

**Running head: SIMILAR OR DIFFERENT ADVISORS**

**THE IMPACT OF INFORMATION FROM SIMILAR OR DIFFERENT ADVISORS  
ON JUDGMENT**

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## **ABSTRACT**

In making judgments, we often rely on advice from others. These others can be similar to or different from ourselves along a number of dimensions. The judgments can be about others' actions or our own future actions. In this paper, we examine the differential impacts of similarity between the source of the advice and the person making the judgment in two settings: judging others' behavior and judging one's own actions. We find that similarity interacts with the target of the judgment. In particular, information received from a different advisor is more heavily weighed than from a similar advisor in judging others' actions, but information from a similar advisor is more heavily weighed than from a different advisor in judging one's own. We provide two potential explanations for this interaction, difficulty of the judgment and informativeness of the advice, and design a second experiment to explore these mechanisms. Using mediation analyses, we find evidence for both.

*Keywords:* Advice taking; Similarity; Judgment; Difficulty; Informativeness

## INTRODUCTION

When making a judgment, we often look to others for advice (e.g., Bandura & Jourden, 1989; Dawes, 1988; Sims & Manz, 1981-1982). This is true especially when the judgment is one with no clearly correct answer (Brockner et al., 1984). Once the advice is gathered, we weigh others' opinion with our own in order to come to our final judgment. For example, in health care settings, patients or their families consult experts' opinions for specific treatment recommendations and for information on others' behavior when facing similar medical decisions (Zola, 1973). And accountants seek the advice of their colleagues, superiors or subordinates when performing audit tasks and seek information on peers' behavior when dealing with similar requests from clients (Emby & Gibbins, 1988; Kennedy, Kleinmuntz, & Peecher, 1997).

Previous studies have also shown that judgments are influenced by others' advice (Sniezek & Buckley, 1995; Sniezek & Van Swol, 2001; Yaniv, 2003) but perhaps less than they should be. Although the appropriate use of advice leads to better judgments, people tend to weigh their own opinions too heavily and discount the advice they receive from others (e.g., Gardner & Berry, 1995; Harvey & Fischer, 1997; Yaniv & Kleinberger, 2000; Yaniv, 2004a). Several variables have been found to moderate this effect of advice discounting. For instance, people tend to listen to others' opinions significantly more when advice is costly than when it is free (Gino, 2005; Patt, Bowles & Cash, 2006), when the task they are facing is difficult compared to easy (Gino & Moore, 2006) or when advisors are recognized experts (Goldsmith & Fitch, 1997; Harvey & Fischer, 1997; Sniezek, Schrah, & Dalal, 2004). Bonaccio & Dalal (2006) provide an extensive and thorough review on the role of advice in judgment and decision making.

In this paper, we extend this stream of research by reporting on two studies that investigated the impact of information from *similar* or *different* advisors on judgment. The first study is a national phone survey experiment while the second was conducted in a laboratory setting. We were interested in understanding when advice would most heavily influence the judgments made by our participants. We use two types of advisors, those who are similar to the person making the judgment and those who are different. In addition, we use two types of judgments: involving either others' actions or one's own future or hypothetical actions. We thus examine the differential impacts of similarity between the source of the advice and the person making the judgment in two settings: making judgments about others' behavior and making judgments about one's own actions.

Our results indicate that advice is weighed more heavily when individuals are judging the actions of others than when they are judging their own future/hypothetical actions. More interestingly, we find that similarity interacts with the type of judgment being made. In particular, information received from a different advisor is more heavily weighed than from a similar advisor in judgments about others' actions, but information from a similar advisor is more heavily weighed in judgments about one's own. We provide two potential explanations for this interaction: *difficulty* of the judgment being made and *informativeness* of the advice received from others. We design and present a second experiment to further explore these mechanisms, and, through mediation analyses, we find evidence in favor of both.

We begin with a description of the dimensions of our experimental design, reviewing previous research to develop our hypotheses. Next we present our experimental results from the first study and suggest two organizing explanations for our interaction effect. Finally, we test

these explanations in a second experiment. We conclude with theoretical and practical implications of this research.

### **BACKGROUND AND HYPOTHESES**

*Similarity.* Our first dimension in the two studies is the similarity between the recipient of the advice and the advisor. Although previous research has speculated about its importance, this question has not previously been examined. For example, Hovland, Janis & Kelley (1953) stated:

“An individual is likely to feel that persons with status, values, interests, and needs similar to his own see things as he does and judge them from the same point of view. Because of this, their assertions about matters of which the individual is ignorant about but where he feels the viewpoint makes a difference (...) will tend to carry special credibility.” (p. 22)

Prior research has shown that similarity positively affects liking, for example, by increasing attraction (Byrne, 1971).<sup>1</sup> Related studies have found that liking is a positive force toward compliance (Heider, 1958; Cialdini, 2001), which is related to, but not identical with, incorporating the liked person’s advice into one’s own judgments. This literature is thus suggestive (but not conclusive) of a positive relationship between similarity and the impact of advice on the target’s judgment.

The literature on social comparisons also suggests but does not demonstrate this positive relationship. When evaluating our personal opinions about verifiable facts (i.e., our “beliefs” as suggested by Suls, Martin & Wheeler, 2002), we compare our beliefs with those of others who share similar attributes to ourselves, such as background, gender, religion, politics or general world views (Suls & Wheeler, 2000). In fact, although we often base our beliefs on those of

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<sup>1</sup>As Silvia (2005) noted, “People interpret the actions of liked others in ways that maintain a positive image of the other person, such as minimizing differences of opinion (Kelley & Woodruff, 1956) and making other-enhancing attributions for the liked person’s actions (Regan, Strauss, & Fazio, 1974; Sedikides, Campbell, Reeder, & Elliot, 1998; Silvia & Duval, 2001)” (p. 282).

experts, our trust in expert opinion can be overridden when an expert does not have these attributes in common with us (Suls, Martin & Wheeler, 2000).

Thus, we believe that participants will assign a higher weight to advice provided by similar others than to advice from different others (hypothesis 1: Main effect of similarity).

*Judgment type.* The second dimension of our studies compares judgments made about others' actions and one's own future/hypothetical actions. For example, "Among people who donate money to charities and nonprofit organizations, what do you think is the average contribution per month?" is a judgment about others' action. In contrast, "If you did donate money to charities and nonprofit organizations, how much would you contribute per month?" is a judgment about one's own hypothetical action.

In making judgments involving the self, people may not use the same strategies they use when judging others. Self-information should be readily available, given that people are the resident "experts" on themselves. As prior research suggests, people have better information about themselves than they do about others (Pronin, Lin & Ross, 2002; Ross & Sicoly, 1979; Nisbett and Borgida, 1975) and self-knowledge is more mentally accessible than knowledge about others (Markus, 1977); this information might overwhelm advice from others.

Thus, people should know where they stand without having to rely on advice from others to make judgments about their own future/hypothetical actions. As a result, they might be more willing to listen to advice when judging others' action than when judging their own. Thus, we hypothesize, when asked questions about their own behavior, people will weigh advice from others less than when asked questions about others' behavior (hypothesis 2: Main effect of judgment type).

*Interaction of similarity and judgment type.* Some previous work also suggests we may find an interaction effect between these two dimensions. Social comparison theory suggests that, when evaluating our beliefs, we compare them to those of others (Festinger, 1954). Prior research has shown that the effect of social comparison is moderated by similarity (Mussweiler, 2001; 2003). When people begin with the assumption that they are similar to the comparison other (in our case, the advisor), comparison produces assimilation in evaluation. When people begin with the assumption that they are different from the comparison other (the advisor), comparison produces contrast effects. This similarity can be fairly arbitrary; even apparently irrelevant factors, such as people's belief that they share the same birthday with the comparison other (Brown, Novick & Kelley, 1992), affect whether we see assimilation or contrast (Mussweiler, 2003). Thus, if the judgment is about the self, then prior research suggests that information from similar advisors will lead to assimilation and information from different advisors will lead to contrast.

When people make judgments about other people, however, they may rely on different information for assimilation/contrast. Depending on how similar people think the advisors are to the other whose behavior they are judging, we may see different assimilation and contrast patterns. In particular, when the judgments participants face is about the behavior of another person (*different* from oneself), information from a *different* advisor could lead to assimilation, while information from an advisor *similar* to oneself could lead to contrast in judging the behavior of a *different* other.

This argument relies on the idea that when people make judgments about themselves, their future/hypothetical self is more similar to their actual self (and thus more similar to a similar advisor), than to a different advisor. In contrast, when people make judgments about

other people, different than themselves, these targets are more similar to a different advisor than to an advisor similar to themselves.

Thus, we hypothesize, when asked questions about their own behavior, people will weigh information from similar advisors more than dissimilar advisors. However, when asked questions about others' behavior, people will weigh information from dissimilar advisors more than similar advisors (hypothesis 3: Interaction effect between similarity and judgment type).

### **EXPERIMENT 1**

This first study is concerned with how the similarity between a participant (in the role of advice-recipient and judgment-maker) and an advisor impacts the judgments about one's own behavior and others' behavior. We use a 2 (similarity: similar vs. different advisors) x 2 (judgment type: judgments of one's own behavior vs. judgments of others' behavior) design. The first factor is between-subjects, so each participant receives advice from either a similar or a different advisor. The second factor is within-subjects, so each participant makes judgments both about others' behavior and about their own future/hypothetical behavior. We use this design to test our three hypotheses above.

#### **Method**

*Design.* We conducted a national phone survey experiment. Participants were randomly assigned to one of two experimental conditions, with 74 participants in the similar advisor condition (54%) and 64 participants in the different advisor condition (46%). All participants made judgments both about their own future/hypothetical behavior as well as about the behavior of others (a within-subject factor).



Similarity was created by matching the participant's profile on the dimension of gender, geographical region, education, political affiliation, and age with that of the hypothetical advisor (see Appendix A for details on the wording used to manipulate similarity).

*Experimental Implementation.* The experiment was divided into two phases, each including two blocks of questions (four judgments of others' behavior and four judgments of one's own). In Phase I, participants were asked to form judgments on their own. In Phase II, another party was described as an expert, either similar or different from the participant, and they advised the participant on the appropriate judgment. Participants then formed a second judgment for the same 8 questions (Appendix B lists all the questions used in the survey). Our dependent variable of interest will be derived from the differences between the first and second judgment formed, described in the *Dependent Variable* subsection below.

More specifically, at the beginning of Phase II, participants were told "I will now ask you to answer the same series of questions. Yet, this time you will be given an answer from a randomly selected expert. Her name is Mary [His name is Tom]." Then, when asked for a judgment, participants were told what the advisor suggested. For example, for question 1 the interviewer said: "Among people who donate money to NPR or a local public radio station, what do you think is the average contribution per month? Mary [Tom] states the monthly contribution is 10 dollars."

The similarity manipulation influences the description of the other party in Phase II, based on the profile of the participant. Participants randomly assigned to the similar condition were given a description of Mary [Tom] with features similar to their own profile, including gender, geographical region, education, political affiliation, and age. Participants randomly assigned to the different condition were given a description of the advisor with features different

than their own on the same dimensions (see Appendix A for more detail). The values used as advice in Phase II were randomly selected by the experimenter among answers of 50 people who had previously completed Phase I. They were held constant across participants and across the two conditions (similar vs. different advisor).

*Participants.* We recruited participants through TESS.<sup>2</sup> Telephone numbers were randomly generated from nationwide numbers using the Genesys list-assisted method, which includes unpublished numbers and new listings. A random sample of numbers, were matched to a database of business and non-working numbers; numbers which were either business or non-working were eliminated from the sample.

*Incentives and Participation.* At each phone number, we randomly selected a person from household members age 18 or older. After the sample was drawn and non-working and business numbers were eliminated, the remaining sample was sent to a telephone list company for reverse-address matching. When an address was available, the household was mailed a pre-survey letter containing a \$5 bill. Of those letters mailed, 6% were returned as undeliverable. The letter described the upcoming phone call and explained that upon completion of the interview, the participant would receive a check for \$20. Regardless of whether a household received a pre-survey letter, each participant was informed during the telephone interview that they would receive a \$20 check when the interview was completed. Checks were mailed within three to four weeks of the completed interview.<sup>3</sup> A total of 138 individuals participated. The participation rate was 32.4%.

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<sup>2</sup> The Time-sharing Experiments for the Social Sciences (TESS) is funded by the National Science Foundation. The Indiana University Center for Survey Research conducted the telephone survey part of the project. The purpose of the TESS project is to provide social science researchers interested in short, experimental topics, a cost-effective opportunity to gather data on a national level.

<sup>3</sup> All interviewers received at least 15 hours of training in interviewing techniques before production interviewing. Interviewers received two hours of classroom training specific to each production group. In addition, each interviewer spent an entire 3-hour shift conducting practice interviews. Interviewers were instructed to read

*Participants' demographics.* Table 1 reports information about participants' demographics. Participants reported their gender, marital status, level of education, race, employment, age, together with their state of origin, political orientation and religious preferences. The average age of respondents was 52 ( $SD = 18$ ), the minimum age was 18 (by selection) and the maximum was 86.

To assess whether respondents to our survey are representative of the US population, the demographic composition of the survey participants was compared with national parameters established in the U.S. Census Bureau.<sup>4</sup> Our analyses suggest that our sample is representative of the overall US population. Indeed, the demographic composition of the participants in our sample was close to the U.S. Census parameters on the various indicators measured.

*Dependent measure.* To capture the impact of advice on responders' judgments we used the "weight of advice" (hereafter, WOA). Remember that each participant made two judgments of the same question, one by themselves in Phase I and one after receiving advice in Phase II.

The WOA is a measure of how much the advice is incorporated into the new judgment. In our

setting:  $WOA = \frac{|\text{Phase II judgment} - \text{Phase I judgment}|}{|\text{Advice} - \text{Phase I judgment}|}$ . This measure has been used in many

previous studies (see, for instance, Hell, Gigerenzer, Gauggel, Mall, & Muller, 1988; Harvey & Fisher, 1997; Yaniv, 2004b; Gino, 2005; and Gino & Moore, 2006).

The weight of advice measure reflects how much a participant reacts to the advice received in forming her judgment. If the Phase II judgment is the same as the Phase I judgment, the advice is ignored and the  $WOA = 0$ . If the Phase II judgment is the same as the advice, then

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questions and response categories at a two-words-per-second pace. Interviewers were also instructed to use neutral probes and feedback phrases. Audio and visual monitoring was regularly conducted by the telephone survey supervisors using the Center for Survey Research (CSR) facilities, which do not allow the interviewers to know they are being monitored. Monitoring was conducted randomly, with each interviewer being monitored at least once during each 3-hour shift.

<sup>4</sup> We used the U.S. Census Bureau published in March 2004, <http://www.census.gov/ipc/www/usinterimproj/>

the initial judgment is ignored and the WOA= 1. Of course, values in the middle reflect a weighting of initial (Phase I) judgment and advice.

This measure is subject to a few limitations (for further details, see Bonaccio & Dalal, 2006). First, it yields undefined values when the advice is equal to the initial (Phase I) judgment. In our study, this was rare (80 out of 1104, about 7% of the cases); following previous research these observations were dropped (Yaniv, 2004a; Yaniv, 2004b; Gino & Moore, 2006). Second, the WOA does not distinguish situations in which the Phase II judgment moves *towards* the advice from situations in which it moves *away from* the advice, although the latter occurs seldom (9 out of 1104, about 1% of the cases). Following previous research, we included these observations in the analyses we present below; however, the nature of the results does not change if we drop them. Finally, the WOA has a lower bound of zero but does not have an upper bound. If the Phase II judgment overshoots the advice, the WOA is greater than one. This rarely happens (67 out of 1104, about 6% of the cases), and in this study, following previous research, we truncate the WOA value to 1 (Harvey & Fischer, 1997; Gino & Moore, 2006).

In the study, there were some missing data points for the WOA measure due to “Don’t Know” and “Refused to answer” responses (10 out of 1104, about 1% of the cases). “Don’t Know” and “Refused to answer” were not provided to respondents as a response option but were used whenever a participant volunteered “don’t know” or refused to answer a question after an interviewer probed for a substantive response. Whenever a participant answered either “Don’t Know” or “Refused to answer” their response for a certain question was not recorded in the dataset, thus resulting in a missing data point for WOA. Finally, we did not compute a WOA for people who answered YES to the questions asking about one’s own behavior (215 out of 1104, about 19% of the cases), for instance, how much they contributed to NPR last month.

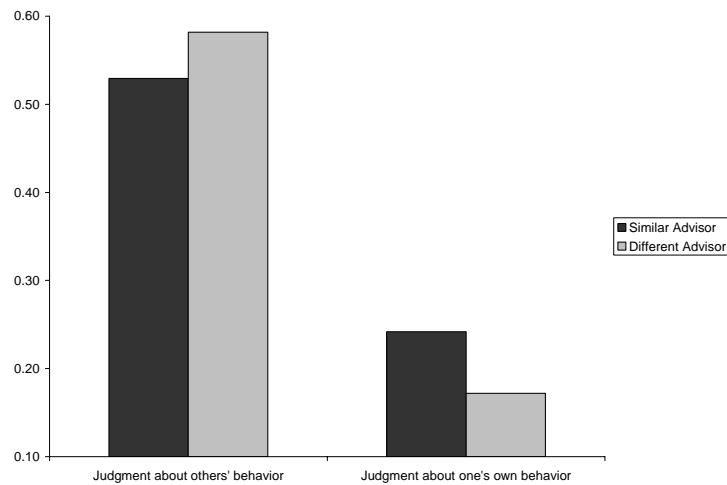
## Results

In total, there were 839 valid data points for the WOA measure. These values were used in the analyses reported below. First, we compute the mean for each participant's WOA values in each condition, and then we compare the distribution of those values across conditions.

*Weight of advice.* To assess the impact of the experimental manipulations, we compare participants' WOA values across conditions. In particular, the values for WOA were subjected to an analysis of variance in which similarity (similar vs. different advice source) served as a between-subjects factor, and judgment type (own or others' behavior) served as within-subject factor.

Results reveal a significant main effect of judgment type,  $F(1,130) = 128.55, p < .0001, \eta^2 = .50$ , supporting hypothesis 2: Advice is weighed more heavily when the participant is judging the actions of others ( $M = 0.56; SD = 0.28$ ) than when they are judging their own future/hypothetical actions ( $M = 0.21; SD = 0.26$ ). However, in contrast to what was predicted in hypothesis 1, we find no significant main effect for similarity ( $p = .80$ ): Information from similar advisors is weighed the same as information from different advisors.

Finally, the results reveal a significant interaction effect between judgment type and similarity,  $F(1,130) = 3.97, p < .05, \eta^2 = .03$ , thus supporting hypothesis 3. In particular, information received from a different advisor is more impactful ( $M = 0.58; SD = 0.29$ ) than from a similar advisor in judging others' behavior ( $M = 0.53; SD = 0.26$ ), but information from a similar advisor is more impactful ( $M = 0.24; SD = 0.27$ ) than from a different advisor in judging one's own behavior ( $M = 0.18; SD = 0.25$ ). Figure 1 presents the mean values of WOA graphically.

**Figure 1. Mean values of WOA pooled by condition.**

*Explaining the interaction effect.* We present two potential explanations for the interaction effect between judgment type and similarity, which will be developed and tested in Study 2. The first, we call *difficulty*, is that people perceive questions about others' behavior as more difficult than questions about the self, and they rely more heavily on different advisors for difficult questions. The second, we call *informativeness*, is that similar advisors are perceived as more accurate than different advisors in judging one's own actions (and thus the advice they provide is perceived as more informative), but that different advisors are more accurate than similar advisors in judging others' actions.

## Discussion

The results of Study 1 are consistent with two of our three hypotheses. First, we do not find the hypothesized main effect of similarity of advisor on judgments. Second, we find that people use advice more heavily when making judgments about others' behavior than when making judgments about their own future or hypothetical behavior.

Third, we find the predicted interaction effect between similarity and judgment type: information received from a different advisor is more effective than from a similar advisor in

making judgments about others' behavior, but information from a similar advisor is more effective than from a different advisor in making judgments about one's own behavior. We suspect that the lack of main effect of similarity is caused by the nature of this interaction effect.

Study 2 presents two possible mechanisms to mediate this interaction effect: the first mechanism concerns the *difficulty* of the judgment, while the second refers to how *informative* the received advice is.

## EXPERIMENT 2

Our first objective in experiment 2 is to replicate the results from our first study on a student population with a different set of judgments. Our second objective is to measure possible mediators for the interaction effect between judgment type and similarity. We explain the hypotheses for two sets of mediation analyses below, along with the procedure we used to design the new set of judgments. The first mediator, difficulty, is about the judgment, while the second mediator, informativeness, is about the advice received.

*Difficulty.* A first possible explanation for the interaction effect between judgment type and similarity has to do with *difficulty* of the judgment participants faced. Prior research has found that people rate themselves above average in domains in which the average person feels capable, such as driving a car or operating a computer mouse and below average in more challenging domains, such as juggling and computer programming (Kruger, 1999), a tendency labeled 'solo-comparison effect' (Moore & Kim, 2003). Related work has explored the implications of the solo-comparison effect for advice-taking (Gino & Moore, 2006).

Evidence suggests that while people believe themselves to be better than others on simple tasks ('better than average' or BTA effect), they believe that they are worse than others at difficult tasks ('worse than average' or WTA effect) (Kruger, 1999; Moore & Kim, 2003;

Windschitl, Kruger, & Simms, 2003).<sup>5</sup> Thus, Gino & Moore argue, on simple tasks, where people perform better than expected and believe that they are better than others, they have little reason to pay attention to others' advice. But on difficult tasks where people perform worse than expected and believe that they are worse than others, they are more likely to believe that others might have something useful to tell them. Given that people have better information about themselves than they do about others (Pronin, Lin & Ross, 2002; Ross & Sicoly, 1979), they might perceive questions about the self as easy and questions about others as difficult. These findings suggest that if judgments about others' behavior are perceived as more difficult than judgments about one's own behavior we should expect a main effect of judgment type on WOA, as we found in Study 1.

Related research has shown that perceived similarity between the average participant and the self moderates BTA and WTA effects (Moore & Small, 2006). Thus, on difficult tasks, since people think of themselves as worse than others, advice from similar advisors is likely to be of less value than advice from different advisors. In other words, on difficult tasks, people think of themselves and of similar advisors as worse than different advisors, and thus will be more willing to take advice coming from different advisors. Instead, on easy tasks, people think of themselves as better than others. Thus advice from advisors similar to themselves will be more heavily weighed than advice from advisors different than themselves. On easy tasks, people think of themselves and of similar advisors as better than different advisors, and thus will be more willing to take advice coming from similar than different advisors. This explanation is consistent with our observed interaction effect.

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<sup>5</sup> Several cognitive mechanisms have been proposed to explain BTA and WTA effects (for an extensive review, see Moore, *in press*).



To summarize, according to the difficulty explanation, when people perceive the judgments to be difficult, as in judgments about others, they perceive themselves and similar advisors as below average. Thus, they weigh different advisors' advice more than they weigh similar advisors' advice. However, when people perceive the judgments to be easy, as in judgments about the self, they perceive themselves and similar advisors as above average. Thus, they weigh similar advisors' advice more than they weigh different advisor's advice. Difficulty of the judgment should thus mediate the interaction effect of judgment type and similarity.

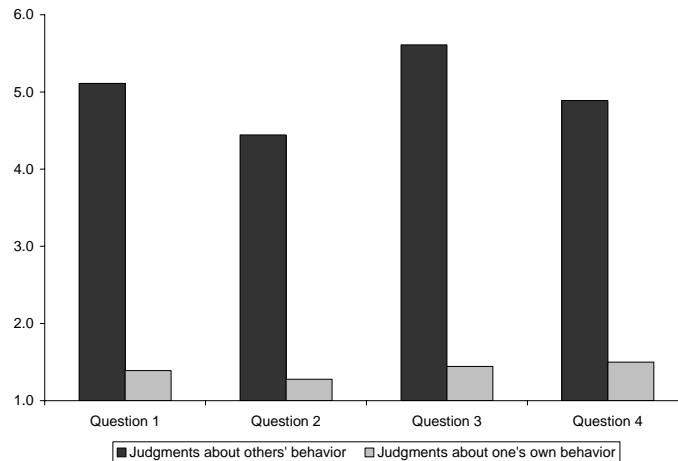
*Informativeness.* A second possible explanation has to do with *informativeness* of the advice received. According to this explanation, when judging one's own future/hypothetical behavior, the advice of those similar to you is more informative, as it represents a draw from a population more likely to act as you would act (or more accurate in forecasting your own actions). In contrast, when judging another's behavior, advice from someone similar to you is likely to be duplicative of one's own opinion, and thus will not carry much independent information. Thus for judgments about others, people weigh advice from those who are different than them more than advice from those who are similar and vice versa

*Selecting judgments for Study 2.* In our first experiment, we were not concerned about the difficulty of the judgments being required. Ex-post we asked a new set of participants to rate the difficulty of the questions we used in Study 1 on a scale from 1-very easy to 7-very difficult. These participants were recruited on university campuses and were not part of the sample that completed Study 1. There were 18 participants (33% female and 67% male). Figure 2 shows the difficulty rating per question (mean across participants).

While in the first experiment we only had easy judgments about the self and difficult judgments about others, in the second experiment, we add difficult judgments about one's own

behavior and easy judgments about others' behavior. This design provides us a more diverse set of questions and a broader range of difficulty ratings for each judgment type. In Study 2 we collect measures on both perceived difficulty of each judgment and perceived informativeness of the advice, and conduct mediation analyses for both these mechanisms.

**Figure 2. Difficulty ratings (1-7 scale).**



## Method

*Design.* The experiment employs a 2 (judgment type: judgments of one's own vs. judgments of others' behavior) x 2 (similarity: similar vs. different advisors) mixed design in which judgment type is a within-subject factor and similarity is a between-subject factor.

*Procedure.* The experiment consisted of two phases. In Phase I, participants were asked a few demographic questions and then were asked to make 16 judgments (see Appendix C). After each judgment they were asked to rate the difficulty of the judgment on a 1-7 scale (1=very easy; 7=very difficult). Judgments varied in terms of their level of difficulty, so that we had both easy and difficult judgments about the self, as well as both easy and difficult judgments about others. These new judgments had been extensively pre-tested to ensure we had sufficient variance in difficulty ratings. In the experiment we randomized the order of judgment type.

At the beginning of Phase II, people were randomly assigned to one of two conditions: advice from a similar advisor or from a different advisor (the manipulation used for similarity was the same as in Study 1; see Appendix A for details). After hearing the description of their advisor, people were asked to rate on a 1-7 scale “how much do you think the advisor is a person like you?” with endpoints not like me at all (1) and very similar to me (7) as a manipulation check. Then they faced the same 16 questions they had answered in Phase I, along with advice. The values used as advice in Phase II were randomly selected among answers of 30 students who had previously completed Phase I for course credit. Instead of reporting on the difficulty of the judgment, after each Phase II judgment participants were asked, “how informative was the additional information you received from Mary [Tom]?” They replied on a similar 1-7 scale.

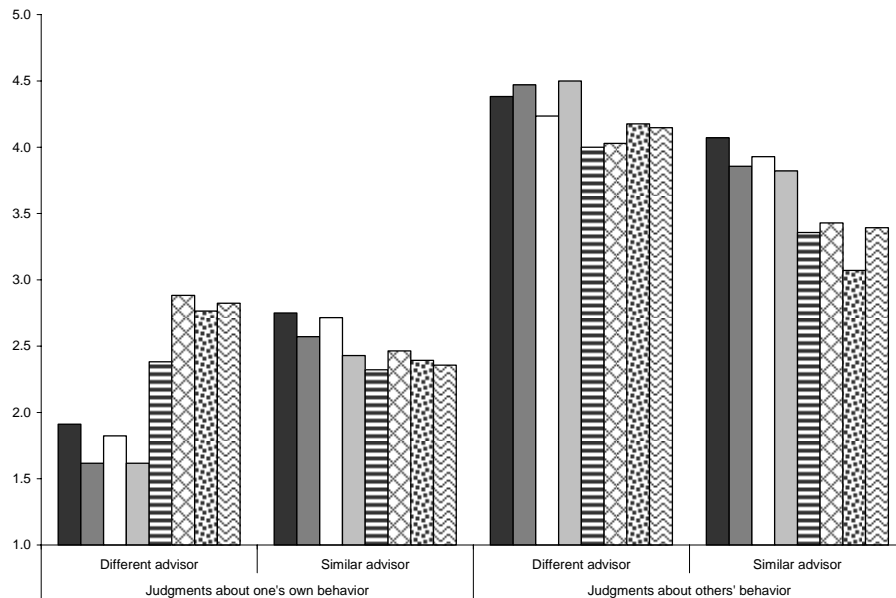
*Participants.* One hundred and six individuals participated in Study 2. Participants were recruited using ads in which they were offered money to complete a survey on individual behavior. During recruitment and again in the experiment’s instructions, participants were told that they would receive \$7 for their participation and that the experiment would take about 20 minutes. Fifty-two males (49%) and 54 females (51%) participated. Their average age was 24. Most participants were students from local universities (77 of 106, 73%); 18 participants (17%) were working for pay, 5 were temporarily unemployed (5%) while the remaining participants (5%) reported they were doing something else. Forty-eight individuals participated in the similar advisor condition, and 58 individuals participated in the different advisor condition.

## **Results**

*Manipulation check: similarity.* Consistent with our expectations, the similarity ratings in the different advisor condition was significantly lower ( $M = 2.67$ ,  $SD = 1.22$ ) than the similarity ratings in the similar advisor condition ( $M = 4.25$ ,  $SD = 1.55$ ),  $t(104) = -5.86$ ,  $p < .0001$ .

*Difficulty measures.* As we mentioned above, the judgments used in Study 2 had been selected to generate variance in the difficulty of the judgments for both self and others. The difficulty rating for the questions used in Study 2 can be found in Figure 3. As Figure 3 shows, judgments about others' behavior were perceived as more difficult ( $M = 3.90$ ;  $SD = 1.52$ ) than questions about one's own behavior ( $M = 2.38$ ;  $SD = 1.31$ ),  $F(1,60) = 602.02$ ,  $p < .0001$ ,  $\eta^2 = .58$ . However, we found sufficient variation in difficulty within a judgment type to run mediation analyses.

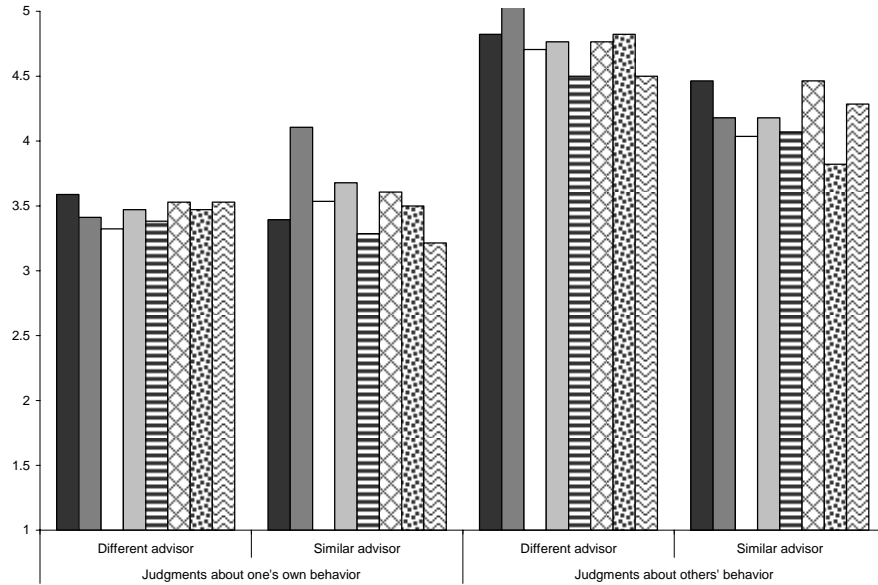
**Figure 3. Difficulty rating for questions used in Study 2 (1-7 scale).**



*Informativeness measures.* In Study 2 we also collected measures on the informativeness of the advice participants received from others. Informativeness and difficulty rating were positively correlated ( $r = .26$ ,  $p < .0001$ ). Figure 4 reports informativeness ratings for each question. As Figure 4 shows, informativeness ratings also varied based on judgment type. In particular, advice received on questions about others' behavior was perceived as more

informative ( $M = 4.58$ ;  $SD = 1.40$ ) than advice received on questions about one's own behavior ( $M = 3.58$ ;  $SD = 1.56$ ),  $F(1,60) = 228.88$ ,  $p < .0001$ ,  $\eta^2 = .27$

**Figure 4. Informativeness rating for questions used in Study 2 (1-7 scale).**

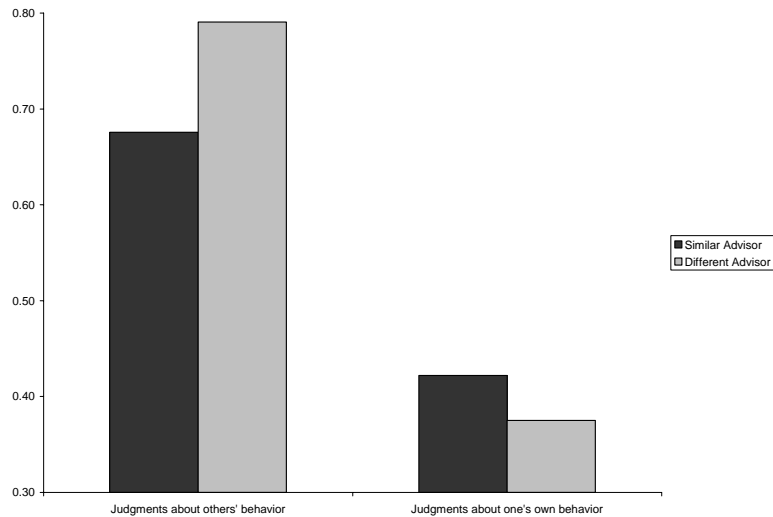


*Advice-taking.* The values for WOA were subjected to an ANOVA similar to the one conducted for Study 1 in which judgment type (judgments of one's own actions vs. judgments of others' behavior) served as within-subject factor and similarity (similar vs. different advisor) served as a between-subject factor.

This analysis replicates the results from our first study. In particular, we find a main effect for judgment type: advice is weighed more heavily on questions about other's behavior ( $M = 0.74$ ,  $SD = 0.24$ ) than on questions about one's own actions ( $M = 0.40$ ,  $SD = 0.25$ ),  $F(1,104) = 140.98$ ,  $p < .0001$ ,  $\eta^2 = .58$ . In addition, no main effect for similarity was found ( $p = .38$ ). Also, the interaction effect between judgment type and similarity was significant,  $F(1,104) = 8.24$ ,  $p = .005$ ,  $\eta^2 = .07$ . For judgments about others, participants weighed advice from different others ( $M = 0.79$ ,  $SD = 0.21$ ) more heavily than advice from similar others ( $M = 0.68$ ,  $SD = 0.26$ ). For judgments about the self, participants weighed advice from similar others ( $M = 0.42$ ,  $SD = 0.24$ )

more heavily than advice from different others ( $M = 0.38$ ,  $SD = 0.27$ ). Figure 5 presents the mean values of WOA graphically.

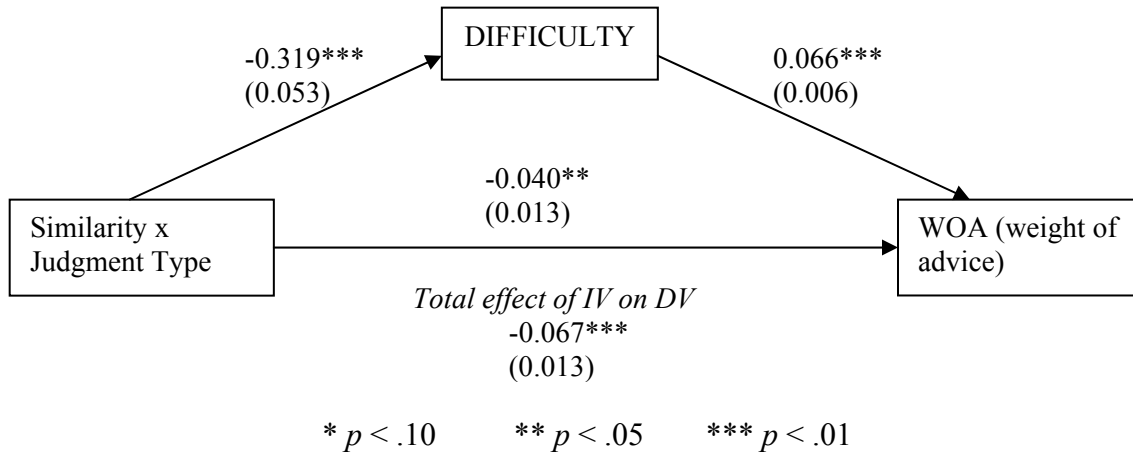
**Figure 5. Mean values of WOA by condition.**



*Mediation analyses.* In order to investigate which factors can explain the interaction between similarity and judgment type found in both studies, we conducted mediation analyses (Baron & Kenny, 1986). We report standardized regression coefficients and standard errors in parenthesis.

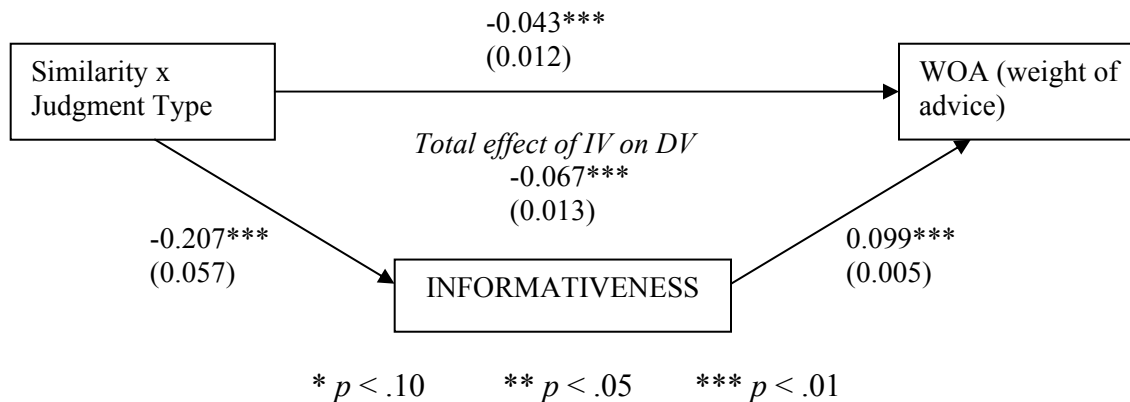
In the first mediation, difficulty was hypothesized to mediate the effect of judgment type and similarity on the weight of advice from similar or different others. In this analysis, WOA values were used as the dependent variable, and similarity x judgment type was used as the independent variable. The results of this mediation analysis are reported in Figure 6. Difficulty ratings partially mediated the effect of similarity x judgment type on advice taking. In particular, 31.67% of the total effect of similarity x judgment type on WOA is mediated by difficulty ratings. A Sobel test confirmed that the mediation effect was significant ( $z = -6.48$ ,  $p < .0001$ ).

**Figure 6. Mediation analysis (Mediator: Difficulty Ratings), Study 2.**



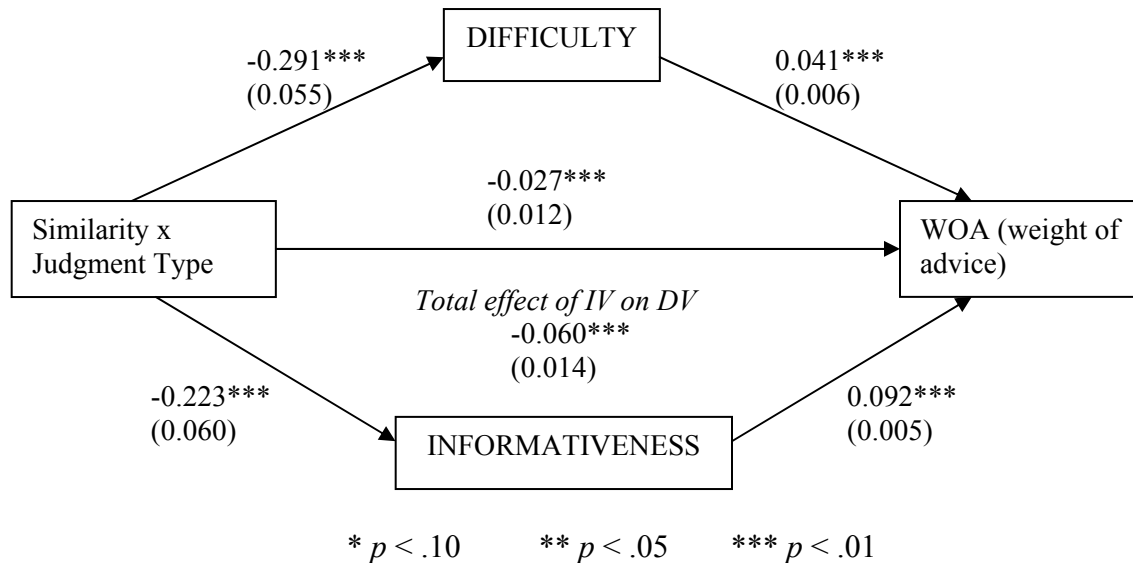
A second mediation analysis used informativeness as a predictor of how much individuals weigh advice from similar or different others depending on the judgment they are facing. As before, WOA values served as the dependent variable, and similarity x judgment type served as the independent variable. The results of this mediation analysis are reported in Figure 7. Informativeness ratings partially mediated the effect of similarity x judgment type on advice taking. In particular, 30.78% of the total effect of similarity x judgment type on WOA is mediated by informativeness. A Sobel test confirmed that the mediation effect was significant ( $z = -4.10, p < .0001$ ).

**Figure 7. Mediation analysis (Mediator: Informativeness Ratings), Study 2.**



We conducted a third mediation analysis in which difficulty ratings and informativeness ratings were used simultaneously to explain the similarity x judgment type interaction effect on WOA. The results of this analysis show that both difficulty and informativeness ratings partially mediate the effect of similarity on advice taking (see Figure 8).

**Figure 8. Mediation analysis, Study 2.**



First, both the perceived difficulty of the judgment participants faced (relative measure: from 1 = not difficult at all, to 7 = very difficult) and the informativeness of the advice (relative measure: from 1 = not informative at all, to 7 = very informative) were regressed on the similarity x judgment type interaction. The standardized coefficients for both factors were significant ( $\beta = -.29$ ,  $t = -5.29$ ,  $p = .0001$  for difficulty;  $\beta = -.23$ ,  $t = -3.74$ ,  $p = .0002$  for informativeness).<sup>6</sup> Second, when the WOA was regressed on the similarity x judgment type interaction, the standardized coefficient was significant ( $\beta = -.060$ ,  $t = -4.35$ ,  $p < .0001$ ). Third, when informativeness and difficulty were added as independent variables, the standardized

<sup>6</sup> Note that these statistically significant coefficients are observed even in the presence of correlation between the independent variables (difficulty and informativeness). This correlation would tend to inflate the standard errors of the estimates, making it more difficult to find statistically significant effects. The fact that we find the effects even in the presence of this correlation suggests that they are likely to be even more significant than we estimate.



coefficient of informativeness was significant ( $\beta = .092$ ,  $t = 17.25$ ,  $p < .0001$ ) as well as the standardized coefficient of difficulty ( $\beta = .041$ ,  $t = 7.04$ ,  $p < .0001$ ). The coefficient for the interaction effect between similarity and judgment type on WOA decreased in size and significance (from  $\beta = -.060$ ,  $t = -4.35$ ,  $p < .0001$  to  $\beta = -.027$ ,  $t = -2.20$ ,  $p = .03$ ), implying a partial mediation effect.

In sum, these results support the prediction that both difficulty of the judgment and informativeness of the advice mediate the interaction effect of similarity and judgment type observed in the two studies.

## **Discussion**

The results of Study 2 replicate our findings from Study 1. People use advice from others more heavily when judging others' behavior than when judging their own future/hypothetical behavior. Furthermore, people use advice from similar others more than different others when judging their own behavior, but from different others more than similar others when judging others' behavior.

We tested two explanations for this interaction effect, difficulty of the judgment and informativeness of the advice. We predicted that the effect of the interaction between advisor's similarity and judgment type on the weight of advice would be mediated by both the subjective perception of difficulty of the judgment and the subjective perception of informativeness of the advice. We conducted three mediation analyses testing the effects of difficulty and informativeness independently and together. Sobel tests confirmed that the mediation effects are significant in all three analyses. We found that 31.67% of the total effect of similarity x judgment type on WOA is mediated by the difficulty ratings and 30.78% by informativeness ratings.

## GENERAL DISCUSSION

When making judgments, people routinely rely on advice from others, although previous research suggests they discount advice too much (Yaniv & Kleinberger, 2000; Yaniv, 2004a).

In this paper we tested the hypothesis that people would weigh others' advice significantly more in making judgments about others' behavior than in making judgments about their own future or hypothetical behavior. We also predicted that the similarity between the person making the judgment and the person giving advice would interact with the type of judgment being made. In particular, we hypothesized that when asked questions about their own behavior, people would weigh information from similar advisors more than information from dissimilar advisors. However, when asked questions about others' behavior, people would weigh information from dissimilar advisors more than similar advisors.

These predictions were confirmed in two experiments involving different types of judgments with advice from others who were either similar to or different from the participant (i.e., advice-recipient) on several dimensions such as gender, age, and education. The results of the second study also show that the interaction between similarity and judgment type is mediated by the perceived difficulty of the judgment and the perceived informativeness of the advice.

These results are interesting given that participants did not have any information on the opinions or values held by the advisors. In both our studies, similarity was manipulated by varying demographic characteristics of the advisor to match (or mis-match) the respondent's. Thus, based on the experimental condition, the advisor was either similar to or different from the advice-receiver on surface-level characteristics. It is often assumed that surface-level similarity (e.g., demographics) is equated with deep-level similarity (e.g., attitudes opinions, information,

values), even though such congruence does not always exist (Phillips, 2003; Phillips & Loyd, 2006). Consistent with this research, our participants probably assumed congruence. As a result, they behaved as if their own opinions were worth less or more than those of an expert based on the judgment they faced and on the expert's surface-level characteristics. An expert of the same gender and level of education, for instance, was perceived as a more valuable and informative source of advice on judgments about the self than judgments about others.

*Limitations and future research opportunities.* One important topic for future research surrounds the limitations and boundary conditions of the effects we document. Our mediation analyses showed that perceived difficulty of the judgment and perceived informativeness of the advice each explain about 30% of the effect of similarity x judgment type interaction on advice use. Future research could investigate other factors that potentially account for the remaining 40%.

Future research could also investigate whether different levels of similarity have an impact on the effect we demonstrate. We found that similarity and judgment type interact in two studies in which we manipulated similarity by considering dimensions such as gender, age, education and geographical location (i.e., "surface-level similarity"). Future research could explore the impact of deep-level similarity on the demonstrated effect.

Another direction for future research is the use of different types of judgment to investigate our effect. For instance, research might consider individual judgment tasks people are confronted with on a daily basis, such as investment decisions or purchasing choices, rather than forming judgments about their own or others' actions.

Finally, our findings are suggestive of the idea that people will not only weigh advice differently depending on similarity and judgment type, but that they may also *look for* advice

accordingly. Neither of our studies allowed participants the opportunity to search for advice from a set of advisors, who may have varied in their similarity to the participant. This would be a natural and interesting extension.

## CONCLUSIONS

This research provides evidence of the differential impact of advice received from similar or different experts on judgments about others' behavior and one's own behavior. Individuals weighed advice from similar experts more heavily than advice from dissimilar experts when making judgments about their own behavior, but they weighed advice from dissimilar experts more than similar experts, when making judgments about others' behavior. We suggest and test two mechanisms for this effect; the *difficulty* of the judgment and the *informativeness* of the advice. We find that both partially mediate the observed interaction effect, both independently and jointly. These results have important implications for the question of when advice is incorporated into judgments, and may also predict what advice will be sought by decision-makers.

**TABLES**

**Table 1. Respondents' demographics.**

<i>Measure</i>	<i>Composition</i>		
<i>Gender</i>	64 Male (46%)	74 Female (54%)	
<i>Marital Status</i>	70 Married (51%)	67 Not Married (49%)	1 N/A <sup>7</sup>
<i>Non-currently married</i>	4 Living with a partner 13 Divorced	21 Widowed 26 Never been married	2 Separated 1 N/A
<i>Education</i>	8 Grade 1 to 11 (6%) 47 (34%) Some college but no degree	38 (28%) High-school degree 45 (33%) College degree or higher	
<i>Racial group</i>	120 (87%) White	6 (4%) Black or Afro-American	12 (9%) N/A
<i>Employment</i>	68 (49%) Working for pay 7 (5%) Homemakers 4 (3%) Doing something else	1 (1%) Temporarily unemployed 7 (5%) Students 7 (5%) Not working because of disability	43 (31%) Retired 1 N/A
<i>Age</i>	70 (12%) 18-29 years old 43 (31%) 45-64 years old	34 (25%) 30-44 years old 44 (32%) 65 years old or older	

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<sup>7</sup> N/A indicates that the respondent refused to answer.

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### APPENDIX A: Similarity manipulation (Experiment 1)

Mary [Tom] is an expert on charitable donations and volunteering. She [He] has lived on the West Coast [on the East Coast|in the South|in the Mid-West] all of her [his] life. She [He] did not graduate from high school [graduated from high school|has some college, but no degree|completed {her|his} {Associates Degree|graduated from college|completed a graduate degree}] and is now working with an organization that does research on how much money, time and other resources Americans give to charitable and nonprofit organizations. She [He] is a Democrat [is a Republican|is politically independent|does not associate with any political party] and is in her [his] 20s [30s|40s|50s|60s]. She [He] has been working with the “National Survey of Giving, Volunteering, and Participating” for a long time [12 years].

### APPENDIX B: Survey questions (Experiment 1)

#### A. Estimates of others’ behavior (Phase I):<sup>8</sup>

1. Among people who donate money to National Public Radio or a local public radio station, what do you think is the average contribution per month? (in dollars)
2. Among people who donate money to charities and nonprofit organizations, what do you think is the average contribution per month? (in dollars)<sup>9</sup>
3. Among people who volunteer with the Red Cross, what do you think is the average number of hours volunteered per month?
4. Among people who volunteer with ANY organization, what do you think is the average number of hours volunteered per month?

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<sup>8</sup> Before asking this block of question, the interviewer told respondents what follows: “The following questions are going to ask you about how much time or money you think the average person spends on a variety of tasks per month. All questions refer to the behavior of an average person in the United States. For some questions, you might not have an answer in mind, but we encourage you to provide your best guess even in those cases.”

<sup>9</sup> Clarification, if needed: “Please do not include NPR or local radio station contributions in your answer. Please do include contributions to religious organizations.”

**B. Estimates of one's own actions (Phase I):**<sup>10</sup>

1. In the past year, have you contributed to National Public Radio or a local public radio station?
  - a. If YES: How much did you contribute per month?
  - b. If NO: If you did contribute, how much money would you contribute per month?
2. In the past year, have you contributed to a charity or a nonprofit organization?
  - a. If YES: How much did you contribute per month?
  - b. If NO: If you did contribute, how much money would you contribute per month?
3. In the past year, have you volunteered for the Red Cross?
  - a. If YES: How many hours did you volunteer each month?
  - b. If NO: If you did, how many hours would you volunteer each month?
4. In the past year, did you volunteer anywhere?
  - a. If YES: How many hours did you volunteer each month?
  - b. If NO: If you did, how many hours would you volunteer each month?

**A. Estimates of others' behavior (Phase II):**

1. Among people who donate money to NPR or a local public radio station, what do you think is the average contribution per month? Mary [Tom] states the monthly contribution is [amount] dollars.
2. Among people who donate money to charities and nonprofit organizations, what is the average contribution per month? Mary [Tom] states the monthly contribution is [amount] dollars.

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<sup>10</sup> Before asking this block of question, the interviewer told respondents what follows: "The following questions are going to ask you about how much time or money YOU contribute on a variety of tasks PER MONTH. In case you do not contribute regularly, please answer thinking how much you would contribute if you contributed on a regular basis."

3. Among people who volunteer with the Red Cross, what is the average number of hours volunteered per month? Mary [Tom] states the monthly number of hours is [amount].
4. Among people who volunteer with any organization, what is the average number of hours volunteered per month? Mary [Tom] states the monthly number of hours is [amount].

**B. Estimates of one's own actions (Phase II):**

1. Earlier you said that you would give [gave] [amount] dollars {Earlier you did not say how much you would give} per month to National Public Radio or a local public radio station. Mary [Tom] states your average monthly contribution should be [amount] dollars. In the future, how much do think you would contribute per month?
2. Earlier you said that you would give [gave] [amount] dollars {Earlier you did not say how much you would give} per month to charities and nonprofit organizations. Mary [Tom] states your average monthly contribution should be [amount] dollars. In the future, how much do think you would contribute per month?
3. Earlier you said that you would volunteer [volunteered] for the Red Cross [amount] hours per month. {Earlier you did not say how many hours you would volunteer for the Red Cross per month.} Mary [Tom] states your average monthly hours should be [amount]. In the future, how many hours per month do you think you would volunteer?
4. Earlier you said that you would volunteer [volunteered] anywhere [amount] hours per month. {Earlier you did not say how many hours you would volunteer anywhere per month.} Mary [Tom] states your average monthly hours should be [amount]. In the future, how many hours per month do you think you would volunteer?

**APPENDIX C: Survey questions (Experiment 2)**

**Judgments about others' behavior**

1. Among people who donate money to organ donation organizations, what do you think is the average contribution per month? (in dollars)
2. Among people who donate money to reduce pollution (caused by individual gasoline usage), what do you think is the average contribution to environmental organizations per month? (in dollars)
3. Among people who donate money to organizations that provide food to starving children, what do you think is the average contribution per month? (in dollars)
4. Among people who donate money to support organizations working on preserving water, what do you think is the average contribution to support water conservation per month? (in dollars)
5. Consider a person who has a \$5,000 monthly disposable income. How much money do you think that person contributes to National Public Radio or a local public radio station per month? (in dollars)
6. Consider a person who has a \$5,000 monthly disposable income. How much money do you think that person contributes to charities and nonprofit organizations per month? (in dollars)
7. Consider a person who works 20 hours per week. How many hours do you think that person volunteers with the Red Cross per month?
8. Consider a person who works 20 hours per week. How many hours do you think that person volunteers with ANY organization per month?

**Judgments about one's own behavior**

1. In the past year, have you donated money to organ donation organizations? a. If YES: How much money did you give per month? b. If NO: If you did, how much money would you give per month?

2. In the past year, have you donated money to any environmental organization to reduce pollution? a. If YES: How much money did you give per month? b. If NO: If you did, how much money would you give per month?
3. In the past year, have you donated money to any organizations that provide food to starving children? a. If YES: How much money did you give per month? b. If NO: If you did, much money would you give per month?
4. In the past year, have you donated money to support water preservation? a. If YES: How much money did you give per month? b. If NO: If you did, much money would you give per month?
5. If YOU had a \$5,000 monthly disposable income, how much money would you contribute to National Public Radio or a local public radio station per month?
6. If YOU had a \$5,000 monthly disposable income, how much money would you contribute to a charity or a nonprofit organization per month?
7. If YOU worked 20 hours per week, how many hours would you volunteer for the Red Cross each month?
8. If YOU worked 20 hours per week, how many hours would you volunteer anywhere each month?