text{TPT}_i + u_{2i} + u_{2j}$$

$$\beta_{3ij} = \beta_{30} + \beta_{31} \text{TPT}_i + u_{3i} + u_{3j}$$

Here, β_{11} represents the relationship between trait perspective-taking and distinctive accuracy, β_{21} captures the relationship between trait perspective-taking and normative accuracy, and β_{31} represents the relationship between trait perspective-taking and distinctive assumed similarity.

CHAPTER III

RESULTS

General Impression Accuracy

On average across conditions, perceivers formed judgments that were significantly distinctively and normatively accurate, and their judgments displayed significant levels of distinctive assumed similarity (see Table 3). In general, perceivers understood targets' distinctive personalities, viewed targets positively, and judged targets as having a similar personality to themselves.

Table 3 Personality Judgment Accuracy

<i>Parameter</i>	<i>Estimate (SE)</i>
Fixed Effects	
Intercept	-0.02 (0.06)
Distinctive Accuracy	0.29 (0.08)*
Normative Accuracy	0.73 (0.08)***
Distinctive Assumed Similarity	0.12 (0.01)***
Random Effects	
Perceiver (Perceptive Accuracy)	
Intercept	0.24***
Distinctive Accuracy	0.13***
Normative Accuracy	0.27***
Distinctive Assumed Similarity	0.14***
Target (Expressive Accuracy)	
Intercept	0.14***
Distinctive Accuracy	0.21***
Normative Accuracy	0.21***
Distinctive Assumed Similarity	0.02***
Residual SD	1.26
Sample Sizes	
Perceivers	420
Targets	7

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Perspective-Taking and Impressions

As expected, perceivers in the perspective-taking condition reported trying to take the targets' perspectives significantly more than perceivers in the control condition ($b = 0.53, p < 0.001$), indicating that the perspective-taking manipulation was effective. Moreover, those in the perspective-taking condition indicated that they were able to take the targets' perspectives significantly more than those in the control condition ($b = 0.26, p = 0.002$). Responses to the "Try" manipulation check item and the "Able" manipulation check item were significantly related ($r = 0.50, p < 0.01$). Trait perspective-taking did not differ significantly between perceivers in the perspective-taking condition and those in the control condition ($b = -0.15, p =$

0.11). In sum, the perspective-taking manipulation was effective, and random assignment was successful in creating groups that did not significantly differ in trait perspective-taking.

State Perspective-Taking and Perceptive Accuracy

Contrary to what was hypothesized, perceivers in the perspective-taking condition did not form judgments significantly greater in distinctive accuracy compared to perceivers in the control condition. Additionally, perceivers in the perspective-taking condition did not form judgments higher in normative accuracy (positivity) than perceivers in the control condition. Finally, judgments by perceivers in the perspective-taking condition did not display significantly greater distinctive assumed similarity than judgments by perceivers in the control condition (see Table 4 and Figure 3). Thus, counter to what was expected, state perspective-taking did not improve perceivers’ ability to understand the targets’ unique personalities, did not improve impression positivity, and did not change the extent to which perceivers viewed the target as being similar to themselves.

Table 4 State Perspective-Taking (SPT) and Impression Accuracy

<i>Parameter</i>	<i>Estimate (SE)</i>
Fixed Effects	
Intercept	-0.02 (0.06)
Distinctive Accuracy	0.28 (0.08)*
Normative Accuracy	0.72 (0.08)***
Distinctive Assumed Similarity	0.11 (0.01)**
Distinctive Accuracy X SPT	0.01 (0.01)
Normative Accuracy X SPT	0.04 (0.03)
Distinctive Assumed Similarity X SPT	0.0003 (0.02)
Perceivers	
Control Condition	209
Perspective-Taking Condition	211

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

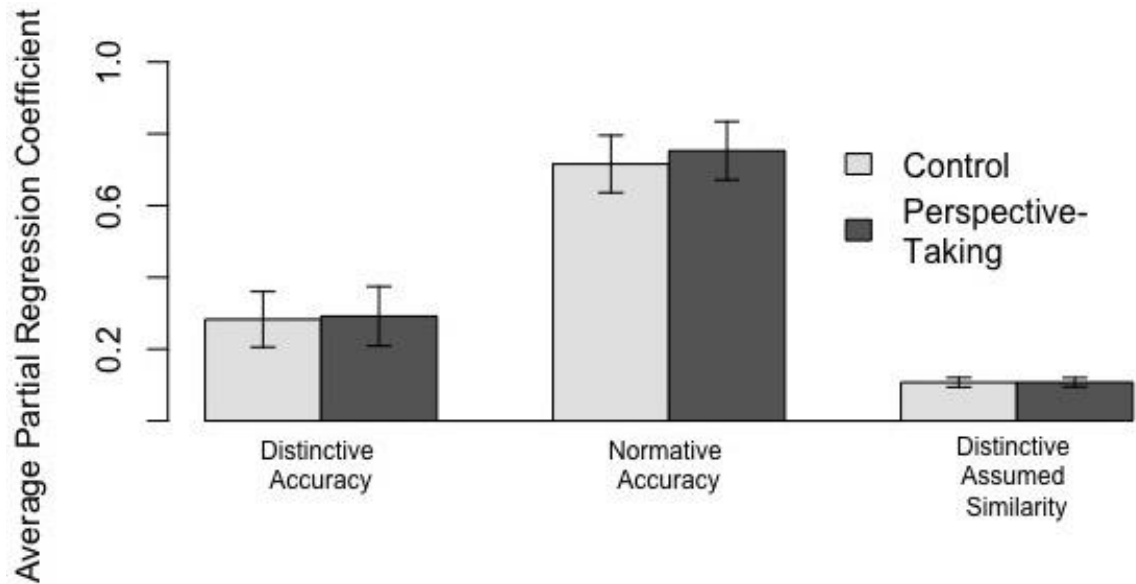


Figure 3 Impression Accuracy by Condition

Follow-Up Analyses

To better understand why the main hypothesis was not supported, follow-up analyses were conducted. It is possible that some perceivers in the perspective-taking condition chose not to perspective-take even though they were instructed to do so and that some perceivers in the control condition chose to perspective-take despite not being instructed to do so. If this is the case, then the main analysis presented above measures differences in perceptive accuracy based only on whether or not perceivers were *instructed* to perspective-take and not on whether perceivers actually did perspective-take. A better understanding of state perspective-taking's effects on impressions can be gained by examining the relationship using perceivers who did or did not *try* to take the targets' perspectives and by examining the relationship with perceivers who were or were not *able* to successfully take the targets' perspectives. As such, two follow-up analyses were conducted based on participants' responses to the "Try" manipulation check item

(“How much did you try to adopt the perspective of the individuals being interviewed?”) and the “Able” manipulation check item (“To what extent were you able to adopt the perspective of the individuals being interviewed?”). The same data analytic procedure used for the main hypothesis was used for these follow-up analyses.

The first analysis isolated the perceivers who did and did not actively try to take the targets’ perspectives while still maintaining the distinction between conditions. This analysis included only participants in the control condition who responded to the “Try” manipulation check item with a “1” ($N = 6$) or “2” ($N = 18$; indicating that they did not try to take the targets’ perspectives) and participants in the perspective-taking condition who responded to the “Try” item with a “4” ($N = 93$) or “5” ($N = 108$; indicating that they did try to take the targets’ perspectives). For those perceivers, there was not a significant difference in distinctive accuracy between the conditions. However, there was a significant difference in normative accuracy between the two conditions. Perceivers in the perspective-taking condition who reported trying to take the targets’ perspectives viewed the targets with significantly greater positivity (normative accuracy) than those in the control condition who reported not trying to take the targets’ perspectives. Finally, there was not a significant difference in the levels of distinctive assumed similarity in perceivers’ judgments between the two conditions (see Table 5 and Figure 4). In sum, when limiting the sample to only those perceivers who did or did not try to perspective-take, there is still no evidence that state perspective-taking improves the ability to accurately judge another’s unique personality or that state perspective-taking changes the extent to which a perceiver views a target as having a similar personality to themselves. However, there is evidence that trying to take a target’s perspective does increase the positivity of a perceiver’s impression.

Table 5 Follow-Up Analysis Based on Responses to “Try” Manipulation Check Item (Control Condition 1 and 2, Perspective-Taking Condition 4 and 5)

<i>Parameter</i>	Estimate (<i>SE</i>)
Fixed Effects	
Intercept	0.03 (0.08)
Distinctive Accuracy	0.29 (0.09)**
Normative Accuracy	0.63 (0.10)***
Distinctive Assumed Similarity	0.08 (0.03)*
Distinctive Accuracy X SPT	0.004 (0.03)
Normative Accuracy X SPT	0.13 (0.06)*
Distinctive Assumed Similarity X SPT	0.03 (0.03)
Perceivers	
Control Condition	24
Perspective-Taking Condition	199

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

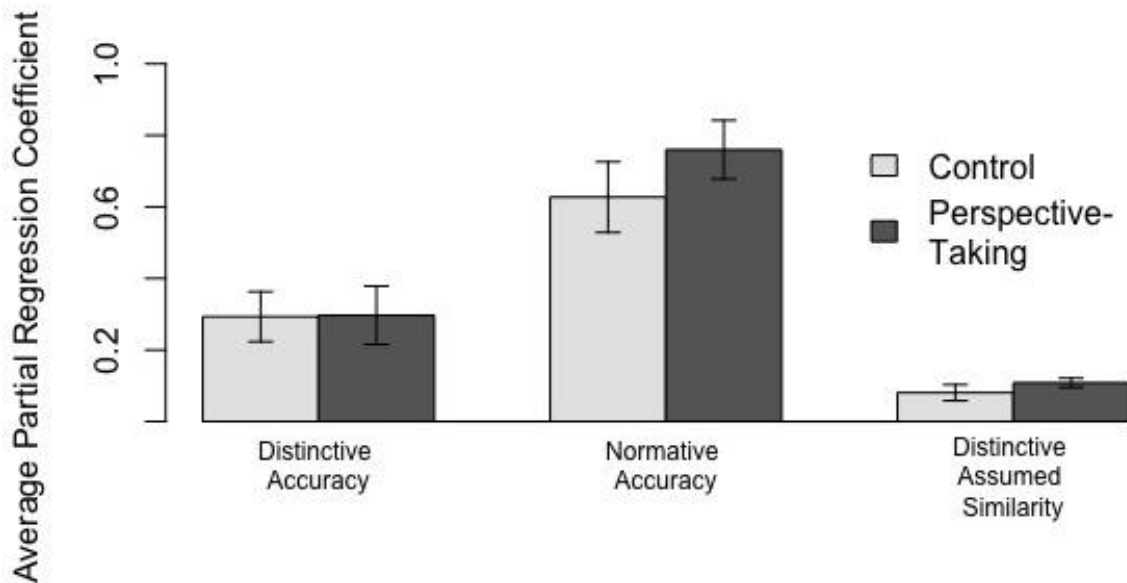


Figure 4 Accuracy by Condition for “Try” Item Follow-Up Analysis

The second analysis isolated the perceivers who were and were not able to successfully take the targets’ perspectives while again maintaining the distinction between conditions. In the second follow-up analysis, only participants in the control condition who responded to the “Able” item with a “1” ($N = 8$) or “2” ($N = 23$; indicating that they were unsuccessful in taking

the targets’ perspectives) and participants in the perspective-taking condition who responded to the “Able” item with a “4” ($N = 116$) or “5” ($N = 28$; indicating that they were successful in taking the targets’ perspectives) were included. For these perceivers, distinctive accuracy did not differ significantly between the conditions. However, perceivers in the perspective-taking condition did make judgments significantly higher in normative accuracy (positivity) than perceivers in the control condition. Lastly, there was no difference in distinctive assumed similarity between the conditions (see Table 6 and Figure 5). Thus, when restricting the sample to only those perceivers who reported being able or not able to take the targets’ perspectives, there is again no evidence that state perspective-taking causes perceivers to judge targets’ unique personalities more accurately or that state perspective-taking alters the extent to which a perceiver views a target as being similar to themselves. Yet, there is evidence that being able to take a target’s perspective results in more positive impressions of that target.

Table 6 Follow-Up Analysis Based on Responses to “Able” Manipulation Check Item (Control Condition 1 and 2, Perspective-Taking Condition 4 and 5)

<i>Parameter</i>	<i>Estimate (SE)</i>
Fixed Effects	
Intercept	0.02 (0.07)
Distinctive Accuracy	0.28 (0.09)*
Normative Accuracy	0.59 (0.09)***
Distinctive Assumed Similarity	0.06 (0.03)*
Distinctive Accuracy X SPT	0.02 (0.03)
Normative Accuracy X SPT	0.17 (0.06)**
Distinctive Assumed Similarity X SPT	0.06 (0.03)
Perceivers	
Control Condition	31
PT Condition	142

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

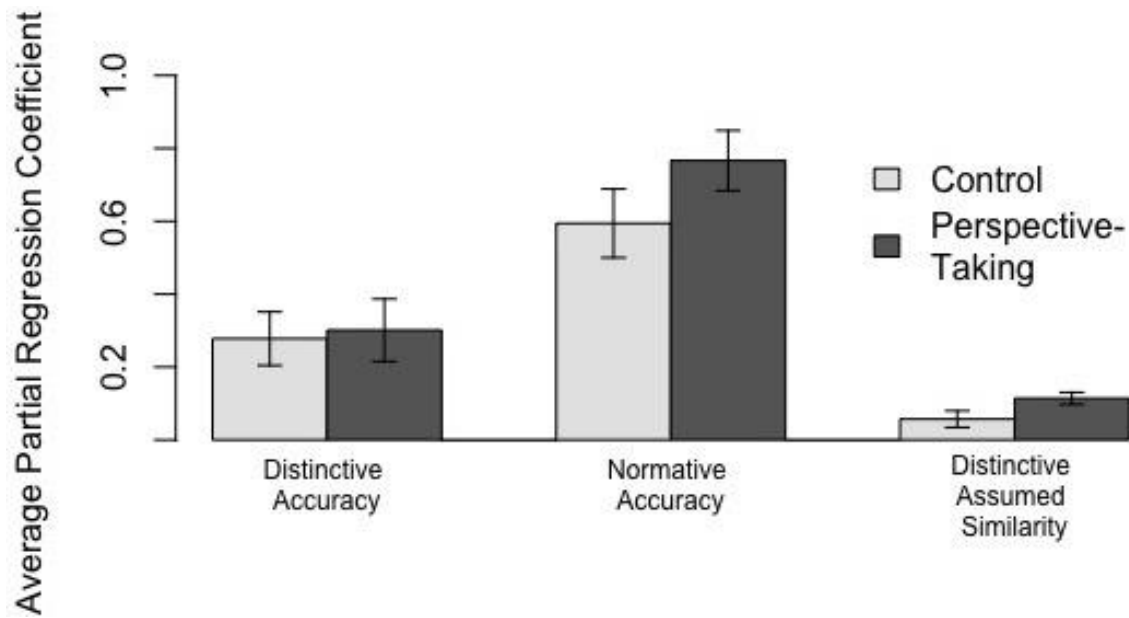


Figure 5 Accuracy by Condition for “Able” Item Follow-Up analysis

Attention, Liking, and Perceived Closeness

Attention, liking, and perceived closeness were mechanisms expected to play a role in the relationship between perspective-taking and distinctive accuracy, normative accuracy, and distinctive assumed similarity, respectively. Average attention was determined by averaging participants’ responses to two items measuring attention ($r = 0.71, p < 0.01$), and average liking was measured by averaging participants’ responses to two items measuring liking ($r = 0.80, p < 0.01$). Perceived closeness was measured using one item. Contrary to what was expected, perceivers in the perspective-taking condition did not report paying significantly more attention on average toward the targets compared to perceivers in the control condition ($b = -0.02, p = 0.71$), and they did not report significantly greater liking for the targets compared to perceivers in the control condition ($b = 0.04, p = 0.34$). Moreover, perceivers in the perspective-taking condition did not report significantly greater levels of perceived closeness between themselves

and the targets compared to perceivers in the control condition ($b = -0.05, p = 0.44$). Thus, there is no evidence that state perspective-taking impacts attention, liking, or perceived closeness.

Exploratory Analyses: Trait Perspective-Taking

An exploratory analysis was conducted to assess the moderating role of trait perspective-taking on the effect of state perspective-taking in impressions. Trait perspective-taking did not significantly moderate the relationship between state perspective-taking and distinctive accuracy, the relationship between state perspective-taking and normative accuracy, or the relationship between state perspective-taking and distinctive assumed similarity (see Table 7). Thus, a perceiver's existing level of perspective-taking tendencies did not play a role in how much state perspective-taking influenced his/her impressions.

Table 7 Trait Perspective-Taking (TPT) as a Moderator of State Perspective-Taking (SPT) and Impressions

<i>Parameter</i>	<i>Estimate (SE)</i>
Fixed Effects	
Intercept	-0.02 (0.06)
Distinctive Accuracy	0.28 (0.08)*
Normative Accuracy	0.71 (0.08)***
Distinctive Assumed Similarity	0.10 (0.01)***
Distinctive Accuracy X SPT	0.01 (0.01)
Normative Accuracy X SPT	0.05 (0.03)
Distinctive Assumed Similarity X SPT	0.005 (0.02)
Distinctive Accuracy X TPT	0.003 (0.01)
Normative Accuracy X TPT	0.05 (0.02)*
Distinctive Assumed Similarity X TPT	0.01 (0.01)
Distinctive Accuracy X SPT X TPT	0.009 (0.02)
Normative Accuracy X SPT X TPT	0.01 (0.03)
Distinctive Assumed Similarity X SPT X TPT	0.008 (0.02)
Perceivers	416

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

To assess the role of trait perspective-taking in impressions in general and to determine if the results of Colman et al. (2017) were replicated, a moderation analysis was first conducted collapsed across conditions. On average, perceivers higher in trait perspective-taking formed impressions higher in normative accuracy, but not distinctive accuracy or distinctive assumed similarity. Second, the same moderation analysis was conducted for only perceivers in the control condition. This analysis of the control condition is most comparable to that conducted by Colman et al. (2017). For those in the control condition, greater trait perspective-taking was associated with greater normative accuracy, but not greater distinctive accuracy or distinctive assumed similarity. Third, the moderation analysis was conducted for only perceivers in the perspective-taking condition. For those in the perspective-taking condition, greater trait perspective-taking was associated with greater normative accuracy, but not greater distinctive accuracy or distinctive assumed similarity (see Table 8). Thus, trait perspective-taking was only consistently related to greater normative accuracy and was not associated with greater distinctive accuracy or distinctive assumed similarity. As such, these results do not fully replicate those of Colman et al. (2017).

Table 8 Trait Perspective-Taking (TPT) as a Moderator of Impressions

<i>Parameter</i>	Collapsed Across Conditions	Control Condition	Perspective- Taking Condition
	Estimates (<i>SE</i>)	Estimates (<i>SE</i>)	Estimates (<i>SE</i>)
Fixed Effects			
Intercept	-0.02 (0.06)	-0.02 (0.06)	-0.02 (0.06)
Distinctive Accuracy	0.28 (0.08)*	0.29 (0.08)**	0.29 (0.08)*
Normative Accuracy	0.73 (0.08)***	0.71 (0.08)***	0.75 (0.08)***
Distinctive Assumed Similarity	0.11 (0.01)***	0.11 (0.01)***	0.11 (0.01)***
Distinctive Accuracy X TPT	0.01 (0.01)	0.004 (0.01)	0.01 (0.01)
Normative Accuracy X TPT	0.05 (0.01)***	0.05 (0.02)*	0.06 (0.02)**
Distinctive Assumed Similarity X TPT	0.02 (0.01)	0.01 (0.01)	0.02 (0.01)
Perceivers	416	207	209

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

CHAPTER IV

DISCUSSION AND CONCLUSION

This study examined whether actively taking another's perspective when forming first impressions improves personality judgment accuracy and positivity and changes the extent to which a perceiver views a target as having a similar personality to themselves. Previous research has found that individuals with greater perspective-taking tendencies (those higher in trait perspective-taking) tend to form personality judgments that are high in distinctive accuracy, normative accuracy, and distinctive assumed similarity (Colman et al., 2017). The purpose of the current study was to examine the causality of these relationships; that is, whether state perspective-taking causes more distinctively and normatively accurate judgments, as well as judgments greater in distinctive assumed similarity. Perceivers who were instructed to take the targets' perspectives did report trying and being able to perspective-take significantly more than perceivers who were not instructed to take the targets' perspectives. However, the results of this study find no evidence that state perspective-taking causes improved perceptual accuracy or changes how similar a perceiver views a target as being to themselves, but state perspective-taking may improve impression positivity if perceivers are instructed to perspective-take and consequently try or are able to successfully take another's perspective.

Interpretation of Results

Distinctive Accuracy

Contrary to what was predicted, state perspective-taking did not improve distinctive accuracy. Perceivers who were instructed to take the targets' perspectives did not judge the targets' unique personalities any more accurately than perceivers who were not instructed to take the targets' perspectives. This was the case even for perceivers who reported actively trying or being able to perspective-take. The theoretical rationale for state perspective-taking's effects on perceivers' ability to detect target cues (potentially through greater attention) and utilize target cues (potentially through greater cognitive complexity) in order to form more distinctively accurate personality impressions was strong. Yet, these findings are in line with recent research indicating that perspective-taking does not improve interpersonal accuracy. Research using standard tests and measures of interpersonal accuracy has shown that state perspective-taking does not improve perceivers' ability to accurately judge others' thoughts, emotions, or attitudes (Eyal et al., 2018). While the present study utilized realistic estimates of accuracy, the conclusion that state perspective-taking does not improve personality judgment accuracy is in line with the previous research on empathic accuracy and extends this to include personality impressions.

Additionally, the ineffectiveness of state perspective-taking in improving distinctive accuracy provides evidence that perceptual accuracy may be a fairly stable individual difference that is not easily manipulated. Indeed, only one study has successfully altered perceivers' distinctive accuracy by manipulating perceivers' accuracy motivation (Biesanz & Human, 2010). Thus, further research on perceiver impressions involving experimental manipulations is necessary to fully understand the intrapersonal variability of perceptual accuracy. If very few

manipulations are successful in altering perceptive accuracy, this would suggest it is a stable ability with little within-person variability.

Cue Detection and Attention

Given that distinctive accuracy did not improve after perspective-taking, state perspective-taking may not improve a perceiver's ability to detect target cues, a step in RAM (Funder, 1995) that is necessary for accurate personality judgments. Given that attention toward a target is required for successful perspective-taking (Lin et al., 2010), it was expected that perspective-taking could increase a perceiver's attention toward a target, thereby allowing the perceiver to better detect target cues and form more distinctively accurate judgments. However, there was no evidence that state perspective-taking resulted in increased attention. Thus, while perspective-taking requires attention, it does not increase attention. It is possible that all participants, regardless of condition, found the target videos interesting and were engaged in the study. As such, perceivers in both conditions could have already been directing a high level of attention to the targets such that any increase in attention as a result of perspective-taking was minimal.

Normative Accuracy

Contrary to what was hypothesized, instructing perceivers to take the targets' perspectives did not result in more normative, positive judgments by those perceivers. However, follow-up analyses indicated that state perspective-taking did increase the positivity of perceivers' judgments when those perceivers were instructed to perspective-take and consequently tried or were able to take the targets' perspectives. Thus, actually trying to take a

target's perspective or being able to successfully take a target's perspective may result in more positive impressions of that target.

In addition, state perspective-taking was expected to increase liking and, as a result, normative accuracy (positivity). However, state perspective-taking did not cause greater liking for the perspective-taking target. This is contrary to research illustrating that state perspective-taking promotes liking and positive evaluations of a target (Davis et al., 1996; Galinsky & Moskowitz, 2000). Of note, previous research demonstrating greater liking after perspective-taking, and research on state perspective-taking in general, has typically presented targets in photographs or scripted interviews, and the targets are often intentionally portrayed as having certain salient and dominant characteristics (such as a negative stereotype). It is possible that perspective-taking does not affect how perceivers judge targets when those targets are in more naturalistic settings; that is, when perceivers are not presented with obviously defining characteristics and when the targets themselves control the cues they present and how they behave. However, it would be beneficial for future research on state perspective-taking to determine if this is indeed the case by employing more paradigms, such as face-to-face interactions, that use real people in unscripted situations as targets.

Distinctive Assumed Similarity

Contrary to what was predicted, state perspective-taking did not increase the distinctive assumed similarity of perceivers' judgments. As such, state perspective-taking did not alter the extent to which perceivers applied their own distinctive personality traits to the target and viewed the target as being similar to themselves. Perceived closeness was the proposed mechanism through which state perspective-taking might increase distinctive assumed similarity. However,

inconsistent with previous research (e.g., Davis et al., 1996; Galinsky, Wang, et al., 2008), perceivers in the perspective-taking condition did not indicate greater perceived closeness with the targets compared to perceivers in the control condition. Of note, perceived closeness was measured differently in the present study compared to how self-other overlap and perceived closeness have been measured in previous research. Past research has typically measured self-other overlap and perceived closeness using the Inclusion of Self in Other scale (Aron et al., 1992), which presents participants with seven pairs of circles that increasingly overlap. This study measured perceived closeness with a modified version of this item, in which the seven pairs of circles decreased in the amount that they overlapped. This methodological difference, and the fact that this study measured perceived closeness (a component of self-other overlap) rather than self-other overlap itself, may account for the inconsistency with past research. However, perceived closeness is a main factor of self-other overlap (Myers & Hodges, 2012), and future research should work to determine if perceived closeness and self-other overlap have differing associations with state perspective-taking, as this would have important implications in understanding state perspective-taking's effects.

Trait and State Perspective-Taking

Perceivers' levels of trait perspective-taking did not influence the relationship between state perspective-taking and impressions. Thus, the effectiveness of state perspective-taking did not change depending on the perceiver's existing levels of trait perspective-taking. Additionally, in contrast to Colman and colleagues (2017), trait perspective-taking was only associated with greater normative accuracy and was not associated with greater distinctive accuracy or distinctive assumed similarity. Thus, this study only partially replicates previous research and

highlights that the relationship between trait perspective-taking and impressions may not be as robust as previously thought.

Direction of Causality in the Perspective-Taking and Impressions Relationship

Colman et al.'s (2017) study was correlational in nature, and the present study assessed only one of the possible causal directions. However, results from this study provide no evidence that perspective-taking causes greater perceptive accuracy. As such, it is possible that the direction of causality between trait perspective-taking and impressions is opposite of what was expected and that perceptive accuracy causes greater perspective-taking tendencies. Potentially, over time and with practice, as individuals develop the ability to consistently form accurate personality judgments, their tendency to see others' points of view and take others' perspectives (trait perspective-taking) may also increase. If greater perceptive accuracy causes greater perspective-taking tendencies, then this could explain the present study's overall null findings.

Additionally, it is possible that the correlational relationship between perspective-taking and impression is due to another underlying variable. Other characteristics that are consistently correlated with trait perspective-taking, such as healthy interpersonal functioning and a higher sensitivity to others feelings and reactions (Davis, 1983), may account for the relationship between trait perspective-taking and distinctive accuracy, normative accuracy, and distinctive assumed similarity found by Colman et al. (2017). Indeed, if this is the case, then the overall lack of a relationship between state perspective-taking and impressions in this study are to be expected because trait perspective-taking (and consequently state perspective-taking) would not be directly related to impressions.

The Equivalence of Trait and State Perspective-Taking

These findings also provide implications regarding the relationship between state and trait perspective-taking as evidenced by their differing associations with impressions. Perspective-taking research has typically treated trait and state perspective-taking as different manifestations of the same process, but comparisons between the results of the current study and those of Colman et al. (2017) do not provide such a clear conclusion. The idea of trait-state isomorphism is that the consequences of states and traits should be the same (Fleeson, 2001; Fleeson, Malanos, & Achille, 2002). Thus, if trait perspective-taking and state perspective-taking do not result in the same outcomes, it is unlikely that they are simply different forms of the same process. Based on the findings of this study, there are two possible conclusions to be drawn regarding the relationship between trait and state perspective-taking.

The first possibility is that state and trait perspective-taking are not equivalent processes because they are not related to the same constructs in the same way. The present research provided no evidence that state perspective-taking is related to distinctive accuracy or distinctive assumed similarity, despite previous research showing a relationship between trait perspective-taking and these components of impressions (Colman et al., 2017). Thus, by the argument of trait-state isomorphism, state and trait perspective-taking may not be equivalent processes because they do not demonstrate the same outcomes. Thus, researchers should consider the possibility that trait and state perspective-taking are not identical processes when operationalizing perspective-taking in future research.

The second possibility is that state and trait perspective-taking are equivalent processes, but they are only associated with normative accuracy in first impressions. In the present study, trait perspective-taking was only related to normative accuracy, and state perspective-taking was

associated with greater normative accuracy (but not distinctive accuracy or distinctive assumed similarity) for perceivers who reported trying or being able to perspective-take. As such, both forms of perspective-taking were associated with the same outcome, which would be expected if they are identical processes. If this is the case, then the relationship between trait perspective-taking and distinctive accuracy and distinctive assumed similarity found by Colman et al. (2017) may be attributed to other characteristics that are associated with trait perspective-taking (e.g., healthy interpersonal functioning or greater sensitivity to other's thoughts and feelings).

Limitations and Future Research

Ceiling Effects with Good Targets

Using good targets may have produced ceiling effects and, in a sense, restricted the range of perspective-taking's effects. Good targets were used in this study because a perceiver can only form an accurate personality judgment if a target is first providing adequate trait-relevant cues (Rogers & Biesanz, 2018). Judgment accuracy tends to increase as targets provide a greater quantity of cues and better quality cues (Letzring, Wells, & Funder, 2006), but the targets in the present study may have provided such a large quantity of high quality cues that perspective-taking did not provide perceivers with any additional information, and any perceiver could have easily detected and interpreted the targets' cues, regardless of condition. Perspective-taking may be more useful when the target's personality-relevant cues are not obvious and readily available. If a target provides a lower quantity of cues or lower quality cues, perspective-taking may allow perceivers to detect and utilize more information than could be gained without perspective-taking. As such, future research should use a range of good and moderate targets to determine whether perspective-taking is effective for other types of targets.

Lack of Dissimilarity

State perspective-taking's ineffectiveness in improving impression accuracy in the present study could be due to a lack of dissimilarity between the targets and the perceivers. The targets and perceivers were already similar: most were around the same age, all were attending the same university, most were living in the same city, 71.1% of perceivers were the same ethnicity as the targets, and 77.9% were the same gender as six out of the seven targets. Indeed, a large limitation of the study is that all targets were white and only one target was male. As such, the targets were not drastically and obviously different from the majority of perceivers on many characteristics. Perspective-taking can only be impactful if the target is sufficiently recognized as being distinct from the self (Sassenrath et al., 2014; Todd et al., 2011), so such great similarity between targets and perceivers and a lack of diversity among targets may have lessened perspective-taking's effects. Findings from Colman et al. (2017) further support this idea. In three of their four samples, participants were recruited from MTurk, and the average age difference between targets and perceivers was over 10 years. As such, the perceivers were older and likely had more diverse backgrounds and perspectives compared to the targets. The dissimilarity between perceivers and targets may have contributed to the relationship between trait perspective-taking and accurate impressions found by Colman et al. (2017). Future research should aim to use targets and perceivers who are dissimilar from one another to determine whether greater dissimilarity does in fact lead to greater state perspective-taking effects.

Video Impressions vs. Face-to-Face Impressions

This study used a video impressions paradigm, and this allowed for the direct examination of perceiver effects while holding target effects constant. However, a more

comprehensive understanding of the relationship between state perspective-taking and impressions could be found by examining state perspective-taking's effects in face-to-face interactions. With a face-to-face interaction paradigm, researchers can assess how state perspective-taking impacts a target's cue relevance and cue availability in addition to a perceiver's ability to detect and utilize cues. In face-to-face interactions, a perceiver's behaviors can influence the likelihood that a target will make trait-relevant cues available. For instance, targets tend to express more cues that are relevant to their true personality when perceivers create interaction atmospheres that allow a target to feel comfortable doing so (Letzring, 2008). State perspective-taking could alter how a perceiver interacts with a target (such as increasing the interest a perceiver displays in getting to know and understand the target), thereby influencing the relevance and availability of a target's cues. Additionally, given that Colman et al. (2017) also used a video impression paradigm, future research could examine the impact of trait perspective-taking in face-to-face interactions. It is possible that trait perspective-taking may have a different association with impression accuracy when perceivers interact with a target face-to-face. Overall, future research would benefit from examining the effects of both trait and state perspective-taking in face-to-face interactions in order to arrive at a more comprehensive understanding of perspective-taking's relationship with impressions.

Determining Other Methods to Improve Impression Accuracy

Finally, given the important consequences of impressions, future research should aim to determine other methods to improve impression accuracy. The expectation that state perspective-taking would be a method to increase both the distinctive accuracy and positivity (normative accuracy) of perceivers' judgments was not supported. Currently, only accuracy motivation has

been established as a means of increasing distinctive accuracy, but this comes at the cost of impression positivity (Biesanz & Human, 2010). Because first impressions can influence a perceiver's future decisions and behaviors toward a target, it would be beneficial to determine a practical method for everyday interpersonal interactions that would allow perceivers to accurately judge others' unique personalities while still viewing them positively. Thus, future research should work to determine effective and easy-to-implement methods to improve both the accuracy and positivity of first impressions. If very few methods are successful in improving these components of impressions, this would suggest that perceptive accuracy is in fact a stable individual difference that is unlikely to be easily improved.

Conclusion

This research provides evidence that taking another's perspective does not result in more accurate first impressions of that person and does not alter how a perceiver views that person in relation to themselves. However, this study does suggest that actively trying to or being able to take another's perspective may result in more positive impressions of that individual. These findings contribute to perspective-taking literature by examining the effects of state perspective-taking in the realm of realistic personality judgments and by providing evidence that trait and state perspective-taking may not be identical processes. Moreover, these findings can inform the impressions literature in general by contributing to the understanding of what processes facilitate and directly improve first impression accuracy. Overall, while taking another person's perspective when first meeting him/her will not necessarily improve the accuracy of one's first impressions, it does not hurt impression accuracy. In fact, trying to see another person from his/her own point of view may help one to view that person a little more positively.

REFERENCES

- Ambady, N., Hallahan, M., & Rosenthal, R. (1995). On judging and being judged accurately in zero-acquaintance situations. *Journal of Personality and Social Psychology*, *69*(3), 518-529. doi:10.1037/0022-3514.69.3.518
- Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of other in the self scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, *63*(4), 596-612. doi:10.1037/0022-3514.63.4.596
- Barrick, M., Patton, G., & Haugland, S. (2000). Accuracy of interviewer judgements of job applicant personality traits. *Personnel Psychology*, *53*(4), 925-951.
- Batson, C. D., Early, S., & Salvarani, G. (1997). Perspective taking: Imagining how another feels versus imagining how you would feel. *Personality and Social Psychology Bulletin*, *23*(7), 751-758. doi:10.1177/0146167297237008
- Beer, A., & Watson, D. (2008). Personality judgment at zero acquaintance: Agreement, assumed similarity, and implicit simplicity. *Journal of Personality Assessment*, *90*(3), 250-260. doi:10.1080/00223890701884970
- Bernstein, W. M., & Davis, M. H. (1982). Perspective-taking, self-consciousness, and accuracy in person perception. *Basic and Applied Social Psychology*, *3*(1), 1-19. doi:10.1207/s15324834basp0301_1
- Biesanz, J. C. (2010). The social accuracy model of interpersonal perception: Assessing individual differences in perceptive and expressive accuracy. *Multivariate Behavioral Research*, *45*(5), 853-885. doi:10.1080/00273171.2010.519262
- Biesanz, J. C., & Human, L. J. (2010). The cost of forming more accurate impressions: Accuracy-motivated perceivers see the personality of others more distinctively but less normatively than perceivers without an explicit goal. *Psychological Science*, *21*(4), 589-594. doi:10.1177/0956797610364121
- Blackman, M. C., & Funder, D. C. (1998). The effect of information on consensus and accuracy in personality judgment. *Journal of Experimental Social Psychology*, *34*(2), 164-181. doi:10.1006/jesp.1997.1347
- Borkenau, P., & Liebler, A. (1995). Observable attributes as manifestations and cues of personality and intelligence. *Journal of Personality*, *63*(1), 1-25. doi:10.1111/j.1467-6494.1995.tb00799.x

- Bowler, M. C., Bowler, J. L., & Cope, J. (2012). Further evidence of the impact of cognitive complexity on the five-factor model. *Social Behavior and Personality*, *40*(7), 1083-1097. doi:10.2224/sbp.2012.40.7.1083
- Bowler, M. C., Bowler, J. L., & Phillips, B. C. (2009). The Big-5[+ or -]2? The impact of cognitive complexity on the factor structure of the five-factor model. *Personality and Individual Differences*, *47*(8), 979-984. doi:10.1016/j.paid.2009.08.002
- Brüne, M., Abdel-Hamid, M., Lehmkämpfer, C., & Sonntag, C. (2007). Mental state attribution, neurocognitive functioning, and psychopathology: What predicts poor social competence in schizophrenia best? *Schizophrenia Research*, *92*(1), 151-159. doi:10.1016/j.schres.2007.01.006
- Chan, M., Rogers, K. H., Parisotto, K. L., & Biesanz, J. C. (2011). Forming first impressions: The role of gender and normative accuracy in personality perception. *Journal of Research in Personality*, *45*(1), 117-120. doi:10.1016/j.jrp.2010.11.001
- Christiansen, N. D., Wolcott-Burnam, S., Janovics, J. E., Burns, G. N., & Quirk, S. W. (2005). The good judge revisited: Individual differences in the accuracy of personality judgments. *Human Performance*, *18*(2), 123-149. doi:10.1207/s15327043hup1802_2
- Colman, D. E., Letzring, T. D., & Biesanz, J. C. (2017). Seeing and feeling your way to accurate personality judgments: The moderating role of perceiver empathic tendencies. *Social Psychological and Personality Science*, *8*(7), 806-815. doi:10.1177/1948550617691097
- Cronbach, L. (1955). Processes affecting scores on "understanding of others" and "assumed similarity". *Psychological Bulletin*, *52*, 177-193.
- Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology*, *10*, 85.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, *44*(1), 113-126. doi:10.1037/0022-3514.44.1.113
- Davis, M. H., Conklin, L., Smith, A., & Luce, C. (1996). Effect of perspective taking on the cognitive representation of persons: A merging of self and other. *Journal of Personality and Social Psychology*, *70*(4), 713-726. doi:10.1037/0022-3514.70.4.713
- Davis, M. H., Soderlund, T., Cole, J., Gadol, E., Kute, M., Myers, M., & Weihing, J. (2004). Cognitions associated with attempts to empathize: How do we imagine the perspective of another? *Personality and Social Psychology Bulletin*, *30*(12), 1625-1635. doi:10.1177/0146167204271183
- Dovidio, J. F., ten Vergert, M., Stewart, T. L., Gaertner, S. L., Johnson, J. D., Esses, V. M., . . . Pearson, A. R. (2004). Perspective and prejudice: Antecedents and mediating mechanisms. *Personality and Social Psychology Bulletin*, *30*(12), 1537-1549. doi:10.1177/0146167204271177

- Duan, C., & Hill, C. E. (1996). The current state of empathy research. *Journal of Counseling Psychology, 43*(3), 261-274. doi:10.1037/0022-0167.43.3.261
- Edwards, A. L. (1957). *The social desirability variable in personality assessment and research*. New York: Dryden Press.
- Eyal, T., Steffel, M., & Epley, N. (2018). Perspective mistaking: Accurately understanding the mind of another requires getting perspective, not taking perspective. *Journal of Personality and Social Psychology, 114*(4), 547-571. doi:10.1037/pspa0000115
- Fleeson, W. (2001). Toward a structure- and process-integrated view of personality: Traits as density distributions of states. *Journal of Personality and Social Psychology, 80*(6), 1011-1027. doi:10.1037/0022-3514.80.6.1011
- Fleeson, W., Malanos, A. B., & Achille, N. M. (2002). An intraindividual process approach to the relationship between extraversion and positive affect: Is acting extraverted as “good” as being extraverted? *Journal of Personality and Social Psychology, 83*(6), 1409-1422. doi:10.1037/0022-3514.83.6.1409
- Funder, D. C. (1995). On the accuracy of personality judgment: A realistic approach. *Psychological Review, 102*(4), 652-670. doi:10.1037/0033-295X.102.4.652
- Funder, D. C., & West, S. (1993). Consensus, self-other agreement, and accuracy in personality judgment: An introduction. *Journal of Personality, 61*(4), 457-476. doi:10.1111/j.1467-6494.1993.tb00778.x
- Furr, R. M. (2008). A framework for profile similarity: Integrating similarity, normativeness, and distinctiveness. *Journal of Personality, 76*(5), 1267-1316. doi:10.1111/j.1467-6494.2008.00521.x
- Galinsky, A. D., & Ku, G. (2004). The effects of perspective-taking on prejudice: The moderating role of self-evaluation. *Personality and Social Psychology Bulletin, 30*, 594-604. doi:10.1177/0146167203262802
- Galinsky, A. D., Ku, G., & Wang, C. S. (2005). Perspective-taking and self-other overlap: Fostering social bonds and facilitating social coordination. *Group Processes & Intergroup Relations, 8*(2), 109-124. doi:10.1177/1368430205051060
- Galinsky, A. D., Maddux, W. W., Gilin, D., & White, J. B. (2008). Why it pays to get inside the head of your opponent. *Psychological Science, 19*(4), 378-384. doi:10.1111/j.1467-9280.2008.02096.x
- Galinsky, A. D., & Moskowitz, G. B. (2000). Perspective-taking: Decreasing stereotype expression, stereotype accessibility, and in-group favoritism. *Journal of Personality and Social Psychology, 78*(4), 708-724. doi:10.1037/0022-3514.78.4.708

- Galinsky, A. D., Wang, C. S., & Ku, G. (2008). Perspective-takers behave more stereotypically. *Journal of Personality and Social Psychology, 95*(2), 404-419. doi:10.1037/0022-3514.95.2.404
- Hall, J. A., Andrzejewski, S., & Yopchick, J. (2009). Psychosocial correlates of interpersonal sensitivity: A meta-analysis. *Journal of Nonverbal Behavior, 33*(3), 149-180. doi:10.1007/s10919-009-0070-5
- Hooper, N., Erdogan, A., Keen, G., Lawton, K., & McHugh, L. (2015). Perspective taking reduces the fundamental attribution error. *Journal of Contextual Behavioral Science, 4*(2), 69-72. doi:10.1016/j.jcbs.2015.02.002
- Human, L. J., & Biesanz, J. C. (2011a). Target adjustment and self-other agreement: Utilizing trait observability to disentangle judgeability and self-knowledge. *Journal of Personality and Social Psychology, 101*(1), 202-216. doi:10.1037/a0023782
- Human, L. J., & Biesanz, J. C. (2011b). Through the looking glass clearly: Accuracy and assumed similarity in well-adjusted individuals' first impressions. *Journal of Personality and Social Psychology, 100*(2), 349-364. doi:10.1037/a0021850
- Human, L. J., & Biesanz, J. C. (2012). Accuracy and assumed similarity in first impressions of personality: Differing associations at different levels of analysis. *Journal of Research in Personality, 46*(1), 106-110. doi:10.1016/j.jrp.2011.10.002
- Human, L. J., & Biesanz, J. C. (2013). Targeting the good target. *Personality and Social Psychology Review, 17*(3), 248-272. doi:10.1177/1088868313495593
- Human, L. J., Biesanz, J. C., Finseth, S. M., Pierce, B., & Le, M. (2014). To thine own self be true: psychological adjustment promotes judgeability via personality-behavior congruence. *Journal of Personality and Social Psychology, 106*(2), 286-303. doi:10.1037/a0034860
- Human, L. J., Sandstrom, G. M., Biesanz, J. C., & Dunn, E. W. (2013). Accurate first impressions leave a lasting impression. *Social Psychological and Personality Science, 4*(4), 395-402. doi:10.1177/1948550612463735
- Kristof-Brown, A., Barrick, M. R., & Franke, M. (2002). Applicant impression management: Dispositional influences and consequences for recruiter perceptions of fit and similarity. *Journal of Management, 28*(1), 27-46. doi:10.1177/014920630202800103
- Kruglanski, A. (1989). The psychology of being "right": The problem of accuracy in social perception and cognition. *Psychological Bulletin, 106*(3), 395-409.
- Ku, G., Wang, C. S., & Galinsky, A. D. (2010). Perception through a perspective-taking lens: Differential effects on judgment and behavior. *Journal of Experimental Social Psychology, 46*(5), 792-798. doi:10.1016/j.jesp.2010.04.001

- Ku, G., Wang, C. S., & Galinsky, A. D. (2015). The promise and perversity of perspective-taking in organizations. *Research in Organizational Behavior*, *35*, 79-102. doi:10.1016/j.riob.2015.07.003
- Lenton, A. P., Bruder, M., Slabu, L., & Sedikides, C. (2013). How does “being real” feel? The experience of state authenticity. *Journal of Personality*, *81*(3), 276-289. doi:10.1111/j.1467-6494.2012.00805.x
- Letzring, T. D. (2008). The good judge of personality: Characteristics, behaviors, and observer accuracy. *Journal of Research in Personality*, *42*(4), 914-932. doi:10.1016/j.jrp.2007.12.003
- Letzring, T. D. (2015). Observer judgmental accuracy of personality: Benefits related to being a good (normative) judge. *Journal of Research in Personality*, *54*, 51-60. doi:10.1016/j.jrp.2014.05.001
- Letzring, T. D., & Human, L. J. (2014). An examination of information quality as a moderator of accurate personality judgment. *Journal of Personality*, *82*(5), 440-451. doi:10.1111/jopy.12075
- Letzring, T. D., Wells, S. M., & Funder, D. C. (2006). Information quantity and quality affect the realistic accuracy of personality judgment. *Journal of Personality and Social Psychology*, *91*(1), 111-123. doi:10.1037/0022-3514.91.1.111
- Lin, S., Keysar, B., & Epley, N. (2010). Reflexively mindblind: Using theory of mind to interpret behavior requires effortful attention. *Journal of Experimental Social Psychology*, *46*(3), 551-556. doi:10.1016/j.jesp.2009.12.019
- Lorenzo, G. L., Biesanz, J. C., & Human, L. J. (2010). What is beautiful is good and more accurately understood. Physical attractiveness and accuracy in first impressions of personality. *Psychological Science*, *21*(12), 1777. doi:10.1177/0956797610388048
- Luo, S., & Snider, A. G. (2009). Accuracy and biases in newlyweds' perceptions of each other: Not mutually exclusive but mutually beneficial. *Psychological Science*, *20*(11), 1332-1339. doi:10.1111/j.1467-9280.2009.02449.x
- Lyusin, D., & Ovsyannikova, V. (2016). Measuring two aspects of emotion recognition ability: Accuracy vs. sensitivity. *Learning and Individual Differences*, *52*, 129-136. doi:10.1016/j.lindif.2015.04.010
- Myers, M. W., & Hodges, S. D. (2012). The structure of self–other overlap and its relationship to perspective taking. *Personal Relationships*, *19*(4), 663-679. doi:10.1111/j.1475-6811.2011.01382.x
- Myers, M. W., Laurent, S., & Hodges, S. D. (2014). Perspective taking instructions and self–other overlap: Different motives for helping. *Motivation and Emotion*, *38*(2), 224-234. doi:10.1007/s11031-013-9377-y

- Parker, S. K., Atkins, P. W., & Axtell, C. M. (2008). Building better work-places through individual perspective taking: A fresh look at a fundamental human process. *International Review of Industrial and Organizational Psychology*, 23, 1-54.
- Paulhus, D. L. (1984). Two-component models of socially desirable responding. *Journal of Personality and Social Psychology*, 46(3), 598-609. doi:10.1037/0022-3514.46.3.598
- Powell, D. M., & Bourdage, J. S. (2016). The detection of personality traits in employment interviews: Can "good judges" be trained? *Personality and Individual Differences*, 94, 194-199. doi:10.1016/j.paid.2016.01.009
- Ready, R. E., Clark, L. A., Watson, D., & Westerhouse, K. (2000). Self- and peer-reported personality: Agreement, trait ratability, and the "self-based heuristic". *Journal of Research in Personality*, 34(2), 208-224. doi:10.1006/jrpe.1999.2280
- Rogers, K. H., & Biesanz, J. C. (2015). Knowing versus liking: Separating normative knowledge from social desirability in first impressions of personality. *Journal of Personality and Social Psychology*, 109(6), 1105-1116. doi:10.1037/a0039587
- Rogers, K. H., & Biesanz, J. C. (2018). Reassessing the good judge. *Journal of Personality and Social Psychology*. doi:10.1037/pspp0000197
- Rogers, K. H., Wood, D., & Furr, R. M. (2018). Assessment of similarity and self-other agreement in dyadic relationships: A guide to best practices. *Journal of Social and Personal Relationships*, 35(1), 112-134. doi:10.1177/0265407517712615
- Sassenrath, C., Sassenberg, K., & Scholl, A. (2014). From a distance *Social Psychological and Personality Science*, 5(1), 18-26. doi:10.1177/1948550613486672
- Saucier, G. (1994). Mini-markers: A brief version of Goldberg's unipolar big-five markers. *Journal of Personality Assessment*, 63(3), 506-516. doi:10.1207/s15327752jpa6303_8
- Schlegel, K., Boone, R., & Hall, J. A. (2017). Individual differences in interpersonal accuracy: A multi-level meta-analysis to assess whether judging other people is one skill or many. *Journal of Nonverbal Behavior*, 41(2), 103-137. doi:10.1007/s10919-017-0249-0
- Schmid Mast, M., Bangerter, A., Bulliard, C., & Aerni, G. (2011). How accurate are recruiters' first impressions of applicants in employment interviews? *International Journal of Selection and Assessment*, 19(2), 198-208. doi:10.1111/j.1468-2389.2011.00547.x
- Selfhout, M., Denissen, J., Branje, S., & Meeus, W. (2009). In the eye of the beholder: Perceived, actual, and peer-rated similarity in personality, communication, and friendship intensity during the acquaintanceship process. *Journal of Personality and Social Psychology*, 96(6), 1152-1165. doi:10.1037/a0014468
- Smith, A. (2006). Cognitive empathy and emotional empathy in human behavior and evolution. *The Psychological Record*, 56(1), 3-21. doi:10.1007/BF03395534

- Sun, S., Zuo, B., Wu, Y., & Wen, F. (2016). Does perspective taking increase or decrease stereotyping? The role of need for cognitive closure. *Personality and Individual Differences, 94*, 21-25. doi:10.1016/j.paid.2016.01.001
- Sunnafrank, M., & Ramirez, A. (2004). At first sight: persistent relational effects of get-acquainted conversations. *Journal of Social and Personal Relationships, 21*(3), 361-380.
- Swann, W. B. (1984). Quest for accuracy in person perception: A matter of pragmatics. *Psychological Review, 91*(4), 457-477. doi:10.1037/0033-295X.91.4.457
- Todd, A. R., Galinsky, A. D., & Bodenhausen, G. (2012). Perspective taking undermines stereotype maintenance processes: evidence from social memory, behavior explanation, and information solicitation. *Social Cognition, 30*(1), 94-108. doi:10.1521/soco.2012.30.1.94
- Todd, A. R., Hanko, K., Galinsky, A. D., & Mussweiler, T. (2011). When focusing on differences leads to similar perspectives. *Psychological Science, 22*(1), 134-141. doi:10.1177/0956797610392929
- Trent, N., Park, C., Bercovitz, K., & Chapman, I. (2016). Trait socio-cognitive mindfulness is related to affective and cognitive empathy. *Journal of Adult Development, 23*(1), 62-67. doi:10.1007/s10804-015-9225-2
- Vazire, S., & Mehl, M. R. (2008). Knowing me, knowing you: The accuracy and unique predictive validity of self-ratings and other-ratings of daily behavior. *Journal of Personality and Social Psychology, 95*(5), 1202-1216. doi:10.1037/a0013314
- Vescio, T. K., Sechrist, G. B., & Paolucci, M. P. (2003). Perspective taking and prejudice reduction: the mediational role of empathy arousal and situational attributions. *European Journal of Social Psychology, 33*(4), 455-472. doi:10.1002/ejsp.163
- Vogt, D. S., & Colvin, R. C. (2003). Interpersonal orientation and the accuracy of personality judgments. *Journal of Personality, 71*(2), 267-295. doi:10.1111/1467-6494.7102005
- Vorauer, J. D., Martens, V., & Sasaki, S. J. (2009). When trying to understand detracts from trying to behave: Effects of perspective taking in intergroup interaction. *Journal of Personality and Social Psychology, 96*(4), 811-827. doi:10.1037/a0013411
- Wang, C. S., Ku, G., Tai, K., & Galinsky, A. D. (2014). Stupid doctors and smart construction workers. *Social Psychological and Personality Science, 5*(4), 430-436. doi:10.1177/1948550613504968
- Warner, A. (2018). *Detecting deception: The accuracy of the good judge*. (Master's thesis). Retrieved from <https://scholar.utc.edu/theses/552>
- Watson, D., Hubbard, B., & Wiese, D. (2000). Self-other agreement in personality and affectivity: The role of acquaintanceship, trait visibility, and assumed similarity. *Journal of Personality and Social Psychology, 78*(3), 546-558.

Wood, D., Gosling, S. D., & Potter, J. (2007). Normality evaluations and their relation to personality traits and well-being. *Journal of Personality and Social Psychology*, 93(5), 861-879. doi:10.1037/0022-3514.93.5.861

Zaki, J., Bolger, N., & Ochsner, K. (2008). It takes two: The interpersonal nature of empathic accuracy. *Psychological Science*, 19(4), 399-404. doi:10.1111/j.1467-9280.2008.02099.x

APPENDIX A

IRB APPROVAL LETTER

Institutional Review Board

Dept 4915
615 McCallie Avenue
Chattanooga, TN 37403
Phone: (423) 425-5867
Fax: (423) 425-4052
instrb@utc.edu
<http://www.utc.edu/irb>

TO: Kathryn Graef
Dr. Kate Rogers **IRB # 18-067**

FROM: Lindsay Pardue, Director of Research Integrity
Dr. Amy Doolittle, IRB Committee Chair

DATE: 5/18/2018

SUBJECT: IRB #18-067: Assessing Personality

The IRB Committee Chair has reviewed and approved your application and assigned you the IRB number listed above. You must include the following approval statement on research materials seen by participants and used in research reports:

The Institutional Review Board of the University of Tennessee at Chattanooga (FWA00004149) has approved this research project # 18-067.

Annual Renewal. All approved research is subject to UTC IRB review, at least once a year. Please visit our website (<http://www.utc.edu/research-integrity/institutional-review-board/forms.php>) for the Form B (continuation / change / completion form) that you will need to complete and submit if your project remains active and UTC IRB approval needs to be renewed for another year. Unless your research moves in a new direction or participants have experienced adverse reactions, then renewal is not a major hurdle. You as Principal Investigator are responsible for turning in the Form B on time (2 weeks before one year from now), and for determining whether any changes will affect the current status of the project. When you complete your research, the same change/completion form should be completed indicating project termination. This will allow UTC's Office of Research Integrity to close your project file.

Please remember to contact the IRB immediately and submit a new project proposal for review if significant changes occur in your research design or in any instruments used in conducting the study. You should also contact the IRB immediately if you encounter any adverse effects during your project that pose a risk to your subjects.

For any additional information, please consult our web page <http://www.utc.edu/irb> or email instrb@utc.edu.

Best wishes for a successful research project.

APPENDIX B

PERSONALITY SELF-REPORT

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement.

1	2	3	4	5	6	7
Disagree strongly	Disagree	Disagree a little	Neutral	Agree a little	Agree	Agree strongly

1. Is bashful.
2. Is bold
3. Is careless
4. Is cold
5. Is complex
6. Is cooperative
7. Is creative
8. Is deep
9. Is disorganized
10. Is efficient
11. Is energetic
12. Is envious
13. Is extraverted
14. Is fretful
15. Is harsh
16. Is imaginative
17. Is inefficient
18. Is intellectual
19. Is jealous
20. Is kind
21. Is moody
22. Is organized
23. Is philosophical
24. Is practical
25. Is quiet
26. Is relaxed
27. Is rude
28. Is shy
29. Is sloppy
30. Is sympathetic
31. Is systematic
32. Is talkative
33. Is temperamental
34. Is touchy
35. Is uncreative
36. Is unenvious
37. Is unintellectual

- 38. Is unsympathetic
- 39. Is warm
- 40. Is withdrawn

APPENDIX C

PERSONALITY IMPRESSIONS

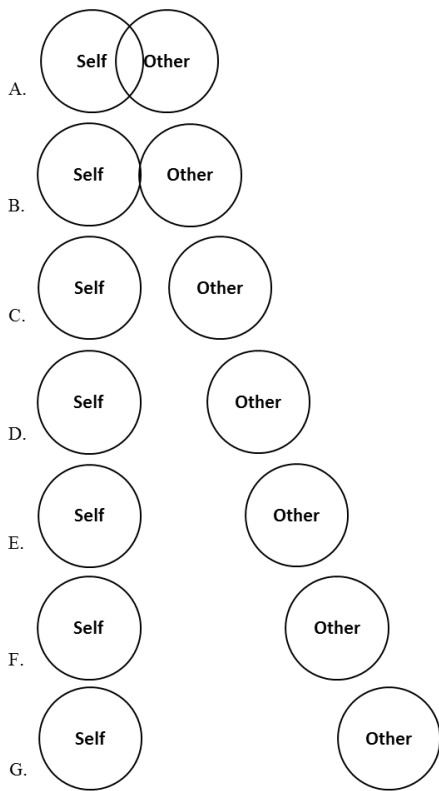
Please write the number that indicates the extent to which you agree or disagree with that statement: *I see this person as someone who...*

1	2	3	4	5	6	7
Disagree strongly	Disagree	Disagree a little	Neutral	Agree a little	Agree	Agree strongly

1. Is bashful.
2. Is bold
3. Is careless
4. Is cold
5. Is complex
6. Is cooperative
7. Is creative
8. Is deep
9. Is disorganized
10. Is efficient
11. Is energetic
12. Is envious
13. Is extraverted
14. Is fretful
15. Is harsh
16. Is imaginative
17. Is inefficient
18. Is intellectual
19. Is jealous
20. Is kind
21. Is moody
22. Is organized
23. Is philosophical
24. Is practical
25. Is quiet
26. Is relaxed
27. Is rude
28. Is shy
29. Is sloppy
30. Is sympathetic
31. Is systematic
32. Is talkative
33. Is temperamental
34. Is touchy
35. Is uncreative
36. Is unenvious
37. Is unintellectual
38. Is unsympathetic

- 39. Is warm
- 40. Is withdrawn
- 41. Is bright
- 42. Is very likeable
- 43. Is engaging and interesting
- 44. Held my attention for most of the clip
- 45. Is from the same cultural or ethnic group as me
- 46. Has a similar accent or way of speaking as me

47. Please circle the picture or letter below which best depicts you in relation to the person you just met



1	2	3	4	5	6	7
Not At All			Neutral			A Great Deal

- 48. How much do you like this person overall?
- 48. How much do you trust this person?

APPENDIX D

INTERPERSONAL REACTIVITY INDEX

Davis (1980)

1	2	3	4	5	6	7
Does not describe me well						Describes me very well

1. I daydream and fantasize, with some regularity, about things that might happen to me.
2. I often have tender, concerned feelings for people less fortunate than me.
3. I sometimes find it difficult to see things from the "other guy's" point of view.*
4. Sometimes I don't feel very sorry for other people when they are having problems.
5. I really get involved with the feelings of the characters in a novel.
6. In emergency situations, I feel apprehensive and ill-at-ease.
7. I am usually objective when I watch a movie or play, and I don't often get completely caught up in it.
8. I try to look at everybody's side of a disagreement before I make a decision.*
9. When I see someone being taken advantage of, I feel kind of protective towards them.
10. I sometimes feel helpless when I am in the middle of a very emotional situation.
11. I sometimes try to understand my friends better by imagining how things look from their perspective.*
12. Becoming extremely involved in a good book or movie is somewhat rare for me.
13. When I see someone get hurt, I tend to remain calm.
14. Other people's misfortunes do not usually disturb me a great deal.
15. If I'm sure I'm right about something, I don't waste much time listening to other people's arguments.*
16. After seeing a play or movie, I have felt as though I were one of the characters.
17. Being in a tense emotional situation scares me.
18. When I see someone being treated unfairly, I sometimes don't feel very much pity for them.
19. I am usually pretty effective in dealing with emergencies.
20. I am often quite touched by things that I see happen.
21. I believe that there are two sides to every question and try to look at them both.*
22. I would describe myself as a pretty soft-hearted person.
23. When I watch a good movie, I can very easily put myself in the place of a leading character.
24. I tend to lose control during emergencies.
25. When I'm upset at someone, I usually try to "put myself in his shoes" for a while.*
26. When I am reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me.
27. When I see someone who badly needs help in an emergency, I go to pieces.
28. Before criticizing somebody, I try to imagine how I would feel if I were in their place.*

*Indicates perspective-taking subscale item

APPENDIX E

DEMOGRAPHICS QUESTIONNAIRE

1. Your gender: Male Female Prefer not to answer Other _____
2. Your age: _____
3. Your major ethnic background (e.g., Caucasian, Hispanic) _____
4. What is your major? _____
5. What is your class rank? Freshman Sophomore Junior Senior Other _____

VITA

Kathryn Myfanwy Graeff was born on April 18, 1995 to Timothy Robert Graeff and Myfanwy Borel Graeff. She grew up in Nolensville, Tennessee and attended Nolensville Elementary School, Sunset Middle School, and Ravenwood High School. She graduated *summa cum laude* from Belmont University in 2017 with a Bachelor of Science in psychology and a minor in statistics. After earning her undergraduate degree, she was accepted to the Psychology Research Master's program at the University of Tennessee at Chattanooga (UTC). While studying at UTC, Kathryn worked as a graduate assistant in the psychology department, was a graduate instructor for undergraduate statistics lab courses, and managed the Personality, Perceptions, and Interpersonal Behavior Lab. Kathryn will graduate from UTC in May of 2019 with a Master of Science in psychology with a concentration in research, after which she plans to pursue a career in research and statistics.