Construing Action Abstractly and Blurring Social Distinctions: Implications for Perceiving Homogeneity Among, but Also Empathizing With and Helping, Others

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Most people's actions serve goals that, defined abstractly enough, are quite similar to one another. The authors thus proposed, and found, that construing action in abstract (vs. concrete) terms relates to perceiving greater similarity among persons both within and across different social groups (Studies 1–3). By fostering perspective taking, viewing action abstractly also related to empathizing with and expressing willingness to help nonstigmatized and stigmatized others (e.g., AIDS patients; Studies 3–5) and to donating money to help those in need (Study 6). These findings held when controlling for ideological, motivational, and broad personality variables. Abstract action construals, then, appear to blur social distinctions, fostering perspective taking and empathy on the one hand but also perceptions of group homogeneity on the other.

What prompts people to treat others with care and respect? One answer to this question centers on the degree to which they perceive similarity between themselves and others. Perceiving similarity between oneself and others can lead one to take others' perspectives (e.g., Cialdini, Brown, Lewis, Luce, & Neuberg, 1997; Davis, Conklin, Smith, & Luce, 1996; Regan & Totten, 1975), prompting experiences of empathic emotions (e.g., Cialdini et al., 1997; Davis et al., 1996; Eisenberg & Miller, 1987), which, in turn, increase one's likelihood of helping others when they need it (e.g., Batson, Polycarpou, et al., 1997; Cialdini et al., 1997; Schroeder, Penner, Dovidio, & Piliavin, 1995; Staub, 1978).

Because perceiving similarity between self and others produces these and other prosocial outcomes (e.g., Brewer & Miller, 1988; Galinsky & Moskowitz, 2000), a key question is: What is the basis of this perception? With cognitive maturity, children become able to perceive similarity across members of different groups (e.g., Aboud & Fenwick, 1999; Doyle & Aboud, 1995; Katz & Zalk, 1978). Whether they use these skills, however, may depend on several factors, such as their core belief systems, which serve as blueprints for how to interpret and respond to social information (e.g., Heider, 1958; Hong, Levy, & Chiu, 2001; Kelly, 1955). For

example, lay people may use the Protestant work ethic (PWE; Weber, 1904–1905/1958), which implies that lack of success reflects laziness, to explain and justify social inequalities (Crandall, 2000; Sidanius & Pratto, 1999), thus creating opposition to group-equalizing efforts (Heaven, 1990; MacDonald, 1972).[1] Accordingly, endorsing the PWE in the United States is associated with less sympathy toward disadvantaged groups and with greater racial prejudice (Katz & Hass, 1988). In contrast, egalitarianism, the belief in social equality and justice, relates to directing more sympathy and positive attitudes toward disadvantaged groups (Katz & Hass, 1988; Somerman, 1993). Moreover, people's beliefs that their prosocial treatment of others provides self-relevant rewards (e.g., by allowing them to express their values or acquire useful experiences) also influence how they perceive and treat others (Clary et al., 1998; Clary, Snyder, Ridge, & Miene, 1994).

We propose that, apart from people's ideologies and from the social rewards they seek, their basic perceptual frames of reference also may influence whether they perceive similarity between themselves and others. As detailed below, our work builds on research showing that people differ reliably in their tendencies to view action abstractly (Vallacher & Wegner, 1989); on research showing that people of all backgrounds pursue goals that, defined abstractly enough, are quite similar to one another (e.g., Stevens & Fiske, 1995); and on research showing that people feel greater similarity with one another when they focus on their commonly shared goals (e.g., Gaertner, Mann, Dovidio, Murrell, & Pomare, 1990). The essence of our proposal is that people who chronically represent action in abstract terms are more likely to view themselves as sharing goals with others and, hence, more likely to

[1] This general work ethic exists in not only Western but also Eastern cultures, although its more specific meanings and uses may vary by culture (see Furnham et al., 1993; Niles, 1999).

perceive similarity between themselves and others. To help expli-cate this idea, we next briefly review the research that inspired it.

Shared Goals

In a classic demonstration, Sherif (1966) showed that tempo-rarily inducing a common, superordinate goal (e.g., fixing a broken water tank) among competitive teams of boys created a sense of connectedness among all the boys, thereby reducing interteam conflict. Later work confirmed that when people of diverse back-grounds work cooperatively together (e.g., on a school assignment) intergroup attitudes and relations improve (e.g., Aronson & Bridgeman, 1979; Gaertner et al., 1990; Johnson & Johnson, 2000). At least two mechanisms appear to underlie these effects. First, depending on someone for goal attainment may lead one to attribute the positive feelings associated with goal attainment to one's attitude toward the person (e.g., Forgas, 1995; Schwarz & Clore, 1988). Second, and most relevant to our inquiry, sharing a goal with someone, even if one's likelihood of goal attainment is not dependent on the other person, can lead one to view greater similarity between oneself and the other person because of the salience of the commonality (the shared goal) between self and other. Much work on the common in-group identity model (Gaert-ner & Dovidio, 2000; see also Hewstone, Rubin, & Willis, 2002), for example, shows that inducing a superordinate identity (e.g., "teammates") among diverse groups (e.g., African American and Caucasian students) can improve intergroup relations, with diverse individuals coming to view each other in terms of their shared commonality (the common identity).

Because viewing oneself as sharing goals with others promotes viewing self–other similarity, it might seem that one reason people do not always treat each other with care and respect is because they rarely try to infer others' goals and, hence, rarely have a chance to notice their shared commonalities. This is not the case, however. People regularly infer others' goals. Even when facing demanding time constraints (Long & Golding, 1993), for example, readers of action statements spontaneously generate goals to explain actors' conduct (Dopkins, 1996; Long, Golding, & Graesser, 1992), and even preschoolers systematically use nonverbal behavioral cues to detect actors' intentions (e.g., Meltzoff & Brooks, 2001; Mont-gomery, Moran, & Bach, 1996; Wellman & Phillips, 2001). Al-ternatively, perhaps people do not always treat each other with care and respect because people of different backgrounds pursue mark-edly different goals and, hence, view little cross-group common-ality. This is not true either. When defined abstractly, the goals people pursue (e.g., to belong, to be effective, and to understand) appear universal across cultures and time periods, which may reflect humans' common evolutionary development (Stevens & Fiske, 1995; see also Schwartz, 1992). Moreover, when people do try to infer other people's more abstract goals, they typically assume that others share goals that they themselves pursue (e.g., Bruner & Taiguri, 1954; Gollwitzer, Heckhausen, & Steller, 1990). What, then, stops people from focusing upon their shared, abstract goals?

Abstract and Concrete Action Representation

Vallacher and Wegner (1985, 1987, 1989) showed that people differ in their tendencies to view action abstractly. Whereas one

person reliably might represent the action of "paying the rent" as "writing a check" (a concrete representation, describing how an action is performed), for example, another person reliably might represent it as "maintaining a place to live" (an abstract represen-tation, describing why an action is performed). Previous research has focused on how people's chronic tendencies to construe action at different levels of abstraction relate to various aspects of self-regulation, including health-related behaviors (Emmons, 1992), procrastination (Dewitte & Lens, 2000), feedback seeking (Freitas, Salovey, & Liberman, 2001), and academic specialization (Bishop, Thomas, & Peper, 2000). Shah and Kruglanski (2000), for exam-ple, noted that viewing actions as relating to a common, abstract goal should increase one's willingness to substitute one action for another because of the salience of the actions' shared commonal-ity, the shared goal (see also Lewin, 1951; Tesser, Martin, & Cornell, 1996).

Abstract Versus Concrete Action Representation and Blurring Social Distinctions

We reasoned that the same proclivity to construe actions in abstract versus concrete terms should affect how people construe others. Because people of all backgrounds generally pursue similar abstract goals (Stevens & Fiske, 1995) and generally assume that others' abstract goals are similar to their own (Gollwitzer et al., 1990), it follows that people who chronically represent action in abstract terms are more likely to interpret others' behaviors as reflecting abstract goals similar to their own. Consider, for exam-ple, a business executive. Such a person might represent her daily actions relatively concretely, as making decisions that advance her company's wealth. Alternatively, she may view her actions more abstractly, as providing for her family. Now imagine how she might view a homeless man. Again, she could construe his actions relatively concretely, as, for example, picking through trashcans, or in relation to a more abstract goal, such as trying to find food for his family. Accordingly, if she chronically tends to view action in concrete terms, then she will view little similarity between herself (a "decision maker advancing her company's wealth") and the homeless man (a "trash-picker"). In contrast, if she chronically tends to view action in more abstract terms, then he or she should view greater similarity between herself ("a family provider") and the homeless man ("a family provider").

We propose, then, that holding an abstract (vs. concrete) view of action should relate to perceiving greater similarity between mem-bers of different social categories—a traditional hallmark of non-prejudice (e.g., Gaertner & Dovidio, 2000; Phillips & Ziller, 1997). Thus, we expected people holding an abstract (vs. concrete) action construal to perceive greater similarity between themselves and diverse others. Moreover, we predicted that an abstract action representation, by leading people to take others' perspectives, would relate to feeling empathy for and expressing willingness to help others of diverse social groups.

However, our reasoning also directly implies that an abstract action representation, as a lens that blurs social details, also should predict perceiving similarity among members of the same social category—a traditional hallmark of stereotyping (e.g., Aboud, 1988; Allport, 1954; Levy, Stroessner, & Dweck, 1998; Linville, Fischer, & Salovey, 1989). That is, stereotyping partly reflects an exaggeration or generalization of the extent to which members of

a group share characteristics (e.g., "All car salespersons are dishonest"). Stereotyping thus colors social judgment and behavior by prompting expectations of similarity among a group's members (e.g., Hamilton, Sherman, & Ruvolo, 1990; Hamilton & Trolier, 1986; Snyder, Tanke, & Bersheid, 1977). Seemingly opposing processes, then, such as perceiving similarity across (vs. within) groups, which may set the stage for relatively nonbiased (vs. biased) intergroup attitudes and relations, may grow naturally from the same perceptual tendency.

Current Research

Six studies tested these ideas. In Study 1, we examined whether people who view action in abstract terms perceive greater self–other similarity and between-group similarity as measured by the Universal Orientation Scale (UOS; Phillips & Ziller, 1997). We next tested whether people holding an abstract (vs. concrete) action construal more readily assume the perspectives of dissimilar others, including members of relatively nonstigmatized groups (Study 2) and stigmatized groups (Study 3). Because taking others' perspectives promotes empathy (e.g., Batson, Polycarpou, et al., 1997; Coke, Batson, & McDavis, 1978; Stoland, 1969), we also examined whether holding an abstract action construal relates positively to experiencing empathy toward both dissimilar others (Studies 3 and 5) and similar others (Study 4), and we tested whether perspective taking mediates these expected effects. Because empathy relates to willingness to help others (e.g., Batson, 1991; Eisenberg & Miller, 1987; Schroeder et al., 1995), we next tested whether action representation is associated with willingness to help similar and dissimilar others, and we examined whether empathy mediates these expected effects (Studies 4 and 5). We also examined whether these hypothesized effects on willingness to help others would translate into actual helping behavior (i.e., donating money to help needy others; Study 6). Finally, we examined whether action representation relates to perceiving homogeneity within social groups. That is, we tested whether representing action abstractly is associated with viewing members of a particular group (Studies 2 and 3) as similar to one another with respect to basic personality attributes. Across studies, we also tested whether our hypothesized effects hold when controlling for participants' core ideologies (i.e., egalitarianism and PWE) and for different social rewards they expected their interactions with diverse others to provide.

In summary, we predicted that people chronically representing action in abstract (vs. concrete) terms would perceive greater similarity both across and within groups, and we tested implications of this prediction for outcomes including empathizing with and helping others of varying backgrounds.

Study 1

Study 1 tested whether representing action in abstract versus concrete terms relates to perceiving members of different social groups as relatively similar versus dissimilar. Moreover, we examined whether this relation is obtained independently of participants' egalitarian beliefs.

Method

Participants

A total of 423 introductory psychology students (184 men and 239 women) at the State University of New York at Stony Brook ranging in age from 17 to 34 years ($M = 18.66$) participated in exchange for course credit. Not included were data from 6 additional participants who failed to follow directions. Including these participants' data does not alter the significance of any results reported herein. All participants indicated that English was their native language. Participants were 16.5% African American, 19.8% Asian, 47.2% Caucasian, 1.2% East Indian, 7.5% Latino, and 5% more than one ethnicity (2.8% of participants did not indicate race or ethnicity). Quite similar proportions were obtained in the other studies reported in this article examining undergraduate samples. Neither participants' race or ethnicity nor gender moderated (or, when used as a covariate, affected the significance of) any effects reported in this article and hence will not be discussed further.

Procedure

Participants completed a battery of questionnaires during an hour-long session. Along with measures contributed by other investigators and unrelated to our investigation, this battery included, in randomly varying order, the measures described below.

Measures

Behavior Identification Form (BIF). The BIF (Vallacher & Wegner, 1989), a 25-item, dichotomous-response questionnaire, assesses individual differences in level of action identification. For each item, participants read about an action (e.g., "voting") and circled which of two identifications more appropriately described it. The choices corresponded to abstract (high-level) identifications (e.g., "influencing the election") and concrete (low-level) identifications (e.g., "marking a ballot"). Concrete identifications were scored 0, abstract identifications were scored 1, and each participant's responses were averaged to provide a BIF index ($M = .64$, $SD = .20$, Cronbach's $\alpha = .83$).

UOS. The UOS (Phillips & Ziller, 1997) assesses individual differences in perceived similarity across members of different social categories, including between the self and others. Participants rated each of 20 items (e.g., "The similarities between males and females are greater than the differences" and "When I meet someone I tend to notice differences between myself and the other person" [reverse-coded]) on a 5-point scale ($1 = does\ not\ describe\ me\ very\ well$ to $5 = describes\ me\ very\ well$). Each participant's responses were averaged to provide a UOS index ($M = 3.30$, $SD = 0.79$, Cronbach's $\alpha = .58$).

Humanitarianism–Egalitarianism (H-E) ideology. The H-E (Katz & Hass, 1988) scale assesses individuals' endorsement of a social justice ideology. Participants rated each of 10 items (e.g., "One should be kind to all people" and "A good society is one in which people feel responsible for one another") on a 6-point scale ($1 = strongly\ disagree$ to $6 = strongly\ agree$). Each participant's responses were averaged to provide an H-E index ($M = 4.26$, $SD = 1.04$, Cronbach's $\alpha = .87$).

Results and Discussion

As predicted, participants' BIF scores correlated positively with their UOS scores, $r(423) = .19$, $p < .001$, but were not correlated significantly with their H-E scores, $r(423) = .08$, $p > .11$. Replicating previous research (Phillips & Ziller, 1997), H-E and UOS correlated positively with one another, $r(423) = .22$, $p < .001$. However, both BIF, $\beta = .18$, $F(1, 420) = 14.09$, $p < .001$, and

H-E, $\beta = .20$, $F(1, 420) = 18.78$, $p < .001$, accounted for unique variance in UOS.

Independent of participants' egalitarian beliefs, then, their chronic tendencies to identify action in abstract versus concrete terms related positively to perceiving similarity across members of different social categories and to perceiving the self as similar to others.

Study 2

If abstractly representing action relates to perceiving similarity across not only members of different groups (as shown in Study 1) but also individuals within groups, then people holding an abstract action representation should be more likely to perceive similarity among members of the same group. Study 2 tested this idea by examining college students' perceptions of college professors. Consistent with Study 1's finding of a relation between action representation and viewing social category boundaries as permeable, we expected college students holding abstract action construals to assume more easily the perspective of a college professor (a member of an out-group). However, we also expected college students holding abstract action construals, as a result of perceiving similarity among individuals, to view college professors as a more homogenous group, that is, to view college professors as more similar to one another across basic personality dimensions.

Method

Participants

A total of 167 introductory psychology students (84 men and 82 women; 1 participant failed to indicate gender) at the State University of New York at Stony Brook ranging in age from 18 to 27 years ($M = 19.06$) participated in exchange for course credit. Not included were data from 3 additional participants who failed to follow directions. Including these participants' data does not alter the significance of any results reported herein. All participants indicated that English was their native language.

Procedure

Participants completed a battery of questionnaires during an hour-long session. Along with measures unrelated to our investigation, this battery included, in randomly varying order, the measures described below.

Measures

BIF. Participants completed the BIF described in Study 1 ($M = .62$, $SD = .19$, Cronbach's $\alpha = .81$).

Perspective taking. Indicating the extent to which they could take the perspective of college professors, participants used an 11-point scale (0 = *not at all* to 10 = *extremely*) to answer the following two questions: (a) "How easily can you imagine what it would be like to be a college professor?" and (b) "How easily can you imagine yourself as a college professor?" Each participant's responses to the two questions were averaged to create an index of perspective taking ($M = 4.22$, $SD = 2.68$, Cronbach's $\alpha = .83$).

Perceived homogeneity. Indicating the extent to which they viewed college professors to be similar to one another, participants used the same 11-point scale to answer the question "How similar do you think college professors are to one another on the following dimensions?" Dimensions assessed were (a) intellect, (b) values, (c) honesty, (d) morality, (e) worries, (f) motivation, and (g) social opinions. Each participant's responses to the seven items were averaged to create an index of perceived homogeneity of college professors ($M = 4.90$, $SD = 1.71$, Cronbach's $\alpha = .79$).

Results and Discussion

As predicted, participants' BIF scores correlated positively both with their degree of taking the perspective of a college professor, $r(167) = .17$, $p < .05$, and with their degree of perceiving that college professors are homogenous with respect to their personal attributes such as morals, social opinions, and intellect, $r(167) = .17$, $p < .05$. Thus, although perceiving members of an out-group as similar to one another often is interpreted to reflect stereotyping of the group (e.g., Aboud, 1988; Allport, 1954), whereas taking the perspective of an out-group member often is interpreted to reflect nonbiased judgments or nonprejudice toward the group (e.g., Gaertner & Dovidio, 2000; Phillips & Ziller, 1997), our data show that the same perceptual tendency, of viewing action abstractly, is associated positively with both predilections.

Study 3

Study 3 had three general aims. First, we tested whether findings from Study 2 could be replicated when participants considered members of stigmatized, relatively unfamiliar groups (homeless persons and persons with AIDS). For example, would people holding an abstract action representation more easily assume the perspective of a homeless person? Such an effect could show that relations between action representation and perceiving overlap between oneself and dissimilar others do not depend on people's concerns with maintaining a positive mood, given that assuming a stigmatized group member's perspective often induces a negative mood (Batson, Polycarpou, et al., 1997). Because the effect sizes reported in Studies 1 and 2 fell between conventional definitions of small and medium effects (Cohen, 1988), examining these effects' robustness across different kinds of social targets seems especially worthwhile. Thus, would people holding an abstract action representation more likely view homeless people as sharing many similar attributes? People's tendencies to view members of stigmatized groups as highly homogenous often reflect their ideological leanings, such as their endorsement of the PWE, the belief that stigmatized group members have their shared lack of hard work to blame for their predicaments (e.g., Katz & Hass, 1988). To test the assumption that these hypothesized effects reflect representational rather than ideological differences, then, we further examined whether participants' action representations and PWE ideological beliefs each would account for unique variance in their perceptions of homogeneity among these stigmatized groups.

Second, to explore the different implications of viewing an out-group as homogenous for ideological versus representational reasons, we also tested whether participants' PWE ideological beliefs, but not their chronic action representations, would relate positively to directing negative feelings toward stigmatized group members. Moreover, viewing stigmatized groups as homogenous often relates positively to viewing them in a biased or negative way (e.g., Aboud, 1988; Allport, 1954). However, if the relation between representing action abstractly and viewing stigmatized groups as homogenous reflects a perceptual tendency rather than a generally negative view of stigmatized groups, then action representation should moderate the relation between viewing stigma-

tized groups as homogenous and feeling negatively toward them. That is, for people holding a predominantly abstract action representation, who presumably view stigmatized group members as similar to one another simply because they pay less attention to the details of individuating information, the relation between viewing stigmatized groups as homogenous and feeling negatively toward them should be attenuated. Study 3 tested this hypothesized interaction.

Third, we examined an affective implication of perspective taking. Adopting another person's perspective can lead one to experience empathic emotions directed toward the other person (e.g., Batson, Polycarpou, et al., 1997; Coke et al., 1978). As a result of adopting a homeless person's perspective, then, would people viewing action in abstract terms be more likely to experience empathic emotions directed toward homeless people? Study 3 tested this mediational hypothesis. To isolate further how action representation relates to empathy, we also assessed participants' general empathic concern and three of its known correlates: proclivities to experiencing personal distress, fantasizing, and taking others' perspectives (Davis, 1983). As indicated above, our theorizing predicts that action representation and empathic concern should relate positively to one another and that this relationship should be mediated by perspective taking. Thus, we tested whether perspective taking only (and not personal distress or fantasizing) would mediate this expected relationship.

Method

Participants

A total of 139 introductory psychology students (67 men and 72 women) at the State University of New York at Stony Brook ranging in age from 18 to 27 years ($M = 19.06$) participated in exchange for course credit. Two participants failed to answer the perceived-similarity items and 1 participant failed to answer the perspective-taking items; hence, analyses of those variables are based on the remaining ($n = 137$ and $n = 138$, respectively) participants' responses. All participants indicated that English was their native language.

Procedure

Participants were seated in individual cubicles that allowed privacy. To afford further privacy, we provided participants with envelopes in which to seal their responses. Participants then received packets containing, in randomized order, the measures described below. After completing the study and inserting their envelopes into appropriate drop boxes, participants were debriefed and thanked for their participation.

Measures

BIF. Participants completed the BIF described in Study 1 ($M = .67$, $SD = .24$, Cronbach's $\alpha = .89$).

PWE ideology. PWE ideology was measured using Katz and Hass's (1988) 11-item scale, which is a shortened form of Mirels and Garrett's (1971) 19-item scale. Following Weber (1904–1905/1958), the measure assesses beliefs about work (e.g., "A distaste for hard work usually reflects a weakness of character"), individual achievement (e.g., "Most people who don't succeed in life are just plain lazy"), and discipline (e.g., "People who fail at a job have usually not tried hard enough"). Participants rated the items on a 6-point scale (1 = *strongly disagree* to 6 = *strongly agree*), and their responses were averaged such that a high score indicated greater agreement with the PWE ($M = 3.59$, $SD = 0.68$, Cronbach's $\alpha = .70$).

Taking the perspective of stigmatized group members. Indicating the extent to which they could take the perspective of homeless persons and persons with AIDS, participants used an 11-point scale (0 = *not at all* to 10 = *extremely*) to answer four questions (condensed to two questions below for brevity): (a) "Have you ever imagined how homeless people [people with AIDS] feel about being homeless [having AIDS] and how it affects their lives?" and (b) "Have you ever imagined how you would feel if you were homeless [had AIDS] and how it would affect your life?" Because participants' degree of taking the perspective of homeless persons and of persons with AIDS (as measured by each of the two 2-item scales described above) were related highly, $r(138) = .66$, each participant's responses to these four questions were averaged to create an index of perspective taking directed toward both target groups ($M = 6.38$, $SD = 2.08$, Cronbach's $\alpha = .89$).

Perceived homogeneity of stigmatized groups. To indicate the extent to which they viewed homeless persons to be similar to one another and people with AIDS to be similar to one another, participants used the same 11-point scale to answer the question "How SIMILAR do you think homeless people [people with AIDS] are to one another on the following dimensions?" As in Study 2, dimensions assessed were (a) intellect, (b) values, (c) honesty, (d) morality, (e) worries, (f) motivation, and (g) social opinions. Because participants' degree of perceiving homogeneity among homeless persons and among persons with AIDS (as measured by each of the two 7-item scales described above) were related highly, $r(137) = .54$, each participant's responses to these 14 items were averaged to create an average index of perceived homogeneity within both target groups ($M = 4.92$, $SD = 1.61$, Cronbach's $\alpha = .89$).

Empathy toward stigmatized group members. To indicate their experience of empathic emotions directed toward stigmatized group members, participants used a 9-point scale (1 = *not at all* to 9 = *extremely*) to rate their experiences of six empathic emotions (empathy, warmth, sympathy, moved, compassion, and respect) directed toward each of the two target groups (homeless persons and persons with AIDS). Because participants' degree of empathizing with homeless persons and degree of empathizing with persons with AIDS (as measured by each of the two 6-item scales described above) were related highly, $r(139) = .54$, each participant's responses to these 12 items were averaged to create an index of empathic emotion directed toward both target groups ($M = 5.82$, $SD = 1.64$, Cronbach's $\alpha = .87$).

Negative affect directed toward stigmatized group members. Indicating their experience of negative affect directed toward stigmatized group members, participants used a 9-point scale (1 = *not at all* to 9 = *extremely*) to rate their experiences of three negatively valenced emotions (hostility, suspicion, and disgust) directed toward each of the two target groups (homeless persons and persons with AIDS). Because participants' degree of feeling negatively toward homeless persons and participants' degree of feeling negatively toward persons with AIDS (as measured by each of the two 3-item scales described above) were related highly, $r(139) = .41$, each participant's responses to these 6 items were averaged to create an average index of negative affect directed toward both target groups ($M = 2.96$, $SD = 1.58$, Cronbach's $\alpha = .74$).

Interpersonal reactivity. Davis's (1983) 28-item Interpersonal Reactivity Index is a measure of empathic concern and three of its correlates. With all items rated on a 5-point scale (1 = *does not describe me well* to 5 = *describes me very well*), the measure includes four 7-item subscales: (a) Empathic Concern (EC), or feelings of empathy and concern for others (e.g., "I often have tender, concerned feelings for people less fortunate than me"; $M = 3.88$, $SD = 0.65$, Cronbach's $\alpha = .74$); (b) Perspective Taking (PT), or adopting the psychological view of others (e.g., "When I'm upset at someone, I usually try to 'put myself in his/her shoes' for awhile"; $M = 3.42$, $SD = 0.66$, Cronbach's $\alpha = .74$); (c) Personal Distress (PD), or feelings of personal anxiety and discomfort in emotional situations (e.g., "Being in a tense emotional situation scares me"; $M = 2.75$, $SD = 0.74$, Cronbach's $\alpha = .78$); (d) Fantasy (FS), or daydreaming about fictitious

situations (e.g., "I daydream and fantasize, with some regularity, about things that might happen to me"; $M = 3.40$, $SD = 0.74$, Cronbach's $\alpha = .74$).

Results

As shown in Table 1, replicating and extending results from Study 2, participants' BIF scores correlated positively both with their degree of taking the perspective of homeless persons and persons with AIDS and with their degree of perceiving that these stigmatized groups are homogenous with respect to members' personal attributes such as morals, social opinions, and intellect. As indicated, participants' degree of endorsing the PWE ideology also related positively to their perceptions of homogeneity among these stigmatized groups. Both BIF, $\beta = .23$, $F(1, 134) = 8.08$, $p < .01$, and PWE, $\beta = .18$, $F(1, 134) = 4.90$, $p < .03$, accounted for unique variance in perceptions of group homogeneity. As also indicated in Table 1, whereas PWE related positively to holding negative views of stigmatized group members, BIF did not. In contrast, BIF related positively to holding empathy for stigmatized group members, whereas PWE did not. Thus, whereas BIF and PWE converged in their similarly positive relations to perceiving homogeneity among stigmatized groups, they diverged in their relations to experiencing negative affect and directing empathy toward stigmatized group members.

Supporting the proposal that perspective taking mediates the effect of action representation on empathy, regression analyses showed that the originally significant relation between BIF and empathy for stigmatized group members, $\beta = .18$, $F(1, 136) = 4.66$, $p < .04$, was no longer significant, $\beta = .11$, $F(1, 135) = 1.81$, $p > .18$, when controlling for participants' degree of taking stigmatized group members' perspectives, which itself accounted for unique variance in empathy, $\beta = .35$, $F(1, 135) = 18.97$, $p < .01$. Baron and Kenny's (1986; see also Kenny, Kashy, & Bolger, 1998) modification of the Sobel (1982) test showed that the indirect effect of BIF (through perspective taking) on empathy was statistically significant ($Z = 2.10$, $p < .05$).

Further demonstrating a relation between action representation and empathy, BIF related positively to EC, $r(137) = .19$, $p < .03$. Replicating past work (Davis, 1983), EC also correlated positively with FS, $r(137) = .27$, $p < .01$; PD, $r(137) = .32$, $p < .01$; and PT, $r(137) = .38$, $p < .01$. To test our proposal that action representation affects general empathic concern independently of people's tendencies to fantasize and experience personal distress but is mediated by their tendency to take others' perspectives, we next performed a two-step hierarchical regression analysis predicting EC. At the first step, we entered FS, PD, and BIF, and each accounted for unique variance in EC, $\beta = .24$, $F(1, 135) = 9.37$, $p < .01$; $\beta = .32$, $F(1, 135) = 17.28$, $p < .01$; and $\beta = .16$, $F(1, 135) = 4.44$, $p < .04$, respectively. This finding demonstrates that the relation between BIF and EC is not explained by people's tendencies to fantasize or experience personal distress. However, the relation between BIF and EC was no longer significant, $\beta = .11$, $F(1, 134) = 2.09$, $p > .15$, when also controlling for PT, which itself accounted for unique variance in EC, $\beta = .34$, $F(1, 134) = 19.87$, $p < .01$. Baron and Kenny's (1986; see also Kenny et al., 1998) modification of the Sobel (1982) test showed that the indirect effect of BIF (through PT) on EC was statistically significant ($Z = 2.07$, $p < .05$).

Consistent with previous theorizing (e.g., Allport, 1954), and as shown in Table 1, participants' degree of perceiving homogeneity among stigmatized group members and participants' degree of directing negative affect toward stigmatized group members were related positively. As predicted and as shown in Figure 1, however, a regression of participants' homogeneity ratings on their negativity ratings, BIF scores, and the interaction between the two variables showed that this relation was moderated by BIF, $F(1, 133) = 14.13$, $p < .01$. Thus, for participants scoring below the BIF median, perceiving homogeneity among stigmatized groups and directing negative affect toward stigmatized groups were related positively, $r(70) = .41$, $p < .01$; for participants scoring above the BIF median, in contrast, these variables were not related significantly, $r(63) = -.06$, ns. The difference between these correlation coefficients was significant ($Z = 2.80$, $p < .01$).

Discussion

Findings from Study 3 again showed that people holding abstract action representations both perceive other social groups as more homogeneous and report more easily adopting the perspectives of members of other social groups. Study 3 explored perceptions of stigmatized group members (homeless people and people with AIDS) rather than perceptions of nonstigmatized group members (college professors, in Study 2). Moreover, mediational analyses suggested that holding an abstract action representation, by leading one to take a stigmatized group members' perspective, can produce empathy directed toward the stigmatized group member. Additional analyses showed that the relation between action representation and general empathic concern was mediated by a

Table 1
Correlations Among Variables in Study 3 (N = 139)

Measure	1	2	3	4	5	6
1. BIF	—					
2. PWE	.05	—				
3. Within-group similarity	.24***	.20**	—			
4. Perspective taking	.21**	−.12	.10	—		
5. Empathy	.18**	−.06	.23***	.38****	—	
6. Negativity	−.08	.31****	.17*	−.06	−.07	—

Note. Measures 3–6 refer to judgments of people facing AIDS and homelessness. BIF = Behavior Identification Form; PWE = Protestant work ethic.
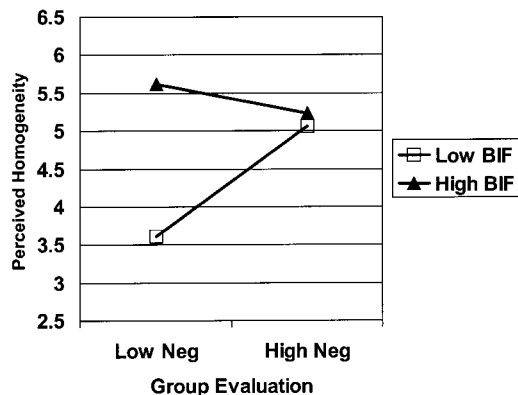* $p < .10$. ** $p < .05$. *** $p < .01$. **** $p < .001$.

Figure 1. Predicted values of perceived homogeneity among homeless people and people with AIDS for participants scoring 1 standard deviation above and below the Behavior Identification Form (BIF) mean and 1 standard deviation above and below the mean in feeling negatively toward homeless people and people with AIDS (Study 3). Neg = negative feelings.

general tendency to take others' perspectives and not by general tendencies to fantasize or to experience personal distress.

Tendencies to view members of stigmatized groups as homogenous often relate to evaluating stigmatized groups negatively and to subscribing to ideologies such as the PWE. Indeed, our data showed that participants' chronic action representations and their PWE ideological beliefs each accounted for unique variance in their perceptions of homogeneity among these stigmatized groups. Despite this convergence of ideology and action representation in relating to perceived homogeneity, however, participants' ideologies, and not their action representations, related positively to how negatively they felt toward stigmatized group members. The data also showed that, overall, participants' degree of perceiving homogeneity among these stigmatized groups related positively to their degree of feeling negatively toward them. However, this relation was amplified among participants holding primarily concrete action representations and was absent among participants holding primarily abstract action representations. Together, these findings support the claim that people who tend to represent action abstractly pay less attention to details that individuate people from one another and, hence, perceive greater similarity between individuals and social groups, ironically leading them both to view stigmatized group members as highly similar to one another and to take stigmatized group-members' perspectives and show empathy for them.

Study 4

Findings from Study 3 suggested that holding an abstract action representation, by leading one to take others' perspectives, can produce feelings of empathy for others. If this is true, then action representation should relate also to one's attitudes toward helping others, given that holding empathy for others is a reliable predictor of helping others (e.g., Batson, 1991; Coke et al., 1978). In Study 4, we tested this idea by presenting participants with various scenarios concerning a person in need of help. To probe the generality of our findings, we had participants consider a member

of their own social group (a student at their university) rather than a member of different social groups (as in Studies 1–3). Moreover, the scenarios varied in their content domains and in the severity of the problem faced by the person needing help. Across the different levels of content and severity, we predicted that participants' chronic action representations would relate positively to their reported willingness to help. Moreover, we expected that empathy would mediate this effect. A potential alternative explanation is that people who abstractly represent action might underestimate the amount of time required to help a person and thus be more willing to offer help. To address this possibility, we also assessed and controlled for participants' perceptions of the time-related costs of helping. Another potential alternative explanation is that people's action representations might relate to their situational versus personal attributions for others' problems, which are known to affect people's willingness to help others (e.g., Weiner, Perry, & Magnusson, 1988). To address this possibility, we aimed to indicate clearly in all of our scenarios that situational, not personal, factors gave rise to the target person's need for help, and we assessed whether participants adopted this intended meaning.

Method

Participants

A total of 94 introductory psychology students (47 men and 47 women) at the State University of New York at Stony Brook ranging in age from 18 to 27 years ($M = 18.97$) participated in exchange for course credit. All participants indicated that English was their native language.

Procedure

Participants completed a battery of questionnaires during an hour-long session. Along with measures contributed by other investigators and hence unrelated to our investigation, this battery included, in randomly varying order, the measures described below.

Measures

BIF. Participants completed the BIF described in Study 1 ($M = .62$, $SD = .20$, Cronbach's $\alpha = .83$).

Helping scenarios. Participants read about an unfortunate life circumstance of a target person, A.L., ostensibly a student at their university. As a result of random assignment, participants received 1 of 4 scenarios varying according to the domain of the need situation (job vs. housing) and the severity of the target person's need of help (high vs. low). The low-severity scenarios for the different domains appear separately below, with bracketed text indicating higher severity.

> Imagine you learn that A.L., a first-year Stony Brook University undergraduate student who lives in Stony Brook, just found out that the company she/he works for 30 hours per week is downsizing. This means A.L.'s responsibilities at work will slightly change [A.L. will lose her/his job]. A.L. has no means of external financial support. To what extent are you willing to help A.L. with her/his search for a new job (for example, by asking around about job openings, searching newspapers and the web for job ads, helping prepare a new resume)?

> Imagine you learn that A.L., a first-year Stony Brook University undergraduate student who lives in Stony Brook, just found out that her/his landlord has sold her/his apartment. The new owner has given A.L. 6 months [4 days] to find a new place to live. A.L. has no means of external financial support. To what extent are you willing to help

A.L. find another apartment (for example, by asking around about room vacancies, making phone calls to prospective landlords, searching newspapers and the web for apartments to rent)?

Manipulation check (perceived responsibility of the target). To check whether, as intended, participants did not hold the target person responsible for his/her situation, participants were asked to rate "How responsible do you think A.L. is for the situation he/she is in?" on a 9-point scale (1 = *not at all* to 9 = *very much*).

Willingness to help the target person. Indicating their willingness to help the target person, participants used 9-point scales to answer two questions. First, they indicated their willingness to help the target person (1 = *not at all* to 9 = *very much*; $M = 4.88$, $SD = 2.23$). Second, they indicated how much time they would be willing to spend helping the target person (0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, or 5.0 hr; $M = 2.32$, $SD = 1.24$). Each participant's responses were averaged to create an index of willingness to help (Cronbach's $\alpha = .73$).

Empathy toward the target person. Indicating their experience of empathic emotions, participants used a 9-point scale (1 = *not at all* to 9 = *extremely*) to rate their experiences of six empathic emotions (warmth, sympathy, tender, moved, compassion, and softhearted; Batson, Fultz, & Schoenrade, 1987) directed toward the target person. Each participant's responses were averaged to create an index of empathy ($M = 4.77$, $SD = 2.31$; Cronbach's $\alpha = .89$).

Perceived time cost of helping. Participants were asked to rate "How costly in terms of your time do you feel it is for you to help A.L.?" on a 9-point scale (1 = *not at all* to 9 = *very much*; $M = 4.80$, $SD = 2.30$).

Results and Discussion

Suggesting that, as intended, participants did not hold the target person responsible for his or her situation, participants' average rating of the target's responsibility ($M = 3.69$, $SD = 2.35$) was significantly below the midpoint of the scale, $t(93) = 5.44$, $p < .01$. Moreover, participants' BIF scores and their responsibility ratings did not correlate significantly, $r(92) = .02$, *ns*, suggesting that any relation between BIF and willingness to help cannot be explained by differences in perceived responsibility.

A multivariate analysis of variance analyzing participants' empathy and willingness to help showed that, as anticipated, neither the two 2-way interactions between BIF and scenario content and severity nor the 3-way interaction among the three variables were statistically significant (all $Fs < 1.8$, $ps > .17$). Thus, the different levels of scenario content and severity were collapsed across all subsequent analyses. As predicted, participants' BIF scores related positively to their reports of both empathy toward, $r(94) = .33$, $p < .01$, and willingness to help, $r(94) = .33$, $p < .01$, the target person. Consistent with previous research (Cialdini et al., 1997), participants' willingness to help also related significantly to their perceptions of the time-related costs of helping, $r(94) = -.21$, $p < .05$. To test our proposal that action representation affects willingness to help independently of the perceived time-related costs of helping but is mediated by empathy, we next performed a two-step hierarchical regression analysis predicting willingness to help. At the first step, we entered BIF and perceived time-related costs, and BIF accounted for unique variance in willingness to help, $\beta = .32$, $F(1, 91) = 10.43$, $p < .01$, whereas the latter variable accounted for a marginally significant portion of variance, $\beta = -.18$, $F(1, 91) = 3.31$, $p < .08$. This finding demonstrates that the relation between BIF and willingness to help is not explained by perceptions of the time-related costs of helping. However, the relation between BIF and willingness to help was no longer significant,

$\beta = .11$, $F(1, 90) = 1.88$, $p > .17$, when also controlling for empathy, which itself accounted for unique variance in willingness to help, $\beta = .61$, $F(1, 91) = 55.50$, $p < .01$. Baron and Kenny's (1986; see also Kenny et al., 1998) modification of the Sobel (1982) test showed that the indirect effect of BIF (through empathy) on willingness to help was statistically significant ($Z = 3.02$, $p < .01$).

These findings build on those of Study 3 by showing that holding an abstract action representation relates positively to feeling empathy for not only stigmatized group members (as shown in Study 3) but also members of one's own group. Moreover, action representation also related positively to participants' reported willingness to help a person in need. Participants' experiences of empathy, and not their concerns with the time-related costs of helping, mediated this effect.

Study 5

Can representing action abstractly affect one's willingness not only to help a single person in need but also to participate in broader volunteer efforts? Previous research has focused on how community service can help volunteers reach goals, such as gaining career-related experience, demonstrating humanitarian values, understanding community issues, and strengthening social relationships (e.g., Clary et al., 1998, 1994). Apart from these important motivational factors, we suggest that one's chronic tendency to represent action in abstract versus concrete terms, by affecting one's perceived similarity among members of different social categories and hence the amount of empathy one directs toward others, should prove an additional determinant of volunteerism.

We tested these ideas among 10th-grade high school students. We chose this sample both to examine further the generality of our findings and because substantial U.S. governmental funds are directed toward increasing volunteerism among youth (e.g., America's Promise, 2000). Volunteerism benefits youth's psychological development (e.g., self-esteem, personal competence), academic competence (e.g., school grades, educational goals), and social development (e.g., social responsibility, prosocial behavior; e.g., Conrad & Hedin, 1989; Yates & Youniss, 1996). Thus, understanding determinants of youth volunteerism potentially can afford considerable practical as well as conceptual benefits. In this study, we tested whether youths' chronic action representations would relate to their interest in performing different volunteer activities directed toward several disadvantaged groups (homeless persons, sick children, and senior citizens). We further examined whether this relation would be obtained independently of motivational factors but would be mediated by empathy. To help isolate the potential relation between action representation and volunteerism, we also assessed and controlled for participants' general levels of extracurricular activity, as reflected in the number of clubs or teams to which they belonged.

Method

Participants

Participants were 90 10th graders (25 boys and 65 girls) between the ages of 15 and 17 years ($M = 15.60$) attending a medium-sized suburban high school in Long Island, New York. Two participants failed to answer questions assessing several of the VFI subscales (described below); hence,

analyses of those variables are based on the remaining ($n = 88$–89) participants' responses. The sample included those students who themselves agreed to participate and whose parents or guardians provided written consent. The sample was predominantly Caucasian. After the study, all participants were debriefed thoroughly.

Procedure

Each classroom was tested separately, but within each classroom the students participated as a group. Two experimenters coordinated the study. The students were told that the study was part of a large project examining youths' opinions. Participants received training in using response scales and were taught the difference between giving their opinion and someone else's. Then, participants were asked to give their personal opinions in a questionnaire packet containing, in randomly varying orders, the measures described below.

Measures

BIF. Participants completed the BIF described in Study 1 ($M = .68$, $SD = .21$, Cronbach's $\alpha = .84$).

Willingness to volunteer. Ostensibly so that the students' school's Volunteer Center could make available appropriate volunteer activities, participants were asked to indicate their willingness to perform different volunteer activities. In reference to helping each of three groups (homeless persons, senior citizens, and sick children), participants used 10-point scales (1 = *not at all willing* to 10 = *extremely willing*) to rate their willingness to perform four different activities: (a) "Drop off some food or clothing for the group at a collection site on campus," (b) "Volunteer with other high school students at a shelter, organization, or hospital in which you work with all of these people," (c) "Walk in a walkathon to raise $ for this group," and (d) "Volunteer by yourself at a shelter, organization, or hospital working one-to-one with these people." Participants' willingness to help these different groups (as measured by the three 4-item scales described above) was related highly (average $r = .77$); thus, each participant's responses to the 12 items were averaged to create an average index of willingness to help the three groups ($M = 7.54$, $SD = 1.76$, Cronbach's $\alpha = .91$).

Volunteer Functions Inventory (VFI). The 30-item VFI (Clary et al., 1998) asks respondents to use a 7-point scale (1 = *not at all important or accurate* to 7 = *extremely important or accurate*) to rate the importance or accuracy of six reasons for volunteering. The six reasons are assessed by six 5-item subscales: Self-Protection (e.g., "By volunteering, I feel less lonely"; $M = 3.29$, $SD = 1.32$, Cronbach's $\alpha = .84$), Demonstrating Values (e.g., "I feel it is important to help others"; $M = 4.95$, $SD = 1.29$, Cronbach's $\alpha = .87$), Gaining Career Experience (e.g., "Volunteering allows me to explore different career options"; $M = 4.36$, $SD = 1.51$, Cronbach's $\alpha = .82$), Social Benefits (e.g., "My friends volunteer"; $M = 3.49$, $SD = 1.46$, Cronbach's $\alpha = .91$), Gaining a Better Understanding (e.g., "Volunteering lets me learn things through direct, hands-on experience"; $M = 4.84$, $SD = 1.34$, Cronbach's $\alpha = .85$), and Self-Enhancement (e.g., "Volunteering makes me feel important"; $M = 4.36$, $SD = 1.40$, Cronbach's $\alpha = .90$).

Social activity participation. Participants viewed a list of 79 sports, academic, and community clubs relevant to their school and identified all activities in which they had participated in the past year. Participants' responses were summed to create an index of social activity participation ($M = 4.12$, $SD = 2.41$).

Empathy toward three target groups. Participants used a 9-point scale (1 = *not at all* to 9 = *extremely*) to rate their experiences of six empathic emotions (warmth, sympathy, tender, moved, compassion, and softhearted; as in Study 4, these items were drawn from Batson et al., 1987) directed toward each of the three target groups (homeless persons, senior citizens, and sick children). Participants' degrees of experiencing empathic feelings

toward the three groups (as measured by the three 6-item scales described above) were related positively (average $r = .40$); thus, each participant's responses to the 18 items were averaged to create an index of empathy directed toward the three groups ($M = 7.06$, $SD = 1.41$, Cronbach's $\alpha = .90$).

Results and Discussion

As predicted, participants' BIF scores related positively both to their reported willingness to volunteer, $r(90) = .42$, $p < .01$, and to their experiences of empathy, $r(90) = .34$, $p < .01$. Willingness to volunteer also was associated with the number of extracurricular activities in which participants reported engaging, $r(90) = .28$, $p < .01$, participants' experiences of empathy, $r(90) = .49$, $p < .01$, and participants' scores on all six of the VFI subscales (rs between .31 and .49, $ps < .01$). The six VFI subscales correlated substantially with one another (average $r = .58$), which is consistent with past work (e.g., in an analogous undergraduate sample, average $r = .41$; Clary et al., 1998, Study 2).

To test our proposal that action representation affects willingness to volunteer independently of general extracurricular-activity involvement and of the motivational functions served by volunteering but is mediated by empathy, we next performed a two-step hierarchical regression analysis predicting willingness to volunteer. At the first step, we entered BIF, extracurricular activity involvement, and the six VFI subscales, and found that BIF accounted for a significant portion of unique variance, $\beta = .21$, $F(1, 79) = 4.62$, $p < .05$. The only other variable to account for a significant portion of unique variance was the Values subscale of the VFI, $\beta = .31$, $F(1, 79) = 6.56$, $p < .02$. These findings show that the relation between BIF and willingness to volunteer is not explained by students' general levels of extracurricular activity or by the different motivational functions they expect volunteering to serve. However, the relation between BIF and willingness to volunteer was no longer significant, $\beta = .15$, $F(1, 78) = 2.41$, $p > .12$, when also controlling for empathy, which itself accounted for unique variance in willingness to volunteer, $\beta = .37$, $F(1, 78) = 9.88$, $p < .01$. Baron and Kenny's (1986; see also Kenny et al., 1998) modification of the Sobel (1982) test showed that the indirect effect of BIF (through empathy) on willingness to volunteer was statistically significant ($Z = 2.10$, $p < .05$).

Independent of the motivational functions students expected volunteering to afford and of students' general levels of extracurricular activity, then, their predilections to represent action abstractly related positively to their reported willingness to volunteer, and empathy mediated this effect.

Study 6

Findings from Studies 4 and 5 support our proposal that construing action abstractly, by leading one to take others' perspectives, relates positively to expressing a desire to help others. But will this relation translate into actual helping behavior? Study 6 investigated this question, which bears consideration given decades of research showing that people do not always carry out the behaviors they report preferring (e.g., Ajzen & Fishbein, 1973; Sia, Lord, Blessum, Ratcliff, & Lepper, 1997; Wilson, Dunn, Kraft, & Lisle, 1989).

An additional goal was to address a potential alternative explanation for any findings. Although the designs of Studies 1–5

addressed various alternative explanations, such as participants' ideologies and the rewards participants expected helping others to provide, it is possible that other aspects of personality might explain our effects. For example, might people who construe action abstractly simply be open to a wider array of experiences? If so, they might more willingly engage in helping behaviors merely because doing so affords new experiences. Addressing this alternative is important, given that it differs clearly from our conceptual analysis that construing action abstractly increases one's focus upon the abstract goals that all people share, thus increasing one's likelihood of taking others' perspectives and helping others when they need it. Accordingly, we also assessed and controlled for participants' openness to experience, as operationalized by Costa and McCrae (1992). Of course, McCrae and Costa's (1987) five-factor model of personality includes four other factors. McCrae (1993) found that participants' tendencies to view action abstractly, as measured by the BIF employed in the current work, did not relate reliably to their neuroticism, extraversion, or agreeableness scores but did relate, at levels approaching statistical significance, to their openness and conscientiousness scores. Thus, although a clear rationale for why conscientiousness might explain our effects is not readily apparent, we also assessed and controlled for that variable to explore further the independence of our predicted effects from these broader aspects of personality.

Addressing these issues, in Study 6, we measured participants' levels of action representation, openness to experience, and conscientiousness. Next, under the guise of evaluating newspaper articles, participants read about a local homeless shelter and were given an opportunity, while alone in a room with the door closed, to make an anonymous monetary donation to the shelter. On the basis of our theorizing above, we expected participants' tendencies to view action abstractly, independent of their levels of openness and conscientiousness, to relate positively to how much money (if any) they deposited into a collection can. To address the possibility that participants' levels of action representation might relate to their proclivities to become engaged in written narratives, thus perhaps influencing the amount of money they donated to the cause the articles described, we also assessed and controlled for participants' interest in the articles themselves.

Method

Participants

A total of 60 undergraduates (24 men and 36 women) at the State University of New York at Stony Brook ranging in age from 16 to 31 years ($M = 19.85$) were recruited via posters placed around campus offering $5.00 cash payment for participation. All participants indicated that English was their native language.

Procedure

Upon arrival at the laboratory, each participant was seated individually in a small room containing a computer, which provided all experimental instructions. After a participant had signed a consent form, the experimenter closed the door, leaving the participant to complete the study in private. On the leftmost corner of the desk, behind the computer monitor and hence out of participants' immediate sight, was a donation can, printed on which was the name and logo of a local homeless shelter. This can was stocked with numerous coins; thus, it rattled when shaken. However, the coins inside were placed within a plastic bag, allowing easy detection of

any donations participants might provide. On top of the can, and also out of participants' immediate sight, was a sealed plain white envelope, on which was hand-written, "$5 Subject Payment." This envelope contained, in U.S. currency, four $1 bills, two quarters, and five dimes. The experimenter made no reference to the envelope or donation can. The instructions for the experiment were self-paced, and participants advanced the instructions by pressing a response key. For the first 20 min of the experiment, participants completed an unrelated experiment entailing the pronunciation of numbers. Next, participants completed the BIF and NEO measures, learned about a homeless shelter through the evaluation of purported campus articles, and were instructed via computer to take their payment and to consider whether or not to make a cash donation to the homeless shelter.

Materials

BIF. Participants completed the BIF described in Study 1 ($M = .61$, $SD = .24$, Cronbach's $\alpha = .88$).

Openness to experience and conscientiousness. Using a 5-point scale (1 = *strongly agree* to 5 = *strongly disagree*), participants evaluated two dimensions of their personality: openness to experience (12 items; $M = 3.58$, $SD = 0.44$, Cronbach's $\alpha = .62$) and conscientiousness (12 items; $M = 3.47$, $SD = 0.60$, Cronbach's $\alpha = .83$). These two subscales were taken from the NEO Personality Inventory short form (Costa & McCrae, 1992).

Description of a homeless shelter. The cover story used to introduce the homeless shelter was adapted from Batson and colleagues' investigations of helping among college students (Batson, Garst, Rubchinsky, & Dawson, 1997; Batson, Polycarpou, et al., 1997). In Batson and colleagues' work, participants were told that they would be listening to and evaluating a new university broadcast. Participants in the current study were told that they would be reading and evaluating a new column for one of the university newspapers. The new column, titled, "News from the Personal Side," was described as going "beyond the facts of local events to report how these events affect the lives of the individuals involved" (Batson, Sager, et al., 1997, p. 498).

Participants were further told that "The article you will read is real; it involves interviews with homeless persons from a local homeless shelter, Hope House. You will read excerpts from the article and then be asked some questions about it." The life stories were adapted from actual life stories of homeless persons obtained via the Internet. The article began as follows:

> One life change, such as losing a job, being evicted from a residence, or just trying to meet the increased cost of living expenses can throw an unsuspecting person into a world of homeless chaos. Several homeless persons staying at Hope House, a local shelter, were generous enough to share their life stories for this article. Their names have been changed to assure their right to privacy and anonymity.

Participants next read about four homeless persons. Two examples are given below.

> Harry is 47 years old and has been living at Hope House for the past 2 months. Until he needed to undergo major surgery in 1999, he was a local maintenance worker. After his surgery, he began living on the streets without a warm bed to sleep in or a place to take a shower. He has no immediate family to help him. Searching for a job became nearly impossible, as Harry worked to meet his basic food and shelter needs. At Hope House, he was provided with peer counseling services and transportation vouchers, enabling Harry to focus on his job search.

> Ana appears to be in her late thirties and has been living at Hope House for a few months. When Ana came to Hope House, she was scared, cold, exhausted, and run-down. She was also very concerned

because her dog of eight years ran away, and it was very cold out. She had been wearing the same clothes for months and was traveling around Long Island by herself. She lost touch with her family a long time ago. She said that the people at Hope House are her family for now. With the help of the staff at Hope House and encouragement from other residents of Hope House, Ana is looking for a job.

Following the article, the next computer screen presented "an important note from the experimenter." Adapted from a Batson, Sager, et al. (1997, p. 500) study examining participants' willingness to volunteer time to help a university student in need, this note stated

It occurred to us that some people reading the news article about homeless persons at Hope House might wish to help them. To explore this possibility, we contacted Hope House and asked what kind of help was needed. The director of Hope House suggested that donations would be most helpful at this time. The white envelope on the desk next to your computer monitor contains your $5 payment for participation in the study. When you open the envelope, you will notice that it contains four $1 bills plus one dollar in change. Please take your payment at this time. There also is a gray can labeled "Hope House" on your desk. If you would like to donate some money to Hope House, please do so at this time. Please be assured that your participation in this study in no way obligates you to donate to Hope House. 100% of donations collected here will be donated to Hope House Homeless Shelter.

To ascertain that all participants read these instructions, we included on the next computer screen an abbreviated reminder of them. After participants had taken their payment and had donated or not, they used a 9-point scale to answer the question "How interesting did you find the article you read?" Participants next were asked to provide written comments about the experiment. No participants reported being suspicious of any aspect of the study. Participants lastly were thanked and thoroughly debriefed.

Donation of money to local homeless shelter. After each participant exited the laboratory, the experimenter counted the amount (if any) of money he or she had deposited into the donation can ($M = \$0.94$, $SD = \$1.33$).

Results and Discussion

Because the distribution of cash contributions was positively skewed, a natural logarithmic transformation of this variable (see Judd & McClelland, 1989) was used to reduce the impact of outliers in the analyses reported below (although all reported effects also are significant when analyzing the raw scores). As predicted, participants' BIF scores related positively to the amount of money they deposited into the donation can, $r(60) = .32$, $p < .02$. Participants' BIF scores did not relate significantly either to their openness to experience scores, $r(60) = -.08$, ns, or to their ratings of how interesting they found the article itself to be, $r(60) = .07$, ns, but did relate significantly to their conscientiousness scores, $r(60) = .32$, $p < .02$. To examine whether the relation between BIF and amount of money donated was independent of the influence of these other three variables, all four independent variables were entered into a simultaneous regression equation predicting amount of money donated. In this analysis, participants' openness scores, $\beta = .31$, $F(1, 55) = 6.46$, $p < .02$, as well as their liking of the homelessness article they read, $\beta = .27$, $F(1, 55) = 4.72$, $p < .05$, accounted for unique portions of the variance in money donated, whereas their conscientiousness scores did not ($\beta = .07$, $F < 1$, ns). Even when controlling for these three variables, moreover, participants' BIF scores accounted for a significant portion of the variance in the amount of money they

donated, $\beta = .29$, $F(1, 55) = 5.43$, $p < .03$. Illustrating the impact of this relation, the regression analysis (controlling for all other variables) suggests that a person scoring 1 standard deviation below the BIF mean would be predicted to donate an average of $0.61, whereas a person scoring one standard above the BIF mean would be predicted to donate an average of $1.28.

Whereas findings from Studies 1–5 showed that people's tendencies to view action abstractly versus concretely relate to their judgments of and stated willingness to help others, then, data from Study 6 show that these relations translate into actual helping behavior.

General Discussion

Because people of all backgrounds generally pursue similar abstract goals (Stevens & Fiske, 1995), we predicted that people chronically representing action in abstract terms would be more likely to view themselves as sharing goals with others and, hence, more likely to perceive overlap between themselves and others. Accordingly, we reasoned that representing action relatively abstractly should decrease one's attendance to the social details that distinguish people from one another. This reasoning implies that an abstract action representation should relate positively both to perceiving permeable boundaries between social categories and to viewing social categories as homogenous groups of similar individuals.

Data from six studies supported these ideas. In Study 1, participants holding relatively abstract action representations were more likely to possess a universal orientation (Phillips & Ziller, 1997) toward perceiving greater similarities than differences among people of different social groups (e.g., young vs. old and women vs. men) and between themselves and diverse others. Further suggesting a view of social category boundaries as permeable, representing action abstractly also related to taking the perspectives of dissimilar others, including members of both relatively nonstigmatized groups (college professors, Study 2) and stigmatized groups (homeless people and people with AIDS, Study 3). Because taking others' perspectives promotes empathic concern (e.g., Batson, Polycarpou, et al., 1997; Coke et al., 1978; Stoland, 1969), we also predicted and found that action representation related positively to experiencing empathy directed toward both dissimilar others (Studies 3 and 5) and similar others (Study 4). Moreover, perspective taking mediated the relation between action representation and empathy (Study 3), and empathy mediated relations between action representation and reported willingness to help a single individual similar to oneself (Study 4) and different groups of individuals in need (Study 5). Demonstrating that these results reflect more than merely people's stated desires to help others, participants holding relatively abstract action representations donated more money to people in need (Study 6). Finally, suggesting that action representation also affects perceptions of the homogeneity of social groups, representing action abstractly related positively to viewing members of particular groups, whether stigmatized (Study 3) or not (Study 2), as similar to one another with respect to personality attributes such as hopes, worries, and intelligence.

Representational Versus Ideological Influences on Social Cognition

These results suggest a distinction between representational and ideological influences on social cognition. Holding egalitarian beliefs relates positively to viewing social category boundaries as permeable (Phillips & Ziller, 1997), whereas holding the PWE relates positively to viewing members of stigmatized groups as highly similar to one another, reflecting their shared lack of effort (Katz & Hass, 1988). Because the same representational tendency to construe actions differentially abstractly related positively to both the former and the latter outcomes, however, these data suggest that inferring a person's ideology from his or her social judgments sometimes could prove misleading. In Study 1, for example, both action representation and egalitarianism related positively to viewing social category boundaries as permeable. In this study, then, a person holding an abstract action representation and thus perceiving high similarity across people of diverse social categories, presumably simply because of not attending to individuating information, might be mistaken for an egalitarian activist, bent on correcting social injustices. In Study 3, however, both action representation and the PWE ideology related positively to viewing members of stigmatized groups as similar to one another. In contrast to Study 1, then, in this study, a person holding an abstract action representation and thus perceiving high similarity among stigmatized group members, again presumably simply because of not attending to individuating information, might be mistaken for a social conservative, convinced that members of stigmatized groups have only their shared lack of hard work to blame for their negative predicaments.

Further differentiating representational from ideological influences on social cognition, additional findings from Study 3 showed that the PWE, and not action representation, related positively to holding negative views of members of stigmatized groups. Moreover, although we found an overall positive relation between viewing stigmatized groups as homogenous and feeling negatively toward them, this relation was amplified among participants holding primarily concrete action representations and absent among participants holding primarily abstract action representations. Viewing stigmatized groups as homogenous, then, need not always reflect negatively biased views of stigmatized group members but sometimes might reflect a tendency simply to construe stigmatized group members in abstract terms relatively devoid of individuating information. Future research, then, should explore directly whether people who view action abstractly fail to remember individuating information presented to them.

Alternative Explanations

Although consistent with our predictions, can these results be explained alternatively? For example, might people who represent action abstractly also have higher levels of intelligence or educational accomplishment, and might such variables help explain our effects? Adolescents more educationally accomplished do volunteer more to help others (e.g., Johnson, Beebe, Mortimer, & Snyder, 1998), but it is difficult to see how higher educational accomplishment or intelligence would predict perceiving greater homogeneity among social groups, as abstract action representation was shown to do in the current work. Moreover, previous research found no reliable relations between people's tendencies to view action abstractly and their levels of intelligence (Vallacher & Wegner, 1989) or years of education (McCrae, 1993); thus, the present results do not appear likely to reflect the influence of those variables. Previous work also found no reliable relations between level of action representation and cognitive complexity, tolerance for ambiguity, or dogmatism (Vallacher & Wegner, 1989); thus, the current results do not appear dependent on those various cognitive styles either. Moreover, our effects were obtained even when controlling statistically for participants' ideological leanings (Studies 1 and 3), their broad personality traits (Study 6), the perceived costs of helping others (Study 4), the rewards they expected helping others to provide (Study 5), the responsibility they accord others for their situations (Study 4), and participants' engagement in the experimental tasks they were asked to complete (Study 6). Although future work will need to address further these and other interesting alternatives, then, the above considerations strengthen the viability of our conceptual account of the current results.

Perceiving Similarity Among People: Social Costs and Benefits

These findings suggest that different social benefits and costs might accrue through viewing action differentially abstractly. To promote intergroup harmony, an abstract construal may be most beneficial, by fostering perceiving similarity among diverse others. To engender meaningful interpersonal relationships, on the other hand, a more concrete construal may be most beneficial, by fostering recognition of individuals' unique attributes. However, intergroup relations are often interpersonal, manifest through interaction with a single out-group member. Thus, facilitating social relations (both interpersonal and intergroup) may require striking a balance between an abstract and concrete action construal. Researchers increasingly have acknowledged that in intergroup contact situations engendering positive distinctiveness at the interpersonal level and positive similarities at the intergroup level can help people to generalize new positive attitudes to entire groups (e.g., Hewstone, 1996; Hewstone et al., 2002). However, structuring intergroup situations to achieve both aims simultaneously is particularly challenging (Hewstone et al., 2002). People more easily learn to meet one or the other of these aims, attending to others' inner qualities (Aboud, 1993; Aboud & Fenwick, 1999) or viewing similarities across diverse groups (e.g., Gaertner & Dovidio, 2000; Gaertner, Mann, Murrell, & Dovidio, 1989). Our findings potentially may prove helpful here, given that different types of situations can lead people to represent action differentially abstractly (Vallacher & Kaufman, 1996; Vallacher & Wegner, 1985, 1987). Trope and Liberman (in press), for example, showed that people represent distal-future actions more abstractly than near-future actions. Accordingly, simply leading students to plan a social event in the distal rather than proximal future might ensure that they invite a more diverse group of guests, because of perceiving greater similarity among diverse others. Once the event begins, the students' lower-level representations of immediate actions might facilitate the interpersonal distinctiveness needed to form meaningful interpersonal relationships.

Conclusion

In *Utopia*, Thomas More (1516/2001) envisioned a seemingly idealized nation providing all citizens with exactly equal rights. Inhabitants of this nation make every effort to ensure equality, even including transferring "persons from households with too many people to those with too few" (p. 67). Whether one embraces this vision's equality or recoils from its repression of individuality, one's endorsement of it may depend partly on how abstractly one represents action. Our findings showed that, on the one hand, an abstract action construal relates to a view of members of different groups as equal, and almost interchangeable, such that people holding an abstract construal feel the pain of disadvantaged outgroup members as if it were their own. On the other hand, the same view, by blurring social details, relates to overlooking that which distinguishes individuals from one another.

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