



**Inherently Relational: Interactions Between Peers' and
Individuals' Personalities Impact Reward Giving and
Appraisal of Individual Performance.**

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Abstract:	<p>Introverted individuals may experience and evaluate their dyadic work relationships differently than extraverts. In two studies, we investigated the interaction effect of an individual's and observing peer's personality traits on performance evaluations and reward giving. Study 1 showed that introverted (but not extraverted) peers consistently evaluated extraverted and disagreeable (but not introverted and agreeable) individuals' performance as lower. Study 2 replicated these findings with regard to performance evaluation and reward giving using an experimental design that manipulated actor personality and held objective performance constant. The results also showed that introverts' trait sensitivity and negative person impressions mediated these relationships. Overall, results support an information utilization model of interpersonal dyadic evaluation, wherein introverts are more sensitive to interpersonal personality traits than their extraverted counterparts, incorporating interpersonal traits in person impressions and subsequent evaluations and reward distributions. We conclude with implications for dyadic workplace interactions, personality, and sources of emergent dyadic influences on performance evaluation.</p>

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Inherently Relational: Interactions between Peers' and Individuals' Personalities Impact Reward Giving and Appraisal of Individual Performance

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3 **Inherently Relational: Interactions between Peers' and Individuals' Personalities Impact**
4 **Reward Giving and Appraisal of Individual Performance**
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8 **ABSTRACT**
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10 Introverted individuals may experience and evaluate their dyadic work relationships differently
11 than extraverts. In two studies, we investigated the interaction effect of an individual's and
12 observing peer's personality traits on performance evaluations and reward giving. Study 1
13 showed that introverted (but not extraverted) peers consistently evaluated extraverted and
14 disagreeable (but not introverted and agreeable) individuals' performance as lower. Study 2
15 replicated these findings with regard to performance evaluation and reward giving using an
16 experimental design that manipulated actor personality and held objective performance constant.
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18 The results also showed that introverts' trait sensitivity and negative person impressions
19 mediated these relationships. Overall, results support an information utilization model of
20 interpersonal dyadic evaluation, wherein introverts are more sensitive to interpersonal
21 personality traits than their extraverted counterparts, incorporating interpersonal traits in person
22 impressions and subsequent evaluations and reward distributions. We conclude with implications
23 for dyadic workplace interactions, personality, and sources of emergent dyadic influences on
24 performance evaluation.
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3 The relationships we have with coworkers can profoundly impact our work experiences,
4 well-being, and productivity. Recent findings that having a best friend at work is a key indicator
5 of engagement (Buckingham & Coffman, 1999) and that employees often search for a sense of
6 community in the workplace (Klein & D'Aunno, 1986; Pfeffer, 2006) bolster the notion that
7 relational counterparts are especially relevant to our work experience. For example, work design
8 research shows that interpersonal relationships have strong impacts on jobs, roles, and tasks
9 (Grant & Parker, 2009). Relationships between coworkers are some of the strongest determinants
10 of well-being (Myers, 1999) and perceptions of meaningful work (Gersick, Bartunek, & Dutton,
11 2000; Wrzesniewski, Dutton, & Debebe, 2003), creativity (Burt, 2004; Perry-Smith, 2006), and
12 career mobility (Gersick et al., 2000). In addition, two recent meta-analyses showed that social
13 support between coworkers was strongly related to organizational variables such as absenteeism,
14 turnover intentions, job satisfaction, organizational commitment (Humphrey, Nahrgang, &
15 Morgeson, 2007), effort reduction, and individual performance (Chiaburu & Harrison, 2008).

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34 Work is intimately intertwined with social relationships (Grant & Parker, 2009), and
35 individuals often define themselves in their workplaces vis-à-vis their relationships to others
36 (Sluss & Ashforth, 2007). Organizational members constantly assess the extent to which their
37 peers are valuable contributors, and to what extent they are deserving of credit for collective
38 successes (Gómez, Kirkman, & Shapiro, 2000). Accordingly, the evaluations made of us by our
39 peers can have profound effects on our careers through informal channels for personal success,
40 including sharing vital information (Cerne, Nerstad, Dysvik, & Škerlavaj, 2013), spreading
41 harmful or beneficial reputational information (Feinberg, Cheng, & Willer, 2012; Feinberg,
42 Willer, Stellar, & Keltner, 2012), or directly helping in our efforts (Bowler & Brass, 2006).
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Moreover, peer evaluation influences our success through formal channels, including direct peer evaluation in self-managed teams (Ilgen & Pulakos, 1999) or via 360 degree feedback systems which may be considered in formal appraisal and promotion decisions (Mount, Judge, Scullen, Sytema, & Hezlett, 1998). Indeed, a recent Wallstreet Journal article points out that peer performance reviews are becoming increasingly popular in organizations (Silverman & Kwoh, 2012). Organizations such as Oracle and Google now rely on employees to monitor and incentivize their coworkers via a peer bonus system, and services such as www.bonus.ly help organizations integrate peer bonuses into their cultures and operations. Social media websites (such as www.linkedin.com) allow individuals to endorse their peers, and such recommendations may create advantageous opportunities. Thus, organizational scholars should find great interest in uncovering relational characteristics which influence the evaluations we make of others in the workplace, as evaluations made by one's coworkers can increasingly impact career outcomes.

Surprisingly, however, dyadic interactions between coworkers are rarely tested in the organizational literature (for exceptions see Bakker & Xanthopoulou, 2009; Curhan & Pentland, 2007; Ferrin, Bligh, & Kohles, 2008; Yalovleva, Reilly, & Werko, 2010). Indeed, the way we feel in the presence of others is driven by both the traits of the interaction partner as well as the traits of the focal individual (Eisenkraft & Elfenbein, 2010), yet organizational researchers often make the error of considering the characteristics and traits of only one of the interacting peers (Duncan, Kanki, Mokros, & Fiske, 1984). We argue that reactions to the personalities of others vary as a function of the traits of the raters themselves. Specifically, we explore how the interpersonal traits (i.e., extraversion and agreeableness) of focal individuals (actors), and their

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3 observing peers (peers)¹, interact to affect the evaluations that peers make of the contributions of
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5 actors, resulting in dyadic differences in evaluations of performance, peer bonuses and
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7 recommendations for opportunities given to the actor. Critically, we focus here on how
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9 introverts' differential sensitivity to the interpersonal traits of others influence how they form
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11 judgments of their team members, with consequences for how they subsequently rate and reward
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13 them. Regardless of whether the interpersonal traits that underlie such judgments eventually help
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15 or hinder collective performance or whether the judgments themselves are accurate, a systematic
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17 "rater by actor" effect in evaluations and rewards may have critical implications for the careers
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19 of those involved.
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24 Drawing from the Realistic Accuracy Model (RAM) of personality judgment (Funder,
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26 1995), we present an information-utilization model of interpersonal dyadic evaluation. We
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28 propose that complementary processes of trait sensitivity and general impression formation make
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30 introverted (but not extraverted) peers especially reactive to interpersonal personality traits (i.e.,
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32 agreeableness and extraversion) of focal actors. Accordingly, introverts are likely to pay special
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34 attention to interpersonal traits, and also construct more negative general person impressions
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36 when interacting with disagreeable and extraverted individuals. In previewing our results, trait
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38 sensitivity and negative person impressions constructed by introverted peers lead to diminished
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40 evaluations of performance and distribution of rewards for disagreeable and extraverted actors.
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45 In our first study, we use a field sample of in-tact and enduring teams to determine
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47 whether extraverted and disagreeable team members are evaluated more poorly by their
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49 introverted (but not extraverted) peers. In our second study, we use an experiment wherein actor
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51 personality was carefully manipulated and the task performance contributions of actors was held
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56 ¹ The terms actors and partners are commonly used in dyadic analysis to describe relationships between participants
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58 (see Kenny, Kashy, & Cook, 2006). However, because we discuss evaluations made by partners as the focal
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60 outcome, we use the term "observing peers" to facilitate clarity throughout.

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3 constant to test mediating mechanisms of the proposed effect, and determine whether trait
4 interactions (in the absence of differences in task performance) produce systematic deviations in
5 evaluations and provisions of peer bonuses and promotion recommendations. The combined
6 results of our two studies support a model demonstrating that introverts (but not extraverts)
7 systematically evaluate their peers more negatively as a function of actor disagreeableness and
8 extraversion, with potentially negative outcomes for the actor. As such, introverts may
9 unknowingly serve a critical role as gatekeepers of outcomes in organizational settings.

20 INTERPERSONAL TRAITS: AN INTERACTIONIST APPROACH

21
22 Personality traits are important to individuals' functioning in the workplace because the
23 cognitions, emotions, and behaviors reflected in personality are thought to contribute not only to
24 task performance (see Barrick, Mount, & Judge, 2001) but also to how individuals react and
25 relate to each other while performing work together (e.g., LePine, Buckman, Crawford, &
26 Method, 2011; LePine & Van Dyne, 2001). Two traits in particular have been demonstrated to be
27 specifically relevant for social interactions: extraversion and agreeableness (McCrae & Costa,
28 1989; Wiggins & Trobst, 1999). These traits fit closely with the interpersonal circumplex
29 dimensions of *dominant—submissive* and *agreeable—cold-hearted* (Wiggins & Trapnell, 1996).
30 As McCrae and Costa (1989) note, "Extraversion and Agreeableness define the plane of
31 interpersonal behavior," with the interpersonal circumplex being comprised of "the two-
32 dimensional plane defined by Extraversion and Agreeableness" (McCrae & Costa, 1989: 590).
33 Hence, extraversion and agreeableness are the traits we expect to be specifically relevant when
34 assessing interpersonal personality influences on work outcomes.

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53 Personality exists as both real underlying attributes/traits of individuals (Funder, 1995),
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3 2001; Connelly & Ones, 2010). Accordingly, Funder's (1995) Realistic Accuracy Model (RAM)
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5 of personality judgment suggests that individuals attempt to accurately rate and utilize the traits
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7 of others in order to successfully anticipate their likely behavior (Funder, 1995). In order to
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9 evaluate the personality traits of another, the environment must allow the target to express the
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11 trait (Relevance); the encounter must allow for observation of trait expression (Availability); the
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13 observer must notice trait-relevant cues (Detection), and the observer has to appropriately
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15 assemble these cues to form an impression of the target (Utilization; Funder, 1995).
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20 Critically, the priorities an individual places on detecting specific traits in others may
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22 vary (Funder, 1995). Because people evaluate the personalities of others for functionalist goals
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24 such as protecting themselves from interpersonal conflicts (Funder, 1995), we argue that
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26 introverts and extraverts will differentially both *detect* and *utilize* trait information gleaned from
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28 interactions with peers to evaluate their behavior. Indeed, individuals evaluate others with their
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30 own chronically activated schemas in mind (Markus, Smith, & Moreland, 1985). For example, in
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32 one study, less sociable (i.e., introverted) individuals demonstrated greater accuracy in
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34 identifying extraversion levels and other traits of those whom they had just met (Ambady,
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36 Hallahan, & Rosenthal, 1995). However, individuals may also utilize traits differently in making
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38 judgments about the target. Supportingly, Bargh, Bond, Lombardi and Tota (1986) found that
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40 participants who were shy (or kind) were more likely to interpret ambiguously shy (or kind)
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42 target behaviors in terms of that trait than other participants, suggesting that our interpretations
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44 of the traits of others are made with our own perspectives in mind.
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50 Funder (1995) argued that trait utilization may be moderated by a *judge X information*
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52 *sensitivity interaction*: "Certain judges might prefer or be able to receive and use certain kinds of
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54 information but not other kinds...this tendency of certain judges to search for and perceive
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3 certain information, or to weigh certain kinds of information more heavily in their judgments, is
4 called *sensitivity*” (Funder, 1995: 664). Accordingly, we first argue that introverts (but not
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certain information, or to weigh certain kinds of information more heavily in their judgments, is called *sensitivity*” (Funder, 1995: 664). Accordingly, we first argue that introverts (but not extraverts) are more likely to monitor behavior with particular concern for interpersonal traits. Second, we argue that introverts (but not extraverts) are more likely to utilize interpersonal traits in forming general impressions and then evaluate others through that lens.

Introversion as a trait-sensitivity amplifier

Prior work suggests two reasons why introversion should amplify sensitivity to interpersonal traits within interdependent settings. First, introversion is generally associated with reduced assertiveness (Bendersky & Shah, 2013; Lobel, 1981), and individuals lower in assertiveness generally prioritize relational outcomes such as reduced interpersonal conflict (i.e., Ames, 2008). Thus, introverts may actively monitor their potential teammates for signals that behaviors related to competition and conflict may be forthcoming. Accordingly, trait signals of extraversion (perceived as associated with poor listening and low receptivity; Grant, Gino, & Hoffman, 2011) and disagreeableness (associated with argumentativeness; Barrick et al., 2001) should be particularly useful to introverts.

Second, introverts display generally enhanced sensory processing sensitivity and responsiveness to stimuli (Stelmack, 1990). Studies have shown that introverts are more sensitive to loud noises, temperature extremes, bright sunrays, and to irritating stimuli (Aron & Aron, 1997). Indeed, introverts exhibit significantly greater overall sensory-processing sensitivity than extraverts (Aron & Aron, 1997), indicating that they pay more attention than extraverts to even slight stimuli. Thus, the tendency of introverts to be stimulated by their environment should also make them more reactive to the effects of other people’s interpersonal traits.

Introverted peers are more sensitive to actor (dis)agreeableness.

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3 Because most social situations are somewhat ambiguous (Bruner, 1958), many
4 disagreeable behaviors may be interpreted as benign. However, we argue that introverts may be
5 more generally sensitive to the agreeableness of potential interaction partners for two reasons.
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7 First, agreeableness signals the likelihood of cooperation and reciprocity (Ames & Bianchi,
8 2008). Although trait (dis)agreeableness has multiple facets, individuals low in agreeableness are
9 “more argumentative, inflexible, [and] uncooperative,” and these tendencies are likely to have
10 negative effects on peers (Barrick et al., 2001). Indeed, the conflict oriented behaviors of
11 disagreeable actors should elicit strong reactions from others, because the need to protect oneself
12 from potential social harm is a fundamental human motive (Kenrick, Li, & Butner, 2003).
13 Because introverted peers are generally lower in assertiveness than their extroverted counterparts
14 (Bendersky & Shaw, 2013; Lobel, 1981), introverted peers are likely to view disagreeable actors
15 as particularly problematic, as introverts are less likely to engage in assertive and corrective
16 behaviors when arguments occur (Lobel, 1981).
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34 Second, the disagreeable behaviors of actors may be more rapidly detected by introverts
35 than by extraverts simply because such behaviors may create obstacles to the outcomes which
36 introverts favor: relational outcomes (Bendersky & Shah, 2013). By contrast, extraverts often
37 prioritize instrumental outcomes, and thus may simply find (dis)agreeableness less diagnostic.
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43 ***Introverted peers are more sensitive to actor extraversion.***
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45 Prior research has demonstrated that less sociable (i.e., introverted) individuals are more
46 capable of discerning extraversion in zero acquaintance encounters (Ambady et al., 1995). We
47 suggest that introverted peers are more sensitive to extraversion because they recognize that
48 highly assertive (i.e., extraverted) actors often compromise relational outcomes in the interest of
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3 instrumental ones (Ames & Flynn, 2007), and because extraverts are often afforded initial high
4 status in the absence of relevant performance information (Bendersky & Shah, 2013).
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8 First, while extraversion is associated with sociability, it is also defined by social
9 dominance. Bono, Boles, Judge and Lauver (2002) found that the average level of extraversion
10 in roommate pairs was associated with increased relationship conflict. Further, extraverts
11 frequently sacrifice interpersonal harmony for the sake of instrumentality (Ames, 2008). While
12 most people naturally resist domination by others (Driskell, Olmstead, & Salas, 1993; Ridgeway,
13 1987), dominant behavior may sometimes be difficult to detect (Gottman & Ringland, 1981;
14 Dunbar & Burgoon, 2005), suggesting that individuals will expend effort to detect it only to the
15 extent to which it is useful for them to do so. Introverts, who care about relational outcomes,
16 should therefore be more sensitive to these traits. Second, researchers have argued that because
17 of increased assertiveness, extraverts are often afforded high status within newly formed groups
18 (Bendersky & Shah, 2013), and that such status conferrals might come at the expense of their
19 peers who don't display these traits (i.e., introverts). We suggest that introverts may be aware of
20 the fact that high status conferrals afforded to extraverts may come at their own expense. Thus,
21 introverts should be motivated to rapidly detect trait extraversion in their coworkers.
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41 Additionally, extraverted behaviors may be viewed critically by introverted peers because
42 extraversion signals possible conflict. Extraversion has been conceptualized as the tendency to
43 exhibit high levels of intense emotions and energy (Watson & Clark, 1997). Extraverts are
44 particularly good at expressing and transmitting intense emotions (Hatfield, Cacioppo, &
45 Rapson, 1994), such as anger. In turn, their conflict orientation makes extraverts exhibit
46 behaviors that may be perceived as highly aversive. Therefore, for similar reasons that introverts
47 would be sensitive to disagreeableness, they should also be sensitive to signals of extraversion.
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3 By contrast, extraverted peers find interpersonal competition less threatening than their
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5 introverted counterparts (Schneer & Chanin, 1987), and highly assertive (i.e., extraverted) peers
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7 generally over-emphasize instrumental outcomes within work teams (Ames & Flynn, 2007).
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10 Thus, extraverts are less likely to find traits related to extraversion especially diagnostic.

11 **Introversion as a filter of trait information utilization in forming person impressions**

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13 We suggest that introverts will not only differentially attend to interpersonal traits, but
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15 that they will also utilize interpersonal traits in constructing overall impressions. Humans tend to
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17 judge others' behaviors based on the general person impression they have formed of them (Srull
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19 & Wyer, 1989). By *person impressions*, we refer to the top-down mental representation of what a
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21 person is like in general (including both trait-based expectations and likeability), constructed for
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23 use in future interactions and judgments (Srull & Wyer, 1989). A given behavior, then, may be
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25 interpreted in several different ways (cf. Bruner, 1957) depending on the favorability evaluations
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27 formed about the person. For example, a person's comment may be interpreted to be brilliant,
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29 eccentric, or socially awkward based on the general impression formed in the first few minutes
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31 of interacting with him (Pfeffer, 2010). As such, general person impressions may have a
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33 profound effect on how people interpret the behaviors of others. Indeed, when a person is
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35 described by a set of adjectives, evaluations of the positivity of any descriptor increase with the
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37 positivity of those that accompany it (Anderson & Lampel, 1965; Kaplan, 1975; Wyer, 1974).
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46 This effect is also known as the halo effect (Nisbett & Wilson, 1977) which suggests that
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48 known attributes of a person influence the way individuals perceive unknown attributes that are
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50 unrelated to the behaviors that informed the general impression. Thus, if an individual has
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52 formed the general impression of another as being disagreeable, this perception may cast a halo
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54 on other aspects of the other person's personality (e.g., her honesty; Higgins, Rholes, & Jones,
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3 1977; Srull & Wyer, 1979; 1980). When people observe another's behaviors, they attempt to
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5 interpret each behavior in terms of more general trait concepts that come to mind at the time of
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7 evaluation, eventually aggregating to a general evaluative impression (Srull & Wyer 1989). Once
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9 they form such a general impression of a person, they interpret this person's subsequent
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11 behaviors according to this *overall* evaluative concept (i.e., likeability) and not the specific
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13 behavior or trait-level impressions (i.e., extravert) (Srull & Wyer, 1989).
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18 ***Introverted peers are more likely to utilize actor (dis)agreeableness to form impressions***
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20 According to Funder's (1995) model, trait utilization in impression formation depends in
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22 part on the judge, who may differentially incorporate certain traits. Thus, while agreeableness
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24 provides information to interaction partners about one's ability to interact smoothly with others
25
26 (Barrick et al., 2001), agreeableness may not be equally useful to everyone. Indeed, Ames and
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28 Bianchi (2008) found that individuals differentially attended to agreeableness of a potential
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30 interaction partner, as a function of their own likely positional power in the interaction.
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32 Specifically, those evaluating from the perspective of a potential subordinate included judgments
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34 of agreeableness in their assessments; by contrast, those evaluating from a position of power
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36 largely excluded judgments of agreeableness from their assessments (Ames & Bianchi, 2008).
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41 Because introverted individuals are typically quieter and more reserved in their social
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43 interactions (Gosling, John, Craik, & Robins, 1998) and are less assertive (Bendersky & Shah,
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45 2013) they are generally placed in positions of relatively low social power compared to their
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47 extraverted counterparts (Grant, Gino, & Hofmann, 2011). In turn, individuals low in social
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49 power are likely to vigilantly monitor for signs that higher power individuals may cause them
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51 harm (Galinsky, Magee, Inesi, & Gruenfeld, 2006). Furthermore, because of introverts' desire to
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53 avoid arguments and aggressive interactions (Blickle, 1997), they may place a premium on
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3 utilizing trait agreeableness when judging others. By contrast, because extraverts enjoy the
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5 benefits of dominance and social power in their dyadic interactions (Grant et al., 2011), and
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7 because they focus more on instrumental outcomes (Ames & Flynn, 2007), agreeableness may
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9 be less useful for extraverted peers in forming a judgment about the actor.
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13 *Introverted peers are more likely to utilize actor extraversion to form impressions*
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15 Similarly, we suggest there is differentially useful information for introverts to be found
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17 in the trait extraversion of others. Although there are qualities of extraverts that draw others
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19 toward them (e.g., friendliness, sociability), extraverts may also be described as domineering,
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21 bossy, aggressive, unrestrained, outspoken, and forceful (Costa & McCrae, 1992; Trapnell &
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23 Wiggins, 1990). Extraversion has been related to a preference for both dominance and
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25 competition as conflict resolution strategies (Schneer & Chanin, 1987) and the tendency to be
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27 argumentative (Blickle, 1997). Because introverts are apprehensive about initiating
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29 communication within groups (Opt & Loffredo, 2000) and generally adopt a less confrontational
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31 interaction style (Blickle, 1997), trait extraversion in others should be perceived as potentially
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33 threatening, and hence especially relevant in forming judgments of others.
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38 By contrast, while extraverted peers may detect the extraversion of others, they might be
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40 less likely to utilize it in constructing their evaluations of others. Although extraverted peers may
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42 recognize the potential for conflict with extraverted actors, their preference for dominance and
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44 competition attenuates the perceived threat of other extraverts (Schneer & Chanin, 1987).
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46 Additionally, because those operating from positions of high social power (i.e., extraverts) are
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48 more concerned with performance-relevant traits in constructing their judgments of others (Ames
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50 & Bianchi, 2008), extraverted individuals should be less likely to utilize trait extraversion in
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52 forming performance evaluations.
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Performance evaluation and rewards giving

As work is increasingly completed through collaboration (Ilgen & Pulakos, 1999), organizations have increasingly relied upon peer evaluations and peer rewards to maintain effective work relationships. Because introverts are more likely to attend to interpersonal traits, we reason that they will likely attend to the negative interpersonal behavior of disagreeable and extraverted actors when evaluating performance. In this sense, the sensitivity of introverts to others' traits should contribute to how they evaluate the performance of others.

Because appraisal ratings are necessarily made in the absence of complete information and certainty of memory (Wherry & Bartlett, 1982; Martell & Leavitt, 2002), biases in observation (i.e., what behaviors are attended to) and biases in recall (i.e., which behaviors are filtered and utilized in evaluation) can have dramatic effects on performance ratings (Wherry & Bartlett, 1982). Accordingly, less performance-relevant information (e.g., race; past performance history) can have an effect on the way we evaluate others' performance (Hekman, Aquino, Owens, Mitchell, Schilpzand, & Leavitt, 2010; Martell & Leavitt, 2002). Thus, because introverts are more likely to detect and utilize interpersonal traits in their judgments, they should be more likely to include such information in their appraisals and in granting rewards.

Whether or not the impressions introverts form and in turn influence their performance evaluations of others can be interpreted as more comprehensive (i.e., considering traits which may ultimately disrupt others in the group) or simply more biased, we expect that the trait sensitivity of introverts (but not extraverts) and the negative person impressions of disagreeable and extraverted individuals constructed by introverted (but not extroverted) peers should negatively affect evaluations of performance. Indeed, individuals generally face some degree of uncertainty when rating and rely upon person impressions to "fill-in the gaps" (Wherry &

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3 Bartlett, 1982), and may also reweight performance criteria to justify decisions reflecting their
4 own social preferences or biases (Uhlmann & Cohen, 2005). Because the person impressions
5 made by introverted peers will be focused heavily on aspects of relational behavior, we expect
6 the (negative) judgments made of disagreeable and extraverted actors by introverted peers to
7 downwardly influence their performance evaluations. We also expect peers' sensitivity to the
8 actors' traits and peers' general impressions of the actors to mediate these relationships (i.e., first
9 stage mediation, Edwards & Lambert, 2007).

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20 Further, rewards and advancement opportunities are not necessarily strongly related to
21 performance (Dohmen, 2004; Carmeli, Shalom, & Weisberg, 2007; Pfeffer, 2010; Zenger, 1992).
22 However, there is ample evidence to suggest that both traits (Judge, Higgins, Thoresen, &
23 Barrick, 1999; Seibert, Crant, & Kraimer, 1999) and person impressions (Flynn, Chatman, &
24 Spataro, 2001) can effect career outcomes. Thus, we expect the interactions between peer trait
25 (introversion) and actor traits (disagreeableness and extraversion) to also affect the rewards and
26 recommendations for advancement given to the actor. Moreover, given that we expect trait
27 interactions to influence the trait sensitivity and impressions that are formed, we in turn also
28 expect trait sensitivity and person impressions to mediate the relationship between trait
29 interactions and rewards. Thus, we hypothesize that peer observer by actor trait interactions will
30 influence both peer observers' performance evaluations made about the focal actor, as well as the
31 rewards they give the actor in the following ways:

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48 *Hypothesis 1a: There will be an interaction between observing peers' extraversion and*
49 *actors' extraversion in predicting observing peers' performance evaluations of and*
50 *rewards given to actors. Specifically, performance evaluations and reward-allotments*
51 *made by introverts to their extraverted counterparts will be more negative than those*
52 *made by extraverted peers.*

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Hypothesis 1b: There will be an interaction between observing peers' extraversion and
actors' agreeableness in predicting observing peers' performance evaluations of and

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3 *rewards given to actors. Specifically, performance evaluations and reward allotments*
4 *made by introverts to their disagreeable counterparts will be more negative than those*
5 *made by extraverted peers.*
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8 *Hypothesis 2a: Trait-sensitivity mediates the interaction between observing peers'*
9 *extraversion and actors' extraversion on performance evaluations of and reward given to*
10 *the actor.*
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12 *Hypothesis 2b: Trait-sensitivity mediates the interaction between observing peers'*
13 *extraversion and actors' agreeableness on performance evaluations of and rewards given*
14 *to the actor.*
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17 *Hypothesis 3a: Person impressions made of actors mediate the interaction between*
18 *observing peers' extraversion and actors' extraversion on performance evaluations of*
19 *and reward given to the actor.*
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22 *Hypothesis 3b: Person impressions made of actors mediate the interaction between*
23 *observing peers' extraversion and actors' agreeableness on performance evaluations of*
24 *and rewards given to the actor.*
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27 **STUDY 1**

28

29 **Participants and Procedure**

30

31 Graduate students enrolled in five sections of a required Management course at a large
32 Southeastern university voluntarily participated in a study on "team effectiveness" in exchange
33 for extra credit. Ninety-seven of the 178 participants were working professional or executive
34 MBA students and the rest were traditional MBA or Master in Management students. Average
35 age was 29.5; average work experience was 8.23 years (SD = 5.79), and 73% were male.
36 Students were assigned to four or five-person teams by the MBA office at the beginning of their
37 program. The study was introduced around the midpoint of the semester and consisted of
38 completing an online questionnaire about team members, team processes, and the focal
39 participant's personality. One hundred ninety one students of 207 elected to participate (92%).
40 Due to missing data, responses from 178 participants were included in the analyses.
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Measures

Performance evaluations. Each team member rated his or her 3-4 team members on 13 items taken from the Role Based Performance Scale (RBPS, Welbourne, Johnson, & Erez, 1998). The RBPS consists of five dimensions of performance of which four (task, creative, team, and citizenship) were used. The dimension of career was excluded as it was deemed irrelevant in this context, as were two items from the other dimensions (e.g., customer service). The RBPS has been validated extensively in multiple settings (Welbourne et al. 1998). Participants rated their team members on a scale ranging from 1 = *need much improvement* to 5 = *excellent*. Example items include: “Quantity of work output (task),” “Coming up with new ideas (creative),” and “Doing things that help others (citizenship).” The coefficient alpha reliability estimate for this scale was .95.

Agreeableness. Agreeableness was measured with the Mini-Markers agreeableness scale developed by Saucier (1994). The 10-item scale asked participants to describe themselves by responding to adjectives such as “sympathetic,” “warm,” “cooperative,” and “harsh (reverse item)” on a five-point response scale (1 = *very inaccurate* to 5 = *very accurate*). Coefficient alpha for this measure was .84.

Extraversion. Extraversion was measured with the Mini-Markers extraversion scale (Saucier, 1994). The 10-item scale asked participants to describe themselves using adjectives such as “extraverted,” “talkative,” “assertive,” and “shy (reverse item)” on a five-point rating scale (1 = *very inaccurate* to 5 = *very accurate*). The coefficient alpha for this measure was .91.

STUDY 1 RESULTS

Means, standard deviations, and intercorrelations of all variables appear in Table 1. We employed a social relations model dyadic (i.e., round-robin) design in which each person rated

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2
3 all other team members (Kenny et al., 2006). As a preliminary analysis we partitioned the
4 variance of performance evaluation into variance-components using Kenny's (1995) SOREMO
5 program for the round-robin data structure. Variance partitions for performance evaluation
6 suggested that judgments of performance are mainly dependent on interactive relationship
7 effects. Variance due to actor effect (13%, $p < .05$) indicates that only a small portion of the
8 performance ratings were due to attributes of the actor. Twenty six percent ($p < .05$) of the
9 performance evaluation variance was due to peer effects; and 36%² was accounted for by the
10 relationships or the dyadic interaction between actors and peers.
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22 In order to test the influence of the personalities of peers and actors on peer evaluations
23 of the actor's performance we used a dyadic method for Hierarchical Linear Modeling (HLM
24 6.08, Raudenbush, Bryk, & Congdon, 2009) developed by Campbell and Kashy (2002). This
25 method accounts for the interdependence of the dyads by modeling how the peer and actor
26 independent variables affect the peer outcomes. In this method each dyad is treated as a group of
27 two individuals. At level 1 each dyad has two rows, and in each row the rated performance of a
28 dyad member (as given by the other member) is regressed on the mixed predictor variables of
29 peer and actor personality as well as personality interactions of the actor and the peer. For
30 example, in a dyad consisting of peers A and B, the first row regresses A's performance (as
31 given by B) on A's extraversion, B's extraversion, and the interaction between A's and B's
32 extraversion. In turn, the second row regresses B's performance (as given by A) on B's
33 extraversion, A's extraversion, and the interaction between B's and A's extraversion.
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50 Accordingly, at level 1 we regressed the performance rating on the extraversion and
51 agreeableness of both the actor and the observing peer and the interaction between the peer's
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57 ² We conducted another analysis using the four facets of performance in the Welbourne et al. (1998) scale to
58 calculate the error variance (25%).
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3 extraversion and actor's extraversion and agreeableness. At level 2 a null model was specified
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5 where each β coefficient from the first level was the dependent variable and, except for the
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7 intercept that had an error term, ($\beta_{0j} = \gamma_{00} + U_{0j}$) all other coefficients were tested as fixed-effects
8
9 without error terms (i.e., $\beta_1 = \gamma_{10}$).³
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13 The results of the HLM analysis for all three data sets are reported in Table 2, and show
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15 that both agreeableness and extraversion of actors interacted with extraversion of peers to
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17 influence evaluations of actors' performance in all three sub-samples. A graph of the interaction
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19 between peers' and actors' extraversion in sub-sample 1 is shown in Figure 1. The figure shows
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21 that introverted peers clearly rate the performance of introverted actors higher than the
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23 performance of extraverted actors, with no difference of rated performance related to the trait of
24
25 extraversion by extraverted peers. Simple slopes analysis for HLM (Preacher, Curran, & Bauer,
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27 2006), represented in Table 2 shows that all three sub-sample slopes for introverted peers were
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29 significant while the slopes for extraverted peers were not. Thus, Hypothesis 1a is supported.
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35 A graph of the interaction between peer extraversion and actor agreeableness in sub-
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37 sample 1 is shown in Figure 2. The figure shows that extraverted peers are not significantly
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39 influenced by the agreeableness of actors. In contrast, introverted peers rate the performance of
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41 disagreeable actors as lower than that of agreeable actors. Simple slopes analysis in sub-sample 1
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43 (Table 2) shows that the slope for introverted peers was significant while the slope for extraverts
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45 was not significant. The same trends in the data were present in sub-samples 2 and 3; however,
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50 ³ Because these analyses only account for independent dyads in a data set and the round-robin design employed
51 in this study had non-independent dyads (i.e., A is a peer of B, C, and D) we divided the data set into three
52 separate sub-samples (80 - 83 dyads) in which each dyad only appeared once (i.e., A with B and C with D).
53 These data sets are not completely independent because they consist of the same participants. However, the
54 dyads in these data sets are independent. Because our sample also contained groups of five individuals there
55 were actually three more independent-pair data sets that could potentially be created and analyzed. However,
56 the sample size of these additional data sets ranged in size from 9 to 19 and given methodological conventions
57 pertaining to small samples they were deemed too small to be analyzed.
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3 here the slopes for introverted peers, as well as, the slopes for extraverted peers were also
4 significant. These results suggest that all peers may prefer agreeable actors; however, the
5 presence of an interaction effect and steeper simple slopes suggest that introverts are more
6 reactive to the agreeableness of actors. Thus, H1b is supported.
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12 **STUDY 2**

13 **Sample and Procedure**

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17 Students enrolled in a management course at a large Southeastern university were asked
18 to participate in a study aimed at investigating virtual work teams. Participation was on a
19 voluntary basis and was rewarded with extra credit. One hundred forty three students
20 participated with age ranging from 19 to 46 years old and a median age of 20. Fifty seven
21 percent were female and 66.9% identified themselves as White, 4.9% African American, 19%
22 Hispanic, 5.6% Asian, and 3.5% listed their race as 'other'. Participants were told that the study
23 would consist of two separate parts: first, they would answer questions about their own
24 personality via an on-line survey; secondly, they would be contacted and assigned to a four-
25 member on-line team task about one week later.
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39 In the first phase of the study participants completed a personality questionnaire and
40 wrote a brief paragraph describing their own personality. About a week later participants were
41 contacted via e-mail and were provided a link to the second part of the study. Once consent for
42 participation was secured, participants were guided through (and confirmed) basic system
43 requirements for the study, including enabled computer speakers or a headset, a functioning
44 microphone, and sufficient uninterrupted time to take part in the study. Participants then selected
45 an avatar (the image of one of four Monopoly pieces), and entered a username to represent them
46 in the game.
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Participants were then provided with a personality profile of each of their assigned on-line teammates. These profiles included the players' usernames, chosen avatars, self-description personality paragraphs that were obtained a week earlier, and "unique personality profiles generated by the computer from their completed personality questionnaire that was answered a week earlier." Importantly, when participants viewed their own profiles, they were provided with scripted feedback on their own personality that was designed to be especially vague (i.e., neutral about actual traits) and which could be applied to virtually anyone (i.e., "You tend to live in the here and now but your work productivity is dependent on your mood"). Participants were instructed to pay close attention to the personality characteristics of the other three team members.

In the next phase, participants entered the "Synergize!" game with their on-line teammates (see Figure 3). The goal of the game was to generate, as a team, as many highly creative uses for a brick as possible within a ten-minute time limit. During a turn, a specific player who was "holding the ball" was to enter a unique creative use for a brick. After his/her turn, this player clicked on another player's avatar to pass this team member an "electronic ball" (and it would consequently be that player's turn). Players were also given two options to interact with their on-line teammates. During their turn, entering the word 'chat' as their answer enabled a dialog box, in which players could send a text message to all of their team members. After the message was displayed, a textbox indicating it now was the player's turn to enter a creative use for brick appeared. Alternatively, players could enter the word 'talk', and use their computer or headset microphone to send a real-time voice message to all of their teammates. Each time a player entered an answer and passed the ball on to another team member, the on-screen score

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3 was increased by one point. The score was unaffected by ‘chat’ and ‘talk’ options, and the game
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5 ended after 10 minutes.
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8 Finally, in the last phase, participants answered questions about their teammates.
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10 Specifically, participants were told that, in the interest of time, each player would be asked to
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12 rate only one other teammate. Upon completion of all four phases, participants were thanked for
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14 their participation and debriefed.
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17 **Experimental Manipulations**

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19 Except for the participant, all players in the Synergize! game were electronic
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21 confederates, designed to appear to be real participants⁴. The uses for a brick, spoken ‘talk’
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23 comments, and written ‘chat’ comments were pre-scripted by the experimenters and provided
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25 during the game in a sequence that resembled real play and spontaneous commentary. All
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27 electronic confederates used colloquialisms, occasional misspellings or abbreviations, and
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29 sometimes humorous answers to increase believability. In some communications, the electronic
30
31 confederates mentioned the actual player’s username or answers (e.g., “good job, ___!”, or “___
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33 isn’t very good at this”) to further facilitate believability. Response lags varied within-player to
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35 simulate thinking time delays. All electronic confederates passed the ball at random to the other
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37 players, indicating a realistic pattern of play. While confederates’ creative uses for a brick,
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39 response times and number of comments were kept constant across conditions (holding objective
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41 performance constant), the content of ‘chat’ comments, ‘talk’ statements, and personality profiles
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43 of the target virtual confederate were varied to reflect the personality manipulation.
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51 Personality profiles of the confederates were manipulated in three ways: (a) the paragraph
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53 description that participants “wrote” describing themselves (see Amabile, 1983 for a similar
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56 ⁴ For example, a screen at the beginning of the study indicated how many other players were logging-on to the
57 system, and “thinking time” delays by the electronic confederates (based on real pilot players) varied
58 probabilistically across turns.
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3 manipulation), (b) the “computer generated” profile based on the personality questionnaire
4 participants “answered,”⁵ and (c) the “chat” and “talk” comments during the game. Participants
5
6 were randomly assigned to one of four conditions in a between-subjects-design. In all four
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8 conditions two of the three electronic confederates provided the same personality paragraphs
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10 across conditions, with the self-describing paragraphs (i.e., “I rely a lot on my intuition and I am
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12 very spontaneous,” and computer generated personality profiles (i.e., Efficient, Responsible,
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14 Emotional. You are thorough and can be relied on to get the work done but sometimes you can
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16 be touchy) specifically designed to describe vague or personality-imprecise characteristics and
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18 avoid signaling clues to extraversion or agreeableness.
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24 We manipulated the personality profile of the third (target actor) confederate according to
25 each condition, to describe an individual who was either highly: agreeable; disagreeable;
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27 extraverted; or introverted. For example, a self-descriptor of the agreeable target confederate
28
29 consisted of statements such as “I hate confrontations and I prefer to collaborate with other
30
31 people rather than argue with them.” The computer generated statement for the agreeable target
32
33 was “Pleasant, Cooperative, Helpful. People tend to get along with you and trust you.” For a
34
35 disagreeable target we used statements such as “I am not really interested in other people’s
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37 problems. I hate it when people are making excuses and I let people know when they are lazy or
38
39 incompetent.” The computer generated profile for the disagreeable target was “Abrupt,
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41 Sarcastic, Impatient. You are quick to judge others and you tend to frequently lose your temper.”
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43 Similarly, a self-descriptor of an extraverted target consisted of statements such as “I am an
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45 outgoing person, I enjoy social activities and hanging out with lots of people” and “I really like
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55 ⁵ We conducted an additional study with two groups of participants ($N_{\text{agreeableness}}=17$, $N_{\text{disagreeableness}}=22$) in which we
56 omitted the computer generated profile from the manipulations of agreeableness/disagreeableness. The results were
57 identical to the results obtained with the computer profile included. Thus, in the reported results we retained this part
58 of the manipulation.
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3 to take charge and influence the way things get done.” The computer generated profile for the
4
5 extraverted target was “Friendly, Sociable, Dominant, Assertive. You think highly of yourself
6
7 and you would be a fierce opponent. You are someone to keep as a friend and avoid as an
8
9 enemy.” For the introverted target we used statements including “In general I am a quiet person
10
11 and do not like to draw attention to myself. “ The computer generated profile for the introverted
12
13 confederate was “Shy, Quiet, Laid-back. You tend to keep in the background but you could be a
14
15 very good second in command.”⁶
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20 During the game, all three virtual confederates used the ‘chat’ option, and two of the
21
22 confederates (including the target actor) used the ‘talk’ option. The manipulated confederate
23
24 (actor) made both spoken and written comments meant to support the personality profile
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26 manipulation, which were designed to reflect behavioral manifestations of the corresponding
27
28 personality trait. For example, the extraverted version of the confederate exclaimed “I wish I
29
30 could meet and talk to you all personally!” but also “Hey _____, C’mon buddy, let’s go!” and
31
32 “_____, you need to come up with better ideas, pal.” In contrast, the introverted confederate
33
34 stated “It is kind of strange playing with total strangers,” and “I prefer not to say much... so
35
36 please don’t think I am being standoff-ish.” An agreeable confederate used comments such as
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38 “Guys these are some great ideas you are coming up with” and “nice pass _____”, while the
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40 disagreeable confederate commented “Would you pass the ball to me already?” and “C’mon
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42 _____...while we are young.”
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48 The ‘talk’ responses for the manipulated conditions were recorded using the same voice
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50 actor across conditions. The neutral ‘talk’ responses of one of the neutral confederates (added to
51
52 increase believability) were recorded by a second voice actor, and the messages were held
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54 constant across conditions. The ‘chat’ and ‘talk’ responses occurred probabilistically across
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58 ⁶ The confederate self-descriptions and Inquisit syntax for “Synergize!” may be requested from the third author.
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3 games, such that participants heard between three and five, and on average four ‘talk’ or ‘chat’
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5 turns from the manipulated confederate, and between two and four from the neutral confederates,
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7 during the game. On average, roughly half of the turns taken by the manipulated confederate
8
9 were without ‘chat’ or ‘talk’ commentary. Critically, the uses for a brick provided by the
10
11 manipulated confederate and response times did not vary across conditions, to hold objective
12
13 performance constant across conditions. That is, regardless of condition, the manipulated
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15 confederate was equally effective at contributing to the team’s task performance. In the final
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17 phase of the study, real participants were told that they would be randomly assigned to answer
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19 questions about a single team member. Although the computer presented a short delay with a
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21 message stating that it was “randomly choosing team member”, all participants were assigned to
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23 answer questions about the manipulated confederate.
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29 Because of the possibility that participants might realize that the electronic confederates
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31 were not real people, a naivety check was incorporated into the study design. After the task,
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33 participants were told the plausible story that because all the participants came from the same
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35 large management class there is a possibility that they had guessed whom the other team
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37 members were, and this knowledge may affect the results of the study. They were then asked an
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39 open-response question of “do you think you might know whom any of these other players are?”
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41 Indicating that they don’t know who the team members are or writing names would suggest that
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43 participants believed the other confederate players were real individuals (i.e., by not answering
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45 “they’re virtual people”, “they’re not real”, or “they’re part of the study”). Data from participants
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47 who suggested “virtual people”, “they’re bots” or other statements indicating their suspicions of
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49 our use of confederates in this study in response to the naivety check (eight participants in total)
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51 were discarded.
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Measures

Performance evaluations. Performance evaluation of the confederate was rated by participants using the RBPS (Welbourne et al., 1998) scale ($\alpha = 0.96$).

Promotion recommendations. Promotion recommendations were measured with six items adopted from Kiker and Motowidlo (1999). Participants were asked to imagine that they are managers and that their team members are their employees. They then had to make several promotion recommendation decisions about the manipulated confederate on a 7-point anchored scales (e.g., promotion suitability rated on 1 = totally unsuitable to 7 = extremely suitable anchored scale), whether to promote the confederate, and whether to recommend him/her for a fast-track development program ($\alpha = .96$).

Peer reward decisions. To measure whether participants were willing to reward the manipulated confederate they were told that as a token of appreciation for students' participation in our study, and to the extent that we could afford with our limited budget for this study, we bought a number of gift cards from AMAZON worth \$5 each and that we intend to offer these to the participants. However, participants were told that because of the limited number of gift certificates we could not give each and every participant a gift card, but instead we would rely on team member recommendation for the decision of who should receive the gift. The decision rule was that for a participant to receive the gift certificate, it would require at least the recommendation by two team members. Participants were then asked to indicate which two of their three team members should receive the gift certificate. If the manipulated confederate received the gift certificate from the participant it was recorded as '1' otherwise it was recorded as '0.'

Person impressions. Person impressions were measured with 20 items from Anderson's

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2
3 (1968) likability adjectives list. Anderson investigated a list of 555 traits that people may
4 attribute to others, ranked by their positivity. Of this list we chose the first 20 items representing
5 the most positive impressions people have about others, and are unrelated to agreeableness and
6 extraversion. We reasoned that constructed impressions of positivity/negativity based upon
7 inferred traits best represent the conceptualization of general “person impressions” by Srull and
8 Wyer (1989). Participants indicated whether adjectives such as “sincere,” “honest,”
9 “trustworthy,” and “intelligent,” described the manipulated confederate on a 1 = *Very inaccurate*
10 to 5 = *Very accurate* scale ($\alpha = 0.92$).
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22 ***Trait sensitivity.*** Strictly speaking there is no objective score of the confederate
23 “extraversion” or “agreeableness” to which we could compare the sensitivity of introverted and
24 extraverted participants to the confederate traits. However, the manipulation of the confederate
25 traits were rather strong involving self-description, “computer generated profile,” and behaviors.
26 Thus, the confederate could be perceived as a “prototypical” example of an extravert or an
27 agreeable person. Accordingly, the higher score a participant gave to the confederate on
28 measures of extraversion and agreeableness the more “sensitive” they could be perceived to be to
29 this trait. We measured participants’ sensitivity to the confederate’s extraversion by asking the
30 participant to indicate whether the 12 adjectives of the Saucier (1994) scale described the
31 manipulated confederate on a 1 = *Very inaccurate* to 5 = *Very accurate* scale. Example items
32 included “talkative,” “assertive,” “verbal,” “energetic,” and “shy” (reversed). Coefficient alpha
33 reliability estimate was $\alpha = 0.96$. Similarly, we measured participants’ sensitivity to the
34 confederate’s agreeableness by asking the participant to indicate whether the 12 adjectives of the
35 Saucier (1994) scale described the manipulated confederate on a 1 = *Very inaccurate* to 5 = *Very*
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3 accurate scale. Example items included “kind,” “cooperative,” “warm,” “pleasant,” and “harsh”
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6 (reversed). Coefficient alpha reliability estimate was $\alpha = 0.97$.
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8 **Peer’s extraversion.** Extraversion of the actual participants was measured with John and
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10 Srivastava’s (1999) big five personality scale ($\alpha = 0.91$). The 8 item scale asked participants to
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12 respond to statements such as “I am outgoing and sociable” on a five-point response scale (1 =
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14 *strongly disagree* to 5 = *strongly agree*).
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STUDY 2 RESULTS

Table 3 presents means, standard deviations, and inter-correlations of study variables.

Extraversion Condition

Manipulation checks. We conducted a one-way analysis of variance (ANOVA) with
manipulated confederate extraversion as the independent variable on the dependent variable of a
brief manipulation check scale using three items from the Big Five Inventory (BFI) of John,
Donahue, and Kentle (1991). Participants indicated on a scale ranging from 1=*Strongly Disagree*
to 7=*Strongly Agree* whether the confederate was “talkative,” “assertive,” “shy or inhibited”
(reversed). The coefficient alpha reliability estimate was $\alpha = 0.82$. Results indicated that
manipulated extraversion significantly influenced participants' ratings ($M_{\text{introvert}} = 2.48$, $SD_{\text{introvert}}$
 $= 1.15$; $M_{\text{extravert}} = 4.51$, $SD_{\text{extravert}} = 1.43$; $F(1, 65) = 39.20$, $p < .01$). Thus, results confirmed the
manipulation validity.

**Interaction of peer extraversion and actor extraversion on performance evaluations,
promotions, and reward giving.** To test the hypothesis that actor (confederate) extraversion
interacted with peer (participant) extraversion to influence performance evaluations of and

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3 promotion recommendations given to the confederate, we conducted a two-way MANOVA⁷ with
4 performance evaluations and promotion recommendations as the dependent variables with
5 factors of the manipulated confederate's extraversion and the participant's extraversion (split at
6 the mean). Results suggested that the main effect of participant extraversion was not significant,
7 Multivariate $F(2, 61) = .61, ns$, but that the main effect of manipulated virtual confederate
8 extraversion was significant, Multivariate $F(2, 61) = 3.86, p < .05, \eta^2 = .11$. However, this main
9 effect was qualified by a significant interaction, Multivariate $F(2, 60) = 4.68, p < .05, \eta^2 = .13$.

10 ANOVA results showed a significant interaction effect ($F(1, 61) = 7.21, p < .01$) such that
11 introverted participants evaluated the performance of introverted confederates ($M_{\text{introverted}} = 3.48,$
12 $SD_{\text{introverted}} = .77$) as higher ($F(1, 28) = 12.41, p < .01$) than the performance of extraverted
13 confederates ($M_{\text{extraverted}} = 2.36, SD_{\text{extraverted}} = .95$), while the extraversion level of the confederate
14 did not make a difference to extraverted participants ($M_{\text{introverted}} = 2.92, SD_{\text{introverted}} = .81;$
15 $M_{\text{extraverted}} = 2.98, SD_{\text{extraverted}} = .56; F(1, 34) = .05, ns$) (importantly, objective performance of the
16 confederate was held constant across conditions). Similar results were found for promotion
17 recommendations given about the confederate. ANOVA results showed a significant interaction
18 effect ($F(1, 61) = 5.63, p < .05$) such that introverted participants gave more positive promotion
19 recommendations ($F(1, 38) = 44.98, p < .01$) to the introverted confederate ($M_{\text{introverted}} = 4.40,$
20 $SD_{\text{introverted}} = 1.40$) than to the extraverted confederate ($M_{\text{extraverted}} = 2.53, SD_{\text{extraverted}} = 1.38$); the
21 extraversion level of the confederate did not influence extraverted participants' promotion
22 recommendations ($M_{\text{introverted}} = 3.20, SD_{\text{introverted}} = 1.35; M_{\text{extraverted}} = 3.28, SD_{\text{extraverted}} = 1.37; F(1, 34)$
23 $= .03, ns$). We note that a lack of difference in ratings made by extraverted peers rules out the

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⁷ All the AVOVA results in this section were conducted with Type II sums of squares which are recommended for unbalanced data (Langsrud, 2003).

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3 alternative explanations of homophily (preference for those that share the same trait level) and
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6 complementarity (preference for those with the opposite trait level).
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9 With regard to rewarding the confederate the results of a logistic regression showed that
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11 the effect of participant extraversion was not significant ($B = -.50, ns$) and neither was the effect
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13 of manipulated virtual confederate extraversion ($B = -.86, ns$). However, the effect of the
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15 interaction was significant ($B = .55, p < .05$). An odds-ratio of 5.78 ($B = 1.75, p < .05$) suggests
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17 that introverts were almost six times as likely to reward the introverted confederate in
18
19 comparison to the extraverted confederate. In contrast, extraverts were not different in their
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21 rewards patterns of extraverts and introverts ($B = -.55, ns, \text{Odd-ratio} = .58$). Thus, H1a
22
23 (extraversion) is supported⁸.
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27 ***Mediated moderation effects of person impressions and rating of extraversion.*** To test
28
29 for mediation effects we conducted two mediated moderation regression analyses for each
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31 dependent variable, using a bootstrap approach with 3,000 iterations (see Preacher, Rucker, &
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33 Hayes, 2007). Table 4 shows that when the mediating variables were included in a regression
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35 with performance evaluations, promotions, and rewards as the dependent variables the
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37 coefficients of person impressions were significant. Conditional indirect effects between actor
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39 extraversion and performance evaluations through person impressions showed a significant
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41 indirect effect ($b = -.44, p < .05$) for introverted participants. Similarly, conditional indirect
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43 effects between confederate extraversion and promotion recommendations and peer reward
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45 decisions through person impressions also showed significant indirect effects ($b_{promotions} = -.50, p$
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53 ⁸ An alternative explanation to the results described in this section is that they all simply represent liking of the
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55 confederate. To address this alternative option we ran a series of regressions in which each dependent variable was
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57 regressed on peer's extraversion, the manipulated extraversion, and the interaction term. In each regression we also
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59 controlled for liking of the confederate which was measured using the Allen and Rush's (1998) adapted version of
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the Wayne and Ferris (1990) liking measure ($\alpha = 0.95$). The results showed that adding liking as a control did not
significantly change any of the results.

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3 < .05; $b_{reward} = -.26, p < .05$) for introverted participants. In contrast, the indirect effect through
4
5 person impressions for extraverted participants was not significant for any of the dependent
6
7 variables. Thus, hypothesis 3a was supported. Trait sensitivity was only a significant mediator of
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9 promotion recommendations but not of performance evaluation or reward decisions. The
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11 conditional indirect effects between confederate extraversion and promotion recommendations
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13 through trait sensitivity showed a significant indirect effect ($b = -.74, p < .05$) for introverted
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15 participants but not for extraverted participants. Thus, hypothesis 2a was partially supported.
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20 21 **Agreeableness Condition**

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23 *Manipulation checks.* To determine whether our experimental manipulations created the
24
25 intended conditions for the study, we conducted a one-way analysis of variance (ANOVA) with
26
27 the experimental manipulation of confederate agreeableness as the independent variable.
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29 Participants indicated on three items from John et al.'s (1991) BFI scale ranging from 1 =
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31 *Strongly Disagree* to 7 = *Strongly Agree* whether the confederate "liked to cooperate," "was
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33 helpful and unselfish with others," "starts quarrels with others" (reversed). The coefficient alpha
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35 reliability estimate was $\alpha = 0.85$. The results indicated that manipulated agreeableness
36
37 significantly influenced participants' ratings ($M_{agreeable} = 5.84, SD_{agreeable} = 1.04; M_{disagreeable} = 2.31,$
38
39 $SD_{disagreeable} = 1.09; F(1, 67) = 188.25, p < .01$). Thus, the results confirmed the expected
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45 manipulation effects.

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47 *Effects of actor agreeableness and peer extraversion on performance evaluations,*
48
49 *promotion recommendations, and rewards.* To test hypothesis 1b that confederate agreeableness
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51 interacted with participant's extraversion to influence evaluations of performance and
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53 promotions given to the confederate, we conducted a two-way MANOVA with dependent
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55 measures of evaluations and promotion and factors of confederate agreeableness and
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3 participant's extraversion (split at the mean). The main effect of participant extraversion was not
4
5 significant, Multivariate $F(2, 64) = 1.79$. In contrast, the MANOVA results suggested that the
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7 main effect of the manipulated virtual confederate's agreeableness was significant, Multivariate
8
9 $F(2, 64) = 57.68, p < .01, \eta^2 = .64$. However, this main effects was qualified by a significant
10
11 interaction, Multivariate $F(2, 64) = 4.22, p < .01, \eta^2 = .11$.
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15 ANOVA results of performance evaluations showed a significant interaction effect ($F(1,$
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17 $65) = 8.46, p < .01$). Introverted participants evaluated the performance of agreeable confederates
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19 ($M_{\text{agreeable}} = 4.19, SD_{\text{agreeable}} = .47$) as higher ($F(1, 38) = 158.43, p < .01$) than the performance of
20
21 disagreeable confederates ($M_{\text{disagreeable}} = 2.12, SD_{\text{disagreeable}} = .57$). While extraverted participants
22
23 also evaluated the performance of the agreeable confederate ($M_{\text{agreeable}} = 3.98, SD_{\text{agreeable}} = .83$) as
24
25 higher than the performance of the disagreeable confederate ($M_{\text{disagreeable}} = 2.80, SD_{\text{disagreeable}} =$
26
27 $.63$) this difference was less pronounced ($F(1, 27) = 17.67, p < .01$). With regard to promotion
28
29 recommendations, ANOVA results showed a significant interaction effect ($F(1, 65) = 4.10, p <$
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31 $.05$) in that introverted participants gave more positive promotion recommendations ($F(1, 38) =$
32
33 $98.14, p < .01$) to the agreeable confederate ($M_{\text{agreeable}} = 5.07, SD_{\text{agreeable}} = .98$) than to the
34
35 disagreeable confederate ($M_{\text{disagreeable}} = 1.94, SD_{\text{disagreeable}} = 1.02$). Here again, while extraverted
36
37 participants also gave more positive promotion recommendations to the agreeable confederate
38
39 ($M_{\text{agreeable}} = 5.02, SD_{\text{agreeable}} = 1.48$) than to the disagreeable confederate ($M_{\text{disagreeable}} = 3.13,$
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41 $SD_{\text{disagreeable}} = 1.63$) this difference was also less pronounced ($F(1, 27) = 10.71, p < .01$).
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49 With regard to rewarding the confederate, the results of a logistic regression showed that
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51 the effect of participant extraversion was not significant ($B = -.97, ns$) but the effect of the
52
53 manipulated virtual confederate agreeableness was significant ($B = 4.12, p < .01$). In addition,
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55 the effect of the interaction was significant ($B = 1.02, p < .01$). The results suggested that
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3 introverts were much more likely ($\chi^2 = 32.67, p < .01$) to give the reward to the agreeable
4 confederate (21 out of 21 possible rewards)⁹ than they gave to the disagreeable confederate (2
5 out of 19 possible rewards). In contrast, extraverted participants were not more likely ($\chi^2 = 2.66,$
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ns) to give the rewards to the agreeable confederate (11 out of 16 possible rewards) than the disagreeable confederate (5 out of possible 13 rewards).

Mediated moderation effects of person impressions and trait sensitivity. To test whether person impressions and trait sensitivity mediated the relationship between participant's extraversion, confederate agreeableness, and their interaction on performance evaluations, promotion, and reward decisions, we conducted two mediated moderation regression analyses for each dependent variable, using a bootstrap approach with 3,000 iterations (see Preacher et al., 2007). Table 5 shows that when the mediating variable was included in a regression with performance evaluations, promotions or reward as the dependent variable both the coefficients of person impressions and trait sensitivity were significant. Thus, it seems that person impressions and trait sensitivity both mediated the relationship between confederate agreeableness and the three dependent variables. Thus, both hypothesis 2b and 3b were supported. Conditional indirect effects between confederate agreeableness and performance evaluations through person impressions and trait sensitivity showed a significant indirect effect (*person impressions*: $b = -1.33, p < .01$; *trait sensitivity*: $b = -1.47, p < .01$) for introverted participants. Similar results were found for extraverted participants (*person impressions*: $b = -.62, p < .01$; *trait sensitivity*: $b = -1.01, p < .01$) but the magnitude of these effects were significantly smaller. The same pattern of results was obtained with regard to promotions and reward as the dependent variables. Table 5 shows that the indirect effects from confederate agreeableness to promotions and rewards through person impression and trait sensitivity were significant for both introverts and extraverts.

⁹ Odd-ratio could not be calculated because this cell had only 1s and no zero.

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3 However, in all cases the magnitudes of these indirect effects were stronger for introverts than
4 they were for extraverts.
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7 8 **DISCUSSION** 9

10 Do introverted individuals experience and evaluate dyadic work relationships differently
11 than extraverts? In a field study using enduring teams and an experimental study with controlled
12 electronic confederates, we demonstrate that introverted (but not extraverted) peers show
13 heightened sensitivity to the interpersonal traits (i.e., agreeableness and extraversion) of others.
14 Introverted (but not extraverted) peers evaluated the performance of their disagreeable and
15 extraverted team members significantly more negatively and offered them less rewards than they
16 did for their agreeable and introverted team members. Further, this systematic effect on
17 performance evaluation was replicated even when objective performance was held constant, by
18 the virtue of the attention that individuals devote to observing others' traits and as a function of
19 the more negative person impressions constructed by introverted peers. Taken together, the
20 results of our studies offer meaningful theoretical contributions to literatures on dyadic
21 workplace interactions, personality in organizations, and accuracy in performance appraisal.
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38 **Theoretical contributions** 39

40 Our research first contributes to theory on dyadic workplace interactions. Krasikova and
41 LeBreton (2012) have recently argued that a significant misalignment exists between theory and
42 method in our study of dyadic phenomena, wherein researchers fail to capture the interactive
43 contributions of each partner and the emergent effects which arise between them. Accordingly,
44 we demonstrate that the negative effects of one's presence on others can actually vary as a
45 function of the observer's own traits. Specifically, while extraverts may not find the
46 interpersonal traits of others aversive, introverts appear vulnerable to experiencing heightened
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3 negative affectivity in the presence of extraverted and disagreeable others. We suggest that other
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5 “emergent profiles” of interpersonal aversion may exist, which are largely hidden due to
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7 contingency effects of the traits of the observer.
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10 Second, we note that our results appear to complicate an existing body of research on
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12 complementarity effects which suggests that one should prefer interaction partners whose
13
14 interpersonal style compliments (as opposed to mimics) one’s own. Those who are submissive,
15
16 for example, would prefer interaction partners who would take charge. Conversely, those who
17
18 are dominant would prefer interaction partners who would cooperate and even submit to their
19
20 wishes (Grant et al., 2011; Kiesler, 1983; Moskowitz, 2009; Tiedens & Fragale, 2003). However,
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22 these apparent inconsistencies may be due to several meaningful factors. Because status
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24 moderates complementarity relationships (Moskowitz, Ho, & Turcotte-Tremblay, 2007), we find
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26 that dominant traits can actually negatively affect more submissive individuals in more lateral
27
28 peer relationships (where dominating behaviors may be viewed as less legitimate). And, while
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30 prior work has shown that extraverts are generally perceived as having greater positive impact on
31
32 team performance, this work does not focus on the personality of the raters themselves (Barry &
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34 Stewart, 1997) or only complementarity with respect to the average extraversion of the entire
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36 team (and consequent attraction to the team unit) rather than dyadic peers (Kristof-Brown,
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38 Barrick & Stevens, 2005). Future research should explore with greater granularity the boundary
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40 conditions of complementarity while considering dyadic composition and features of the team
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42 context simultaneously. Our findings tentatively suggest that *dyadic* dominance complementarity
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44 effects may be limited to hierarchical (supervisor/subordinate) relationships, such that
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46 dominance behavior may actually be penalized by introverted peers working within self-
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48 managed teams, peer-to-peer interactions, or other lateral work arrangements. We suggest that
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3 similar effects might be found in other lateral dyads, including customer-provider relationships.
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5 Additionally, our research contributes directly to personality research. Extant studies
6 have shown heightened sensitivity of introverts to external stimuli (e.g., Barnes, 1975; Haier,
7 Robinson, Braden, & Williams, 1984; Schalling, 1971) and slower habituation and adaptation to
8 aversive stimuli (Eysenck, 1957). Our studies are the first we know of to extend this general
9 effect to include sensitivity to the traits of other human beings, which opens new opportunities
10 for understanding how Big 5 traits drive our experience and interpretations of other people.
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19 Moreover, our studies demonstrate that introverts appear to attend to different
20 information when constructing person impressions than extraverts do. Due to a preference for
21 relational outcomes in groups and greater aversion to those who might disrupt social harmony
22 within interdependent contexts, introverts are more likely to pay additional attention to the
23 interpersonal traits of their team members. Because accurately judging traits in others requires
24 the careful deployment of cognitive resources (Funder, 1995) person judgments are necessarily
25 incomplete pictures of what an individual is “really like” (Srull & Wyer, 1989). Accordingly, by
26 demonstrating that introverts show heightened sensitivity to interpersonal traits of others, we
27 generate important new questions about what trait information is potentially overlooked in the
28 process. These findings also suggest that other systematic differences in how peers construct
29 person judgments of others as a function of personality traits should be explored.
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45 Finally, our research has important implications for theories of performance assessment
46 and ratings (Wherry & Bartlett, 1982). While performance evaluations are often used as a
47 criterion measure in management (Borman, White, & Dorsey, 1995) few studies to date have
48 investigated the interactional effects of the characteristics of the observer of performance (i.e.,
49 supervisor, peer) with the characteristics of the actor. First, our results (Study 1) show that when
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3 partitioning the variance of performance evaluation to its components, the variance accounted by
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5 the ratee (13%) is half of the magnitude of the variance accounted by the rater (26%) and about a
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7 third of the variance accounted by the relationship (36%) between the two parties. Assuming
8
9 such results generalize to other studies, our research demonstrates that potential sources of bias
10
11 may be “hidden” as emergent properties of dyadic interactions. Whereas rater effects leading to
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13 variance in evaluations are frequently described as “bias,” we uncover the possibly more
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15 influential effects driven by characteristics that live not within the observer or the actor, but as an
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17 emergent property of the dyad itself. We believe that such an “emergent dyadic source of bias”
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19 approach may very well be useful in considering non-personality domains of performance
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21 appraisal. For instance, while traditional approaches to studying race and gender bias in the
22
23 workplace tend to examine characteristics of the rater including implicit bias (Hekman et al.,
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25 2010), an examination of bias as emergent dyadic property might better explain why some
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27 female and minority candidates still thrive in a presumably biased environment (i.e., a potential
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29 immunity effect based upon not triggering the biases of raters).
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37 Second, because we held objective performance constant in Study 2 (and manipulated
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39 only performance irrelevant trait expressions), we demonstrate that some source of influence
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41 unrelated to individual performance infiltrates evaluations of disagreeable and extroverted others
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43 made by introverted peers. At a minimum, these findings suggest that introverts differentially
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45 attend to the interpersonal aspects of performance, and less to the instrumental outcomes
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47 associated with individual task performance. Whereas we suggest that this variance meets the
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49 strict definition of bias described in rating theory (Wherry & Bartlett, 1982), we believe the
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51 implications may be more profound. As workplaces become increasingly interdependent and
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53 collaborative (Ilgen & Pulakos, 1999), the notion of individual task performance within
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3 interdependent settings may be simplistic. By including evaluations of interpersonal behavior in
4 performance ratings, introverts may simply be accounting for the negative impact disagreeable
5 and dominant team members may have on the performance of others (Porath & Erez, 2007). As
6 the philosopher Jean-Paul Sartre noted, “Hell is other people,” in that there is no objective reality
7 of ourselves in the absence of how others view us--this logic may hold especially true for what it
8 means to perform as an individual within interdependent settings.
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10 11 12 13 14 15 16 17 **Limitations and directions for future research**

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19 Our studies are necessarily limited by our ability to tap hidden psychological processes
20 and consider plausible moderating circumstances. First, while objective performance (number
21 and quality of responses by the confederate) and performance-relevant behavior (time spent
22 thinking and “chatting” with other players) was held constant across conditions in Study 2,
23 performance is a multi-dimensional construct. Accordingly, the penalty assigned in performance
24 evaluations and rewards and promotions given as a function of agreeableness and extraversion
25 may not necessarily represent “bias” in appraisal. Because teamwork is necessarily
26 interdependent, extraverted and disagreeable behaviors including interpersonal rudeness (Porath
27 & Erez, 2007) that may have a negative impact on the performance and creativity of others can
28 be viewed as counterproductive behavior. Thus, the sensitivity of introverted peers may actually
29 represent detection of behaviors which are anticipated to hurt collective (but not individual)
30 performance. Thus, introverts may actually be evaluating the performance of disagreeable and
31 extraverted actors more holistically, and not less accurately. Future research should examine
32 whether introverts are making more accurate judgments of *performance*, or simply more accurate
33 judgments of *personality* which then influence their interpretations of performance (including the
34 criteria they choose to focus on). Specifically, future research might build upon our findings
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3 using performance tasks specifically designed to capture memory processes typically involved in
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5 appraisal bias, including memory sensitivity (Pr) and decision criterion (Br; see Martell &
6
7 Leavitt, 2002).
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10 Second, our study focused on dyadic pairs within team work encounters. While dyads are
11
12 the primary unit of workplace interaction (Kenny et al., 2006), a controlled dyadic study design
13
14 does not allow for organically occurring team behaviors transpiring outside of the dyadic
15
16 interaction, which may attenuate the effects we have found. For example, additional team
17
18 members might serve to buffer introverted observers from the negative interpersonal qualities of
19
20 extraverted and disagreeable team members by serving as intermediaries, actively managing such
21
22 relationships for the benefit of the team or encouraging introverted peers to re-construe facets of
23
24 extraversion and agreeableness (e.g., “she’s not aggressive; she’s passionate!”).
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29 Third, our design (Study 2) did not allow for testing a three-way interaction of observing
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31 peer introversion with both agreeableness and extraversion of the actor, as effectively
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33 manipulating both traits within a single virtual confederate and a limited encounter time would
34
35 be nearly impossible. We believe that such a three-way interaction is unlikely, as introverted
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37 peers responded unfavorably to both disagreeableness and extroversion on the part of others; it is
38
39 unlikely that the expression of both traits would somehow attenuate the effect. Nonetheless,
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41 future research should more specifically tease out the subtle differences in how introverted peers
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43 process trait information for agreeableness and extraversion.
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48 Relatedly, the necessarily limited social encounter within Study 2 required coarse and
49
50 salient manipulations of personality—while this experimental design allowed us to test for causal
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52 and mediating mechanisms of our effects, it also generated limitations. First, our effects may
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54 have been amplified by our specific instructions telling participants to pay attention to
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3 personality. Thus, a focus on interpersonal traits early in acquaintanceship might actually have
4 encouraged participants to over-rely on the negative stereotypical aspects of extraversion.
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8 Second, because of the limited interaction time our manipulation relied partly on self-
9 descriptions of traits to make subsequent behaviors more salient. Future research using extended
10 interactions might rely on manipulations and manipulation checks of trait-consistent behavior
11 (rather than descriptions of traits) to explore how person impression formation might be affected
12 when participants are given a less clear framework for identifying the traits of others. Finally,
13 our limited interaction design required us to describe the introverted confederate partly through
14 shyness, which may signal underlying neuroticism (social anxiety) in addition introversion.
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17 However, we note that despite these necessary limitations of the experimental design, the general
18 findings of Study 2 are parallel to those from the more naturalistic setting of Study 1. Moreover,
19 the presence of an interaction effect in the absence of a main effect (i.e., differential ratings only
20 appear for an extraverted confederate rated by more introverted participants) suggests that our
21 effects are not likely driven by heavy-handed features of the manipulation (which would likely
22 effect both introverted and extraverted participants similarly).
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39 Finally, the majority of individuals are neither deeply introverted nor extraverted (Grant,
40 2013) but our experimental design used clear and perhaps extreme manipulation of extraversion.
41 Although our first study, in which we found the same effects as in our experimental study,
42 measured introversion/extraversion using a continuous scale, future research should explore and
43 specify threshold points at which individuals become negatively affected by those around them.
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50 **Implications for practice and organizations**

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53 Our research offers practical insights for both employees and organizations. First,
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3 individuals high in extraversion and disagreeableness should be made aware that their trait-
4 relevant behaviors may have a profoundly negative impact on how introverted individuals
5
6 experience their dyadic encounters, and may lead to reduced performance evaluation or rewards
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8 giving for collective accomplishments. Second, while loyalty to companies may be disappearing
9
10 in the modern workplace, loyalty to colleagues is not (Cascio, 2003). Individuals may work hard
11
12 because they do not want to let their peers or supervisors down, and may stay in the organization
13
14 just because they do not want to avoid separation from liked colleagues. To engender worker
15
16 commitment, organizations often build social ties through informal events or Friday-afternoon
17
18 socials in hopes of creating community within the organization (Cascio, 2003). Our results
19
20 suggest that considering the personalities of people in the workplace may also affect
21
22 commitment to the organization by affecting the satisfaction of individuals with their colleagues,
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24 and that events designed to increase cohesion through social encounters may have the opposite
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26 effect for certain dyadic combinations. Managers should consider constructing dyadic work
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28 encounters in ways which promote positive and limited exposure to interpersonal traits which
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30 may overwhelm introverts.
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39 Finally, the modern workplace is becoming increasingly interpersonally demanding of its
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41 workforce as it is characterized by little privacy (Jungck & Rahman, 2011), frequent teamwork
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43 (Ilgen 1999) and abundant meetings (Rogelberg, Allen, Shanock, Scott, & Shuffler, 2010). These
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45 work arrangements require employees to continuously see, overhear and interact with their
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47 colleagues. Such a work design is likely to overstimulate introverted employees, while
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49 extraverted employees may contribute more than their share of the stimulation. Hence,
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51 organizations may consider ways to limit the amount of interpersonal exposure introverts are
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53 asked to take in. Indeed, a recent Wallstreet Journal article reports that, specifically, to help
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3 introverts, office furniture makers now build “quiet spaces” that are designed to help introverts
4 relax and get away from stimuli that overwhelm them (Feintzeig, 2014). These “quite spaces” for
5
6 introverts may also indirectly help extraverts, given that introverts’ discomfort with extraverts
7
8 may be expressed in the performance appraisals of and reward giving to their extraverted
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10 counterparts.
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13 **Conclusions.**

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17 As more organizations rely on flatter, self-managed team structures over traditional
18 hierarchies (Humphrey, Hollenbeck, Meyer, & Ilgen, 2007), peer evaluation has become
19
20 increasingly influential in determining key career and reward outcomes within organizations
21
22 (Antonioni, 1996). While research to date has identified rater personality characteristics which
23
24 may lead to leniency in appraisal (Bernardin, Cooke, & Villanova, 2000), our studies are the first
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26 we know of to demonstrate the interaction of rater/target characteristics creating potential
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28 sources of rating effects. Our findings allow both a note of caution about peer ratings, and the
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30 practical advice that actor-peer effects should be actively monitored and corrected for in formal
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32 appraisal and promotion and rewards decisions. In conclusion, we show that dyadic interactions
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34 between coworkers’ personalities have significant emergent influences on the way employees
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36 experience and evaluate their coworkers. We hope that these results will help further shift the
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38 conversation in the study of organizational life from the asocial absolute to the inherently
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TABLE 1

Means (M), Standard Deviations (SD), and Intercorrelations among Study 1 Variables

	Mean	s.d.	1	2	3	4	5
1. Performance evaluations	4.10	.87	---				
2. Extraversion of actor	3.58	.75	-.14	---			
3. Agreeableness of actor	4.14	.51	.25	.06	---		
4. Extraversion of peer	4.10	.49	.12	.03	.07	---	
5. Agreeableness of peer	3.60	.71	.08	.06	.03	.30	---

Notes. N = 80-83 dyads. Correlations greater than |.29| are significant at p < .01 level. Correlations greater than |.17| are significant at p < .05 level. The mean, standard deviations, and intercorrelations are averaged across the three data sets of independent dyads.

TABLE 2

Effects of Peer and Actor Personality on Actors' Performance Evaluations, Study 1

<i>Regression</i>	<i>Performance Evaluations</i>		
	<u>Data Set 1</u>	<u>Data set 2</u>	<u>Data set 3</u>
Actor extraversion (AE)	-.26**	-.19*	-.19*
Actor agreeableness (AA)	.45**	1.71**	.68**
Peer extraversion (PE)	.23*	1.57*	.09
Peer agreeableness (PA)	.05	.09	.19
AE x PE	.21*	.13*	.18*
AA × PE	-.24**	-.36*	-.20*
<i>Variance explained by model</i>	12%	4.7%	6.4%
<i>Simple slopes analysis</i>			
Actor Extraversion	I: -.41** E: .12	I: -.28** E: -.09	I: -.32** E: .12
Actor Agreeableness	I: .63** E: .28	I: 1.96** E: .83*	I: 1.45** E: .55*

Notes. * $p < .05$, ** $p < .01$. N (Data Set 1) = 83, N (Data Set 2) = 81, N (Data Set 3) = 80. The coefficients are unstandardized. I = Peer introvert (one SD below mean of extraversion), E = Peer extravert (one SD above mean of extraversion).

TABLE 3

Means (M), Standard Deviations (SD), and Intercorrelations Among Study 2 Variables

	Mean	s.d.	1	2	3	4	5	6	7
1. Performance evaluations	3.16	.99	---	.72	.54	.68	-.35	-.05	-.27
2. Promotions	3.68	1.59	.84	---	.67	.52	-.36	-.13	-.24
3. Reward	.62	.69	.74	.67	---	.56	-.11	-.16	-.13
4. Person impressions	3.03	1.02	.89	.78	.71	---	-.18	-.11	-.14
5. Trait sensitivity	---	---	.89	.77	.70	.93	---	-.11	.56
6. Peer extraversion	3.46	.78	.24	.33	.00	.24	.26	---	.00
7. Manipulation	---	---	-.79	-.72	-.65	-.74	-.83	-.16	---

Notes. N = 135 (agreeableness condition N = 69 [Agreeable (0) = 37, Disagreeable (1) = 32], extraversion condition N = 66 [Introvert (0) = 43, Extravert (1) = 23]). Agreeableness condition below diagonal; Extraversion condition above diagonal. Means and SD are of the combined sample. Correlations greater than |.31| are significant at the p < .01 level. Correlations greater than |.24| are significant at the p < .05 level. The descriptives of trait sensitivity agreeableness were M = 3.11 (SD = 1.25) and for extraversion M = 2.16 (SD = 1.04).

TABLE 4

Extraversion Condition Moderated Mediation Regression Results

Dependent Variable	Performance Evaluation		Promotion		Reward	
Mediator Variables	<i>Person Impression</i>	<i>Trait Sensitivity</i>	<i>Person Impression</i>	<i>Trait Sensitivity</i>	<i>Person Impression</i>	<i>Trait Sensitivity</i>
Mediator	.70**	-.20	.79**	-.44*	.41**	-.03
Peer's Extraversion (T)	-.86	-1.59**	-1.85*	-2.50**	-.92*	-1.41**
Actor's Extraversion (C)	-1.32*	-1.79*	-2.28*	-2.25	-.88	-1.38*
T x C	.64	1.00*	1.15	1.36*	.52	.81*
Conditional Indirect Effect	I: -.44* E: .10	I: -.34 E: -.16	I: -.50* E: .11	I: -.74* E: -.35	I: -.26* E: .06	I: -.04 E: -.02

Notes. N = 66 [Introvert (0) = 43, Extravert (1) = 23]. **p < .01, *p < .05. Peer is the participant and actor is the virtual confederate. I = Peer's Introversion Indirect path, E = Peer's Extraversion Indirect path.

TABLE 5

Agreeableness Condition Moderated Mediation Regression Results

Dependent Variable	Performance Evaluation		Promotion		Reward	
Mediator Variables	<i>Person Impression</i>	<i>Trait Sensitivity</i>	<i>Person Impression</i>	<i>Trait Sensitivity</i>	<i>Person Impression</i>	<i>Trait Sensitivity</i>
Mediator	.58**	.62**	.83**	.76**	.24*	.27*
Peer's Extraversion (T)	-.49	-1.44	-.49	-2.14	-1.13	-1.48
Actor's disagreeableness (C)	-.93*	-1.03*	-1.41	-1.93	-.84	-.84
T x C	.18	.43	.23	.68	.31	.40
Conditional Indirect Effect	I: -1.33** E: -.62**	I: -1.47** E: -1.01**	I: -1.90** E: -.88**	I: -1.83** E: -1.25**	I: -.55* E: -.25*	I: -.64* E: -.44*

Notes. N = 69 [Agreeable (0) = 37, Disagreeable (1) = 32]. **p < .01, *p < .05. Peer is the participant and actor is the virtual confederate. I = Peer's Introversion Indirect path, E = Peer's Extraversion Indirect path.

FIGURE 1

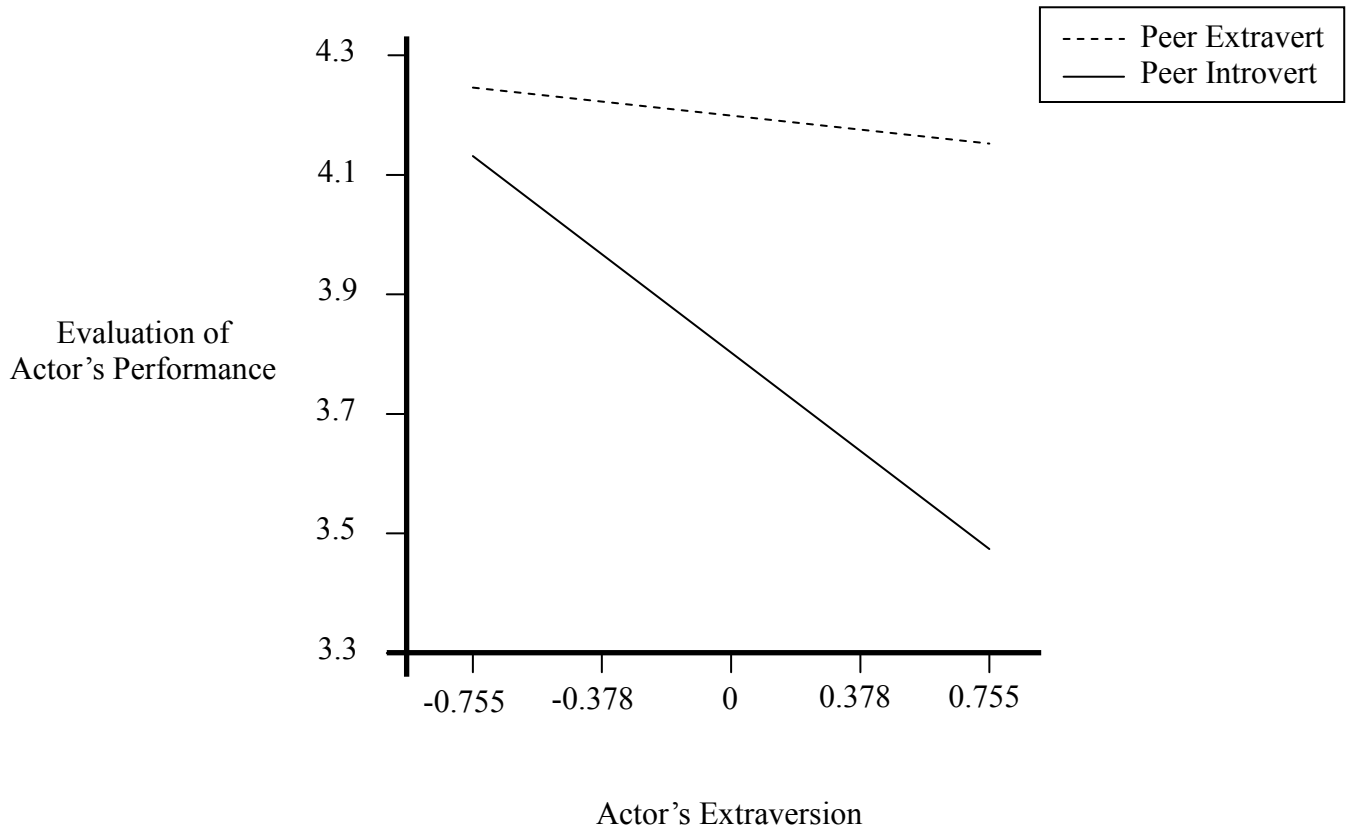
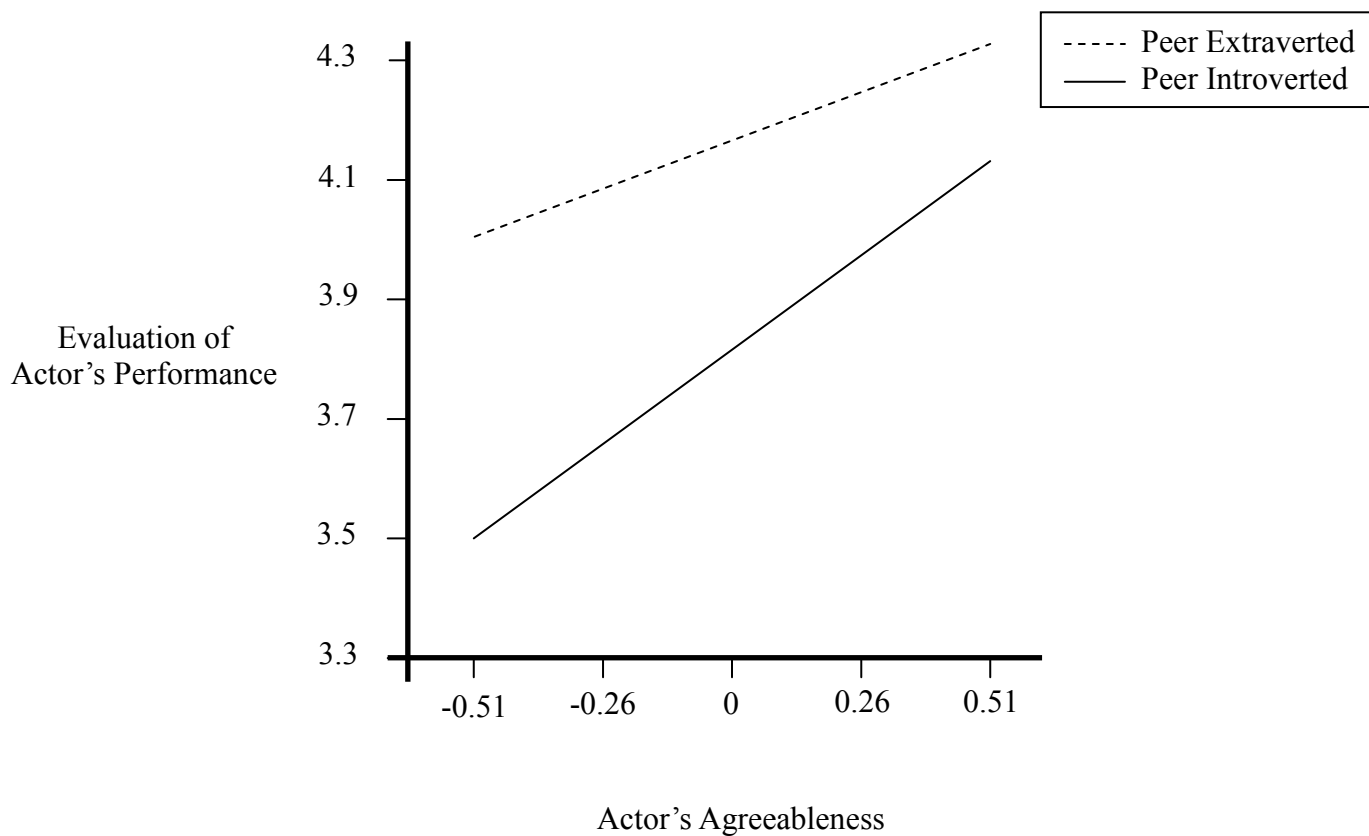
Interactive Effects of Peer and Actor Extraversion on Peer's Performance Evaluations of Actor

FIGURE 2

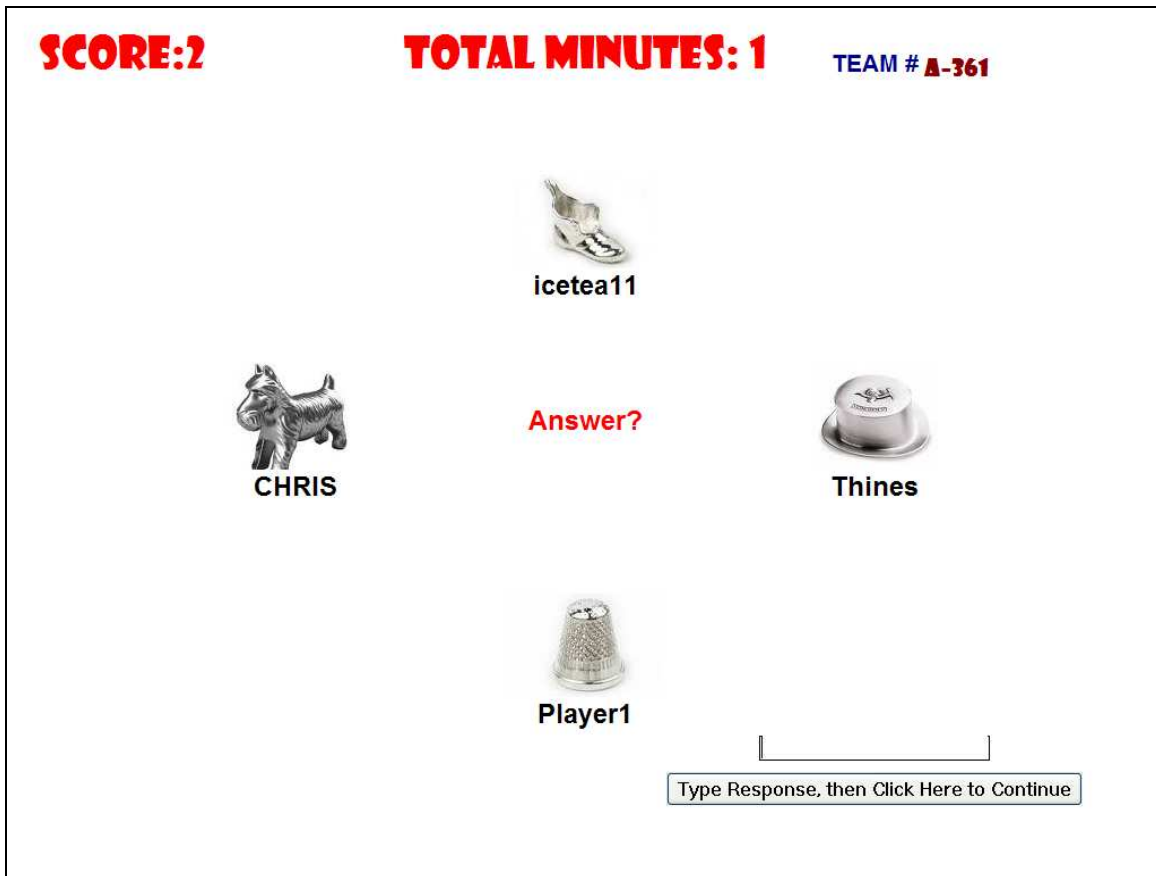
Interactive Effects of Peer Extraversion and Actor Agreeableness on Peer's Performance Evaluations of Actor



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FIGURE 3

Screenshot of Synergize! Game in Play



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3 **Amir Erez** (amir.erez@warrington.ufl.edu) is the Huber Hurst Professor of Management at the
4 Warrington College of Business Administration, University of Florida. He received his Ph.D.
5 from Cornell University. His research examines the cognitive processes by which emotions,
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