
Source Personality and Persuasiveness: Big Five Predispositions to Being Persuasive and the Role of Message Involvement

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Abstract

In the present studies we incorporate a Person \times Situation perspective into the study of the persuasion source. Specifically, we aimed to identify the personality characteristics of the persuasive individual and test the moderating role of target and source involvement. In three studies we found support for hypothesized relationships between source persuasiveness and Extraversion, Neuroticism, and Openness to Experience, and evidence for a moderating effect of involvement. In a preliminary study ($N = 66$, $M_{\text{age}} = 22.7$, 64% female), we demonstrated expected differences in the personality ratings assigned to a hypothetical persuasive versus nonpersuasive individual. In Study 1 ($N = 95$, $M_{\text{age}} = 24.1$, 62% female), through sets of two-person debates, we showed that source Extraversion and Openness to Experience were positively, and Neuroticism negatively, associated with source persuasiveness. In Study 2 ($N = 148$, $M_{\text{age}} = 24.3$, 61% female), we manipulated the level of involvement and mostly replicated the results from Study 1, but, corresponding with our predictions, only when involvement was low. Our findings demonstrate the relevance of an interactionist approach to the study of persuasion, highlighting the role of personality in the study of the persuasion source.

Persuasion is among the most frequently studied topics in social psychology, with thousands of studies being conducted (for reviews of the topic see, for example, Bohner & Dickel, 2011; Wood, 2000). Our need to understand the persuasion process stems from its centrality to human interactions and exchanges. Key questions that are asked in this context include the following: What are the processes through which people are persuaded? What are the conditions that make persuasion more likely to occur? How do individuals differ in processing persuasive messages? and How do persuasive individuals differ from those who are less persuasive?

It is the latter question, about the source of persuasive messages, on which we focus in the present research. Much importance is ascribed to being persuasive in a variety of life contexts, such as the work setting (e.g., Hogan, Hogan, & Murtha, 1992), the educational field (e.g., Hynd, 2001), marketing (e.g., Karmarkar & Tormala, 2010), and the political realm (e.g., Barker, 2005). It is therefore valuable to identify the characteristics of persuasive individuals, and the contexts in which these characteristics are particularly effective. To date, the research that has been conducted on the persuasion source considered variables such as source credibility, expertise, and attractiveness (e.g., Chaiken, 1979; Clark, Wegener, Habashi, & Evans, 2012; Pornpitakpan, 2004), overlooking the

role of personality, which is central to the study of individual differences.

Furthermore, even in studies of source characteristics (e.g., Chaiken, 1979; Clark et al., 2012), the focus has been on targets' perceptions of these characteristics, rather than on the characteristics themselves. For example, in studies of source expertise, the focus has been on how the *label* of being an expert influences target attitude change, rather than on the actual impact of expertise on the source's ability to persuade others. When focusing on source personality, it is particularly relevant to consider the role of the source's attributes, rather than targets' perceptions of these attributes. Whereas the latter is of interest when aiming to understand the process of being

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persuaded, it is the former that should be of interest when aiming to understand the process of persuading. Much less attention has been given to this latter approach in the study of the persuasion process.

More broadly, the literature on persuasion tends to focus on the internal cognitive processes of the target rather than on the actions or predispositions of the source. This corresponds with an overall bias toward the study of introspective processes, within hypothetical contexts, with limited research considering real-life situations and responses to actual behavior (Baumeister, Vohs, & Funder, 2007). To address this issue in persuasion research, in particular when interested in the role of the source, one should examine actual persuasion events, with actual human sources (contrary to using a newspaper ad, for example). Although this has been done in a few cases (e.g., Kruglanski, Webster, & Klem, 1993), most studies involved manipulations of a hypothetical or inanimate source, rather than an actual real-life source in an actual persuasion setting. Accordingly, in the two main studies of the present research, we examined relationships between source personality and persuasiveness through actual real-time persuasion events.

Given the abundance of studies linking personality to behaviors and outcomes, and the continued interest in understanding the persuasion process, it was surprising to find so little work aimed at linking personality with being persuasive and getting others to change their attitudes. Although in the applied context there have been studies linking personality to performance in jobs that require, among other things, being persuasive (e.g., sales; reviewed below), we found no study with the explicit aim of identifying the personality characteristics of the persuasive individual.

We did find a couple of studies on attitude change that are nevertheless relevant for the issue of source personality, despite their focus being on the persuasion target. In one study, individuals high in their need for closure were less likely to change their attitudes in a debate against individuals with a low need for closure, possibly suggesting that they were more persuasive than their low-need-for-closure counterparts (Kruglanski et al., 1993). As Kruglanski et al. (1993) note, however, it is impossible to know in this case whether the effect reflects greater persuasibility of the targets, the greater persuasiveness of the source, or both. Furthermore, in two following studies, Kruglanski et al. obtained evidence that strengthens the interpretation that the effect was due to the persuasibility of the target.

Using the same methodology, Shestowsky, Wegener, and Fabrigar (1998) obtained corresponding findings with need for cognition, yet here too, their finding goes more to indicate the relevance of target, rather than source, personality. Because individuals with high and low need for cognition were matched in their study, one cannot determine whether, and to what degree, attitude change is the result of the source's or the target's personality. Related to this, in both of the above studies, the focus was on the relationship between the individual's disposition and his or her own attitude change. Con-

trarily, when interested in source persuasiveness, it is the relationship between the individual's disposition and his or her *counterpart's* attitude change that should be examined.

Beyond this point, although need for closure and need for cognition are most relevant to the issue of attitude change, they both relate to the likelihood that an individual will yield to others' persuasive attempts. Such traits are therefore more relevant for investigating the target rather than the source. When we think about a persuasive individual, we tend to picture someone who proactively gets others to change their minds, rather than someone who simply holds on to his or her opinions. Therefore, when considering the characteristics of persuasive individuals, dispositions other than the need for cognition or need for closure may prove more appropriate. Furthermore, both need for closure and need for cognition are specific and narrow traits that do not cover the breadth of individuals' personality. Given that so little is known about source personality and persuasiveness, an overarching model of personality, such as the Five-Factor Model (Digman, 1990), which considers a broad spectrum of individuals' personality attributes, would be particularly appropriate. Such a model will allow us to provide a relatively inclusive characterization of the persuasive individual. Accordingly, in the present study, we used the Five-Factor Model to explore the characteristics of persuasive individuals.

Personality and Persuasiveness

To establish our hypotheses, we begin by examining the definitions of the Big Five traits for their relevance to the notion of persuasiveness.

Extraversion

Among the key attributes of extraverted individuals is their tendency to be talkative, outgoing, and energetic (McCrae & John, 1992). They are communicative by nature, find it easy to make contact with others, and are known to exhibit greater dominance compared with their less extraverted counterparts. Compared with introverts, who tend to be quiet, reserved, and withdrawn, extraverts are typically articulate and exhibit an animated and assertive communication style (e.g., Lobel, 1987; Weaver, 2005). They have been found to speak the most (Riggio, Riggio, Salinas, & Cole, 2003) and to make the largest number of influence attempts (Caldwell & Burger, 1997). Such attributes are likely to make extraverts more engaging and should naturally lend themselves to the individual's attempts at persuading others.

Neuroticism

Neuroticism (sometimes referred to through its antonym, Emotional Stability) involves a tendency toward anxiety,

impulsiveness, and instability, in contrast to the self-confidence, calmness, and poise of the emotionally stable individual (McCrae & John, 1992). Such lack of confidence and poise are likely to detract from an individual's perceived expertise and credibility, which have been shown to increase the likelihood of persuasion (e.g., Chaiken & Maheswaran, 1994). Individuals high in Neuroticism have been shown to speak less decisively and fluently (e.g., Alpert, Pouget, & Silva, 2001) and express themselves with lower degrees of confidence (McCroskey, Heisel, & Richmond, 2001). They are therefore less likely to be effective persuaders.

Openness to Experience

Openness to Experience refers to individuals' tendency to be curious, insightful, and of wide interests (McCrae & John, 1992). As such, those who are high on Openness to Experience are more likely than others to offer nonconventional approaches in their discussions, and, when trying to persuade others, are likely to come up with creative arguments for their positions. In addition, their openness to new ideas and ability and willingness to consider multiple perspectives increases the likelihood that they will engage targets, address their concerns, and at the same time help targets see their own (i.e., the source's) perspective. As such, one could expect open individuals to be more persuasive than their less open counterparts.

Conscientiousness

Although, compared with the other Big Five traits, there is less agreement among scholars on the definition of Conscientiousness, most agree that it involves aspects of dependability and an achievement orientation (Barrick & Mount, 1991). Those who are high in Conscientiousness have been described both as hardworking and ambitious as well as careful, thorough, and organized. Although the former set of characteristics suggests that conscientious individuals will work hard to persuade others (just as they work hard at anything else they apply themselves to), the latter suggests that the manner and style in which they do so may be counterproductive, given that their structured, cautious, and planful style will often be perceived as dull and tedious (Helweg-Larsen & Collins, 1997). It is therefore difficult to predict what relationship Conscientiousness will have with persuasiveness.

Agreeableness

The relevance of Agreeableness to persuasiveness is also unclear. Agreeable individuals are characterized as being kind, sympathetic, and nonconfrontational (Digman, 1990). On the one hand, their being sympathetic elicits a positive response from their surroundings, enhancing others' willingness to

listen to and consider their perspective. On the other hand, their nonconfrontational and even somewhat conformist style makes them less likely to try to change others' minds to begin with. It is therefore not straightforward what the relationship between Agreeableness and persuasiveness will be.

The Big Five in persuasion-related work settings

Thus, although the relationship between personality and persuasiveness has not been explicitly tested, definitions of the Big Five suggest that persuasive individuals would tend to be extraverted, emotionally stable (i.e., not neurotic), and open to experiences. The relationships for Conscientiousness and Agreeableness with persuasiveness appear to be less straightforward. To further establish our hypotheses about the relationships between the Big Five and persuasiveness, we reviewed the organizational literature, in which personality has been used to predict behavior in jobs or positions that involve persuasiveness as a required skill.

One such body of work is the literature on leadership. The defining characteristic of leadership is the ability to influence others (Bass, 2008), which, as such, makes it particularly relevant to our interest in persuasiveness. Numerous studies have linked personality to leadership concepts, with a number of meta-analyses summarizing extant findings (e.g., Bono & Judge, 2004; Judge, Bono, Ilies, & Gerhardt, 2002). In an analysis of findings from studies linking the Big Five to leadership effectiveness, the strongest and most consistent predictors were Extraversion, Neuroticism, and Openness to Experience (Judge et al., 2002).

In another meta-analysis (Bono & Judge, 2004), Extraversion and Neuroticism were the most consistent predictors of charismatic leadership, which involves leaders' ability to engage and inspire followers (Shamir, House, & Arthur, 1993). Although in these meta-analyses Conscientiousness showed an overall positive relationship with leadership effectiveness (Judge et al., 2002), and Agreeableness an overall positive relationship with charismatic leadership (Bono & Judge, 2004), these aggregate relationships were weak and inconsistent across the meta-analyzed studies, with some studies showing no relationship and others even exhibiting negative relationships.

Patterns of findings similar to the above emerged in studies linking the Big Five to performance in sales and negotiation contexts, both of which involve persuasion (Barrick & Mount, 1991; Vinchur, Schippmann, Switzer, & Roth, 1998). Individuals with higher levels of Extraversion and Openness to Experience, and lower levels of Neuroticism, have been shown to exhibit improved sales performance (e.g., Furnham & Fudge, 2008; Vinchur et al., 1998) and negotiation outcomes (Galinsky, Maddux, Gilin, & White, 2008; Lynch & Evans, 2002; Ma & Jaeger, 2005; Nauta & Sanders, 2000; see also Barry & Friedman, 1998, for an elaboration on the particular negotiation stage in which Extraversion may be beneficial).

Conscientiousness has overall been the most consistent predictor of job performance across job types, including sales (Barrick & Mount, 1991). This effect, however, is attributed to the diligence of those who are high in Conscientiousness and does not seem to relate to the particular (persuasion-oriented) nature of sales jobs.

With respect to Agreeableness, findings have been inconsistent. In Barrick and Mount's (1991) meta-analysis, Agreeableness had no effect on sales performance. Similarly, helpfulness, which closely corresponds with Agreeableness, had no effect on individuals' negotiation behaviors (Ma & Jaeger, 2005). In other studies, both positive (e.g., Nauta & Sanders, 2000) and negative (e.g., Barry & Friedman, 1998; Warr, Bartram, & Martin, 2005) relationships were found for Agreeableness with sales performance and negotiation behavior.

Although there is more to leadership, sales, and negotiations than mere persuasiveness, persuasiveness is nevertheless a key requirement for successfully performing in each of these contexts. As described above, both trait definitions and findings in these applied fields suggest that individuals who are extraverted, emotionally stable, and open to experiences are better oriented toward getting others to change their minds. We therefore hypothesize the following:

Hypothesis 1: Source Extraversion will be positively related to persuasiveness, as assessed both through perceived source persuasiveness and target attitude change.

Hypothesis 2: Source Neuroticism will be negatively related to persuasiveness, as assessed both through perceived source persuasiveness and target attitude change.

Hypothesis 3: Source Openness will be positively related to persuasiveness, as assessed both through perceived source persuasiveness and target attitude change.

Given the inconsistent evidence for Conscientiousness and Agreeableness, we take on an exploratory approach in examining their relationships with persuasiveness.

The Moderating Role of Involvement

Thus far in our discussion we have set aside the issue of the route through which the persuasive message is processed by the target, an issue that has received much attention in the persuasion literature (e.g., Petty & Cacioppo, 1986a). According to Petty and Cacioppo's Elaboration Likelihood Model, attitude change can be achieved via two routes: central or peripheral (Petty & Cacioppo, 1986b). Whereas the actual content of the persuasive message is what leads to attitude change through the central route, peripheral cues (e.g., the appearance of the source) lead to attitude change through the peripheral route.

In several studies, Petty, Cacioppo, and colleagues delineate the conditions that determine whether central or peripheral processing will be most likely to occur (e.g., Cacioppo, Petty,

Kao, & Rodriguez, 1986; Petty & Cacioppo, 1986a; Petty, Cacioppo, & Goldman, 1981; Petty, Cacioppo, & Schumann, 1983). Among other factors, when targets are personally involved in a given issue and deem it particularly important, they are more likely to process information centrally. When this happens, the persuasion message is put under increased scrutiny. Contrarily, when involvement is low, information processing is more likely to be peripheral (Petty & Cacioppo, 1986b). In this case, peripheral cues, such as the particular style in which one speaks, the number of arguments made, and the appeal of one's tone of voice, will carry more weight than the actual content of the arguments (e.g., Petty & Cacioppo, 1984).

This line of research would therefore suggest that the characteristics that make a person persuasive are contingent on the target's processing route. When conditions increase the likelihood for central processing, characteristics that increase the quality of the persuader's arguments (e.g., cognitive ability) should be most relevant. Contrarily, when conditions increase the likelihood of peripheral processing, characteristics that predominantly provide *cues* of persuasiveness (e.g., raising many arguments) should prove most persuasive. For example, Extraversion has been shown to correlate positively with the number of influence attempts (Caldwell & Burger, 1997), but it has not been linked with the quality of these attempts. Accordingly, in a persuasion context the impact of Extraversion on others' attitudes should be most strongly demonstrated under peripheral, rather than central, processing.

Overall, individual differences in personality reflect differences in the manner and style in which people do things. As suggested above, the quality of introverts' and extraverts' arguments, for example, may be of the same quality, yet the manner in which these arguments are presented will differ markedly when presented by an introvert vis-à-vis an extravert. Thus, while the substance of the arguments that people with different personality traits make could be similar, at surface level they may seem qualitatively different. Therefore, under conditions that increase the likelihood for peripheral processing, such as when target involvement is low, these surface-level manifestations are expected to carry more weight for persuasion to occur. Accordingly, source personality is expected to have a stronger relationship with persuasiveness when target involvement is low.

Moreover, there is also reason to expect stronger personality-persuasiveness relationships when *source* involvement is low. Mischel's (1977) strong situation argument suggests that when situational cues for behavior are strong, differences in personality are less likely to be reflected in people's behavior. We suggest that when trying to persuade others, high involvement constitutes a strong situation in the sense that sources are motivated toward persuading, regardless of their personality. This should restrict some of the variance in how they communicate the persuasion message. For example, whereas extraverted individuals may be more naturally motivated toward expressing their views, high involvement will

create similar motivations even among those who are introverted, who should then behave more similarly to extraverts than when involvement is low. In support of this proposition, strong cues have been said to exist when negotiator aspirations (i.e., involvement) are high (Barry & Friedman, 1998), and accordingly, negotiator aspirations were shown to moderate the relationship between negotiator personality and bargaining success, such that personality effects were weaker when aspirations were high (Barry & Friedman, 1998). We therefore argue that the effect of personality on persuasiveness is meaningful in particular when source involvement is low. In sum, we suggest that conditions that influence target and source involvement will moderate personality-persuasiveness relationships such that these relationships will be stronger when involvement is low. More specifically:

Hypothesis 4: Involvement will moderate the relationship between Extraversion and persuasiveness such that the relationship will be more positive under low involvement.

Hypothesis 5: Involvement will moderate the relationship between Neuroticism and persuasiveness such that the relationship will be more negative under low involvement.

Hypothesis 6: Involvement will moderate the relationship between Openness to Experience and persuasiveness such that the relationship will be more positive under low involvement.

The Present Studies

We will begin by testing the relationship between personality and persuasiveness in two studies, temporarily setting aside the issue of involvement. In a preliminary study, we will examine the personality characteristics that are associated with the concept of persuasiveness. In Study 1, we will test the relationship between actual sources' personality and their persuasiveness, as indicated in targets' rating of source persuasiveness and targets' actual attitude change. We will then conduct a third study, Study 2, in which we focus on the role that involvement has in moderating the personality-persuasiveness relationships.

PRELIMINARY STUDY

As a preliminary test of Hypotheses 1–3, we wanted to examine the personality characteristics that people tend to ascribe to persuasive individuals, and how they differ from those ascribed to individuals who are not persuasive. Specifically, we wanted to compare the perceived Extraversion, Neuroticism, and Openness to Experience of hypothetical persuasive and nonpersuasive individuals. Although this does not constitute a direct test of our hypotheses, it constitutes an initial test of the relationship between personality and persuasiveness.

Method

Participants and Procedure. Participants were 66 undergraduate students at an Israeli university, who participated in the study for course credit. Sixty-four percent of the participants were female, and the mean age was 22.7 ($SD = 2.1$). Participants received the study questionnaire and were asked to think of a person who either excels at persuading people, or who is particularly unskilled at persuading others. Specifically, the instructions were as follows: "Think of a person with the defining characteristic that he or she is highly skilled (very bad) at persuading others. In other words, this person can naturally get (is very ineffective in getting) people to change their opinions. It would be especially good if you could try to think of someone you know personally who fits this description." Next, participants were asked to rate this person's personality. They were then asked to think of a person with the opposite features. That is, those who first thought of a persuasive individual were now asked to think of a nonpersuasive one, and vice versa. Whether a participant was first asked to think of a persuasive or nonpersuasive individual was determined randomly.

Measures. We measured the Big Five using 60 items (12 for each of the Big Five) from the International Personality Item Pool (IPIP) NEO scale (Goldberg, 1999), which is used extensively for measuring the Big Five (e.g., Ashton, Lee, & Goldberg, 2004; Roberts, Chernyshenko, Stark, & Goldberg, 2005). It consists of brief statements (e.g., "try to lead others," "interested in many things") in response to which subjects are asked to indicate how accurately or inaccurately the items describe the rated target. The response scale is a 7-point Likert scale ranging from 1 (*extremely inaccurate*) to 7 (*extremely accurate*). We calculated reliabilities in the present study twice for each of the Big Five: once for ratings of the "nonpersuasive" individual and once for ratings of the "persuasive" individual. Alpha coefficients (nonpersuasive/persuasive) for Extraversion, Neuroticism, Openness to Experience, Conscientiousness, and Agreeableness were .77/.76, .75/.77, .76/.64, .83/.67, and .70/.78, respectively.

Results and Discussion

Means, standard deviations, and correlations among the study variables, in the nonpersuasive and persuasive conditions, are presented in Table 1. To test for differences in traits across conditions, we conducted pair-sampled *t*-tests for each of the Big Five (see Table 2).¹ As can be seen in Table 2, the *t* values for Extraversion, Neuroticism, and Openness to Experience are consistent with our hypotheses. The persuasive individual whom participants had in mind was perceived as more extraverted and open to experiences, and less neurotic, than the nonpersuasive individual they thought of. In addition, the persuasive individual was also perceived as more conscientious and less agreeable than the nonpersuasive individual. The three

Table 1 Preliminary Study: Descriptive Statistics and Correlations for the Variables

Variable (Nonpersuasive Condition)	Mean	SD	1	2	3	4
1. Extraversion	3.35	.74				
2. Neuroticism	4.65	.73	-.28*			
3. Openness to Experience	3.79	.75	.50**	-.03		
4. Conscientiousness	4.16	.81	.07	-.35**	.28*	
5. Agreeableness	4.42	.65	-.05	-.42**	.03	.43**
Variable (Persuasive Condition)	Mean	SD	1	2	3	4
1. Extraversion	5.23	.58				
2. Neuroticism	3.25	.72	-.28*			
3. Openness to Experience	4.76	.54	.35**	-.17		
4. Conscientiousness	4.71	.56	.06	-.36**	.32**	
5. Agreeableness	3.66	.70	-.28*	-.07	.38**	.42**

Note. $N = 66$.

* $p < .05$. ** $p < .01$.

Table 2 Preliminary Study: *t*-Tests for Paired Samples Across Nonpersuasive and Persuasive Conditions

Pair (Persuasive–Nonpersuasive)	$t_{(df=65)}$	Cohen's <i>d</i>
Extraversion	14.00***	2.83
1. Neuroticism	-9.62***	1.93
2. Openness to Experience	7.85***	1.48
3. Conscientiousness	3.82**	.79
4. Agreeableness	-6.67***	1.13

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

strongest effects, nevertheless, were for the three traits for which we had hypotheses, which were significantly ($p < .05$) larger than the effect for Conscientiousness.²

These findings support the notion that persuasive individuals are at least perceived as extraverted, emotionally stable (i.e., not neurotic), and open to experiences, and to a lesser degree are perceived as being less agreeable and more conscientious. To more directly assess the characteristics of persuasive individuals, it is necessary to assess the personality of actual sources, in actual persuasion settings. This will be done in the following two studies.

STUDY I

Method

Participants. Ninety-five undergraduate students at an Israeli university participated in the study in return for a monetary reward equivalent to \$15 each. Sixty-two percent were women, and the mean age was 24.1 ($SD = 2.5$).

Procedure. The study involved two stages. At Time 1, participants filled out personality questionnaires and were asked

to respond to questions about their attitudes on a number of current social or ethical dilemmas. Topics were selected through a series of pilot studies in which a large variety of issues were tested. Only topics that yielded a large divergence in respondents' attitudes, with an approximately equal proportion of support for each side of the dilemma, were ultimately used in the study (see the final list of topics used in Appendix A). On each issue, participants were asked to record their attitude on a scale ranging from 1 (*agree entirely with [one side of the dilemma]*) to 7 (*agree entirely with [the other side of the dilemma]*).

At Time 2, four weeks later, participants took part in two or three debates, each on a different topic, with a different counterpart.³ Participants were matched with other participants who at Time 1 reported holding an opposing opinion to their own. For each participant, three topics were selected, each on which there was another participant who holds the opposite opinion. There were 19 cases in which we could not find three opponents with opposite views, in which case the participant took part in only two debates. Thus, overall, the study included 266 debates (76 individuals took part in three debates each, and the remaining 19 took part in two debates each).

Participants then engaged in 15-minute debates in which the instructions were to persuade their opponent in the "correctness" of their opinions. To increase the likelihood that persuasion would occur, preventing participants from simply holding on to their predebate opinions, participants were told that they should aim to reach consensus (see a similar procedure in Kruglanski et al., 1993). Following each debate, participants were asked to rate their postdebate attitude, using the same scale as the one used at Time 1. In addition, participants were asked to fill out a persuasiveness scale on which they rated their opponent's persuasiveness.

Measures

The Big Five. The Big Five were measured with a 180-item version of the IPIP NEO scale (Goldberg, 1999), on which we based our scale in the preliminary study. Alpha coefficients for Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness were .93, .91, .87, .86, and .87, respectively.

Persuasiveness. We used two measures of persuasiveness. Our first operationalization of persuasiveness involved targets' rating of the source's persuasiveness, using two items: "To what degree was your opponent persuasive?" and "To what degree does your opponent have the ability to influence others' opinions?" Response options ranged from 1 (*not at all*) to 7 (*to a great degree*). We term this variable *perceived persuasiveness*. The scale's Cronbach's alpha reliability score was .93.

A second measure of persuasiveness was created by calculating an "attitude-change" index, consisting of the degree to which the target's attitude following a debate became more similar to the source's predebate attitude, in comparison to the target's predebate attitude. To calculate this index, for each

participant, in each of his or her debates, we considered the difference between targets' pre- and postdebate attitude, and the degree to which it shifted in the direction advocated by the source. To do this, we subtracted the *opponent's* predebate attitude from his or her postdebate attitude and took the absolute value of the result. Changes from sources' pre- to postdebate attitudes, when these existed, were always in the direction of the target's predebate attitude. Thus, the attitude-change index reflects the degree to which participants got their counterparts to change their minds in the advocated direction. We term this persuasiveness variable *target attitude change*.

Results and Discussion

Analytic Procedure. To test our hypotheses, we used the Social Relations Model (SRM; Kenny, 1994; Kenny et al., 2006), to account for the nonindependence of observations within dyads. Our data involved a design similar to a round-robin with four-person groups, in which each group member participated in a debate with the remaining three (or sometimes two) group members.⁴ Participants served both as sources and targets in that they provided personality scores, and thus served as the source, but also provided persuasiveness scores for their debate partners, in which case they served as targets. Such SRM designs constitute a random effects model and involve five sources of variance (Kenny & Livi, 2009): the group (differences across the four-person groups in the degree of persuasiveness exhibited), the source (also known as "actor," involving differences among individuals in how persuasive they are), the target (also known as "partner," involving differences among individuals in how persuasive they perceive others as being), the dyad (idiosyncratic perceptions of the extent to which someone is perceived as persuasive by a particular other), and measurement error.

The SRM can be tested with multilevel models, using the MIXED procedure in SPSS. To run the analysis, the data file first needs to be structured such that each record includes the information provided by one person in the dyad. In our case, given that a source's persuasiveness is determined by the target's response (i.e., persuasiveness rating and degree of atti-

tude change), the record in which source information was included (e.g., personality data) also included the persuasiveness score the actor received from the target and the degree of target attitude change. Thus, person A's record included A's personality data, A's demographics, A's persuasiveness score (provided by person B, the target) and person B's attitude change (also provided by B). Such a structuring of the file means that each debate is represented in two records: one in which A is designated as the actor with B as the partner, and the other in which B is the actor and A is the partner. Furthermore, each record is coded to designate the group from which the dyad was created, the dyad to which the source and target belong, a unique source number, and a unique target number.

Next, in the analysis, each of the first four sources of variance noted above (i.e., group, source, target, and dyad) is included as random effects, and each of the predictors and covariates is included as fixed effects. Once the analysis is run, variance terms that end up not being significantly different from zero can be dropped, and the analysis is then run again without those variance terms. In all of our analyses, neither group nor dyad variance terms were significantly different from zero, suggesting that there were not significant differences across groups, or across dyads, in the overall persuasiveness exhibited, relative to the differences within groups and dyads. Accordingly, these terms were dropped from the analyses.

Descriptive Statistics. Means, standard deviations, and correlations among study variables are presented in Table 3. The target attitude change variable has a lower bound of zero and is similar in its distribution to that of a count variable. Correspondingly, it exhibits a Poisson distribution. To stabilize the variable's variance and bring its distribution closer to that of a normal distribution, we used a square-root transformation (Bartlett, 1947), which indeed improved the variable's normality. We used the transformed variable in our analyses. For means of presentation, given that each participant obtained more than a single score (one for each debate) for both perceived persuasiveness and target attitude change, the persuasiveness variables presented in Table 3 constitute the aggregate persuasiveness scores across debates.

Table 3 Study 1: Descriptive Statistics and Correlations for the Variables

Variable	Mean	SD	1	2	3	4	5	6	7	8
1. Age	24.07	2.51								
2. Sex (0 = female, 1 = male)	.38	.49	.38**							
3. Extraversion	4.56	.78	-.24*	-.13						
4. Neuroticism	3.56	.79	-.07	-.27**	-.40**					
5. Openness to Experience	4.91	.60	-.16	-.19	.32**	-.13				
6. Conscientiousness	4.99	.58	-.04	-.14	.22*	-.40**	-.08			
7. Agreeableness	4.78	.58	-.02	-.35**	.15	-.12	.13	.30**		
8. Aggregate perceived persuasiveness	4.29	.95	-.03	.07	.27**	-.28**	.34**	.12	.06	
9. Aggregate target attitude change ^a	.82	.54	.05	.23*	.05	-.31**	.03	.11	.06	.24*

Note. $N = 95$. ^aA square-root transformation was applied to the target attitude change variable before including it in the analyses.

* $p < .05$. ** $p < .01$.

Hypothesis Tests. As a start, we ran a mixed-models regression analysis for each of the Big Five, together with age and sex as controls,⁵ in predicting each of the persuasiveness variables. The results of these analyses when predicting perceived persuasiveness are presented in the left column of Table 4. As can be seen in the table, all three hypotheses were supported, with Extraversion and Openness yielding positive relationships, and Neuroticism a negative relationship, with persuasiveness. Neither Conscientiousness nor Agreeableness significantly predicted perceived persuasiveness.

Given that Extraversion, Neuroticism, and Openness were all significant, and given the significant correlations among the three traits (see Table 3), we ran another analysis to test the unique contribution of each trait. For this we ran a set of hierarchical analyses, starting with Openness to Experience, which yielded the strongest effect in the previous analysis (estimate = .58, $p < .01$). When Neuroticism was added to the analysis, both Openness (estimate = .53, $p < .01$) and Neuroticism (estimate = $-.26$, $p < .05$) were significant, indicating that Neuroticism explained unique variance in perceived persuasiveness, beyond that explained by Openness. Extraversion, however, was not significant when added to the other traits (although it was marginally significant [estimate = .25, $p = .07$] when only Openness and Extraversion were included in the analysis). This may have to do with the fact that Extraversion is both conceptually and empirically related to both Neuroticism and Openness (e.g., Anusic, Schimmack, Pinkus, & Lockwood, 2009; John & Srivastava, 1999), and thus shares the greatest amount of its variance with the other two traits.

With respect to target attitude-change, because participants were instructed to aim for a consensual attitude, a source who possesses a persuasive personality may nevertheless yield little target attitude change if the target also possesses a persuasive personality. In other words, target attitude change in particular may just as much reflect the target's personality as it does the source's personality. We therefore controlled for targets' five traits in our tests of the effects of each source trait on targets'

attitude change. The results of these analyses are presented in the right column of Table 4. As can be seen in the table, only the effect for Neuroticism was significant (and negative).

Together, these findings provide partial support for the notion that source personality is related to persuasiveness. Indeed, as predicted, having poise and being calm (i.e., being less neurotic) and being curious, creative, and open-minded (i.e., open to experiences) significantly predicted perceptions of the source's persuasiveness. Furthermore, those low on neuroticism were also the most effective in getting others to change their minds. Although when tested alone, Extraversion predicted perceived persuasiveness, it did not explain any unique variance beyond that explained by Openness and Neuroticism. Furthermore, we did not find support for the hypothesized relationships of Extraversion and Openness with target attitude change. As we discuss next, we speculate that this has something to do with the level of involvement participants experienced during the debates in this study.

To this point, we have set aside the issue of level of involvement. As discussed in our introduction, it has been well established that the effect of a persuasion message is to a great degree a function of targets' level of involvement. We proposed that source personality is most likely to influence target attitude change when target involvement is low, whereas the quality of the source's arguments is most influential when involvement is high. When considering the level of involvement elicited in the present study, we can identify some factors likely to elicit high involvement along with others likely to elicit low involvement. For example, the fact that some of the debate topics were highly relevant to students' lives (e.g., preference for papers vs. exams) would have created high involvement, whereas the fact that topics were presented as hypothetical would have created low involvement. It is therefore reasonable to presume that levels of involvement in this study were intermediate.

As such, it is difficult to ascertain the impact that involvement had in the present study. We believe that the intermediate level of involvement we presume to have been elicited could explain our mixed findings. Differences in the effects on perceived persuasiveness versus those on target attitude change may result from the increased sensitivity of the former, given its larger variance (see Table 3). Whereas the measure of perceived persuasiveness allows targets to rate the source as persuasive without this reflecting negatively on the target, our measure of target attitude change requires targets to acknowledge the limitations of their initial attitudes. Since we did not experimentally control the level of involvement, however, we can only speculate about the role that involvement had in this study. We therefore conducted Study 2, in which we experimentally manipulated the level of involvement.

Beyond level of involvement, another important variable we wanted to account for was that of source attractiveness, which has been shown to influence persuasion (e.g., Chaiken, 1979). We therefore assessed and controlled for source attractiveness in Study 2.

Table 4 Study 1: Fixed Effects for Big Five Traits in Predicting Persuasiveness

	Perceived Persuasiveness Estimate (SE)	Target Attitude Change Estimate (SE)
Extraversion	.35*** (.13)	.07 (.07)
Neuroticism	-.33*** (.13)	-.16* (.06)
Openness	.58*** (.16)	.08 (.08)
Conscientiousness	.18 (.18)	.09 (.09)
Agreeableness	.17 (.19)	.02 (.09)

Note. As part of the Social Relations Model analyses (Kenny, 1994; Kenny et al., 2006), we began analyses with tests for group and dyad variances, neither of which was significant. Each effect in the table resulted from a separate analysis. Age and sex were included in controls in all of the analyses, neither of which was significant. In addition, target Big Five traits were included as controls when predicting target attitude change.

* $p < .05$. *** $p < .001$.

STUDY 2

Method

Participants. One hundred forty-eight undergraduate students at an Israeli university participated in the study in return for a monetary reward equivalent to approximately \$15 each. Sixty-one percent were women, and the mean age was 24.3 ($SD = 2.7$).

Procedure. Debate topics for the present study were pretested with a number of samples, in which we aimed to manipulate participants' level of involvement in the topics. One of the criteria for selecting topics was that they could lend themselves to be either more or less contemporary and personally relevant to our participants. We ended up using two dilemmas that proved effective in our pretests. The first involved a dilemma that has been debated in Israel's government and discussed in the media over the past number of years concerning the possibility of introducing differential tuition in Israel's universities, based on applicants' financial standing. The second dilemma concerned whether people should give their relationship partner a second chance upon finding out that the partner had cheated on them.

Our manipulation of involvement level was based on a procedure used in many previous persuasion studies (e.g., Petty & Cacioppo, 1984). Participants were randomly assigned to one of two conditions. In the "high involvement" condition, the dilemmas were worded to make them more contemporary and personally relevant for the participant. In the "low involvement" condition, they were worded more generally and hypothetically (see both versions in Appendix B). These manipulations were honed and evaluated in three focus groups consisting of eight students each, prior to conducting this study. Both members of each debating dyad were always assigned to the same experimental condition, and once assigned, participants remained in the same condition for all debates.

On each topic, participants were asked to record their attitude on a scale ranging from -4 (*agree entirely with [one side of the dilemma]*) to $+4$ (*agree entirely with [the other side of the dilemma]*). After submitting their responses to the dilemma, participants were asked to fill out the personality questionnaire and answer questions about their demographics. While participants were filling these out, the experimenters matched participants with counterparts who held the opposite opinion on the dilemmas. Thirty-four participants took part in two debates, each with a different counterpart, and the remaining 114 participants took part in one debate. Instructions for the debate were the same as those used in Study 1: Participants were asked to persuade their counterparts and encouraged to reach a consensual opinion on the debated topic. As in Study 1, following each debate, participants were asked to rate their counterpart's persuasiveness and report again their attitude on the topic discussed.

In addition, to assess source attractiveness we had two research assistants, blind to our hypotheses, observe and rate participants' physical attractiveness as participants were getting ready to begin their debates.

Measures. For both personality and persuasiveness we used the same measures as those used in Study 1. Alpha coefficients for Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness were .93, .90, .83, .85, and .87, respectively. The alpha coefficient for the perceived persuasiveness scale was .96. In addition, to test the effectiveness of the experimental manipulation, we also measured participants' level of involvement with three items: "To what degree do you feel the topic of this debate is important?" "To what degree is this topic personally relevant for you?" and "To what degree is it important for you to try and persuade others on the topic?" These questions were asked once for each of the debate topics and were then aggregated to create an overall involvement index. Response options ranged from 1 (*not at*

Table 5 Study 2: Descriptive Statistics and Correlations for the Variables

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. Involvement (0 = low, 1 = high)	.53	.50											
2. Age	24.29	2.73	.01										
3. Sex (0 = female, 1 = male)	.39	.49	-.13	.25**									
4. Attractiveness	2.33	.78	.07	-.20*	-.16								
5. Religiosity	2.28	1.31	.01	-.23*	.01	-.01							
6. Extraversion	4.46	.69	-.04	-.25**	-.17*	.15	-.10						
7. Neuroticism	3.68	.80	.03	.09	-.12	-.18*	-.07	-.42**					
8. Openness to Experience	4.69	.53	-.02	-.04	-.28**	-.04	-.15	.55**	-.11				
9. Conscientiousness	4.88	.58	.04	-.10	-.18*	.15	-.07	.25**	-.38**	.18*			
10. Agreeableness	4.63	.53	-.13	-.16	-.23**	.06	.12	.28**	-.10	.17*	.01		
11. Aggregate perceived persuasiveness	4.39	1.35	-.08	.19*	.05	.11	-.17	.01	-.04	.03	.03	-.13	
12. Aggregate target attitude change ^a	1.15	.88	-.04	.09	-.04	.23*	-.11	.15	-.21*	.04	.10	-.14	.29**

Note. $N = 148$.

^aA square-root transformation was applied to the target attitude change variable before including it in the analyses.

* $p < .05$. ** $p < .01$.

all) to 7 (to a great degree). Cronbach's alpha reliability for the six items was .70.

Control Variables. We assessed two control variables in this study: source attractiveness and religiosity. First, source attractiveness was assessed via the two research assistants' ratings. Each assistant individually rated participants' physical attractiveness on a scale ranging from 1 (*unattractive*) to 4 (*attractive*). The zero-order correlation between assistants' ratings was .52 ($p < .01$). To create an attractiveness index, we averaged the two assistants' ratings.

Second, both debate topics in the present study relate, in one way or another, to the conservatism-liberalism contrast. Furthermore, in line with the general population in Israel, our sample was very heterogeneous with respect to participants' religiosity. As such, and given the relationship between individuals' religiosity and their attitudes within the conservatism-liberalism debate, we also asked participants about their religiosity on a scale ranging from 1 (*secular*) to 5 (*orthodox*).

Results and Discussion

Descriptive statistics and correlations among study variables are presented in Table 5. As in Study 1, given the distribution of the target attitude change variable, we used a square-root transformation before using the variable in our analyses. A test of the effectiveness of the involvement-level manipulation indicated that involvement in the low-involvement condition was, as expected, lower than that in the high-involvement condition, $M_{\text{low-involvement}} = 4.1$, $SD = 1.1$; $M_{\text{high-involvement}} = 4.6$, $SD = 1.1$, $F(1, 146) = 6.64$, $p < .01$.

As in Study 1, we used the MIXED SPSS procedure to test Hypotheses 4–6 and followed Aiken and West's (1991) guidelines for testing moderation effects. Specifically, in each analysis (one per Big Five trait), we included as predictors the centered trait variable, the involvement condition, their product, and the control variables, which included the remaining two traits. We first ran analyses for predicting perceived persuasiveness. As can be seen in Table 6, the interaction term was significant for Neuroticism and Openness, and was marginally significant for Extraversion. Neither the interactions nor the main effects were significant for Agreeableness and Conscientiousness.

To interpret the significant interaction effects, we conducted simple slope analyses (see Table 7). Corresponding with our predictions, the slopes for Neuroticism and Openness were in the expected direction and significant (marginally so for Openness), only in the low-involvement condition. For Extraversion, neither slope was significantly different from zero.

We next turned to retest Hypotheses 4–6, this time when predicting target attitude change. Results of these analyses are presented in Table 8. As can be seen, interaction terms were significant for Extraversion and marginally significant for Openness. For Neuroticism, the interaction term was not significant, yet the main effect, while controlling for the Neuroti-

Table 6 Study 2: Fixed Effects Trait \times Involvement Interactions Predicting Perceived Persuasiveness

	Focal Trait (Estimate [SE])		
	Extraversion	Neuroticism	Openness
Age	.08 (.133)	.09 (.05)	.09 (.05) [†]
Sex (0 = female, 1 = male)	-.10 (.28)	-.16 (.28)	-.15 (.28)
Attractiveness	.20 (.16)	.23 (.16)	.18 (.16)
Religiosity	-.18 [†] (.10)	-.18 (.10) [†]	-.18 [†] (.10)
Involvement	-.32 (.25)	-.29 (.25)	-.30 (.25)
Extraversion	.21 (.20)	-.05 (.16)	-.05 (.16)
Neuroticism	-.09 (.14)	-.44* (.21)	-.10 (.10)
Openness	-.32 (.25)	.03 (.14)	.32 [†] (.19)
Focal Trait \times Involvement	-.43 [†] (.24)	.54* (.25)	-.49* (.23)

Note. Each column represents a separate analysis, one for each focal trait. Group and dyad variances were not significant. In all analyses, source trait and involvement were centered before calculating their product (Aiken & West, 1991).

[†] $p < .10$. * $p < .05$.

Table 7 Study 2: Simple Slopes Analysis in Predictions of Perceived Persuasiveness

Predictor	Involvement	
	Low	High
Extraversion	.21 (ns)	-.22 (ns)
Neuroticism	-.44*	.10 (ns)
Openness to Experience	.32 [†]	-.17 (ns)

Note. [†] $p < .10$. * $p < .05$.

cism \times Involvement interaction, was.⁶ To interpret the interactions for Extraversion and Openness to Experience, we conducted simple slope analyses, which supported our hypothesis for Extraversion (see Table 9). The slope was significant only in the low-involvement condition. In addition, although this difference is not statistically significant, it can be seen in Table 9 that Neuroticism's effect was stronger and significant only in the low-involvement condition. Neither the interactions nor the main effects were significant for Agreeableness and Conscientiousness.

Therefore, our findings support the notion that involvement moderates the relationships between personality and persuasiveness, with some distinction between the traits that are meaningful for each aspect of persuasiveness. Specifically, when predicting perceived persuasiveness, involvement moderated the effects of Neuroticism and Openness, such that the effects were in the expected direction (negative for Neuroticism and positive for Openness) only when involvement was low. When predicting target attitude change, we obtained significant effects for Neuroticism and Extraversion. Extraversion interacted with involvement such that Extraversion's effect was positive and significant only when involvement was low, and Neuroticism yielded a main effect and a stronger effect for the low-involvement slope, although the difference between slopes was not significant.

Table 8 Study 2: Fixed Effects Trait \times Involvement Interactions Predicting Target Attitude Change

	Focal Trait (Estimate [SE])		
	Extraversion	Neuroticism	Openness
Age	.02 (.03)	.03 (.03)	.03 (.03)
Sex (0 = female, 1 = male)	-.04 (.18)	-.06 (.18)	-.08 (.18)
Attractiveness	.29** (.10)	.28* (.10)	.26* (.11)
Religiosity	-.07 (.06)	-.06 (.06)	-.06 (.06)
Target Extraversion	-.53** (.16)	-.47** (.16)	-.45* (.16)
Target Neuroticism	-.08 (.12)	-.08 (.12)	-.08 (.12)
Target Openness	.19 (.17)	.15 (.17)	.17 (.17)
Target Conscientiousness	-.13 (.16)	-.10 (.16)	-.13 (.17)
Target Agreeableness	.18 (.17)	.18 (.17)	.16 (.17)
Target attractiveness	-.19 [†] (.10)	-.18 [†] (.10)	-.16 (.10)
Involvement	-.03 (.16)	-.02 (.17)	-.03 (.17)
Extraversion	.25* (.13)	-.07 (.10)	.05 (.10)
Neuroticism	-.13 (.08)	-.26 [†] (.13)	-.14 (.08)
Openness	-.05 (.09)	-.05 (.09)	.11 (.12)
Focal Trait \times Involvement	-.33* (.16)	.17 (.16)	-.26 [†] (.15)

Note. Each column represents a separate analysis, one for each focal trait. Group and dyad variances were not significant. In all analyses, source trait and involvement were centered before calculating their product (Aiken & West, 1991).

[†] $p < .10$. * $p \leq .05$. ** $p < .01$.

Table 9 Study 2: Simple Slopes Analysis in Predictions of Target Attitude Change

Predictor	Involvement	
	Low	High
Extraversion	.25*	-.08 (ns)
Neuroticism	-.26 [†]	-.09 (ns)
Openness to Experience	.11 (ns)	-.15 (ns)

Note. [†] $p = .06$. * $p \leq .05$.

In other words, when the debating individuals are not particularly involved in the topic being discussed, those who are open to experiences are perceived as more persuasive than their less open counterparts, and those who are extraverted are better able to get targets to change their attitudes than introverts. As for neuroticism, those who are emotionally stable (i.e., less neurotic) are overall more effective in changing others' attitudes, although the evidence alludes to the possibility that their persuasiveness is particularly pronounced when discussants are not involved in the topic being discussed. We further discuss these findings in the General Discussion.

Among the control variables, we found significant effects for source attractiveness and target Extraversion on target attitude change. The former corresponds with earlier work on the impact of attractiveness on persuasion (e.g., Chaiken, 1979). The latter means that being extraverted is associated with less attitude change. This might have to do with the dominance aspect of Extraversion, which, in the context of a request to reach consensus, predisposes extraverted individuals not to yield to their counterpart's influence attempts.

GENERAL DISCUSSION

In the present research we address an aspect of the persuasion process that has previously received only little attention. Specifically, we sought to characterize the persuasive individual and to consider the conditions under which source personality traits are particularly relevant for persuasion. Looking at a broad spectrum of people's personality, we demonstrate that three of the Big Five traits (Digman, 1990) correspond with aspects of persuasiveness. Specifically, we found that source Neuroticism and Openness to Experience were related to how persuasive the source was perceived as being (Preliminary Study and Study 1) and that the effects of these traits were moderated by discussants' level of involvement (Study 2). In addition, when predicting target attitude change, Neuroticism had an overall effect (Studies 1 and 2), and Extraversion had an effect only when involvement was low (Study 2).

Overall, we established effects for personality on both aspects of persuasiveness that we measured. There were nevertheless some meaningful differences across the patterns of findings for these two aspects. Effects on perceived persuasiveness appear to be generally more consistent with our conceptualizations, given that five of our six hypotheses were supported for perceived persuasiveness, whereas for target attitude change only the main effect for Neuroticism (Studies 1 and 2) and the moderation effect for Extraversion (Study 2) were supported.

Empirically, this could result from the fact that the target attitude change variable was a difference score (between the pre- and postdebate attitudes), which is systematically related to measurement error (e.g., Cronbach & Furby, 1970), making it harder to obtain significant relationships with other variables. This suggests that our effects for target attitude change may be conservative assessments of the actual relationships between personality and the actual attitude change participants experienced. In some cases, statistical procedures, such as polynomial regressions, can be used to help overcome some of the limitations of using difference scores (e.g., Edwards & Parry, 1993). These procedures, however, are inappropriate for modeling dyadic relationships such as those tested in the present study, in which the focus is on how dyad member characteristics predict counterpart outcomes and in which both dyad members provide scores on both predictor and outcome variables (Krasikova & LeBreton, 2012).

The use of the two persuasiveness indexes was valuable for providing both an objective measure of attitude change as well as a subjective one that, alongside its own limitations, overcomes some of the limitations of the objective measure. Furthermore, each measure provides information on a different aspect of persuasiveness. Although the primary goal of persuasive attempts is to change targets' attitudes, there is nevertheless value in merely being perceived as persuasive. In many contexts, important decisions are made on the basis of how persuasive an individual is perceived as being, even without information about how effective the individual actually is in

getting others to change their attitudes. Such decisions are frequently made when selecting people for jobs (e.g., sales), or even more saliently for political positions, where being perceived as persuasive is a highly valued asset. It is therefore most meaningful to understand what makes a person seem persuasive, independent of what enables that person to change others' attitudes.

The fact that the two persuasiveness measures are only weakly related ($r = .24$ in Study 1; $r = .29$ in Study 2), however, requires some further consideration. On the one hand, this could result from the same statistical features discussed above regarding the difficulty of obtaining significant effects with difference scores. On the other hand, it may represent substantive differences in the aspects of persuasiveness that are measured, thus restricting our ability to generalize findings from one form of persuasiveness to the other. Addressing this point would require studies designed explicitly to explore the conceptual distinctions and overlap between these two forms of persuasiveness.

The main difference in findings across the two persuasiveness indexes we used is that while Openness to Experience yielded effects on perceived persuasiveness, Extraversion had more of an effect on target attitude change. This suggests that being curious, creative, and open-minded offers individuals the image of a persuasive individual but does not actually get others to change their minds, whereas being assertive and energetic may not lend an individual the image of a good persuader but is effective in "getting results." Such a conclusion, however, may only be relevant for the particular persuasion context we studied in the present research, involving in-person persuasion attempts with the explicit goal of getting others to change their minds. Furthermore, contrary to our measure of perceived persuasiveness, in the target attitude change variable, the instruction that participants received was to reach consensus. Although this instruction has been used in a number of persuasion studies (e.g., Kruglanski et al., 1993) as a means of increasing the chances that persuasion will occur, it also confounds source persuasiveness with targets' willingness to yield to others' influence attempts.

In such a persuasion setting, individuals who are high in Openness, and accordingly more willing to consider alternative opinions and attitudes, may be more willing to change their attitudes, despite exhibiting persuasive arguments of their own. Contrarily, those who are high in Extraversion may achieve target attitude change through their sheer assertiveness and dominance, which give them an edge in such social persuasion settings that require reaching consensus. The persuasion setting is therefore a potential boundary condition for our findings. It is certainly possible that other patterns of relationships between personality and persuasiveness may emerge when persuasion is attempted via other means, such as in speeches, newspaper editorials, or advertisements.⁷

Most consistent across the two measures of persuasiveness were the effects of Neuroticism. In Study 1, it was the only trait to yield a main effect on target attitude change. We proposed

that the nonfindings for the other two traits on target attitude change might have resulted from an intermediate (vis-à-vis low) level of involvement in Study 1. Assuming this was indeed the case, this suggests that Neuroticism maintains its relevance for persuasion even when levels of involvement are not especially low. Such an inference corresponds with our findings in Study 2, in which a main effect, and no interaction with involvement, were obtained for Neuroticism on target attitude change. Note, however, that this pattern emerged only when predicting target attitude change, whereas for perceived persuasiveness, Neuroticism yielded patterns equivalent to those of the other traits. This overall pattern for Neuroticism suggests that possessing confidence and poise and being unemotional may be particularly important for getting others to change their attitudes, even when the situation elicits higher levels of involvement.

Aside from their contribution to our understanding of source persuasiveness, our findings also extend the persuasion literature by demonstrating the relevance of the interactionist perspective (e.g., Mischel, 1977; Mischel & Shoda, 1999) for explaining persuasion. As has been discussed in other contexts, our findings demonstrate that the weight of personality in explaining outcomes varies from situation to situation (Kenrick & Funder, 1988; Stewart & Barrick, 2004). As meaningful as individuals' personality may be in enabling them to persuade others, when the situation induces high levels of involvement, it takes more than one's personality to get others to change their minds. As has been established in previous research, when involvement is high, factors more directly related to the quality of one's arguments should constitute the means to changing others' minds (e.g., Chaiken & Maheswaran, 1994; Chaiken & Trope, 1999; Petty & Cacioppo, 1984, 1986b). Such factors within the source may be one's cognitive ability or experience.

Related to this point is the question about whose involvement is being considered. Our findings in Study 2 suggest that under conditions intended to create high involvement of *both target and source*, source personality has little influence on persuasiveness. As noted above, one explanation for this finding is that source personality has more to do with the style of one's presentation than the quality of one's arguments, and accordingly, high *target* involvement, which involves greater scrutiny of the quality of the source's arguments, yields weaker personality-persuasiveness relationships.

Another possibility, however, is that high *source* involvement constitutes a strong situation and leads individuals to behave (e.g., try to persuade) in ways that may be less consistent with their personality (e.g., Barry & Friedman, 1998). Corresponding with this latter view, several studies established weaker personality-behavior relationships under *strong* situations (e.g., Barrick & Mount, 1993; Sverdluk & Oreg, 2009). Given that our design involves actual discussions between people, in which each participant was both a source and a target, both the source and the target experienced the same conditions. A limitation of our study, therefore, is that we cannot disentangle the effect of source involvement from that

of the target. To address this point, future research should consider other designs in which sources are distinct from targets and could be placed under different conditions.

Another limitation in our study is that although our manipulation of involvement was statistically significant, its effect was only modest. This hinders us from making strong and conclusive statements about the differences we found between the two involvement conditions. It does suggest, however, that the significant differences we obtained may be conservative and that real-world differences in personality–persuasiveness effects across the two involvement conditions may be more pronounced. This, however, should be empirically tested via additional research in which a stronger experimental manipulation of involvement should be sought.

Another noteworthy consequence of our research design has to do with the trade-off between realism and control over extraneous variables. By studying persuasion through actual persuasion attempts between individuals, our study benefits from high external validity. Alongside this advantage, however, the field-like nature of our study comes at the cost of not precluding possible intervening variables that may have obfuscated the phenomenon we observed. Ideally, to focus on the effect of source personality, individuals with different personalities would be tested for their persuasiveness in identical contexts. This would require, however, that the persuasion task administered be simulated and artificial, rather than real. Nevertheless, given the scant persuasion research available on source personality, researchers may consider such a route to complement our findings with our current design.

Future research should also be devoted to examining the mechanisms that mediate the relationship between personality and persuasion. Our findings demonstrate that when conditions induce low involvement, certain traits are associated with persuasiveness, and that Neuroticism is associated with target attitude change across levels of involvement. We are yet to determine, however, what produces these effects. Although we have stated our assumptions about what it is that extraverted, emotionally stable, and open individuals do that makes them persuasive, this was not assessed in the present study. A next step in this line of research would be to consider not only source personality but also source behavior, as could be assessed via direct observations and documentations of the persuasion attempts.

Notes

1. Separate analyses of the data for participants who were asked to rate the persuasive individual first and for those who were asked to rate the nonpersuasive individual first yielded the same pattern of relationships. We therefore merged data for the two sets of participants for the analyses we report here.
2. We compared t values by transforming them into r values and used Fisher's r -to- z transformation to assess the difference between effect sizes.

3. In both Studies 1 and 2, in each debate, each participant was both a source and a target. As we elaborate in the Results sections, we used dyadic data analyses (Kenny, Kashy, & Cook, 2006) to disentangle source and target effects.

4. The exception from a pure round-robin design was that in some of our groups, a participant may have interacted with only two of the three remaining group members (in those cases where not all three partners held opposing views to those of the participant). Such a design can nevertheless be analyzed using the same procedure as that used for a regular round-robin design (D. Kenny, personal communication, December 3, 2007).

5. Dropping these controls did not alter the significance (or nonsignificance) of the effects tested. We also reran the analysis, controlling for whether participants in a dyad were of the same sex or different sexes, and for the distance between participants' predebate attitudes. The results were virtually the same and did not alter the effects' significance.

6. Neuroticism's main effect remained (marginally) significant when the interaction term was removed (estimate = -0.15 , $p = .09$).

7. We thank an anonymous reviewer for raising this possibility.

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APPENDIX A

Topics Used for Debates in Study 1

1. Toward the end of the semester, in a theory course you have been taking, the professor lets students choose for their final assignment whether to write a 10-page paper or to take an exam. If you were one of these students, what would you choose?
2. What is your opinion about increasing the speed limit on highways?
3. What is your opinion on the prohibition of marijuana for personal use?
4. What cars do you think are better, of Japanese or European makers?
5. What is your opinion about the mandatory neutering of cats by owners?

APPENDIX B

Topics Used for Debates in Study 2

High-Involvement Condition

1. A recent initiative has been presented, and if approved, will be applied in the upcoming school year. The new initiative proposes to change next year's university tuition fees from the uniform rate that exists today to a differential rate (sliding scale) on the basis of one's financial standing. **The recommendations of students participating in this study will be passed on to the State's inter-university tuition committee.**
2. If your relationship partner cheats on you, should you give him/her a second chance?

Low-Involvement Condition

1. A recent initiative has been presented, to change university tuition fees from the uniform rate that exists today to a differential rate (sliding scale) on the basis of one's economic standing. If approved, the initiative is to be applied, beginning in the 2015 school year.
2. If "David" cheats on "Rachel," or "Rachel" cheats on "David" (two fictional characters), should the party cheated upon give the cheating party a second chance?