What We Think We Do (to Each Other): How Personality Can Bias Behavior Schemas Through the Projection of If–Then Profiles

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People’s knowledge about others includes not only person schemas about the typical traits of others but also behavior schemas about the likely interpersonal consequences of different behaviors. In this article, it is argued that perceiver effects can be interactive at the level of behavior schemas. A person’s own personality configuration of if–then responses in social interactions (Mischel & Shoda, 1995) may contribute to that person’s beliefs about the meaning and impact of relational behaviors more generally. In consequence, people who experience strong (or weak) responses to behaviors that vary along a particular trait dimension, such as warmth–coldness, may expect others to experience similarly strong (or weak) responses to those same kinds of behaviors. In 3 studies, people who were high in trait communion expected others to respond more strongly to behaviors that varied in warmth–coldness than did people who were low in trait communion, and people who were low in trait agency expected others to respond more strongly to behaviors that varied in assertiveness–unassertiveness than did people who were high in trait agency. Studies 2 and 3 provided evidence that participants’ behavior schemas were based on assumptions derived from their own if–then personality profiles.

Keywords: if–then profiles, personality, interpersonal behavior, expectancies

In the 2009 season of the television reality show American Idol, judge Simon Cowell told one contestant that she sounded “like cats jumping off the Empire State building,” chastised another for a performance that was “pointless,” and repeatedly told contestants that they were “forgettable.” It might be assumed that Cowell, the contestants, and the viewers at home all had the same understanding about how such harsh criticism would affect the contestants. Cowell, however, often appeared surprised when contestants reacted to his biting critiques with strong negative emotion. His fellow judge, Paula Abdul, once said, “Constructive criticism is about finding something good and positive to soften the blow.” From the televised interactions between Cowell, Abdul, and the contestants, it was clear that the two judges held very different expectations about how contestants might react to cold versus warm performance feedback.

What role does personality play in how people expect others to react to their behavior? Nearly all of the research on perceiver effects in social perception has examined personality effects at the level of person schemas—the tendency to impute particular qualities or dispositions to most people (Kenny, 1994; Srivastava, 2010; Wood, Harms, & Vazire, 2010). A person who is highly disagreeable, for example, might perceive most others as hostile and untrustworthy (Dodg & Crick, 1990; Graziano, Bruce, Sheese, & Tobin, 2007), whereas a person who is highly narcissistic might perceive most others as stupid and uninteresting (Beck, Freeman, & Davis, 2004). These are simple main effects of personality on perceptions, which is how perceiver effects have been traditionally defined and measured (Kenny, 1994). Personality can exert main effects on person schemas though many mechanisms, including projection of one’s own traits (Beer & Watson, 2008b; Krueger & Clement, 1994), overapplication of chronically accessible trait concepts (Higgins, 1996; Kelly, 1963), and global halo/pitchfork biases (Beer & Watson, 2008a; Wood et al., 2010). Such empirical demonstrations of perceiver main effects would suggest that an American Idol judge whose personality was low on agreeableness and high on narcissism might perceive most contestants as untalented and self-indulgent. Despite these negative person schemas, however, it is possible that the same judge could have more positive (or at least, less negative) schemas for how contestants would react to direct criticism, in comparison with a judge whose personality was more agreeable. This kind of perceiver effect cannot be explained at the level of person schema main effects.

It is surely the case that personality has interactive effects, in addition to main effects, on perceptions of others. Someone who is submissive, for example, may expect to please others by making concessions, but displease others by making demands. These interactive perceiver effects are particularly likely to emerge, I propose, at the level of behavior schemas. Behavior schemas are cognitions about behavior that include relational expectancies about how others are expected to react to the behavior, in the form,
“Behavior A typically has interpersonal consequence X; behavior B typically has interpersonal consequence Y’” (Baldwin, 1992; Fehr & Baldwin, 1996; Fehr, Baldwin, Collins, Patterson, & Bennett, 1999; Rothman, Baldwin, & Hertel, 2004). Little research has examined the effects of broad personality traits (e.g., the Big Two or the Big Five personality dimensions) at the level of behavior schemas. If a personality trait simultaneously increases interpersonal expectations for one type of behavior while decreasing interpersonal expectations for another type of behavior, interactive perceiver effects are shown. Questions about interactive perceiver effects draw attention to individual variation in what people think they do to others when they behave in one manner versus another.

There are many ways that personality might influence behavior schemas. In this article, one type of influence is explored: the projection of one’s own if–then personality profiles onto others (Mischel & Shoda, 1995). People with different personality traits often experience different contingent responses to the behavior of others. These personality contingencies are known as if–then personality profiles and have the form “If others display behavior A, I experience consequence X; if others display behavior B, I experience consequence Y” (e.g., Fleeson, 2007; Fournier, Moskowitz, & Zuroff, 2009; Furr, 2009; Mischel, 2004; Mischel & Shoda, 1995, 2008; Smith, Shoda, Cumming, & Smoll, 2009). People high in agreeableness, for example, are more sensitive to the warmth and coldness of other people’s behavior than are people low in agreeableness (Kammrath & Scholer, in press), and people who are low in self-esteem are more sensitive to acceptance and rejection than are people who are high in self-esteem (Anthony, Wood, & Holmes, 2007). People are likely to incorporate their own experiences of others’ behavior into their general behavior schemas. That is, if other people’s coldness doesn’t bother me very much, I may expect that my coldness doesn’t really bother them. If their assertiveness doesn’t threaten my confidence, I may expect that my assertiveness doesn’t make them feel especially threatened either. Thus, personality may exert interactive effects on behavior schemas, as a result of an accumulation of if–then profile experiences.


**Communion Domain: Trait Communion and the Meaning of Warm–Cold Behavior**

In the communion domain, what are people’s behavior schemas for warm and cold behavior, and how might these schemas vary as a function of personality? Warm behaviors are generally well-liked and usually lead to harmonious interactions and increased relational closeness, whereas cold behaviors are disliked and often lead to hostile interactions and increased relational tension or distance (Asch, 1946; Rusbult, Johnson, & Morrow, 1986; Sadler & Woody, 2003). Nevertheless, people are likely to vary in how sensitive they are to variations in other people’s warmth and coldness. If people project their own sensitivities onto others, then personality traits that correlate with higher sensitivity to warm and cold behavior should be associated with perceiving these behaviors as inherently more pleasing or upsetting (to everyone).

Trait communion is likely to be one such personality dimension. People who are trait warm value friendliness, benevolence, and kindness, and they seek close relational bonds with others (Roberts & Robins, 2000; Roccas, Sagiv, Schwartz, & Knafo, 2002). People who are trait cold prefer more distance in their social relationships, and they avoid intimacy and dependence on others (Locke, 2000; McAdams, Healy, & Krause, 1984; Pohlmann, 2001). Given the goals and values associated with different levels of trait communion, higher levels of trait communion should be associated with greater sensitivity to other people’s warmth and coldness. Indeed, increased sensitivity to warm and cold behaviors has been demonstrated for trait agreeableness (Kammrath & Scholer, in press; Suls, Martin, & David, 1998; Van Kleef, Homan, Beersma, & van Knippenberg, 2010), which is a personality trait highly correlated with trait communion (Graziano & Eisenberg, 1997; McCrae & Costa, 1989).

It is therefore hypothesized that higher levels of communion will be associated with more extreme behavior schemas for warmth–coldness. That is, there should be an interaction between trait communion and behavior schemas, such that increased levels of trait communion will be associated with more positive relational expectancies for warm and more negative relational expectancies for cold behavior. Furthermore, this interaction should be mediated by the feelings participants would expect to experience if others enacted similar behavior toward them.

It is important to note that the hypothesized perceiver effect for trait communion is an interaction effect rather than a main effect. An alternative prediction might be that people who are trait warm will have more positive relational expectancies across the board, for both warm and cold behaviors. Indeed, Horowitz (2004b) has proposed that trait warm people have more positive global schemas of others than do trait cold people. Despite the demonstrated relationship between trait communion and positive person schemas, it is hypothesized that at the level of behavior schemas, trait communion has interactive effects (i.e., “if warm behavior, then reaction X” but “if cold behavior, then reaction Y”). A person can believe that others are generally good at heart and still expect others to be hurt by unfriendly actions—this is, in fact, an apt description of any person who is high on trait communion.

**Agency Domain: Trait Agency and the Meaning of Assertive–Submissive Behavior**

In the agency domain, what are people’s behavior schemas for assertive and unassertive behavior, and how might these schemas vary as a function of personality? Research on assertiveness suggests that there is often an interpersonal cost for acting assertively (Ames, 2008b; Ames & Flynn, 2007; Bowles, Babcock, & Lai, 2007; Delamater & McNamara, 1986; Tinsley, O’Connor, & Sullivan, 2002), although this cost is not as large as the cost for acting coldly (Kammrath, Ames, & Scholer, 2007; Wojciszke & Abele, 2008). One might imagine, however, that not everyone perceives assertive behavior as mildly costly to relationships. Some people may expect interaction partners to react to assertiveness with equanimity. Other people may expect assertiveness to carry a relational cost almost as large as that of coldness. A recent series
of studies by Ames (2008a) demonstrated that people do indeed differ from one another in how they expect others to react to assertive and unassertive behavior and that these different expectancies play an important role in a person’s choice of action.

The source of these individual differences, however, has yet to be investigated. Just as some individuals are more sensitive to behavioral warmth—coldness than are others, it is likely that some people are more sensitive to behavioral assertiveness—submissiveness than are others. It is proposed that a person’s level of trait agency is one personality factor that influences sensitivity to assertive—unassertive behavior. The trait submissive person’s ability to obtain her preferred outcome is highly dependent on whether the interaction partner asserts an opposing preference. If the partner asserts, the trait submissive person yields (Sternberg & Soriano, 1984). This is very different from the typical experience of a trait assertive person. If an interaction partner asserts an opposing preference, the assertive person does not simply fold; rather, she negotiates (Ma & Jaeger, 2005; Sternberg & Soriano, 1984). Accordingly, trait submissive people may anticipate a larger relational cost for assertive behavior specifically because they expect the consequence of assertion to be an improvement in one’s own outcome at the expense of the other person’s outcome (whereas submission leads to helping the other person at a cost to the self). On the other hand, trait assertive people may hold more moderate relational expectancies for assertive and submissive behavior specifically because they see a less strong connection between their own assertions and the other person’s capitulations.

It is therefore hypothesized that there will be an interaction between trait agency and behavior schemas such that lower levels of trait agency will be associated with more positive relational expectancies for assertive behavior and more negative expectancies for submissive behavior. Moreover, it is hypothesized that this interaction will be mediated by people’s beliefs about the benefit or harm the behavior would bring about for the interaction partner’s instrumental outcomes.

The Present Studies

The proposed hypotheses for trait communion and trait agency were tested across three studies in the context of dyadic joint decision-making situations, contexts in which warmth and assertiveness are both highly salient. Studies 1 and 2 employed a scenario design. In Study 1, participants were given an academic and a romantic joint decision-making scenario and were asked to generate their own examples of warm, cold, assertive, and submissive behavior for each scenario. After generating each behavior, participants predicted how they thought an interaction partner would react to the behavior. In Study 2, participants were shown the same scenarios, but this time they were provided with scripted behaviors of each type. Participants rated their relational expectancies for the behaviors and also indicated how they thought the behavior would affect the outcome of the decision (in terms of how it favored the self or the partner) and how they personally would feel if someone acted that way toward them. Study 3 employed a repeated-measures dyadic design. In this study, students in an executive master of business administration (MBA) degree program who were enrolled in a negotiations course engaged in six face-to-face dyadic negotiations over a period of 2 months, each with a different partner. At the end of each negotiation, participants indicated how warmly and assertively they had behaved and how satisfied they thought their interaction partner was with how they had been treated. Participants also answered questions about their assessments of how favorable they thought the outcome of the deal was to each party and how satisfied they personally felt with aspects of the interaction.

All three studies provided tests of the hypothesized effect of trait communion on the extremity of relational expectancies for warm and cold behavior and of the hypothesized effect of trait agency on the extremity of relational expectancies for assertive and submissive behavior. Studies 2 and 3 provided further tests of the mediation hypotheses, with Study 3 allowing simultaneous modeling of participants’ behavior schemas and if–then profiles. Together, the studies aimed to establish the existence of interactive perceiver effects at the level of behavior schemas and to point to one potential source of such effects—the projection of if–then personality profiles.

Study 1

In Study 1, participants read about two joint decision-making scenarios, one academic and one romantic. Each scenario described a situation in which two people needed to make a joint decision but there was disagreement about the best course of action. After reading each scenario, participants were asked to write a short script of what the protagonist might say to the interaction partner if he or she were going to respond in a warm, cold, assertive, or submissive way. After composing each of the four scripts, participants rated their relational expectancy for that particular behavior; that is, they indicated how they thought the interaction partner would likely react if the protagonist initiated the discussion in that way. It was hypothesized that participants who scored higher on trait communion would demonstrate more extreme behavior schemas for warm and cold behaviors and that participants who scored lower on trait agency would demonstrate more extreme behavior schemas for assertive and submissive behaviors.

Method

Participants. The study was conducted as an online survey with a sample of 188 university undergraduates (149 female). The mean age of the students was 18.71 (SD = 1.15). Participants were compensated with credit in their introductory psychology course.

Procedure. Participants logged in to the study site and completed a set of background questionnaires. After completing these measures, participants were informed that they would be shown two fictional decision-making scenarios, one academic and the other romantic. Participants were asked to imagine themselves as the protagonist in each situation and to imagine different ways they could respond toward the other person. Participants then read the first scenario (either romantic or academic, counterbalanced). After reading the scenario, participants were asked to write scripts for what the protagonist might say to the interaction partner if they were going to respond in each of four different ways: assertively, submissively, warmly, or coldly (order counterbalanced). After writing each paragraph, participants were prompted to answer a series of rating questions about their relational expectancies for that response. Once participants had completed the questions about
the first scenario, they repeated the procedure for the second scenario. After completing both scenarios, participants were directed to a debriefing page.

**Background questionnaire.** In the background questionnaire, participants provided their age and gender. They also completed the Interpersonal Adjectives Scale–Revised (IAS–R; Wiggins, Trapnell, & Phillips, 1988), a measure of trait communion and agency. The IAS–R asks participants to rate the degree to which they are described by 64 trait adjectives on a scale from 1 to 8. There are eight adjectives for each of the octants of the interpersonal circle; mean octant ratings are combined according to trigonometric formulae (Dryer & Horowitz, 1997) to obtain scores for trait communion and trait agency. Participants also completed several other personality measures that are not germane to the present hypotheses.

**Stimulus materials.** Two types of decision-making scenarios were shown to participants. These scenarios were pilot tested with a sample of 10 undergraduates, who reported that they were vivid, believable, and genuinely difficult joint decision-making situations. They are reproduced below.

**Academic scenario:** Imagine that a major requirement for one of your courses is to participate in a group project. It is worth a significant portion of your final grade, and your professor has pretty strict guidelines regarding the submission. It is very important for you to do well on it. You are divided into groups of two, and it is suggested that the best way to approach the task is to divide the work up evenly. The two of you decide to e-mail each other a draft and to call about any final revisions. As you are reviewing your partner’s contributions, you are dismayed to discover that he or she has taken a completely different approach to the task.

**Romantic scenario:** Imagine that the holiday season is drawing near. Since you were little, it has been a tradition for everyone in your family to set aside some time to get together for a meal and to visit. You are especially excited this year to invite your new love interest over to meet the rest of your family. It means a lot to you that he or she attends. Your partner, however, reminds you that a close friend’s band has just gotten a big break and will be performing that same evening for the first time at a popular venue about an hour away. Unfortunately, given time and travel constraints, it will not be possible to attend both the dinner and the concert.

After reading each scenario, participants were asked to generate different possible responses to the other person in the scenario: “Imagine what you might say to this person if you were going to respond in a(n) XX manner. Type your response in the space below.” (The XX was substituted with each of the four types of responses in a counterbalanced order: assertive, submissive, warm, cold.)

**Relational expectancies.** After generating the requested type of response (assertive, warm, etc.), participants were asked to rate a short list of statements concerning their relational expectancies for the behavior they had just generated, on a scale from −3 (strongly disagree) to 3 (strongly agree). The five statements were: “He/she would react negatively,” “He/she would react positively,” “He/she would be pleased,” “He/she would be unhappy,” and “He/she would feel at ease.” Negative items were reverse-scored, and then the five items were averaged to create a single relational expectancy score ($\alpha = .97$) for each behavior rated by the participant.

**Results**

Mean relational expectancies were most positive for the warm behaviors ($M = 1.59, SD = 1.06$) and least positive for the cold behaviors ($M = −2.19, SD = 1.03$), with the submissive behaviors ($M = 1.31, SD = 1.29$) and the assertive behaviors ($M = −0.75, SD = 1.53$) falling in between. There were no significant differences in the relational expectancy results for the academic scenario and romantic scenario; therefore, scenario type is not included as a predictor variable in the models reported below.

To test the hypotheses, the data were analyzed using a multilevel modeling approach, with participants’ relational expectancies for the behaviors (Level 1) nested within person (Level 2). A random intercept was included to account for the within-person dependencies in the repeatedly measured expectancies. The independent and dependent variables were $Z$-scored across the entire data set prior to analysis, so that the slope coefficients could be interpreted as standardized slopes. These steps were performed for all analyses in all studies.

Relational expectancies for the eight behaviors were predicted using a Level 1 contrast term for behavior warmth, a Level 1 contrast term for behavior assertiveness, Level 2 terms for trait communion and trait agency, and the key cross-level interaction terms: Behavior Warmth $\times$ Trait Communion and Behavior Assertiveness $\times$ Trait Agency.\(^1\) It was hypothesized that participants high in trait warmth would expect their warm and cold behaviors to have large effects on a partner’s level of satisfaction, whereas participants low in trait warmth would show less extreme relational expectancies. In support of this hypothesis, the interaction between trait communion and behavior warmth was statistically significant, $F(1,1307.66) = 29.61, p < .001$. As shown in Figure 1, trait warm participants (+1 SD on the communion scale) expected partners to be highly sensitive to the warmth–coldness of the behavior ($B = .76, p < .001$). Trait cold participants (−1 SD) expected partners to be sensitive to this behavior dimension, but to a lesser degree ($B = .58, p < .001$).

The next hypothesis concerned agency: It was predicted that participants who were trait submissive would anticipate a large relational cost for assertive behavior, whereas trait assertive participants would expect a smaller cost. This hypothesis was also supported by the data, as indicated by the significant interaction between behavior assertiveness and trait agency, $F(1,1307.61) = 7.13, p < .01$. As shown in Figure 1, trait submissive participants (−1 SD on the agency scale) expected a partner to be less satisfied with assertive behavior than with submissive behavior ($B = −.41, p < .001$). Trait assertive participants (+1 SD) also saw a relational cost for assertive behavior, but to a smaller degree ($B = −.32, p < .001$).

\(^1\)The two excluded Trait $\times$ Behavior interaction terms, Trait Communion $\times$ Behavior Assertiveness and Trait Agency $\times$ Behavior Warmth, were not significant in this study or any subsequent study.
Discussion

The results of Study 1 confirmed the hypotheses that trait agency and trait communion would demonstrate systematic associations with relational expectancies for trait-relevant behavior. Trait communion moderated the extremity of people’s behavior schemas for warm and cold behavior. Participants who were dispositionally warm expected an academic or a romantic interaction partner to be highly appreciative if the protagonist opened a problem-solving conversation in a warm way, but highly dissatisfied if the protagonist initiated the discussion in a cold way. Participants who were dispositionally cold expected the interaction partner to feel less enthusiastic about a warm approach but also less displeased with a cold approach. Trait agency moderated the extremity of people’s schemas for assertive and submissive behavior. Participants who were dispositionally submissive reported that they thought an interaction partner would be very pleased if the protagonist opened the discussion in a submissive way but very unhappy if the protagonist acted assertively. Participants who were dispositionally assertive, on the other hand, saw an attenuated relational benefit for submissiveness and an attenuated relational cost for assertiveness.

Although the interaction effects found in Study 1 matched those that were predicted, they cannot directly address the question of mechanism. It was hypothesized that people high in trait communion (and likewise, people low in trait agency) have more extreme relational expectancies for trait-relevant behavior because they themselves are affected more strongly by the correspondent behaviors of others. Alternative explanations for the data, however, exist. One possibility is that the high communion and low agency participants in Study 1 reported more extreme relational expectancies simply because they drafted more extreme behaviors when asked to write warm, cold, assertive, or submissive scripts. To rule out this possibility, participants in Study 2 were shown prewritten and prepiloted scripts of each behavior type.

Another possible mechanism that could account for the findings is egoism (Alicke & Sedikides, 2009; Tavris & Aronson, 2007). A desire to see the self and one’s own typical behaviors in a positive light could have led participants to report more positive relational expectancies for behaviors that were similar to their own characteristic behavioral tendencies, and more negative expectancies for behaviors that were dissimilar from how they usually behave. To control for egoism, in Study 2 participants were asked how similar each behavior was to the way they would personally choose to handle the situation. Perceived similarity could then be statistically controlled in the analyses of relational expectancies.

Study 2

In this study, participants viewed the same romantic and academic joint decision-making scenarios as used in Study 1. After reading each scenario, participants read four different ways the protagonist might approach the discussion with the interaction partner. The (unlabeled) scripts corresponded to warm, cold, assertive, and submissive behavior, respectively. For each behavior, participants were asked to indicate their relational expectancies, similar to the Study 1 procedure. In this study, however, participants answered additional questions about each behavior. They rated the expected outcome of the joint decision if the protagonist enacted the current behavior, in terms of its favorability for the protagonist and for the interaction partner. Participants also indicated how they would personally feel if someone treated them the way the protagonist was treating the interaction partner. They indicated how likely they would be to say something similar to the interaction partner, if they found themselves in a similar situation in real life.

Study 2, like Study 1, afforded a test of the interaction hypotheses for trait communion and trait agency. In this study, it was also possible to rule out some alternative hypotheses for these interaction effects by controlling for variability in the perceived extremity of the behaviors and by controlling for similarities between the scripted behavior and the participant’s own most likely behavior in the situation. Beyond these controls, Study 2 tested the proposed mediation mechanisms directly. It was hypothesized that the more
extreme relational expectancies that high communion participants would report for warm and cold behavior would be explained by the more extreme personal reactions that these participants would expect to feel if someone treated them with the warmth or coldness the protagonist was displaying toward the interaction partner. It was further hypothesized that the more attenuated relational expectations that high agency participants would report for assertive and submissive behavior would be mediated by their beliefs about how little effect the protagonist’s behavior would have on the other person’s instrumental outcome.

Method

Participants. One hundred sixty-nine undergraduate students (135 female; M age = 18.69, SD = 1.40) participated in this study for credit in their psychology courses.

Procedure. Participants logged into the study website and completed a series of background questionnaires, including the IAS–R (Wiggins et al., 1988) to assess their trait level of communion and agency. After completing the background questionnaires, they were given the same instructions as participants in Study 1: that they would view two decision-making scenarios (one academic, one romantic) and would be asked to answer questions about different possible responses to those situations. In this study, participants were not asked to generate their own responses for each behavior category but instead were shown behavior scripts, described in more detail below. After viewing each script (assertive, submissive, warm, and cold), participants rated their relational expectancy for the behavior, using the same five-item scale as used in Study 1 (α = .93).

Next, participants were asked to rate their agreement with two statements about the likely outcome of the interaction—“I would get my way” and “He/she would get his/her way”—on scales that ranged from –3 (definitely no) to 3 (definitely yes). Ratings on these two items were uncorrelated (r = .03, ns). They were also asked about their imagined personal reactions to the response. They were told, “Imagine that someone you know said the things described to you in real life.” They were shown four statements, which were then scored for each response. The perceived warmth of each behavior was computed by averaging the ratings given to the adjectives warm and cold (reverse-scored), and the perceived assertiveness of each behavior was computed by averaging the ratings given to the adjectives assertive and unassertive (reverse-scored).

Response Stimuli. Assertive, submissive, warm, and cold responses were developed for each scenario (Kammrath & Scholer, in press). Sample responses for the romantic scenario are reproduced below.

Assertive: Hey, we need to make a decision about our plans for Friday. I know the timing is bad, but my family dinner is a tradition, and I really think we have to be there; there’s no way around it. My parents have been planning this for months. It’s important to me—I want you to meet them. I know you’ve been looking forward to the concert, but I’d really like you to come with me to the dinner.

Submissive: So . . . Friday, . . . [pause] I don’t know . . . This is really hard. People will be mad either way. [pause] I just don’t know what to do. [sigh] What should we do?

Warm: Hey, can we talk about Friday night? My family is really important to me, and it would mean a lot if you could meet them. This dinner is sort of an annual tradition, and it would be a great opportunity for you to get to know everyone. At the same time, I know you and Jamie are really close. Jamie’s always been there for us, and it would mean a lot if we were there to support the band. I could try talking to my family about postponing the dinner, or maybe we could promise to catch Jamie’s next concert instead. How are you feeling about all this?

Cold: Shit, [pause] No matter what we do, someone will be mad. [pause] This sucks. [heavy sigh] I guess I don’t really have a choice. My parents will have a fit if I don’t go to the dinner. You can do what you want.

The stimuli were developed over several rounds of pilot testing to ensure that each response scored high/low on the intended trait dimension and relatively neutral on the other trait dimension. 2 To provide a manipulation check, Study 2 participants were asked to rate the warmth and assertiveness of each behavior after answering questions about relational expectancy, anticipated decision outcome, and personal reactions. They rated each behavior script using four descriptive adjectives on scales from –3 (extremely disagree) to 3 (extremely agree). The perceived warmth of each behavior was computed by averaging the ratings given to the adjectives warm and cold (reverse-scored), and the perceived assertiveness of each behavior was computed by averaging the ratings given to the adjectives assertive and unassertive (reverse-scored).

Results

There were no significant differences between scenario conditions (romantic vs. academic) in any of the means or regression coefficients obtained in the analyses reported below. For simplicity, results are reported for models that did not include a separate term for scenario type.

Behavior ratings. The rated warmth and assertiveness of each behavior were analyzed as a manipulation check for the behavior scripts. The warm behaviors were rated as warm (M =

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2 Interestingly, it proved exceedingly difficult to create stimuli that fit these properties. In early pilot tests, assertive scripts were typically perceived as cold, cold scripts as assertive, and submissive scripts as warm. Orthogonal stimuli were achieved primarily by inserting specific words and phrases (e.g., sighs, curses) to compensate for the tendency to perceive blends rather than poles of the dimensions.
The cold behaviors were rated as low in warmth (M = -1.43, SD = 1.42) and neutral on assertiveness (M = 0.37, SD = 1.47). The assertive behaviors were rated as assertive (M = 1.33, SD = 1.19) and neutral in warmth (M = -0.31, SD = 1.46), whereas the submissive behaviors were rated as low in assertiveness (M = -0.77, SD = 1.36) and neutral in warmth (M = 0.07, SD = 1.17). Across the data set, ratings of target warmth were negatively associated with ratings of target assertiveness (r = -0.24, p < .01).

Although the behavior ratings conformed to the necessary specifications at the mean level, there was considerable variability from participant to participant in the warmth and assertiveness perceived for any specific behavior. This variability was predicted, in part, by participants’ traits. Participants’ behavior ratings were analyzed using multilevel models, with ratings (Level 1) nested within persons (Level 2). Separate models were conducted for perceived assertiveness and perceived warmth, using dummy predictor variables for the scripted behavior conditions, Level 2 terms for trait communion and trait agency, and the cross-level interaction terms. Several significant interaction effects emerged.

Trait communion was associated with perceiving the warm behaviors as more warm (B = .23, p < .001), and the cold behaviors (B = -.27, p < .001), the assertive behaviors (B = -.17, p < .001), and the submissive behaviors (B = -.13, p = .05) as more cold. Trait communion was also associated with perceiving the assertive behaviors (B = .32, p < .001) and the cold behaviors (B = .21, p < .001) as more assertive. Trait agency, on the other hand, was associated with perceiving the warm behaviors as more dominant (B = .13, p < .01) and the cold behaviors as less dominant (B = -.12, p = .01).

Relational expectancies. Relational expectancies for the behavior scripts were analyzed in a multilevel model with expectancy ratings (Level 1) nested within person (Level 2). As done in Study 1, relational expectancies were first predicted using a Level 1 contrast term for behavior warmth, a Level 1 contrast term for behavior assertiveness, Level 2 terms for trait communion and trait agency, and the key cross-level interaction terms: Behavior Warmth × Trait Communion and Behavior Assertiveness × Trait Agency. Replicating the results of Study 1, the Behavior Warmth × Trait Communion interaction was significant, F(1, 1162.58) = 130.30, p < .001. Unlike Study 1, the Behavior Assertiveness × Trait Agency interaction was not significant, F(1, 1163.34) = .01, ns. A possible explanation for this null result, however, was the high variation in the perceived warmth of the scripted assertive and unassertive behaviors, which may have created a large amount of unexplained variance in relational expectancies. Indeed, when perceived behavior warmth ratings were entered into the multilevel model as an additional covariate, the Behavior Assertiveness × Trait Agency interaction became significant, F(1, 1148.23) = 4.81, p = .03.

In a final model, relational expectancies for the 8 behaviors were predicted using the Level 1 continuous ratings for behavior warmth and behavior assertiveness, the Level 2 terms for trait communion and trait agency, and the key cross-level interaction terms: Behavior Warmth × Trait Communion and Behavior Assertiveness × Trait Agency. The data indicated a significant interaction between the trait communion of the participant and the continuously rated warmth of a behavior, F(1, 1204.94) = 50.98, p < .001, as well as a significant interaction between the trait agency of the participant and the continuously rated assertiveness of the behavior, F(1, 1226.02) = 10.96, p = .001. These interactions are shown in Figures 2A and 2B. As shown in Figure 2A, trait warm participants (+1 SD) expected the partner’s satisfaction to vary strongly with the warmth of the behavior (B = .89, p < .001). Trait cold participants (−1 SD), on the other hand, expected weaker effects of behavior warmth on the partner’s satisfaction (B = .64, p < .001). As shown in Figure 2B, trait submissive
participants (–1 SD) expected a small relational cost for behavior assertiveness (B = −.11, p < .01). In contrast, trait assertive participants (+1 SD) in this study expected no relational cost for behavior assertiveness (B = −.01, ns).

**Perceived similarity.** The final multilevel model above was repeated, this time including perceived behavior similarity as a covariate. Perceived similarity was indeed a significant predictor of relational expectancies (B = .24, p < .001), but its inclusion in the model did not eliminate the Behavior Warmth × Trait Communion interaction, F(1, 1180.19) = 33.90, p < .001, or the Behavior Assertiveness × Trait Agency interaction, F(1, 1277.08) = 8.46, p < .01.

**Mediated moderation: Trait communion and personal reactions to behavior warmth.** It was hypothesized that trait warm participants would have more extreme relational expectancies for warm and cold behaviors because they themselves experience stronger evaluative reactions when others act warmly or coldly during an interaction. To test this hypothesis, rated personal reactions to the behavior (i.e., “How would you feel if someone said this to you?”) were analyzed. A multilevel model was conducted, predicting personal reactions to the behavior using the Level 1 ratings of behavior warmth and behavior assertiveness, the Level 2 trait communion and trait agency scores, and the key cross-level interactions. There were no significant effects of trait agency on personal reactions to the behaviors. As predicted, however, there was a significant interaction between trait communion and behavior warmth, F(1, 1197.59) = 41.42, p < .001. Trait warm participants reported strong personal reactions to the amount of warmth in the behavior (B = .91, p < .001), feeling very positive about warm behaviors and very negative about cold behaviors. Trait cold participants, on the other hand, reported milder reactions to behaviors that varied in warmth (B = .71, p < .001).

When personal reactions were added to the model predicting relational expectancies, the results indicated that participants’ personal reaction to a behavior was a significant predictor of relational expectancies for that behavior (B = .54, p < .001). The full model is shown in Figure 3. As shown, the personal reaction variable fit the criteria for mediated moderation (Muller, Judd, & Yzerbyt, 2005): There was a significant Trait × Behavior interaction in predicting the mediator, the mediator significantly predicted the dependent variable, and the original Trait × Behavior interaction on the dependent variable was reduced in size by the addition of the mediator, by approximately 50%; this reduced path remained significant, however, F(1, 1212.04) = 18.85, p < .001. The indirect path for the mediated moderation was significant (Sobel’s Z = 6.16, p < .001).

**Mediated moderation: Trait agency and outcome expectancies for behavior assertiveness.** It was hypothesized that trait submissive participants anticipate a bigger relational cost for assertive behavior because they expect assertive behavior to improve one’s own outcome at the expense of the other person’s, causing relational stress. To test this hypothesis, perceived outcomes of the behavior for self and partner (i.e., “I would get my way” and “S/he would get his/her way”) were analyzed. A multilevel model was conducted, predicting outcome perceptions using the Level 1 ratings of behavior warmth and behavior assertiveness, the Level 2 trait communion and trait agency scores, and the key cross-level interactions. All participants expected behavioral assertiveness to improve self-outcomes (B = .31, p < .001), and this effect was not moderated by trait communion or trait agency. For beliefs about the partner’s outcome, the expected effect of behavior assertiveness was moderated by trait agency, as predicted, F(1, 1239.35) = 12.21, p < .001. Trait submissive participants expected a strong negative relationship between the assertiveness of a behavior and the outcome of the partner (B = −.34, p < .001); trait assertive participants, on the other hand, did not perceive assertiveness to have as strongly harmful an effect on partner outcomes (B = −.19, p < .001).

When expected partner outcome was added to the model predicting relational expectancies, the results indicated that participants’ expectations for how a behavior would affect the partner’s outcome significantly predicted their relational expectancies for that behavior (B = .15, p < .001). The full model is shown in Figure 3. As shown, the expected partner outcome variable fit the criteria for mediated moderation: There was a significant Trait × Behavior interaction in predicting the mediator, the mediator significantly predicted the dependent variable, and the original Trait × Behavior interaction in predicting the dependent variable was reduced to nonsignificance when the mediator was included, F(1, 1229.81) = 2.13, ns. The indirect path for the mediated moderation was significant (Sobel’s Z = 3.31, p < .001).

![Figure 3](image-url)
Discussion

In Study 2, it was again shown that trait communion moderated the extremity of people’s behavior schemas for warm and cold behavior and that trait agency moderated the extremity of people’s behavior schemas for assertive and submissive behavior. These effects replicated the results of Study 1, this time using participants’ own warmth and assertiveness ratings for scripted behavior stimuli. These results indicate that trait warm and trait submissive participants were not expecting milder reactions from the interaction partner simply because they saw the behaviors as less extreme. Rather, the attenuated behavior schemas of high communion and low agency participants appeared to reflect genuine beliefs about the equanimity with which interaction partners would react to these particular kinds of social behavior. The data further suggest that these effects were not merely the result of egoism, that is, people having more positive behavior schemas for behaviors that match their own behavior tendencies. When perceived similarity of the protagonist’s behavior to the participant’s own most likely behavior in the situation was statistically controlled, the interaction effects for trait communion and trait agency remained.

Instead, the results provided support for the proposed mediators of each interaction effect. The effects of trait communion were mediated, in part, by personal feelings about warm and cold behavior. Participants who were trait warm indicated that they would feel strong emotions if an interaction partner acted warmly or coldly toward them, whereas participants who were trait cold indicated that a partner’s warmth or coldness would not affect them quite as much. These differential personal reactions predicted participants’ beliefs about an interaction partner’s reactions to warm and cold behavior. The effects of trait agency were mediated by perceived instrumental outcomes of assertive and submissive behavior: People who were trait submissive thought that an act of assertion promoted one’s own outcome at the expense of the other person’s outcome; whereas participants who were trait cold indicated that a partner’s warmth or coldness would not affect them quite as much. These differential personal reactions predicted participants’ beliefs about an interaction partner’s reactions to assertive and submissive behavior.

The results of Studies 1 and 2 supported the hypothesized links between personality dispositions and behavior schemas. Nevertheless, the designs relied on scenario methodologies, which may have limited generalizability. A stronger test of the hypotheses would examine behavior schemas in the context of face-to-face joint decision-making interactions. This methodology was employed in Study 3.

Study 3

The data for Study 3 was obtained from a sample of executive MBA students enrolled in a negotiations class. In each of six class sessions, the students were randomly paired and given role materials for a dyadic negotiation simulation. Students in the course were encouraged to experiment with styles of behavior outside their comfort zone from one negotiation to the next. For each negotiation, students negotiated for a fixed period of time; after a deal was reached, each student separately completed an on-line postnegotiation report. They reported the warmth and assertiveness of their own and their partner’s behavior, how satisfied they felt with their own and their partner’s behavior, and how profitable they thought the deal was for themselves and for their partner. They also reported their beliefs about their partner’s level of satisfaction with them.

This data set offered many advantages for testing the study hypotheses. First, each occasion involved a real face-to-face interaction with another person. Participants were reporting inferences about the effects of behaviors they personally performed, and freely so. As a result, any effects of traits on behavior expectancies cannot be well explained by egoism. The face-to-face design also ensured that participants’ beliefs about the interpersonal consequences of their behavior were not abstract hypotheticals, operating in the absence of any real information about the other person. That is, participants were not reporting “if I did this behavior, then the other person might experience X” but rather “when I did this behavior, then I think this other person did experience X.” Thus, the data set afforded an opportunity to see whether trait effects on behavior expectancies would persist in situations where real evidence about the other person’s feelings was, to some degree, available. Additionally, because data were obtained from both partners, the accuracy of each person’s relational inference could be examined, by looking at the report of how the partner said he or she really did feel about the participant’s behavior.

Second, each student provided data on six different occasions, which afforded the opportunity for multilevel modeling of within-person profiles (Fournier, Moskowitz, & Zuroff, 2008). The structure of the data thus provided an opportunity to compare the two hypothesized if–then signatures for each participant: the participant’s behavior schema about partners’ reactions to his or her own behavior, as well as the participant’s if–then profile of reactions to the behavior of the partner.

Method

Participants. Data were collected from 78 executive MBA students (20 female; \(M_{age} = 36.64, SD = 6.46\)) who were enrolled in a negotiations course. In each of six class meetings, students negotiated in pairs and provided data about their experiences in the negotiation. Each student thus provided data on a maximum of six separate occasions. For some students, the number fell below six due to absences or due to occasions when the student was put in a two-on-one negotiation group (data that were excluded from the present analyses).

Personality assessment. At the start of the semester, students completed a battery of short online personality surveys as a part of their course requirements. Among these surveys was a brief measure of trait agency and trait communion, the Good-Me-Bad-Me Questionnaire (Greco & Kammrath, 2010). This 16-item survey assesses a person’s level of interpersonal strengths and problems on the dimensions of agency and communion. Dimensional scores for strengths and problems were averaged to yield a measure of trait agency and trait communion. In other research (Greco & Kammrath, 2010), this short measure yielded high convergent validity with longer measures of trait agency and trait communion, such as the IAS–R (Wiggins et al., 1988).

Procedure. Students were randomly paired for each negotiation by the course teaching assistant, with the constraint that no two students would ever negotiate with one another twice. Students received their role materials for each negotiation in advance but did not learn the identity of their partner until the negotiation.
was about to begin. Each negotiation took place in a different class session, and class meetings were spaced over a period of 2 months. Negotiations were primarily distributive, with some limited opportunity for integrative value creation. Negotiations ranged from 20 min to 90 min in length. At the conclusion of each negotiation, partners separately completed an online postnegotiation report from their personal laptops. Students completed these reports prior to debriefing the case with each other and with the instructor.

Postnegotiation report. At the end of each negotiation, students reported the terms of their negotiated deal. They rated two items describing the perceived favorability of the deal for themselves and for their partner, on a scale from –3 (I/they got a very unprofitable deal) to 3 (I/they got a very profitable deal). They then answered several questions about their own behavior. They rated the extent to which they had acted “assertive,” “unassertive,” “friendly and agreeable,” and “unfriendly and disagreeable,” on 7-point Likert scales ranging from 0 (not at all) to 6 (very). The negative items were reverse scored and then the first two items were averaged to create a single score for self-behavior assertiveness and the second two items were averaged to create a score for self-behavior warmth. Participants then answered the questions, “How satisfied are you with your behavior?” and “How satisfied do you think your partner felt with your behavior?” on a scale from –3 (very unsatisfied) to 3 (very satisfied). They also answered questions about their partner’s behavior in the negotiation. They rated their partner’s behavior on the same four items as they had rated their own behavior, yielding a score for partner behavior assertiveness and partner behavior warmth. Participants answered the question, “How satisfied did you feel with your partner’s behavior?” on the same scale as used earlier to rate their own behavior.

Results

The Study 3 data set had a cross-classified structure. Relational inferences about partners (measured after each of six negotiations) were nested simultaneously within actors, partners, and dyads. In the multilevel models reported below, the multiple dependencies in the data were modeled by three random statements in SPSS Mixed, which estimated random intercepts for actors, for partners, and for dyads (Kenny, 2007).

Inferred partner satisfaction. Participants’ inferences about their partner’s level of postnegotiation satisfaction were analyzed with a multilevel model, with inferred partner satisfaction ratings (Level 1) nested within actors, partners, and dyads (cross-classified, Level 2). Participants’ ratings of inferred partner satisfaction were predicted using the Level 1 ratings of behavior warmth and behavior assertiveness, the Level 2 scores on trait communion and trait agency, and the two cross-level interaction terms: Behavior Warmth × Trait Communion and Behavior Assertiveness × Trait Agency. Replicating the results of Studies 1 and 2, there was a significant interaction between trait communion and behavior warmth, $F(1, 345.57) = 5.42, p < .05$. As shown in Figure 4A, trait warm participants (+1 SD) expected their partner to react strongly to being treated warmly or coldly, $B = .52, p < .001$. Participants who were trait cold (–1 SD), in contrast, expected milder reactions from the partner ($B = .30, p < .001$). Also replicating the results of Studies 1 and 2, there was a marginally significant interaction between trait agency and behavior assertiveness, $F(1, 245.97) = 3.24, p = .07$, shown in Figure 4B. Participants who were trait submissive (–1 SD) perceived a small relational cost to behaving assertively ($B = -.10, p < .05$). Participants who were trait assertive (+1 SD), on the other hand, failed to see any relational cost for assertive behavior ($B = .07, ns$).

Actual partner satisfaction. Because the data set included information from both members of each dyad, it was possible to replace inferred partner satisfaction ratings with actual partner satisfaction ratings as the dependent variable of the multilevel model. There were no effects of participants’ traits on the amount of satisfaction actually reported by the negotiation partner. There

![Figure 4](image-url) The effects of trait communion and trait agency on relational inferences in negotiations. Trait warm and trait submissive participants showed more extreme relational expectancies for negotiation behaviors that varied in warmth or assertiveness, respectively. Graphs above display predicted values from multilevel analyses of expected partner satisfaction as a function of trait, behavior, and the Trait × Behavior interaction.
were, however, effects for ratings of behavior warmth and behavior assertiveness on satisfaction experienced by the partner. As shown in Figure 4A, when participants reported being more warm, their partners reported feeling more satisfied (B = .19, p < .001). Figure 4B reveals that when participants reported being more assertive, their partners reported feeling less satisfied (B = −.09, p < .05).

**Mediated moderations: Personal reactions and perceived outcome harm.** It was hypothesized that participants high in trait communion would expect their partners to respond strongly to warm and cold behavior because they could imagine themselves reacting strongly to such behavior if roles were reversed. Although participants in this study were not asked, “How would you feel if someone acted toward you the way you just behaved toward your partner?” which would perfectly parallel the mediator variable used in Study 2, they did give a self-evaluation of their own behavior in the interaction. A multilevel model was conducted using satisfaction with self-behavior as the dependent variable, predicted by the Level 1 ratings of behavior warmth and assertiveness, the Level 2 scores on trait communion and trait agency, and the key cross-level interactions. As shown in Figure 5, all participants evaluated themselves more positively when they had behaved more assertively (B = .36, p < .00), and when they had behaved more warmly (B = .32, p < .00). Moreover, as hypothesized, there was a significant Behavior Warmth × Trait Communion interaction on self-satisfaction, F(1, 382.35) = 8.69, p < .01. This interaction is displayed graphically in Figure 6A. Trait warm participants evaluated themselves strongly on the basis of how warmly or coldly they had behaved (B = .47, p < .00), and this was less true of trait cold participants (B = .18, p < .05).

To test its potential as a mediator, the self-satisfaction variable was added as a predictor in the original model of inferred partner satisfaction. As seen in Figure 5, the support for the hypothesis that participants projected their self-evaluations of behavior when inferring how their partner felt about them (B = .36, p < .001). When self-satisfaction was added to the model predicting relational inferences, the original Behavior Warmth × Trait Communion interaction was reduced to nonsignificance, F(1, 344.88) = 1.77, ns. The indirect path for this mediated moderation was significant (Sobel’s Z = 2.38, p = .02).

Regarding trait agency, it was hypothesized that trait submissive participants would expect their partners to respond strongly to assertiveness and submissiveness because they would expect assertive behavior to have negative effects on the other person’s outcomes. To test this hypothesis, multilevel models were conducted for perceived self-profit and perceived partner profit. Six predictors were included in each model: the Level 1 ratings of behavior warmth and behavior assertiveness, the Level 2 scores of trait agency and trait communion, and the two cross-level interactions: Behavior Assertiveness × Trait Agency and Behavior Warmth × Trait Communion. Behavior warmth and trait communion were not significant predictors of perceived profit. There were significant effects, however, for behavior assertiveness and trait agency. For self-profit, the results revealed that participants believed that by acting more assertively, they increased their self-profit (B = .24, p < .001). This belief was not moderated by trait agency, F(1, 381.01) = 2.15, ns. Participants’ beliefs about the effects of their assertiveness on their partners’ profit differed depending on their level of trait agency, F(1, 365.94) = 7.59, p < .01, as hypothesized. This interaction is displayed graphically in Figure 7A. Trait submissive participants believed that their own assertiveness reduced the partner’s profit (B = −.26, p < .01). Trait assertive participants, on the other hand, saw no association between their own assertiveness and the partner’s profit (B = .04, ns).

To assess its potential as a mediator, the inferred partner-profit variable was added as a predictor in the original model of inferred partner satisfaction. As shown in Figure 5, participants who thought their partner had made a good profit from the deal also believed their partner was more satisfied (B = .25, p < .001). When inferred partner-profit was added to the model predicting relational inferences, the original Behavior Assertiveness × Trait Agency effect was reduced to nonsignificance, F(1, 276.59) = .57, ns. The indirect path for this mediated moderation was significant (Sobel’s Z = 2.08, p = .04).

**Participants’ own if–then profiles.** In this data set, it was possible to model participants’ beliefs about the effects of their own behavior on their partner (behavior schemas) and also to model participants’ if–then profiles of experiences as a function of the partner’s behavior. This afforded an opportunity to look for

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**Figure 5.** Mediated moderation model of Trait × Behavior effects on relational inferences in negotiations. The moderating effect of trait communion (Trait Comm) on relational expectancies for behavior warmth (Behav Warm) was mediated by participants’ personal feelings about the behaviors. The moderating effect of trait agency on relational expectancies for behavior assertiveness (Behav Assert) was mediated by beliefs about instrumental outcome-harm. Values in the diagram above are coefficients from multilevel analyses of inferred partner satisfaction. *p < .05. **p < .10.
hypothesized similarities between behavior schemas and if–then profiles.

To look at if–then profiles of feelings toward the partner, a multilevel model was conducted for participants’ satisfaction with the partner as a function of the partner’s behavior. The six predictors included: the Level 1 ratings of partners’ behavior warmth and behavior assertiveness, participant’s Level 2 scores on trait communion and trait agency, and the two cross-level interactions: Partner Warmth × Participant Trait Communion, and Partner Assertiveness × Participant Trait Agency. The interaction between partner assertiveness and participant trait agency on feelings toward the partner was not significant, indicating that trait submissive participants were not more likely than trait assertive participants to be dissatisfied with a partner who had acted assertively. There was a significant interaction, however, between trait communion and partner behavior warmth on feelings of satisfaction with the partner, $F(1,327.07) = 3.86, p = .05$. This interaction is shown in Figure 6B. As hypothesized, trait warm participants reacted strongly to the partner’s behavior warmth and coldness, $B = 6.66, p < .001$. Trait cold participants cared somewhat less about how warmly the partner treated them, $B = 4.9, p < .001$.

To look at if–then profiles of perceived instrumental outcomes, multilevel models were conducted with perceived self-profit and partner-profit as the dependent variables in the analysis, with the following six predictors: the Level 1 ratings of partner behavior warmth and behavior assertiveness, the Level 2 scores of participants trait communion and trait assertiveness, the Level 2 scores of partner trait communion and trait agency, and the two cross-level interactions, Partner Warmth × Participant Trait Communion, and Partner Assertiveness × Participant Trait Agency. There were no significant effects for trait communion in these analyses. There was, however, a marginally significant Partner Agency × Trait Agency interaction effect on perceived self-profit, $F(1, 380.27) = 2.90, p = .09$. The pattern of the interaction, shown in Figure 7B, revealed striking similarities between if–then profiles and behavior schemas concerning beliefs about the effect of one person’s assertiveness on the other person’s profit. As discussed previously, trait submissive participants believed that by acting assertively, they hurt their partner’s profit ($B = -.19$), whereas trait assertive participants believed that their own assertiveness did not affect their partner’s profit ($B = .06$). The new analysis revealed that trait submissive participants believed that their own profit was dimin-

Figure 6. Trait communion and personal satisfaction with warm and cold behaviors in negotiations. Trait warm participants, compared with trait cold participants, evaluated both their own and their partner’s behavior more extremely as a function of the warmth of the behavior. Graphs above display predicted values from multilevel analyses of participant satisfaction as a function of trait, behavior (self or partner), and the Trait × Behavior interaction.

Figure 7. Trait agency and perceived instrumental outcomes for assertive and submissive behaviors in negotiations. Trait submissive participants, but not trait assertive participants, perceived a trade-off between a given negotiator’s assertiveness and the counterparty’s profit. Graphs above display predicted values from multilevel analyses of inferred profit (self or partner) as a function of trait, behavior (self or partner), and the Trait × Behavior interaction.
ished by the partner’s assertiveness ($B = -0.23, p < .01$), whereas trait assertive participants thought that their own profit remained unaffected by the partner’s assertiveness ($B = -0.08, ns$).

As a final step to directly assess the associations between behavior schemas and if–then profiles, a set of analyses were conducted looking at the correlations among individuals’ random slopes for schemas and random slopes for profiles. First, participants’ random slopes for behavior schemas were obtained by regressing their relational expectancies (i.e., inferred partner satisfaction ratings) on their Level 1 ratings of their own behavior warmth and behavior assertiveness and saving the random slopes for both behavior warmth and behavior assertiveness. These slopes represent participants’ mental models of the effects of their own warmth and assertiveness on the partner’s level of satisfaction with the interaction. Next, these behavior schema slopes were correlated with the random slopes obtained from multilevel models of other dependent variables that had been regressed on ratings of behavior warmth and behavior assertiveness. The best predictor of a participant’s slope for the expected interpersonal consequences of behavior warmth–coldness was his or her slope for personal feelings about partner warmth–coldness ($r = .51, p < .001$). The best predictor of a participant’s slope for the expected interpersonal consequences of behavior assertiveness–submissiveness was his or her slope for the perceived partner outcome harm of assertiveness ($r = .62, p < .001$), which was in turn correlated with the slope for the perceived self-outcome-harm from the partner’s assertiveness ($r = .22, p = .06$). These correlations provide support for the hypothesized links between if–then profiles and behavior schemas.

Discussion

In Study 3, across a series of face-to-face interactions, high trait communion participants inferred that their own warm and cold behaviors had stronger effects on their interaction partner than did low trait communion participants, and, similarly, low trait agency participants inferred that their own submissive and assertive behaviors had stronger effects on their interaction partner than did high trait agency participants. These interactive effects of personality on behavior schemas were mediated by the proposed mechanism variables. Replicating Study 2, the moderating effects of trait communion were explained by personal feelings about warm and cold behavior, and the moderating effects of trait agency were explained by perceived instrumental outcomes of assertive and submissive behavior. This replication of the results of Study 1 and 2, in a design where the participant him- or herself freely performed all the behaviors and the partner freely responded to them, suggests the presence of generalized meaning systems about how these behaviors operate in the social world.

The data showed that participants were quite able to report negative relational inferences for their own behavior, suggesting that their inferences were not driven primarily by self-justification mechanisms. In fact, not only were participants reporting negative expectancies for their own behaviors, they were often doing so despite a complete absence of dissatisfaction reported by the actual interaction partner. The actual relational cost of self-perceived coldness, for example, was not as large as most participants (especially trait warm participants) believed. The results suggest that behavior schemas can lead people to misperceive the reactions of their interaction partners, even when interactions take place face-to-face.

In this study, it was possible to model and directly compare participants’ behavior schemas and their if–then profiles. The results indicated significant similarities in the two. Trait cold people were not being entirely hypocritical in expecting partners to be somewhat tolerant of cold behavior—they themselves were more tolerant when they perceived the partner as cold. Likewise, trait assertive people were not being hypocritical in their beliefs that their own assertiveness had no effect on the partner’s outcome—they also reported feeling as though their partner’s assertiveness had no effect on their own outcome. Thus, Study 3 participants expected the partner to exhibit a similar if–then profile to their own, providing support for the claim that people use their own if–then profiles as a partial basis for their behavior schemas.

General Discussion

When we interact with individuals whose personality traits differ markedly from our own, we often find ourselves asking, “how can they act that way?” Before we attempt to answer such questions, however, it is important to consider whether these individuals view their own behavior through the lens of a different meaning system than that which we have used to judge them. In this article, it is argued that people’s meaning systems for behavior (behavior schemas) are systematically influenced by their own if–then personality profiles. As a result, it is not only possible but also quite likely, that individuals who score extremely high or low on a trait dimension will see their own behavior in a different light than how it is seen by most others.

In three studies, using both scenario and in-person dyadic methodologies, it was shown that people high in trait communion, in comparison with people low in trait communion, were more sensitive to the level of warmth in an interaction and that in their behavior schemas they expected other people to be more sensitive to this dimension as well. It was further shown that people low in trait agency were more concerned about outcome trade-offs associated with levels of assertiveness in an interaction and that in their behavior schemas they expected other people to be more concerned about these trade-offs as well. Together, the studies suggest that people’s own if–then personality profiles influence their general beliefs about the consequences of their interpersonal behaviors.

Personality as a Source of Relational Schemas

The present research contributes to the literature on personality and perceivers effects. Past research on this question has demonstrated main effects of personality on general person schemas (Kenny, 1994; Krueger & Clement, 1994; Srivastava, 2010; Wood et al., 2010). Studies have shown, for example that people high in trait communion or trait agreeableness expect others to be kind and good just as they themselves are kind and good (Graziano et al., 2007; Paulhus & Reynolds, 1995; Sadler & Woody, 2003). The present studies indicate that the influence of personality can some-
times be even more complex. People high in trait communion may expect others to be kind and good and may thus expect others to be warm and accepting in most social interactions, but they may also expect quite harsh judgments from interaction partners when they’ve behaved coldly toward them.

Broad personality traits, such as trait agency or communion, can have these complex interactive effects on behavior schemas because traits are themselves associated with rich if–then personality profiles (cf. Fleeson, 2007; Kammrath, Mendoza-Denton, & Mischel, 2005). In Study 3, it was possible to directly examine the associations between personality traits, personality profiles, and behavior schemas. Support was found for the claim that trait communion influences people’s personal reactions to an interaction partner’s warmth–coldness and that trait agency influences outcome perceptions when a partner has behaved assertively or submissively. These patterns mirrored the patterns observed in participants’ behavior schemas for how their own behavior affected others. Thus, individuals appear not only to project their cross-situational consistencies onto interaction partners (Beer & Watson, 2008b) but also their cross-situational behavior contingencies (Fleeson & Noffle, 2008; Furr, 2009; Mischel, 2009).

A further note on the relation between traits, if–then profiles, and behavior schemas is warranted. An examination of the figures and the significance tests from Study 3 reveals that the effects of traits on behavior schemas were typically larger and less variable than the effects of traits on personality profiles. This is an interesting finding, and while future research is necessary to determine its replicability, there are some reasons to imagine that it might replicate. When a person is actually experiencing the social behavior of others and reacting to it (personality profile), there are many situational variables that will influence the person’s response. For example, I might normally feel very hurt and uncomfortable when an interaction partner treats me coldly, but on this occasion I am having a fantastic day, and I simply shrug it off. When a person projects their own if–then profile onto others (behavior schema), it is likely that only the distilled pattern is projected, not the variability. Thus, it is quite likely that the difference in effect sizes for profiles and schemas reflects a systematic cognitive distortion: Because I am generally sensitive to warmth–coldness, I expect others to be very sensitive to warmth–coldness as well, but I expect others to be more consistent in their sensitivity than I am.

**Bias and Accuracy in Behavior Schemas**

Across studies, the distortions in relational schemas as a function of traits were observable and reliable, but not extreme (at least, they were not extreme for individuals within 1 standard deviation above or below the mean on each trait dimension). No one in the study, for example, expected coldness to be relationally harmless, and no one expected the relational cost of assertiveness to be worse than that for coldness. Participants clearly recognized the general patterns reported in the literature for how people typically respond to behaviors that vary in communion or agency. Nevertheless, Study 3 showed that the biasing effects of traits on behavior schemas were sufficient for participants to come away from dyadic interactions with an inaccurate picture of their partner’s feelings and perceived instrumental outcomes. People high in trait communion, for example, thought their partners were much more dissatisfied with cold behavior than the partners indicated feeling. People high in trait agency thought their partners liked them slightly more when they acted assertively, when in fact their partners liked them slightly less.

The results concerning the actual relational costs of assertive or cold behavior in Study 3 should probably not be overgeneralized; there are many reasons to anticipate that the relational costs of these social behaviors will vary depending on the type of interaction, type of relationship, and personality of the interaction partner. The actual relational cost of coldness or assertiveness, for example, might be larger in personal discussions than in business negotiations, or when the behavior is chronic rather than limited to a single interaction. The central point is not the magnitude of the actual relational consequences of these behaviors, but rather the systematic bias in the perceived relational consequences.

An additional point about actual relational consequences is worth emphasizing. The best predictor of how an interaction partner will feel about a behavior is how the partner identifies the behavior, rather than how the self identifies the behavior. This can be most clearly seen in the slopes of Figures 4 and 6B. Figure 6B indicates that the actual cost of behavioral coldness, as identified by the partner, was in fact greater than that expected by either trait warm or trait cold participants. Nevertheless, Figure 4 shows that when participants identified their own behavior as cold, and feared a negative response from their partners, their partner was typically not feeling nearly as harsh. The two data patterns can be explained by the imperfect association between self-perceptions and partner-perceptions of behavior. The reason that self-rated behavior coldness was associated with moderate rather than strong interpersonal costs was simply that partners often did not agree that the participant had acted as coldly as he or she perceived him or herself to have acted.4

**Practical Implications**

The findings of this research suggest that interaction partners with very different personality traits may participate in the same interaction, but each may see one another’s behaviors quite differently as a result of their different behavior schemas. Imagine, for example, a high trait agency person who asserts a preference in a joint-decision making situation. She may assume that her assertion will not influence her partner’s behavior, expecting the partner to take care of his own interests and assert any divergent preference she might feel. As a result, she might take her partner’s silence as evidence of agreement, or at least nondisagreement. If her partner is low in trait agency, however, he may choose to keep silent out of agreement, but rather out of self-sacrifice (something the high trait agency person may not have actually wanted). Individual differences in behavior schemas yield many opportunities for miscommunication and misattribution during dyadic interactions.

This raises the interesting question of intervention—if people who score very high or very low on a trait dimension have behavior schemas that differ from that of most people, can they be

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4 Traits did not moderate the association between self-perceptions and partner perceptions of behavior in Study 3, although traits did show systematic associations with behavior identification in Study 2.
“retrained?” Can people who are high in trait communion, for example, learn that a little coldness in an interaction is not, by-and-large, relationally catastrophic, or can people who are high in trait agency learn that their strong assertions risk causing some relational frustration? Although interventions for biased relational schemas have proven effective in some cases, such as for people with low self-esteem (Baldwin, Baccus, Dandeneau, & Sakellaropoulo, 2008), it is likely that behavior schemas based on if-then profiles may prove difficult to alter. If people are given many examples showing that their behavior has a different effect on a partner than they were expecting, these experiences could conceivably begin to “recondition” the person’s behavior schemas. However, such experiences are likely to be less numerous than a person’s own experiences in response to the social behavior of others. Every time an individual experiences the social behavior of others, her original perception of that behavior is reinforced (e.g., “cold behavior is punishing” or “warm behavior is rewarding”). It is likely that more fruitful avenues for intervention might involve not altering the schemas themselves but instead altering people’s confidence in their schemas. If I feel in my gut that cold behavior is not a big deal, but I have good metacognition that other people don’t feel the same way, I might learn to seek regular feedback about how the other person is feeling about my behavior. Two people with similar personality traits might get away with assuming they are on the same wavelength, but people with different personality traits would be well advised to seek vertical dyadic feedback on a regular basis.

Conclusions

For years, social psychologists have counseled that a full understanding of a person’s behavior requires recognition of the context in which the behavior occurs. The present research highlights that sometimes, the person is the context. Two individuals, both enacting cold behavior or assertive behavior, may mean quite different things by their actions and may hold quite different expectations for how their behavior will be received by others. For those of us who are of a more warm or submissive dispositional nature, it is perhaps comforting to know that the biting comments of a trait cold colleague or the loud demands of a trait assertive colleague are not necessarily intended to cause distress or harm. Indeed, such persons might be surprised to learn how individuals with different personality configurations experience their behavior.

References


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New Journal Announcement: *Psychology of Popular Media Culture*

The Publications and Communications Board of the American Psychological Association has announced that it will begin publishing the journal *Psychology of Popular Media Culture* in 2012. *Psychology of Popular Media Culture*, to be published quarterly, will be a scholarly journal dedicated to publishing empirical research and papers on how popular culture and general media influence individual, group, and system behavior.

The journal will solicit rigorous research studies, as well as data-driven theoretical papers on constructs, consequences, program evaluations, and trends related to popular culture and various media sources. Although the journal welcomes and encourages submissions from a wide variety of disciplines, topics should be linked to psychological theory and research.

The journal is accepting electronic submissions via the journal’s Manuscript Submission Portal under the Instructions to Authors at http://www.apa.org/pubs/journals/ppm.