UNIVERSITÀ
DEGLI STUDI
DI PADOVA

Sede Amministrativa: Università degli Studi di Padova

Dipartimento di Psicologia Generale

SCUOLA DI DOTTORATO DI RICERCA IN SCIENZE PSICOLOGICHE

INDIRIZZO: PSICOLOGIA SOCIALE E DELLA PERSONALITÀ

CICLO XXII

The interplay of empathy, oneness and perceived similarity in mediating the effects of perspective taking on prosocial responses

Direttore della Scuola: Ch.ma Prof. Clara Casco

Coordinatore d'indirizzo: Ch.ma Prof. Anna Maria Manganelli

Supervisore: Ch.mo Prof. Alberto Voci

Dottoranda: Lisa Pagotto

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INTRODUCTION

Perspective taking has been identified as one of the most promising techniques for reducing prejudice and promoting more harmonious intergroup relationships. Yet, there is little consensus on which mechanisms can better account for such beneficial effects. The present work aimed at providing an integrative view of how perspective taking can promote prosocial responses to stigmatized others, by simultaneously examining the role of empathy, oneness and perceived interpersonal similarity.

In the first chapter, we provide a theoretical introduction to the study of empathy in social psychology. We briefly review the history of the concept of empathy, highlighting differences and similarities between the various definitions that have been proposed in literature. We then illustrate why empathy and related phenomena are studied in social psychology. Finally, we describe different measures and manipulations that have been used in past research to assess and to induce empathic feelings.

In the second chapter, we review the literature on the relationship between induced empathy and helping behavior. We first provide a definition of prosocial behavior, helping and altruism. We then describe the empathy-altruism hypothesis (Batson, 1987; 1991) and egoistic challenges to this hypothesis, while reviewing the empirical evidence. Particular attention is devoted to the empathy-merging hypothesis (Cialdini et al., 1997), which is of particular interest for its implications.

In the third chapter, we shift to the intergroup level. We first illustrate how empathy and perspective taking can contribute to the improvement of intergroup relations, by reviewing several theoretical accounts that have been proposed in literature. Then, we describe in detail empirical research that provides evidence of the effectiveness of perspective taking in improving attitudes, reducing prejudice and stereotypical responding, and promoting supportive behaviors in favor of stigmatized groups.

The fourth chapter presents four experimental studies that analyze the mediating mechanisms in the relation between perspective taking and prosocial responses. In the

first three studies, perspective taking was manipulated to test the hypothesis that taking the perspective of a stigmatized group member, i.e., a young immigrant woman in difficulty, would promote prosocial responses toward this specific individual and her membership group as a whole (i.e., North-African immigrants). In the fourth study, two of the key mediators were manipulated by varying participants' attentional focus. For all studies, mediation processes were examined adopting a structural equation model approach.

Finally, in the fifth chapter, we briefly review and discuss the results of the four studies, pointing out how they can contribute to explain, and in part reconcile, apparently contradictory findings in the literature.

CHAPTER 1
EMPATHY IN SOCIAL PSYCHOLOGY: AN INTRODUCTION

What is empathy?

To give a definition of empathy is a tough task, as this term has been and is currently used for different purposes by philosophers, sociologists, etologists, psychologists and neuroscientists. To further complicate matters, a number of other terms – e.g., *sympathy, role taking*, *perspective taking* – are used to refer to similar, or identical, constructs. Daniel Batson, one of the most influential researchers in this research field, recently wrote a chapter, whose title poignantly grasps the state of affairs: "The things called empathy: eight related but distinct phenomena" (Batson, 2009). He pointed out that the term empathy has been applied to at least eight different psychological states or processes:

1. knowing another person's internal state, including his or her thoughts and feelings;
2. adopting the posture or matching the neural response of another;
3. coming to feel as another person feels;
4. intuiting or projecting oneself into another's situation;
5. imagining how another is thinking and feeling;
6. imagining how one would feel in the other's place;
7. feeling distress at witnessing another person's suffering;
8. feeling for another person who is suffering;

In attempting to come to understand what empathy is, we will now review some of the most influential definitions that have been proposed in literature, although we are aware that it is impossible to be exhaustive. To this purpose, it could be useful to consider the main dimensions along which the various definitions of empathy differ,

giving origin sometimes to disagreement, other times to confusion. These dimensions are: cognitive-affective, process-outcome, dispositional-situational.

The primary dimension concerns the nature of empathy and its conceptualization as a cognitive vs. emotional phenomenon. This divergence is evident especially when looking at the history of the concept. The term "empathy" was used for the first time in 1909 by the psychologist Edward Titchener (1867/1927) as the translation of the German term "Einfühlung" (or "feeling into"). Originally, it was used in aesthetics, to indicate the imaginative or perceptual projection of oneself into an object or event to "see" it from the inside. During the 1940's and 1950's, empathy took on a more cognitive flavor, especially in clinical discussions. Dymond (1949, p. 127) described it as the "imaginative transposing of oneself into the thinking, feeling, and acting of another person and so structuring the world as he does." Hogan (1969, p. 308) gave an even more restrictive definition: "the intellectual or imaginative apprehension of another's condition without actually experiencing that person's feelings." In this period, empathy referred to understanding accurately the other's point of view and it was often used as synonymous with role or perspective taking. Around the 1960's, empathy was given a less cognitive and more emotional meaning, especially when used by developmental and social psychologists. Stotland (1969, p. 272), one of the pioneer in this field of research, defined empathy as follows: "It is an observer's reacting emotionally because he perceives that another is experiencing or is about to experience an emotion." Stotland considered to be empathic any kind of emotional reaction, even positive responses (e.g., joy) to another's sufferance, which he called *contrast empathy*.

Lately, researchers have restricted the term empathy to emotional reactions that are at least broadly congruent with those of the target (Batson & Coke, 1981; Eisenberg & Strayer, 1987; Hoffman, 1981, 1987). For instance, Eisenberg and Strayer (1987, p. 5) defined empathy as "an affective state stemming from apprehension of another's emotional state or condition and which is congruent with it." Batson and Coke (1981, p. 169) described empathy as "an emotional response elicited by and congruent with the perceived welfare of someone else." Although these two definitions appear to be quite similar, in that they both refer to empathy as a vicarious response elicited by the other's plight, they substantially differ in the meaning attributed to the adjective *congruent*. In Batson's view, congruent refers to the valence of the response, i.e., positive when the

other's perceived welfare is positive (empathic joy) and negative when the perceived welfare is negative (empathic concern). However, this congruence does not imply that the emotional response has to be the same (or similar) and match the other's affective state. Differently, Eisenberg and Strayer argued that empathy involves sharing the perceived emotion of another – "feeling with" another. This difference of interpretation became clearer later on. In 1991, Batson wrote that empathy is a "particular set of congruent vicarious emotions, those that are more other-focused than self-focused, including feelings of sympathy, compassion, tenderness and the like" (p. 86). At roughly the same time, Eisenberg and collaborators specified that empathy is "an affective response that is similar to what the other person is feeling or would be expected to feel", which is distinguished from *sympathy*, the vicarious emotional reaction that involves feelings of sorrow or concern for the other (Eisenberg & Fabes, 1990; see also Eisenberg, 1991). This last definition is precisely what Batson calls empathy or *empathic concern*. The same set of emotions has been also labeled *sympathetic distress* by Hoffman (1987, 2000) and *sympathetic concern* by de Waal (2008).

Despite the use of different labels for empathy/sympathy, researchers agree on the fact that it is distinguished from *personal distress*, an aversive self-oriented emotional state characterized by feelings of anxiety and unease elicited by witnessing another person's suffering (Batson, 1991; Davis, 1994; Eisenberg & Strayer, 1987). Furthermore, since mid 1970's, researchers have become increasingly aware of the necessity to abandon a rigid juxtaposition between cognitive and emotional empathy, in favor of an integrative view of different components of the empathic phenomenon (e.g., Deutsch & Madle, 1975; Hoffman, 1987; Davis, 1994; Duan & Hill, 1996; Stephan & Finlay, 1999; Strayer, 1987).

Besides the conflict concerning the cognitive vs. affective nature of empathy, another critical issue is the distinction between empathy as a process vs. empathy as an outcome (Davis, 1994). A *process* is something that happens when one is exposed to another person's plight, whereas an *outcome* refers to something that results from this process. So, for example, assuming the cognitive or emotional perspective of another person to come to understand what the other is experiencing is a process; unconsciously imitating the other's facial expression or posture is another. In contrast, emotional

responses in the observer or a more accurate recognition of others' internal states are examples of empathy as outcome. In general, "definitions of empathy (or sympathy) which focus on affective responses are, therefore, outcome-oriented definitions. Approaches which define empathy as role taking, however, more typically focus on the process rather than the outcome" (Davis, 1994, p. 10). Unfortunately, this factor has not been explicitly considered in much of the theorizations, thus contributing to confusion. In this work, we will focus on empathy as the emotional responsivity to another person's distress, while considering perspective taking as the favoured mechanism to elicit such response.

The last dimension to take into account is the distinction between empathy as a trait vs. a state. Researchers have conceived and investigated empathy both as a dispositional and relatively stable tendency to experience vicariously other's states (e.g., Archer, Diaz-Loving, Gollwitzer, Davis & Foushee, 1991; Davis, 1983; Eisenberg, 1991, Eisenberg et al., 1991) or the ability to accurately infer other people's internal states (e.g., Ickes, 1997; 2009; Myers & Hodges, 2009), and as a situation-specific affective state, which can be contextually induced and measured (see Batson, 1991). These distinct conceptions have lead to different research foci, as well as to the development of various measures that tap different aspects (see next paragraph). In this work, we will focus exclusively on empathy as a state, contextually induced and measured.

To clarify the theoretical conceptions guiding this work, we could say that empathy is a twofold phenomenon, consisting of two basic components: one cognitive and one emotional (Davis, 1994; Duan & Hill, 1996; Stephan & Finlay, 1999). Cognitive empathy refers to assuming the perspective of another person (i.e., perspective taking); emotional empathy can be defined as the emotional responsivity to another person's affective state, which is elicited by and is congruent with the other's perceived welfare. Cognitive empathy relates more to the process that allows people to experience empathic feelings, while emotional empathy concerns more the outcome of this process, i.e., the affective experience. Two types of emotional empathy can be distinguished (Davis, 1994; Stephan & Finlay, 1999; Staub, 1987): reactive empathy consists in the emotional reaction to the other person's affective state or condition (corresponding to Batson's empathy or empathic concern and Eisenberg's sympathy);

parallel empathy is experienced when the emotional responses of a person are similar to those expressed by another person (corresponding to Eisenberg's empathy). Witnessing someone in a difficult or painful situation, reactive empathy includes feelings of concern, sympathy and compassion, while parallel empathy involves feelings of sadness, sorrow and grief. When the other person suffers because he/she is a victim of unfair treatment or discrimination, parallel empathy can be characterized also by feelings of injustice, anger, and indignation (Finlay & Stephan, 2000; Dovidio et al., 2004). Some authors consider these feelings as moral outrage (e.g., Dovidio et al., 2004), while Batson's calls this kind of response "empathic anger", implying that it is a particular form of empathic concern (see Batson, Kennedy et al., 2007).

Why is empathy studied in social psychology?

Empathy and related phenomena have received considerable interest in human sciences, especially in developmental and social psychology, as they have been often related to social development and functioning, and in particular to prosocial responding. As Mead pointed out a long time ago now (1934), the ability to take the other's role is essential for living effectively and functionally in the social world.

Developmental psychologists have far-back recognized the role of empathy and perspective taking in the development of persons. Piaget (1932), in his influential theory of child development, considered the ability to decenter, i.e., to consider the others' points of view, as the turning point that allows children to abandon the "self-ish perspective". Staub (1987), summarizing the functions of empathy, pointed out that empathy is a source of the self-concept and self-expansion (Cooley, 1906), as well as a means to positive modes of relating with others. He further suggested that, by creating a bond between self and others, empathy promotes a positive evaluation of human beings and a caring about their welfare, which are likely to be associated with a sense of responsibility for their welfare. The combination of this three factors lead to the development of a general "prosocial value orientation", which is strongly associated with helping. More specifically, empathy has been linked to moral development and responding (e.g., Eisenberg, 2000; Hoffman, 1987; 2000). According to Hoffman and Eisenberg, empathy is widely implicated in moral judgment and reasoning, in that it

constitutes a source of moral principles, and precisely of the "principle of caring" and "the principle of justice". These principles, developed and internalized through socialization, are those that guide moral reasoning and promote prosocial behaviors.

Among social psychologists, empathy has become a notion of central interest in the study of helping behaviors. From the late 1960's to the mid-1970's research focused on situational and social factors that favor or, more often, inhibit helping interventions. Lately, social psychological research has shift from questions concerning *when* people do *not* help to questions concerning *why* people *do* help (Dovidio, 1991). In this context, theoretical models proposed different mechanisms (e.g., negative-state relief, aversive-arousal reduction) that could underlie helping and prosocial behaviors. The prevailing idea was that apparently selfless helping behavior might be selfishly (i.e., egoistically) motivated (e.g., Cialdini, Bauman & Kendrick, 1981; Piliavin, Dovidio, Gaertner & Clark, 1981). Challenging this view, a first version of the empathy-helping hypothesis appeared (Baston & Coke, 1981), claiming that empathy produce a genuinely altruistic motivation to help another person in need. Since then, a large body of research has found empirical evidence of the relation between empathy and helping behaviors (see Chapter 2; see, for a review, Batson, 1991; Davis, 1994; Eisenberg & Miller, 1987b), although the debate on the existence of true altruism is far from being concluded.

More recently, the study of empathy has been applied also to intergroup relations (see Batson & Ahmad, 2009, for a review). Much of this research has focused on the potential of interventions that generate empathy for improving intergroup relations and reducing prejudice. A growing body of research provides converging evidence that encouraging people to adopt the perspective of an outgroup member and empathize with him/her can substantially and positively affect intergroup attitudes and behaviors (for a review of the empirical evidence, see Chapter 3). The general finding is that feelings of empathy, induced at the individual level, can generalize to the intergroup level and promote positive feelings toward the group as a whole. Furthermore, feelings of empathy, because they are associated with a genuine interest for the other's welfare, can also motivate prosocial and supportive behaviors in behalf of the entire group.

In addition, perspective taking is generally considered to facilitate interpersonal understanding, foster social bonds and contribute to social coordination (Galinsky, Ku & Wang, 2005). Research has shown that cognitive outcomes of imagining oneself in

the shoes of an outgroup member can affect stereotype accessibility and application, thanks to a merging process of representations of self and outgroup. Specifically, perspective taking seems to decrease stereotyping of others through application of the self to the other (Galinsky & Moskowitz, 2000), and to increase stereotypicality of one's own behavior and self-judgments through inclusion of the other in the self (Galinsky, Ku & Wang, 2008).

Measuring empathy

Researchers have conceived and investigated empathy both as a dispositional and relatively stable (personality) trait and as a situation-specific affective state. These distinct conceptions have lead to the development and use of different measurements. Measures of dispositional empathy seek to provide a global index that permits to evaluate individual differences in terms of tendency or ability to respond empathically to others' affective states. On the other side, measures of state empathy aim to assess the amount of empathic responses experienced toward a specific person, in a given situation.

Empathy as a dispositional trait

Dispositional empathy has been measured through a variety of questionnaires or scales, which can be understood as operationalizations of different conceptions of empathy. Some of the most commonly used questionnaires have been Hogan's empathy scale (EM; Hogan, 1969), Mehrabian and Epstein's Questionnaire Measure of Emotional Empathy (QMEE; Mehrabian & Epstein, 1972), which has been lately revised and named Balanced Emotional Empathy Scale (BEES; Mehrabian, 1996; for an Italian version, see Meneghini, Sartori & Cunico, 2006). The former considers empathy exclusively as a cognitive phenomenon and assesses role-taking abilities, while Mehrabian's scales are based on a purely emotional conception of empathy and measure the tendency to vicariously experience another's feelings in a variety of situations. The first has been criticized for tapping more social skills rather than perspective taking *per se*, as well as for its methodological weakness, while the second has been criticized for measuring general emotional arousability rather than empathic responsivity.

Adopting a multi-dimensional approach, Davis developed the Interpersonal Reactivity Index (IRI; Davis, 1980, 1983, and 1994; for an Italian version, see Bonino, Lo Coco & Tani, 1998), which is, nowadays, the most widely used questionnaire for measuring dispositional empathy in adults. This instrument includes four 7-item subscales, tapping different but related facets of empathy, two cognitive and two affective. The *perspective taking* (PT) subscale measures the tendency to spontaneously adopt the psychological point of view of others (e.g., "I sometimes try to understand my friends better by imagining how things look from their perspective."), while the *fantasy* (FS) subscale measures the tendency to imaginatively transport oneself into fictional situations (e.g., "I really get involved with the feelings of the characters in a novel."). The other two subscales tap emotional responsivity to the sufferance of others: The *empathic concern* (EC) scale assesses the tendency to experience other-oriented feelings of sympathy and compassion (e.g., "I often have tender, concerned feelings for people less fortunate than me."), while the *personal distress* (PD) scale assesses the tendency to respond with self-oriented feelings of anxiety and discomfort (e.g., "In emergency situations, I feel apprehensive and ill-at-ease.").

Another recently developed and well-validated questionnaire is the Empathy Quotient (EQ; Baron-Cohen & Wheelwright, 2004). It consists of 60 questions: 40 of them are directly related to empathy, tapping cognitive empathy, emotional reactivity to others, and social skills, and the remaining 20 are regarded as filler items in order to distract responders "from a relentless focus on empathy."

Empathy as a situation-induced state

Situational empathy and other emotional reactions to a specific person's suffering have been measured in many ways: through participants' self-reports, through observational techniques, and through various physiological and neuropsychological indices.

Self-reported measures typically consist in asking participants to describe their emotional experience after being exposed to a distressed person, depicted through a narrative, a tape or videotape. Participants are usually provided with a list of emotions and are asked to rate the degree to which they have felt each one. The adjectives most widely adjectives used in literature to measure empathic concern are *sympathetic*,

compassionate, *softhearted*, *tender*, *warm*, and *moved* or *touched*. For personal distress, adjectives typically used are *distressed*, *upset*, *alarmed*, *troubled*, *disturbed*, *worried*, *perturbed*, and *uneasy* (see, for a review, Batson, Fulz & Schoenrade, 1987). Alternatively, in some studies (e.g., Esses & Dovidio, 2002; Shih, Wang, Bucher & Stotzer, 2009) participants are invited to write a short passage to describe their thoughts and emotional reactions to the eliciting stimulus, and then its content is analyzed and coded.

Observational techniques, more often used in developmental psychology, consist in the study of facial, gestural, and vocal indices of empathy-related responding (Zhou, Valiente & Eisenberg, 2003). Typically, participants are observed while they are exposed to empathy-evoking stimuli, such as tapes or videotapes depicting another person in distress, and their reactions are coded as markers of empathy-related responding. For instance, expressions of concerned attention (e.g., eyebrows pulled down and inward over the nose, head forward, frowning, sympathetic statements said in soothing or reassuring tone of voice) are believed to reflect empathic concern; signs of sadness (e.g., sad facial expressions, downturned mouth, gloomy tone of voice) in response to sad events likely tap empathic sadness and may engender empathic concern; tense and anxious expressions (e.g., lip-biting, shaking) are likely to indicate personal distress (e.g., Zahn-Waxler, Radke-Yarrow, Wagner & Chapman, 1992; Eisenberg et al. 1988).

Finally, physiological measures, such as heart rate, palmar sweating, skin conductance, and galvanic skin responses, have also been used (e.g., Berger, 1962; Eisenberg, Fabes, Schaller, Carlo & Miller, 1991; Stotland, 1969) to detect empathy-related responses. For instance, vasocostriction has been associated with general emotional arousal, while palmar sweating and accelerated heart rate have been associated with being personally distressed (e.g., Stotland, 1969; Eisenberg et al., 1988).

More recently, social neurosciences have also begun to contribute to the study of empathy by investigating its neural substrate (see, for reviews, Decety & Ickes, 2009; Decety & Jackson, 2004). Often by means of functional magnetic resonance imaging (fMRI), a growing number of studies have identified which areas/regions of the brain are involved in human empathy. Three lines of research can be distinguished, each addressing one component of empathy (Decety & Jackson, 2006). The first examines

the neural mechanisms underlying the affective response to another's person state and affective sharing; the second examines the mechanisms underlying perspective taking and cognitive appraisal of the experience; the third addresses the monitoring mechanisms that regulate emotions and prevent from empathic overarousal. Within the first line of research, several studies have shown that observing another person's emotional state activates parts of the neuronal network involved in processing that same state in oneself, whether it is disgust (Wicker et al., 2003) or pain (Jackson, Melzoff & Decety, 2005; Morrison, Lloyd, di Pellegrino & Roberts, 2004; Singer et al., 2004). Moreover, neuroimaging experiments have demonstrated that mental simulation of own or other's affective states, through explicit instructions of perspective taking, is associated with activation of regions involved in emotional processing (i.e., amygdala and temporal poles) as well as specific areas related to perspective taking process (e.g., Jackson, Brunet, Melzoff & Decety, 2006; Lamm, Batson & Decety, 2007; Ruby & Decety, 2004). Finally, some studies have investigated the role of self-regulatory processes, which prevent from emotional overarousal and from confusion between self- and other feelings (Decety & Sommerville, 2003; see also Decety & Jackson, 2006), and the role of modulatory factors (e.g., specific features of the emotion, personal characteristics of the observer, relationship between observer and target, and context) that influence the occurrence and intensity of neural activity (see de Vignemont & Singer, 2006).

Inducing empathy

Much of the research on empathy and its consequences has attempted to induce (or inhibit) empathic feelings through experimental procedures. Some of these procedures involve a direct manipulation of physiological arousal associated with empathy (arousal induction) or the interpretation of this arousal (misattribution paradigm). For instance, Batson, Turk, Shaw, and Klein (1995, Study 4) provided participants with false physiological feedback and let them believe that their emotional arousal, in response to the need situation they were exposed to, was high vs. low. As expected, participants in the high-arousal condition reported more empathic concern toward the target than those in the low-arousal condition. In another experiment,

Batson, Duncan, Ackerman, Buckley and Birch (1981, Study 2) gave to participants a pill (actually a placebo) and informed them that it would have produced a feeling of "warmth and sensitivity" vs. "uneasiness and discomfort". Participants then watched a target who received electric shocks and had to report their emotions. Ratings of empathic concern and personal distress were found to be consistent with participants' condition.

Most part of experimental procedures, however, involves more indirect manipulations of empathy, i.e. manipulation of antecedents or situations that facilitate feelings of empathy (e.g., perspective taking, similarity, relationship closeness, attachment cues).

Perspective taking

One of the most commonly used methods of inducing empathy has been to manipulate the participants' observational set. Typically, in this procedure participants are exposed to another person's plight (often painful) and they are asked to report their emotional responses. Prior to exposure, experimental participants are instructed to imagine how the other feels (*imagine-other perspective*) or to imagine how they would feel if they were in the other's situation (*imagine-self perspective*), whereas control participants are asked to remain objective and detached or are not given any instructions. This procedure, initially developed by Stotland (1969), has been used in many studies (e.g., Batson, Early & Salvarani, 1997; Batson et al., 1995; Batson, Polycarpou et al., 1997; Batson et al., 2002, 2005, 2007; Davis et al., 1996, 2004; Dovidio et al., 2004; Finlay & Stephan, 2000; Maner et al., 2002; Stocks et al., 2009; Van Lange, 2008; Vescio, Sechrist & Paolucci, 2003). Overall, results show that perspective taking, either focused on target's feelings or on own feelings, elicit higher levels of empathic concern, as well as other emotional reactions (i.e., distress, sadness, feelings of injustice) compared to the condition in which participants are asked to remain objective. Besides these effects on emotional reactions, perspective taking has been found to influence also cognitive representations of self and others, leading to a perception of merged identities or oneness (Davis et al., 1996; Galinsky & Moskowitz, 2000; Galinsky et al., 2008).

Over the past 50 years, the two perspective-taking sets have been often used interchangeably. Interestingly, research investigating the effects of perspective taking on emotional responses typically used the imagine-other perspective (e.g., Batson, Polycarpou et al., 1997; Batson et al., 2002, 2005; Dovidio et al., 2004; Vescio et al., 2003), while research investigating the effects on cognitive outcomes more often used the imagine-self perspective (e.g., Galinsky & Moskowitz, 2000). However, some research suggests that each observational set may have different effects on various outcomes, both affective and cognitive. For example, Batson, Early et al. (1997) found that imagine-other and imagine-self instructions elicited similar levels of empathic concern for a needy target; however, imagine-self instructions produced a higher level of personal distress. However, Finlay and Stephan (2000) did not find significant differences in their effects on emotional reactions, but they did not include a measure of personal distress. With regards to the effects of perspective taking on cognitive representations of self and other, Davis et al. (1996, Study 1) found that the two instructional sets had comparable effects on participants' perceived self-other overlap. However, in later research investigating cognitions associated with perspective taking, Davis et al. (2004, Study 1) found that instructions to imagine the self in the other's condition produced increased levels of self-related thoughts and lower levels of target-related thoughts compared to instructions to imagine the target's perspective or to simply watch the target (control). The two forms of perspective taking have been found to yield some differences even at the neural level (Jackson et al., 2006). While being scanned in a fMRI machine, participants were presented with pictures of painful situations and were instructed to imagine how they would feel or how would another person feel. Although both perspectives were associated with activation in the neural network of pain processing, the imagine-self perspective involved the pain matrix more extensively and was associated with higher pain ratings.

Similarity

Another frequently used method to induce empathic responses has been to manipulate the degree of similarity between participants and the target person. This kind of manipulation is based on the assumption that inducing an individual to identify with another increases empathic responding (Eisenberg & Strayer, 1987). Indeed, perception

of similarity facilitates the propensity to take the other's perspective, and thus to experience vicariously the same emotional arousal (Krebs, 1975). One technique used to enhance identification is to make participants believe that they are similar to the other in attitudes and interests (e.g., Batson et al., 1981, 1995), personality and values (e.g., Krebs, 1975), prior experience (Stotland, 1969) or preferences. However, the use of this manipulation seems to be problematic, as the dimensions on which the similarity is established vary across studies. For instance, in their early studies, Batson and his collaborators (e.g., 1981, Study 1; 1995, Studies 1 and 2) led participants to believe that they were either very similar or dissimilar to the target by letting them read target's responses to an attitude questionnaire. In a more recent research, Batson et al. (2005) manipulated similarity by varying the age (20 vs. 40) and the profession (student vs. clerk) of the target person. Moreover, Maner et al. (2004) manipulated what they called "oneness" by telling participants that they were highly similar or dissimilar to the target on the basis of the percentage of shared brain activity pattern, which had been previously described as the "fingerprint of one's personality". In addition, some authors manipulated similarity in terms of sharing the same membership group, e.g., common ingroup identity (Dovidio et al., 2004, Study 2). Given this variety of dimensions, it seems difficult to compare the results and draw definitive conclusions about the role of similarity. Moreover, although all studies provided a check of the effectiveness of the similarity manipulation, it remains unclear whether or not participants considered that specific dimension to be important and central to the representation of self. Finally, as Batson, Sager et al. (1997) pointed out, similarity introduces a confound with liking and interpersonal attraction.

Relationship closeness and attachment cues

Another factor that has been proved to be associated with empathy is relationship closeness. For instance, Cialdini, Brown, Lewis, Luce and Neuberg (1997) varied the degree of relationship closeness by instructing participants to think about and describe one of four persons in a difficult situation (e.g., being evicted, orphaned): a near stranger, an acquaintance, a good friend, or a family member. They found that the higher was the closeness with the target person, the stronger were the emotional reactions to the person's plight.

Finally, Mikulincer and collaborators (2001; see also Mikulincer, Shaver, Gillath & Nitzberg, 2005) succeeded in influencing empathy through some cues related to attachment security. Building on the attachment literature that found a positive relation between attachment security and supportive reactions to others' needs, they reasoned that a temporary activation of the sense of security would promote a genuine concern for others' welfare and facilitate altruistic motivation to alleviate others' suffering. Before being exposed to an unknown person in a difficult plight, participants were asked to read a story (Study 1), to look at a picture (Studies 2 and 4), or to recall personal memories (Study 5) that made salient caring behaviors, or they were subliminally primed with words related to proximity and security (Study 3). Results showed that, besides the influence of chronic attachment styles, the contextual activation of the sense of security led participants to respond to others' needs with more empathic concern and lower levels of personal distress. Moreover, attachment security priming were also found to facilitate recalling of personal memories of empathy, i.e., cognitive accessibility of empathy semantic associative network. Importantly, the effects of security priming on reactions to others' needs could not be explained by mood variations. That is, although security priming led mood improvement, changes in mood did not mediate effects of priming on empathy and personal distress. Finally, these effects were replicated across different need situations as well as in reaction to the need of close and distant others.

CHAPTER 2
INDUCED EMPATHY AND PROSOCIAL BEHAVIORS

As explained in previous chapter, social psychologists have started to investigate empathy in relation to prosocial and helping behavior. A large body of research suggests that empathy is positively associated with helping behaviors (for reviews, see Batson, 1991; Davis, 1994; Eisenberg & Miller, 1987b). This well-replicated empirical relation has sparked renewed interest in the debate concerning the possibility that humans are capable of genuine altruistic motivation. Consequently, empathy and its role in prosocial motivation have become a central focus of the egoism-altruism debate. It is important to note that this ongoing debate "is not whether empathy can motivate helping, that has been clearly demonstrated for a range of interpersonal behaviors and even for behaviors directed toward other beneficiaries […]. The issue is whether this motivation is fundamentally altruistic" (Dovidio, Piliavin, Schroeder & Penner, 2006; p. 136).

Distinguishing prosocial, helping and altruistic behaviors

At this point, it seems necessary to clarify the meaning of prosocial behavior, helping and altruism, which have been often used as synonymous (Dovidio et al., 2006). Prosocial behavior is the broadest category of behaviors defined by society as beneficial to other people and/or to the general social system. The fact that a behavior is defined as prosocial vs. antisocial by society means that the definition is not universal, i.e., a certain behavior that is valued by a society could be considered antisocial by another one. Helping can be defined as any action that has the consequence of providing some benefit to or improving the well-being of another person. This category comprehends a great variety of actions, including direct forms of aid (e.g., doing something for the other) and indirect ones (e.g., donating money to charitable organizations); short-term (e.g., contingent to a need or in emergency cases) and long-term (e.g., volunteerism)

helping. Thus, this category is quite broad and heterogeneous, as it includes all types of action that benefits another person in some way, regardless of the helper's intent and of potential rewards.

Differently, the term altruism is reserved for cases in which the helper provides aid with the explicit intention to benefit the recipient and, most importantly, without the anticipation of receiving external rewards or avoiding external punishments (Cialdini, Bauman & Kendrik, 1981; Eisenberg & Miller, 1987a; Staub, 1979; Schwartz & Howard, 1984). According to this view, sometimes named the weak version of altruism (Davis, 1994, p. 128), helping actions carried out to gain internally administered rewards (e.g., feelings of pride and satisfaction, positive self-evaluation) or avoid internally administered punishments (e.g., feelings of guilt and shame, negative self-evaluation) can be regarded as altruistic acts. Similarly, prosocial behaviors guided by internalized moral norms, such as the principle of justice or fairness, are considered to be altruistic. In contrast, Batson (1991; see also Batson & Shaw, 1991) proposed a strong version of altruism, claiming that altruistic acts are only those carried out *solely* for the purpose of increasing the welfare of the other, i.e. when improving the other's welfare is *an end in itself*. He argued that what qualifies an action as altruistic or egoistic is the *nature* of the underlying motivation, and specifically he posited that altruism is "a motivational state with the ultimate goal of increasing another's welfare", while egoism is "a motivational state with the ultimate goal of increasing one's own welfare." So, according to Batson, actions motivated by the desire to gain some kind of reward, either external (material or social) or internal, or to avoid some kind of punishment, either external or internal, are fundamentally egoistic in their nature. In this sense, altruism is not the same as goodness or morality, because actions carried out to comply with social or moral norms do not necessarily involve an altruistic motivation to increase the other's welfare. As Batson and Shaw (1991, p. 160) wrote, "altruistic motivation, if it exists, is morally good. However, moral goodness need not to be altruistic."

The empathy-altruism hypothesis

While acknowledging that egoistically motivated helping occurs and that, probably, *most* helping are egoistically motivated, Batson (1991; see also Batson, 1987) argued that true altruism exists as well. Specifically, he contended that the source of such true altruism is the emotional response of empathic concern. According to his empathy-altruism hypothesis, empathy evokes an altruistic motivation directed toward the ultimate goal of reducing the needy person's suffering and thus improving his/her welfare. However, it's important to note that the empathy-altruism hypothesis does not state that empathic emotion produces helping behavior. Altruistic motivation does not necessarily lead to helping behavior: if someone else provides aid and improves the other's well-being, the altruistically motivated individual will be satisfied as well. Or, if the costs for the self are too high, the individual may choose not to help: altruism does not need to involve self-sacrifice (for a different position, see Krebs, 1991).

Batson (1987, 1991) outlined a three-path model of motivation to help, integrating previous research on helping behavior: the first two paths are egoistic, while the third is altruistic. In this model, the starting point is the perception of another person as in need, that is the recognition that the other's well-being is somehow impaired. This initial perception may be combined with other situational features that shape the individual's internal response to the other's suffering, which is the primary mechanism that determines which motivational state is activated. Before acting, a hedonic calculus is performed: the individual witnessing the other's need will consider various behavioral means of reaching his/her goal, weighing benefits and costs for each potential response. Finally, the individual will choose to perform the behavior that allows him or her to reach the ultimate goal.

Path 1 is based on *social learning* and *reinforcement*. In this path, the perception of the other's need is combined with expectations, based on social learning, of rewards for helping or punishments for not helping. Reinforcements might include material reward, social approval, or increased self-esteem, whereas punishments might include social disapproval or guilt. Thus, the need situation is seen as an opportunity to gain some kind of reward or avoid some kind of punishment, and the motivational state evoked is essentially egoistic.

Path 2 is based on *aversive arousal reduction*. In this path, the perception of the other's need produces an unpleasant state of arousal, characterized primarily by feelings of anxiety and personal distress. Experiencing this aversive state evokes an egoistic motivation to have one's own distress reduced.

Path 3 is based on *empathy*. In this path, the perception of the other's need in conjunction with the adoption of his or her perspective evokes a unique internal response: empathic concern, defined as an other-oriented emotional response congruent with the other's perceived welfare. Perception of the other as in need and perspective taking are both necessary for empathy to occur. A perspective-taking set may be induced by prior experience in similar situations, by a feeling of attachment to the other, or by specific instructions, and it involves focusing on how the other is affected by the need situation. Regardless of its source, adopting the perspective of the needy other leads to feelings of empathic concern for the him or her, which are hypothesized to evoke an altruistic motivation to have the other's sufferance relieved.

To test the validity of the empathy-altruism hypothesis, Batson and his colleagues conducted an impressive series of experiments in which they tried sequentially to rule out various egoistic explanations and, by inference, to find support for the existence of altruistic motivation. In these experiments, participants are typically induced to feel empathic concern for another person in a distressful situation and their behavior is observed in systematically varying circumstances. Specifically, these circumstances vary "in a way that disentangles the relationship between potential ultimate goals, making it possible for the person to obtain one without having obtained the other" (Batson, 1991, p. 66). The individual's behavioral choice (i.e., helping or not) in these "critic" situations should be diagnostic of his/her ultimate goal.

Egoistic challenges to the empathy-altruism hypothesis

The most frequently proposed egoistic alternative explanation for why empathic arousal leads to helping is aversive-arousal reduction (Path 2; see Piliavin et al., 1981; see also Hoffman, 1981). In fact, witnessing the suffering of another person produces an unpleasant state of arousal, often characterized by feelings of tension and distress, and people are motivated to reduce this aversive arousal. If bystanders attribute their

aversive state to the other's situation, and if providing aid represents the most rapid and efficient way to reduce it, then they will choose to help the victim. Otherwise, they will do whatever is personally less costly. According to this explanation, empathically aroused individuals help in order to alleviate their own distress, and therefore benefiting the victim is simply a means, i.e., an instrumental goal, to achieve the ultimate goal of benefiting themselves.

To test the aversive-arousal reduction explanation against the empathy-altruism hypothesis, Batson and his collaborators set up a series of experiments in which they manipulated the ease of escape (Batson et al., 1981; Batson et al., 1983; Toi & Batson, 1982). The basic prediction was that, if individuals were provided with the opportunity to easily escape from the distressing situation without helping, those who were egoistically motivated would choose to leave the scene, because escaping would let them reach their ultimate goal of having their own distress reduced. They would choose to help if helping was the only means to reduce their aversive state, i.e., when the escape was difficult. In contrast, altruistically motivated individuals were expected to help even when escape was easy, because escaping from the situation without helping would not constitute a viable means to reach their ultimate goal of relieving the victim's sufferance. Thus, if empathy really evokes an altruistic motivation to reduce the other's distress, then empathically aroused people would choose to help regardless of the ease of escape. This pattern of results is exactly what Batson and his colleagues found across five experiments, in which an Escape (easy vs. difficult) x Empathy (low vs. high) design was used.

For instance, Toi and Batson (1982) conducted a study in which participants listened to an audiotape describing the plight of another introductory psychology student, who broke her legs in a car accident and was risking to loose one year of course. To manipulate empathy, some participants were instructed to imagine how the person in the interview felt (high empathy), while the other were instructed to attend carefully only to the information presented on the tape (low empathy). Ease of escape was manipulated by varying whether participants believed that they would have met the target in future (difficult escape) or not (easy escape). Participants were then given an unexpected chance to help the target by volunteering to dedicate some hours of tutoring for her. As the researchers predicted, results showed that ease of escape did not affect

the rate of helping of participants in the high-empathy conditions: empathically concerned students helped the target at equivalently high levels regardless of the ease of escape. In contrast, those students who were not experiencing empathic concern but were experiencing a high level of personal distress showed a egoistic pattern of behavior: they helped significantly less when it was easy for them to *physically* escape.

Importantly, the pattern of results held up over a variety of need situations (e.g., target receiving electric shocks, target harmed in a car accident), different manipulations of ease of escape (e.g., ending exposure to the target's suffering, possibility to meet the target in future), and either experimentally induced empathy (e.g., through perspective taking instructions, similarity manipulation) or self-reported empathy. Recently, Stocks, Lisher and Decker (2009) demonstrated that the relationship between empathy and helping remained even when *psychologically* escaping from the situation was guaranteed. Thus, evidence supporting the empathy-altruism hypothesis over the aversive-arousal reduction hypothesis seems to be quite convincing, and is now widely recognized.

A second group of alternative explanations of the motivation to help evoked by empathy claims that this apparently altruistic behavior actually results from some form of reinforcement (Path 1). Through socialization and personal experiences, people learn that helping is associated with specific rewards (Path 1a), while failure to help is associated with specific punishments (Path 1b). That is, people know that the society values helping behaviors, and they might expect a positive evaluation for helping (e.g., praise and social approval) and a negative evaluation for not helping (e.g., blame, guilt and social disapproval). Thus, the finding that observers experiencing empathic concern tended to help, even when escape was easy, may simply be the result of anticipated rewards and punishments, either socially administered or internalized.

According to the social-evaluation version of the empathy-specific punishment hypothesis (Archer et al., 1981), empathically aroused individuals helped more because of the social pressure they felt in the need situation. To test this possibility, Fultz, Batson, Fortenbach and Varney (1987) conducted two experiments in which they manipulated the social evaluative potential of the situation. Consistent with the empathy-altruism hypothesis, they found that empathically concerned individuals continued to help even under conditions of low social evaluation, i.e., when no one else

– not even the person in need – would ever have known whether the participant decided to help or not. However, it is still possible that high-empathy individuals were motivated to help to avoid guilt, self-administered punishments and negative self-evaluation (Dovidio, 1984; Schaller & Cialdini, 1988). Batson and his colleagues (1988, Studies 2-4) responded with a new set of experiments, in which they demonstrated that empathically concerned participants continued to show high levels of helping even when they were given a good justification for not helping (e.g., they were told that most other people did not help, they could attribute their decision not to help to helping-irrelevant features).

With regards to empathy-specific rewards, some authors (e.g., Cialdini, Baumann & Kendrik, 1981; Batson, 1987; Cialdini et al., 1987) argued that helping another person is especially rewarding for empathically concerned individuals. Indeed, through socialization and prior reinforcement people have learnt that helping is associated with praise, honor, pride, and generally with "feeling good". Thus, people may be motivated by the egoistic desire to gain such social or self-rewards. For instance, according to the negative-state relief hypothesis (Cialdini et al., 1987; see also Schaller & Cialdini, 1988), witnessing the sufferance of another person produces a negative affective state, a temporary depressed and sad mood. This negative state creates a need to feel better, which may be satisfied through the rewarding properties of helping another person – *any* other person. Thus, helping the needy other is only a means for reaching the egoistic goal of getting rid of sadness and restoring a positive mood. Consistent with this idea, Ciadini and his collaborators found that empathically concerned individuals offered less help to a suffering victim if they were previously provided with a mood-enhancing experience (receiving praise or money) or if they believed that their mood could not be improved ("mood-fixing" manipulation). However, subsequent research failed to replicate these findings (e.g., Batson et al., 1989; Schroeder, Dovidio, Sibicky, Matthews & Allen, 1988), proving support for the empathy-altruism hypothesis.

According to another version of the empathy-specific reward explanation, people may experience a mood enhancement through sharing vicariously the joy of the needy individual's relief (Smith, Keating & Stotland, 1989). Thus, empathically aroused people may help the person for whom they feel empathy because they anticipate this

positive reinforcement: their ultimate goal may not be benefiting the other, but gaining the rewarding experience of empathic joy. To test this possibility, Batson and his collaborators (1991) designed two studies in which participants were confronted with a person in need but were not given any chance to help her. Instead, they were given the choice whether to hear again from this person or to hear about another person. Before making this choice, they were informed on the likelihood that the needy person's situation would have improved in the meantime. The authors reasoned that if empathically aroused individuals were egoistically motivated to gain empathic joy, then they would choose to hear from the needy person only if they expected that his/her situation had improved. In contrast, if empathically aroused individuals were altruistically concerned about the needy person's welfare, they would choose to hear from him or her in any case. Results showed that the second prediction was correct: participants in the high-empathy condition chose to hear again from the needy other regardless of the likelihood of improvement, i.e., regardless of the likelihood to experience empathic joy. In addition, consistent with the empathy-altruism hypothesis, Batson et al. (1988, Study 1) found that empathically concerned individuals felt just as good when they learnt that others had helped the needy target as when they helped in person.

Overall, the evidence supporting the empathy-altruism hypothesis seems to be quite convincing. The claim that the motivation to help evoked by empathic concern is directed toward the altruistic goal of improving the needy person's welfare has been proved even controlling for egoistic goals of avoiding empathy-specific punishments and gaining empathy-specific rewards. Moreover, it seems also clear that feelings of empathic concern are often distinct from the feelings of personal distress and sadness that frequently accompanied them. All the three emotional states may be associated with prosocial and helping behaviors, but they differ in the kind of motivation they trigger. Personal distress, as a self-focused aversive response to another's sufferance, triggers an egoistic motivation to have one's own distress reduced: this intense, aversive reaction can be alleviated by removing the cause of arousal, i.e., by helping the person, but also by escaping from the distressful situation. Sadness produces an egoistic motivation to seek for relief and, more specifically, for a pleasure-producing experience: helping someone may fulfill this need, but also having other mood-enhancing experiences. On

the contrary, empathic concern, as an other-oriented reaction to the plight of another person, evokes altruistic motivation to alleviate the other person's sufferance: this goal can be reached only by helping the person in need or by learning that the other is no longer suffering (e.g., because someone else provided aid).

The empathy-merging hypothesis vs. the empathy-altruism hypothesis

Recently, Cialdini and his colleagues advanced another compelling egoistic explanation for the data supporting the empathy-altruism hypothesis (Cialdini, Brown, Lewis, Luce & Neuberg, 1997), namely the empathy-merging hypothesis. They noted that conditions that are likely to evoke empathic concern (i.e., perspective taking and attachment-related cues) also lead to a greater sense of self-other merging and, thus, they argued that helping provided under these conditions is not completely selfless but is also directed to the self. Indeed, previous research (Davis et al., 1996) has shown that taking the perspective of another person produces an overlap of cognitive representations of oneself and of the other; specifically, the target is likely to be described thought (positive) traits previously ascribed to the self. Moreover, research on close relationships found that closeness often implies a sense of inclusion of the other in the self, which results in less self/other difference in terms of resources allocation, attributional processes, and use of descriptive traits (Aron, Aron, Tudor & Nelson, 1991; see also Aron, Aron & Smollan, 1992). Finally, evolutionary principles, such as the concept of *inclusive fitness* (Hamilton, 1964), suggest that self-interest can lie outside of one's body and inside another's body, in the form of shared genes, and that helping anther person with relatively high genetic commonality can mean promoting the survival of one's own genes (Burnstein, Crandall & Kitayama, 1994; Dawkins, 1989; Kendrik, 1991). Interestingly, cues signaling genetic commonality, i.e., kinship, friendship, similarity, and familiarity (see Cunningham, 1986), are those that are also associated with attachment and that facilitate perspective taking (Batson & Shaw, 1991). Taken together, these theoretical considerations and empirical evidence point to the idea that the experience of oneness – a sense of shared, merged, or interconnected personal identities – can occur and this is most likely under conditions that evoke also empathic concern and lead to helping.

Cialdini and his colleagues (1997) conducted three experiments to test the hypothesis that the positive relationship between helping and empathic concern could be better explained by the sense of merging between the self and the needy other. They manipulated the degree of relationship closeness by instructing participants to think about one of four persons in a difficult situation: a near stranger, an acquaintance, a good friend, or a family member. Participants were asked to imagine that this person "was just evicted from his/her apartment" (Studies 1 and 3), "died in a car accident leaving his/her two children without a home" (Studies 2 and 3), or need help to make a phone call (Study 3). They were then asked to report how much they were willing to aid the person, by choosing one of seven increasingly costly helping options. After that, participants rated the amount of empathic concern, personal distress, and sadness they experienced, and the amount of oneness they felt with the other. As a measure of oneness, participants were asked to complete the Inclusion of the Other in the Self scale (IOS; Aron et al., 1992) and to indicate the extent to which they would have used the term "we" to describe their relationship with the target. As expected, results showed that as relationship closeness increased, so did self-reported emotional reactions and oneness, as well as helping. Moreover, consistent with the empathy-altruism hypothesis, empathic concern significantly predicted helping, even when controlling for the other egoistic emotional reactions (i.e. sadness and personal distress). However, when empathic concern and oneness were considered simultaneously as predictors of helping, only oneness remained significantly related to helping. This finding is consistent with the claim that the perception of oneness between the self and the needy other can account for the relationship between empathy-inducing conditions and helping.

Batson, Sager et al. (1997) replied to Cialdini's argument by pointing out that the experimental paradigm that they used was not adequate, because they did not manipulate directly empathic concern (i.e., through perspective taking instructions) and included only imagined need situations. In addition, Batson and his collaborators conducted other two experiments, in which they confronted the predictions of the empathy-altruism and the empathy-merging hypotheses using the traditional perspective-taking procedure. Participants were presented with the story of Katie Banks, a college student who was struggling with her life to take care of her younger brother

and sister after the tragic death of her parents[1]. Beforehand, participants were instructed either to imagine target's perspective or to remain objective and detached. Participants were then asked to report their emotional reactions to the target's need and their willingness to help her. To assess self-other merging, three measures were used (two before the helping measure and one after): (a) the IOS scale; (b) mean absolute difference between the ratings of self and of the target on 16 personal attributes, among which 8 were relevant to target's situation and 8 were irrelevant; (c) perceived similarity. Results showed that participants who imagined the target's perspective reported higher levels of empathic concern and greater willingness to help her, compared to those who remained objective. Moreover, although participants in the perspective taking condition perceived somehow a greater similarity (not statistically significant) and a greater overlap of self and target's representations on the IOS scale, this increase of merging could not account for the positive relationship between empathic concern and helping. Most importantly, results concerning ratings on the descriptive attributes revealed that participants in the perspective taking condition perceived the same difference between themselves and the other on irrelevant attributes as did participants in the objective condition: thus, there was no evidence of merging of identities. Rather, on the attributes relevant to the target's situation, there was some indication of an empathy-differentiation effect (although only in Experiment 1). In conclusion, Batson and collaborators suggested that the greater self-other overlap emerged with the IOS scale could be related to the possibility that participants used the scale, at least in part, to report the degree of care felt for the target.

Results obtained by Batson and his collaborators, though, did not convince Cialdini and his collaborators (see Neuberg et al., 1997). They responded to Batson's criticisms pointing out that, even though they did not induce empathic concern through perspective-taking instructions, the level of self-reported empathy was comparable to that reported in Batson's work. Moreover, supporting the empathy-altruism hypothesis, they did find that empathic concern was positively related to helping, and that it continued to predict helping intentions even after controlling for the effects of personal distress and sadness. However, they demonstrated that the relation between empathic

[1] In these experiments, group membership was also manipulated: Katie was introduced as enrolled at the same university as participants (shared membership) or at a rival one (unshared membership). Participants' responses were not affected by group membership.

concern and helping disappeared after controlling for oneness, i.e. a sense of self-other merged identities.

To further corroborate their claim, Cialdini and his colleagues conducted another experiment (Maner et al., 2002), in which they employed the perspective-taking paradigm, widely used by Batson and colleagues to evoke empathic concern and assess helping, while manipulating also oneness. First of all, participants' Participants were told that they would have listened and responded to a randomly selected interview from a radio broadcast. Prior to that, their brain activity, portrayed as the "fingerprint of one's own personality", was apparently recorded via EEG. As a manipulation of oneness, participants led to believe that the person interviewed was either very similar (sharing the 91% of brain activity profile) or very dissimilar to them (sharing only the 12%). In a control condition, no information concerning similarity was provided. Participants then were instructed to listen to the interview either imagining how the person was feeling about what happened to her (perspective taking condition) or trying to remain objective and detached (objective condition). Following the two manipulations, participants were presented with the story of Katie Banks, the young girl who tragically lost her parents and had to take care of her little brother and sister. Finally, they completed a questionnaire including measures of their emotional reactions, their willingness to help Katie, self-other overlap (the IOS scale) and the use of "we" to describe their relation with Katie (these last two measures were averaged to form an index of perceived oneness). Results showed that perspective-taking manipulation affected significantly empathic concern, sadness and personal distress, while the oneness manipulation affected perceived oneness. At the same time, perspective taking lead to an increase of self-other merging in the control condition, where no information concerning similarity was provided. Finally, helping was significantly predicted by oneness in the two experimental conditions, and by perspective taking in the control condition. The results of meditational analyses revealed that the effects of the manipulations (contrasted coded) on helping were significantly mediated only by perceived oneness and sadness. Although empathic concern was positively correlated with helping, it did not add any significant contribution in explaining helping.

CHAPTER 3
PROSOCIAL CONSEQUENCES OF PERSPECTIVE TAKING AND EMPATHY AT THE INTERGROUP LEVEL

Theoretical framework

As we have noted in the first chapter, in the last 15 years social psychological research has devoted considerable attention to empathy and perspective taking in intergroup relations (see Batson & Ahmad, 2009 and Galinsky et al., 2005, for reviews). A growing body of research provides converging evidence that encouraging people to adopt the perspective of an outgroup member and empathize with him/her can substantially and positively affect intergroup attitudes and behaviors. However, the interpretation of these empirical findings is not univocal, as different mechanisms responsible for the positive effects of perspective taking have been proposed.

Batson, Polycarpou and collaborators (1997) focused on the role of empathic concern resulting from perspective taking. They reasoned that, if empathy is associated with a genuine concern for the other's welfare and elicits an altruistic motivation to improve his or her welfare (see Batson, 1991 and Batson, Turk, Shaw & Klein, 1995), then inducing empathic feelings for a member of a needy, stigmatized group should result in increased valuing of his or her welfare. And, provided that the group membership of the individual is salient and is ostensively a cause of his or her suffering, empathic concern and care for the other's welfare should generalize to the group as a whole, resulting in more positive attitudes, feelings and behaviors toward the group as a whole. Furthermore, they suggested that "as an emotional response, empathy may directly address the central feeling and evaluation components of the attitude, rather than relying on inference from information" (p.106). Beside these theoretical considerations, Batson and his collaborators noted that there are also several pragmatic reasons for being optimistic about the potential of empathic arousal to improve intergroup relations. First, empathy is relatively easy to induce: several studies have

shown that simply instructing people to take another person's perspective elicits a range of empathic feelings for this person and leads to a sensitive understanding of his or her situation. Second, empathy can be induced in situations involving low costs and low risks for the persons experiencing empathy, reducing the possibility of avoidance of or withdrawals from intergroup situations. Third, these empathy-inducing situations can be controlled to ensure that they constitute positive experiences for the individuals involved.

While acknowledging the role of empathic concern in promoting more positive intergroup relations, Stephan and Finlay (1999; see also Finlay & Stephan, 2000) suggested that parallel empathic feelings can also contribute to these changes in attitude and behavior. Specifically, they proposed that parallel empathy leads to a decrease of prejudice by arousing feelings of injustice. This might be particularly true for groups whose disadvantage is caused by discrimination and unfair treatment, such as ethnic minorities. Indeed, learning about suffering and discrimination while empathizing with the victims may lead people to reappraise their beliefs in a just world (Lerner, 1980). That is, people may come to think that members of disadvantaged or stigmatized groups are not responsible for their conditions and do not deserve to be blamed and consequently mistreated. As a result, people may change their prejudicial beliefs about the outgroup and, possibly, the patterns of causal attributions and stereotypes that sustain these beliefs, resulting in more positive feelings and attitudes toward the outgroup. This attitude change might further motivate people to engage in social actions aimed at removing social inequality and support policies in favour of the victim groups. Moreover, learning about suffering and discrimination of stigmatized people may also lead members of dominant groups to recognize the role of their ingroups in perpetrating this suffering. In this case, empathic feelings for the victims may be accompanied by collective guilt and shame, which can motivate efforts of reparation and compensatory behaviors (e.g., Brown, Gonzales, Zagefka, Manzi & Cehajic, 2008; Iyer, Leach & Crosby, 2003; Zebel, Doosje & Spears, 2009).

According to Stephan and Finlay (1999), the cognitive component of empathy, i.e., perspective taking, plays also an important role in promoting positive intergroup relations. Indeed, taking the perspective of an outgroup member is likely to be useful in acquiring knowledge about the outgroup, learning about its cultural norms and beliefs

and, eventually, coming to understand its worldview. This increased comprehension may, on the one hand, deaden feelings of threat and fear of the "unknown other" that often accompany prejudice and, on the other hand, lead to a reduction of perceived dissimilarities between ingroup and outgroup. As Stephan and Finlay explained, "understanding the ways that others view the world has the potential to make them seem less alien and frightening and thus to break down perceived barriers between the ingroup and the outgroup" (p. 375). Taking the perspective of an outgroup member may also foster the perception that the other group shares a common humanity and destiny, and thus produce more inclusive category representations. If members of different groups come to conceive themselves as members of a single superordinate group, attitudes toward the former outgroup are likely to become more positive, as ingroup favoritism extends to these new members. Supporting this hypothesis, several laboratory and field studies have demonstrated that interventions that produce more inclusive representations of groups and stimulate a sense of common identity systematically reduce intergroup bias and promote more positive intergroup attitudes (see Gaertner & Dovidio, 2000).

Galinsky and colleagues (2005) further pointed out the role of cognitive, implicit mechanisms involved in perspective taking. In their conceptual analysis of how perspective taking can foster social bonds and facilitate social coordination, they contended that the benefits deriving from perspective taking are achieved through the process of self-other merging, i.e., greater overlap between mental representations of the self and of the other. Specifically, they posited that this increased self-other overlap entails two different processes: (a) the self is applied to the other, so that the other becomes more "self-like"; (b) the other is included in the self, so that the self becomes more "other-like". When the other whom perspective is taken belongs to an outgroup, these processes result in more positive and coordinate intergroup relations through different routes. That is, seeing more of the self in the other leads perspective takers to perceive others more positively and in less stereotypical terms (Galinsky & Moskowitz, 2000). At the same time, including the characteristics of the other in the self leads perspective takers to judge themselves and behave in a stereotype-consistent manner (Galinsky et al., 2008).

Effects of perspective taking on intergroup attitudes

Empathic concern as mediator

Batson, Polycarpou et al. (1997) proposed a three-step model of how empathic concern may improve responses to stigmatized groups: (1) adopting the perspective of a needy person leads to increased empathic feelings for this person; (2) empathic feelings result in increased valuing of this individual's welfare; (3) if group membership is clearly a determinant of this individual's plight, the concern for his or her welfare should generalize to the group as a whole and lead to more positive feelings, beliefs and attitudes toward the group.

To test this model, they conducted three experiments in which they manipulated perspective taking to induce empathic feelings for a stigmatized individual. Participants were students and were invited to take part in a study presented as a broadcast-pilot testing project for a new program of the local university radio. The program, titled "News from the Personal Side", presented real stories of people in difficulty and sought to go "beyond the facts of local events to report how these events affect the lives of the individuals involved". Participants were told that they would be required to listen to a broadcast pilot and then to evaluate it. Before listening, participants were asked to take a particular perspective toward the broadcast and were given written instructions to do so. For participants in the imagine-other condition, the instructions were: *"Imagine how the woman who is interviewed feels about what has happened and how it has affected her life. Try to feel the full impact of what this woman has been through and how she feels as a result."* Participants in the objective condition read the following instructions instead: *"Take an objective perspective toward what is described. Try not to get caught up in how the woman who is interviewed feels; just remain objective and detached."*

In the first experiment, the broadcast that participants heard consisted of an interview with Julie, a young woman who was "experiencing the personal tragedy of AIDS". In the interview, she talked about difficulties, troubles and worries that she was facing since she had discovered that she was HIV positive. In the last part of the interview, as a manipulation of individual responsibility, Julie explained how she contracted the virus: in the victim-not-responsible condition, Julie told that she had been victim of a car accident and she contracted AIDS through blood transfusion, while in the victim-responsible condition she told that she had unprotected sex. After listening to

the broadcast, participants completed three questionnaires. In the first one, participants were given a list of 24 adjectives describing different emotional states and were asked to report how much they had experienced each emotion while listening to the broadcast. Among the emotions listed, six adjectives referred to empathic feelings felt for Julie (*sympathetic*, *compassionate*, *soft-hearted*, *warm*, *tender* and *moved*). The second questionnaire assessed beliefs about, feelings and attitudes toward people with AIDS through a 7-item scale (e.g., Most people with AIDS could have avoided contracting the disease [reverse scored]; In general, how are your feelings toward people with AIDS?). The third questionnaire concerned the evaluation of the pilot broadcast and was inserted for purposes of consistency with the cover story.

Results were supportive of predictions: participants instructed to imagine how Julie was feeling in her plight reported higher levels of empathic concern for her and expressed more positive attitudes toward people with AIDS than did objective participants. These effects were independent of individual responsibility: although participants who learnt that Julie was responsible for her situation reported experiencing somehow less empathic concern for her than those who thought she was not responsible, perspective-taking instructions were still effective in evoking empathic concern for her and, most importantly, in promoting more positive attitudes toward people with AIDS in general. Finally, and consistent with the mediation model, the effect of perspective taking on improved attitudes could be attributed to increased self-reported empathy for the individual.

In this experiment, to verify if the hypothesized change in attitudes was restricted to the subgroup to which the target belonged or was generalized to the broad group, the scope of the group was also manipulated. For half participants the attitude questionnaire referred to “AIDS victims” (broad group), while for the other half it referred to “young women with AIDS” (narrow group). Results showed that the beneficial effects of perspective taking were broad and generalized. Only when participants learnt that the target contracted AIDS through unprotected sex and were then asked to report their attitudes toward young women with AIDS, instructing them to imagine target’s feelings produced a non-significant trend toward expression of less positive attitudes. The authors interpreted this finding, together with the slightly lower empathic concern expressed in the victim-responsible condition, as suggesting that

some participants, who were all young female, might have felt threatened and reacted in a defensive way by derogating the group of young women with AIDS.

In Experiment 2, the same procedure of Experiment 1 was applied to a different stigmatized group: homeless people. Following the introduction to the study and the perspective-taking instructions, participants listened to an interview with Harold, a 56-year-old homeless man who described his life on the streets, his poor living conditions and his needs. After that, participants received a background-information sheet about Harold, in which his individual responsibility was manipulated: half the participants learnt that Harold became homeless after losing his job because of an illness (victim-not-responsible condition), while the other half learnt that he had decided to quit his job because he was tired of working (victim-responsible condition). Finally, participants completed a questionnaire that included a measure of empathic feelings felt for Harold and a 7-item scale assessing attitudes toward the homeless in general. Additionally, participants were asked to rate how much Harold was responsible for his plight and to report how positively they felt toward him. As predicted, participants instructed to imagine Harold's feelings reported higher levels of empathic concern for him and more positive attitudes toward homeless people than participants who remained objective. Moreover, path analyses supported the three-step model: the effect of perspective taking on attitudes toward the homeless could be attributed to mediation through self-reported empathy for the individual (Step 1) and positive feelings toward him (Step 2). Paralleling findings of Experiment 1, effects of perspective-taking manipulation were not affected by individual responsibility: although participants in the victim-responsible condition rated Harold as more responsible for his plight and felt less positively toward him than did participants in the not-responsible condition, these perceptions did not influence their empathic concern for him and their attitudes toward the homeless as a group.

In the last experiment, Batson and his collaborators tested the validity of the three-step model with a highly stigmatized group, convicted murderers, and examined whether the effects of perspective taking could last over time or not. As in the previous two studies, after reading the introduction to the study and the perspective-taking instructions, participants listened to the pilot broadcast. This consisted of an interview with James, a convicted murderer serving life without parole, who described how he

committed an homicide and how was his life in prison and his feelings about it. Immediately after the broadcast, participants were asked to report their empathic feelings for James, how positively they felt for him in general, and their attitudes toward convicted murderers. In addition, 1 to 2 weeks later participants were contacted by telephone and were again asked to report their attitudes toward convicted murderers. Results showed that participants in the perspective-taking condition did express greater empathic concern for James and felt more positively toward him compared to those who remained objective. However, evidence of effectiveness of perspective taking in improving attitudes toward the group was only limited: compared to participants who adopted an objective listening perspective, those who imagined the other's perspective reported feeling more positively toward murderers on a single item, but they did not report more positive attitudes as measured by the global index. But when attitudes were measured 1 to 2 weeks later, the effect was clearer: participants who previously adopted an imagine-other perspective expressed significantly more positive attitudes toward murderers than did participants who remained objective and detached. Moreover, this effect was mediated by empathic concern for and positive feelings toward the individual target reported during the laboratory session, supporting the three-step model.

To summarize, Batson, Polycarpou et al. (1997) provided clear evidence that encouraging people to adopt the perspective of an individual member of a stigmatized group, when hearing about his or her need situation, can promote more favorable attitudes toward the group as a whole. Consistent with the three-step model, the effect of perspective taking on improved attitudes was mediated by, first, empathic concern felt for the individual and, second, by positive feelings toward him or her (which were considered an indicator of valuing the other's welfare). Notably, the effect of perspective taking on attitudes through the mediation of empathic concern was replicated across different stigmatized groups – people with AIDS (Study 1), homeless people (Study 2) and even convicted murderers (Study 3) – and it was not affected by individual responsibility (Studies 1 and 2). Furthermore, this effect was found even when the individual target was not prototypical of the group (i.e., a young woman with AIDS; Study 1), suggesting that the empathy-based approach to attitude change is not vulnerable to subcategorization effects. Finally, the effectiveness of perspective taking and empathic arousal appeared to be enduring over time (Study 3).

Further support of the positive effects of empathy in intergroup relations comes from Vescio et al. (2003), who examined the effects of perspective taking on racial attitudes while assessing more directly the role of target's stereotypicality. In their experiment, participants were instructed either to adopt an other-oriented perspective or to remain objective when presented with the interview of an African American student discussing some difficulties experienced because of his ethnic identity. In one condition, the African American student presented stereotype confirming characteristics, while in the other condition he displayed disconfirming attributes. After listening to the interview, participants were asked to report their feelings for the target and completed a scale assessing pro-Blacks attitudes. Consistent with Batson's model, participants induced to adopt the target's perspective reported more favorable attitudes toward Blacks than those who remained detached and objective. This effect was partially mediated by higher empathic concern felt for the individual target. It is worth noting that participants in the perspective-taking condition reported also experiencing more parallel empathy, operationalized as sadness-related emotions, than did objective participants, but these feelings did not mediate the effect of perspective taking on intergroup attitudes. Most importantly, perspective taking promoted improved intergroup attitudes regardless of target's stereotypicality. This finding provides further support to the idea that perspective taking may facilitate the generalization process from an individual to the entire group because it elicits empathic arousal, which may "get directly to the affective core of intergroup attitudes" (Batson et al., 1997; Pettigrew, 1997).

Interestingly, Vescio et al. (2003) examined also the possibility that perspective taking would improve intergroup attitudes by altering the attributional pattern typically associated with prejudice (e.g., negative events attributed to personal dispositions). Building on research demonstrating that perspective taking can eliminate the actor-observer bias (e.g., Gould & Sigall, 1977; Regan & Totten, 1975), they reasoned that taking the perspective of a needy outgroup member should increase importance ascribed to situational factors in determining his or her plight. Results supported this prediction: compared to objective participants, participants induced to adopt an imagine-other perspective were more likely to attribute the target's negative experiences to situational rather than dispositional causes. Moreover, situational attributions were found to

mediate the effect of perspective taking on endorsement of pro-Blacks attitudes, even more strongly than empathic concern.

Feelings of injustice as mediator

Further support of the positive effects of empathy in intergroup relations comes from Finlay and Stephan (2000), who conducted the first research addressing the effects of perspective taking on racial prejudice. In this study, White American students were presented with a set of scenarios, ostensively written by African American students, who described their personal experiences of discrimination. Participants were encouraged to read the scenarios taking the perspective of the target (by imagining either how he was feelings or how they would feel if they were in his place) or adopting an objective perspective. They were then asked to report their feelings and their attitudes toward both White (ingroup) and African Americans (outgroup). Results indicated that participants who received perspective-taking instructions showed lower levels of bias in their evaluations of ingroup and outgroup compared to those who were instructed to attend objectively to the information. Moreover, after reading about discrimination against African Americans but independent of perspective instructions, participants reported feeling more negative emotions (e.g., anger, annoyance, hostility) toward White Americans. The authors interpreted these feelings as parallel empathic responses, i.e. similar to those experienced by stigmatized group members, that reflected a sense of outrage at social inequality. They further suggested that these feelings may facilitate attitude change and prejudice reduction by stimulating a reappraisal of people's beliefs in a just world.

Similar results were obtained by Dovidio and collaborators (2004, Study 1), who examined the role of different affective and cognitive mediators in explaining how perspective taking can improve intergroup relations and decrease racial prejudice. In this study, White participants, pretested for their attitudes toward Blacks, watched a videotape showing episodes of discrimination against a Black man in everyday circumstances. Beforehand, they were instructed either to adopt the man's perspective by imagining how he felt or to be as objective as possible while viewing the videotape, or in a control condition they were not given any instructions. Immediately after viewing the videotape, participants completed a series of questionnaires aimed at

assessing different affective and cognitive constructs hypothesized as potential mediators. Affective measures included self-reported emotional responses, which reflected empathic concern (e.g., sympathetic, touched), personal distress (e.g., distressed, upset) and feelings associated with injustice (e.g. angered, alarmed), and participants' liking for the target (e.g., How likable do you find Glen?). Cognitive variables included self-other merging, measured by the Inclusion of the Other in the Self scale[2] (Aron et al., 1992), representations of the target "as a unique and separate individual", "as a member of a different group", and "as a member of your own group", and ratings of target's stereotypicality. Finally, ostensively as a part of a different study, participants were asked to report their attitudes toward Blacks completing the same scale used as pre-test. To assess change in prejudice, the difference in scores from pre-test to post-test was calculated. Results indicated that participants instructed to imagine target's feelings showed greater reduction in prejudice than both participants in the objective and control conditions. Moreover, looking within each condition, results revealed that the change in prejudice from pre-test to post-test was significant only for participants in the perspective-taking condition. Participants in this condition reported more feelings associated with perceived injustice and greater self-other merging compared to participants in the other two conditions. The manipulation, though, did not affect any other variable. When testing for mediation, the analyses revealed that feelings of injustice was the only significant predictor of prejudice reduction, while self-other merging was not.

These results, together with those by Finlay and Stephan (2000), indicate that feelings associated with the perception of social injustice, such as anger and indignation, may have an important role in reducing prejudice, especially in interethnic contexts. Indeed, Dovidio and collaborators (2004) suggested that "which processes operate as the main mediating mechanisms may vary as a function of the nature of the episode and the type of response it primarily elicits." (p. 1543)

[2] Following the original theorization by Aron et al. (1991) and subsequent use of the scale (e.g., Cialdini et al., 1997), Dovidio and his colleagues considered this variable as cognitive. However, it is also possible that participants' responses on this measure reflected an affective construct, as they were asked to rate "how they felt about the connection between themselves and the target."

Effects of perspective taking on intergroup prosocial behaviors

In another experiment, Batson, Chang, Orr and Rowland (2002) tested the idea that eliciting empathic concern for a member of a stigmatized group member could not only improve attitudes toward the group as a whole, but also promote willingness to help the group. Using the perspective-taking procedure, they found that participants induced to empathize with a drug addict reported more positive attitudes toward drug addicts in general and were more willing to allocate funds to help these people, compared to participants instructed to remain objective. As predicted, the effect of perspective taking on helping was mediated by self-reported empathic concern for the individual and attitudes toward the group. In addition, participants who imagined the target's feelings reported also caring more about the target's welfare than those who remained objective. Mediation analyses showed that perspective taking increased self-reported empathic concern, which in turn affected caring for the target's welfare, which then resulted in more positive attitudes and more willingness to help drug addicts in general. However, an unpredicted direct effect of perspective taking on attitudes emerged, suggesting that part of the effect of the perspective-taking manipulation lied outside the hypothesized mediated model.

Effects of perspective taking on stereotype accessibility and application

Focusing on more cognitive processes, Galinsky and Moskowitz (2000) demonstrated that perspective taking can decrease stereotype accessibility and application even at a nonconscious level. In two experiments, participants were provided with a picture of an elderly man and were asked to write an essay about a day in his life. Before writing, they were instructed either (a) to imagine to be in his shoes and look at the world through his eyes (perspective-taking condition) or (b) to try actively to avoid their stereotypic preconceptions about old people (suppression condition) or (c) were not given additional information (control condition). Results of the first experiment revealed that both perspective takers and suppressors described the old man less stereotypically than control, but only perspective takers expressed more positive evaluations of the target in their essays. Furthermore, perspective takers showed no implicit hyperaccessibility of the category stereotype (the elderly in general)

in a lexical-decision task. They also continued to express more positive evaluations of other targets when asked to write an essay about a day in the life of another old man and of an African American young man, even without mention of previous experimental instructions. This finding suggests that the beneficial effects of perspective taking were quite durable and could generalize to different targets.

In the second experiment, the authors tested the idea that the reduced degree of stereotypical responding shown by perspective takers could be mediated by an unconscious projection of the self-concept to the outgroup. Indeed, previous research by Davis et al. (1996) showed that perspective taking results in greater merging between cognitive representations of the self and the target, and specifically in the tendency to ascribe more self-descriptive traits to the target. Galinsky and Moskowitz (2000) hypothesized that perspective taking would produce a projection of the self-concept also to the group to which the target belonged. In their second experiment, before performing the narrative essay task, participants were asked to describe themselves on a list of 90 traits, both positive and negative. Participants then wrote an essay about the old man in the picture, with the same instructions as in Experiment 1, and completed a series of filler tasks. Finally, they were asked to describe the elderly, as a group, rating them on the 90 traits previously used to describe themselves. Self-outgroup overlap consisted in the absolute value of the difference between self-ratings and ratings of the elderly for each of the traits. Results concerning essays' content replicated those of Experiment 1: participants instructed to take the perspective of the old man not only wrote less stereotypical essays than control, but also expressed more positive evaluations of the target. Looking at trait attributions, perspective takers were found to rate the elderly less stereotypically on 5 selected stereotypic traits than both participants in the control condition and suppressors. Furthermore, perspective takers showed more overlap between their descriptions of the self and their descriptions of the elderly than participants in the other two conditions. Most importantly, this increased self-outgroup overlap in representations mediated the effect of perspective taking on stereotypical ratings, although the positive valence of essays could also account for this increased overlap.

Taken together, these findings supported the idea that when people take the perspective of another person, by imagining themselves in the other's place (i.e.,

adopting imagine-self perspective), the self-concept is activated and applied not only to the other (see Davis et al., 1996), but also to the group the person represents. This projection process, however, seems to rely on the positiveness of the self-concept. Consistent with this implication, Galinsky and Ku (2004) found that adopting an imagine-self perspective before writing the elderly man's day improved the evaluations of the elderly only when participants had chronically (Experiment 1) or temporally (Experiment 2) high self-esteem.

CHAPTER 4

PERSPECTIVE TAKING AND PROSOCIAL RESPONSES: FOUR EXPERIMENTAL STUDIES ON MEDIATING PROCESSES

Overview of the studies

As illustrated in previous chapters, a growing body of research provides evidence that encouraging people to adopt the perspective of a stigmatized group member can promote improved intergroup attitudes (e.g., Batson, Polycarpou et al., 1997; Dovidio et al., 2004; Finlay & Stephan, 2000; Vescio et al., 2003), decrease stereotypical responding (Galinsky & Moskowitz, 2000) and motivate helping behaviors in favor of group members (e.g., Batson et al., 2002). These beneficial effects have been explained through a variety of mechanisms, ranging from emotional reactions to the other person's plight, e.g., empathy and feelings associated with perceived social injustice, to altered cognitive representations of the self and the other, i.e., a merging of identities. A well-established literature has found that empathy is positively related to helping behaviors and more benevolent evaluations of others (see, for reviews, Batson, 1991; Davis, 1994; Eisenberg & Miller, 1987b). According to some authors, this empathy-helping association is related to a genuine concern for the other's welfare, that is an altruistic motivation to improve the other's condition, while other scholars have underlined the role of egoistic factors, e.g., reduction of aversive emotional states and perception of oneness.

The present research, consisting of four experimental studies, aimed at integrating these two lines of research, by examining the beneficial effects of perspective taking in the context of interethnic relationships in Italy. The general hypothesis guiding this set of studies was that adopting the perspective of a needy individual, member of stigmatized group (North-African immgrants), would promote prosocial responses not only toward this specific individual, but also toward group as a

whole. Additionally, using a structural equation modeling approach, we examined which constructs among those hypothesized as mediators could better account for the prosocial consequences of perspective taking.

Study 1 provided a first test of our hypothesis. Perspective taking was manipulated through written instructions: participants were asked to imagine either how the target was feeling (imagine-other perspective) or how they would feel if they were in the target's situation (imagine-self perspective); in the control condition, they were asked to remain objective and detached (objective perspective). Participants then were presented with the story of a young Moroccan woman, who described her daily difficulties, and were asked to report their attitudes toward her and toward North-African immigrants in general, and their willingness to accord some social and civil rights to North-African immigrants. As potential mediators, we considered emotional responses to the target's plight (i.e., empathic concern and parallel empathy) and perception of self-other merging (using the IOS scale).

In Study 2, we proceeded in a replication of Study 1, while addressing some methodological weakness and theoretical issues. The experimental procedure was the same as for Study 1, but we used a different needy target. Moreover, we assessed participants' emotional responses to the target's plight (i.e., empathic concern, feelings of injustice, sadness and personal distress) using a more accurate and complete scale. We also introduced a new graphical scale of self-other closeness that permitted to measure separately perceptions of the approaching movement of the self toward the other and of the reciprocal movement of the other toward the self. Finally, we used different scales to assess attitudes.

In Study 3, with the aim of better understanding mechanisms of mediation in the relation between perspective taking and prosocial responses, we took into account several potential mediators. These include emotional responses to the target's plight (i.e., empathic concern, feelings of injustice and sadness), perceived oneness (a composite index based on perceptions of interpersonal closeness, similarity and care for the target's welfare) and overlap of cognitive representations of the self and the target. As prosocial outcomes, besides attitudes toward the individual and the group and support for prosocial policies benefiting the group as a whole, intentions to help the specific needy target were also assessed.

Finally, in Study 4, we directly manipulated two sets of mediators, emerged as central in the previous studies: emotional responses to the target's plight and perceptions of self-other similarity that lead to a sense of oneness. To this end, before exposure to the target's plight, participants' attentional focus was manipulated. In one experimental condition, participants were asked to focus on feelings and emotions experienced while reading the story of the target (feelings-focus condition), while in the other one they were asked to focus on similarities and commonalities between themselves and the target (similarities-focus condition); in the control condition, participants were asked to remain objective and detached. The same criterion variables were considered as for Study 3, while potential mediators were assessed using more accurate and differentiate measures.

STUDY 1

Introduction

The aim of the present study was to examine whether taking the perspective of a young Moroccan woman, describing her difficulties associated with being immigrant, would promote prosocial responses not only toward her, but also toward North-African immigrants in general. In particular, we expected that perspective taking would lead to improved attitudes toward both the individual target and the group as a whole, and with endorsement of prosocial policies benefiting the entire group. Furthermore, we examined the role of different potential mediators, i.e., different empathic feelings and self-other merging, and tested their contribution in explaining the effects of perspective taking on prosocial responses.

Method

Participants

Participants were 166 young women (*M* age = 23.63, *SD* = 3.78), who accepted voluntarily to take part in the research. We included only women to keep gender of participants and target person the same in order to minimize cross-gender self presentation concerns. Participants were randomly assigned to one condition of the experimental design.

Procedure

All participants were provided with an experimental booklet and were conducted through the procedure individually. The first page contained the cover story: the research was presented as part of a project in collaboration with the editorial office of a new psychology journal. It was explained that the goal of the project was the creation of a column called “News from the personal side”, which collected experiences and stories of people and “sought to go beyond the facts of local events and report how these events

affect the lives of people involved" (see Batson, Polycarpou et al., 1997). Participants were informed that they would be required to read an article and complete a questionnaire, aimed to know opinions and reactions of hypothetic readers. Participants were then instructed to take a particular perspective while reading and were then presented with an article, narrating the story of Malika, a young woman immigrated from Morocco to Italy. Immediately after reading the text, participants were asked to complete a questionnaire, containing measures of different empathic feelings, self-other merging, attitudes toward Malika, attitudes toward North-African immigrants in general and support for prosocial policies benefiting North-African immigrants. Finally, some ancillary questions and the manipulation check were presented. Participants were then thanked and debriefed.

Perspective-taking manipulation. After the introduction to the research, participants were given written instructions regarding the perspective they were asked to take while reading the text (derived from Batson, Early et al., 1997).

In the *imagine-other* condition, participants were instructed as follows: "While you are reading this article, try to *imagine how the person telling her story feels about what has happened to her and how it has affected her life*. Try not to concern yourself with attending to all information presented. Just concentrate on trying to imagine *how the person who lived that experience feels*."

In the *imagine-self* condition, participants were instructed as follows: "While you are reading this article, try to *imagine how you yourself would feel if you were experiencing what has happened to the person who is telling her story and how this experience would affect your life*. Try not to concern yourself with attending to all information presented. Just concentrate on trying to imagine *how you yourself would feel if you were living that experience*."

Participants in the *objective* condition read the following instructions: "While you are reading this article, try to *be as objective as possible about what has happened to the person who is telling her story*. Do not let yourself involved in the story, try simply to remain *impartial and detached*."

The story of Malika. In the second page of the booklet, all participants were provided with the same text, written in first person and accompanied with a picture of a young woman with a black veil, ostensibly Muslim. Participants were led to believe that the story presented was real. In actuality, the picture had been downloaded from Internet and the text had been invented. In the article, a 22-year-old Moroccan woman, named Malika, described her experience in Italy, explaining that she migrated because she wanted to study pharmacy. She described the difficulties encountered when she tried to find a part-time job: "many people didn't give me even a chance and as soon as they met me… I don't know why Italians behave like that with us Moroccans, maybe they are scared, but I just asked for a job…". She also reported an episode in which she felt "really humiliated, sad and a bit angry" because she was looking for a room in a share-flat and the landlord, just after having observed her clothes carefully, told her that he was not sure that she could pay the rent. Finally, she described her experience at university, in particular her problems with the language and with interpersonal relationships. Malika reported that "some Italians are kind and helpful with me, but others are suspicious, elude me or look at me in a strange way, I think because of my clothes… I heard once some comments about me and my veil… It has been really uncomfortable, I felt different and not welcomed". She concluded her story saying that coming to Italy was not a good choice and that she was "disappointed and embittered."

Measures of potential mediators

Emotional response scale. After reading the story, participants completed an emotional response scale including 11 different emotions, referred to empathic concern (e.g., *tenderness*, *warmth*), sadness and feelings of injustice (e.g., *sadness*, *anger*, *indignation*). Participants were asked to report the degree to which they had experienced each emotion while reading the text (1 = *not at all*, 7 = *extremely*).

Self-other merging was measured with an adapted version of the Inclusion of Other in the Self scale (IOS; Aron et al., 1992). It consisted of seven pictures in which two separate and distant circles (1) increasingly got nearer, touched (4) and overlapped quite completely (7). Participants were instructed to indicate which figure better

represented the relationship between them and Malika concerning the closeness they felt with her in general[3].

Measures of criterion variables

Attitudes. Two types of attitude were considered: *toward the individual target*, whom story participants read, and *toward the group* to which the target belonged. Attitude toward the individual was measured in the very last part of the booklet, apparently as a part of the evaluation questionnaire of the column "News for the personal side", with two items: "How did you like Malika?", and "How much do you appreciate Malika?" (1 = *not at all*, 7 = *extremely*). The items were then averaged (alpha = .80). For the second measure, participants were asked to rate their attitude toward North-African immigrants in general using four 5-point semantic differential scales (*cold-warm*, *negative-positive*, *favorable-unfavorable*, *friendly-hostile*). Opportune items were reverse scored and responses were then averaged to form a single index (alpha = .85), with higher scores representing positive attitudes.

Support for prosocial policies. Participants were asked to state how much they were favorable to grant some social rights to North-African immigrants in general (0 = *totally contrary*, 4 = *extremely favorable*). The rights considered were four: free sanitary assistance, free education for their sons, preferential inclusion in tenement-houses list and administrative vote. Responses to the items were then averaged to form a single index (alpha = .76).

Ancillary questions and manipulation check

At the end of the questionnaire, some multiple-choice questions about general aspects of the story were administered in order to check that participants carefully read the article. All respondents answered correctly and no one had to be excluded. Consistent with the cover story, the last part of the questionnaire concerned the evaluation of the article. Participants were asked to rate how interesting they found the story was and, as described before, how much they appreciated Malika. The last three

[3] In the original scale by Aron et al. (1992), the starting picture represented the two circles already touching, which corresponds to our mid point. However, this scale was created to assess the degree of overlap between representations of self and other within intimate relationships (e.g., romantic partners), whereas in our studies the other is a stranger. Hence, we decided to slightly change the scale by including three pairs of non-overlapping circles.

items provided a check of the perspective-taking manipulation ("While reading the text, to what extent did you concentrate on imagining Malika's feelings?", "While reading the text, to what extent did you concentrate on imagining how you would have felt if you were in Malika's place?", "While reading the text, to what extent did you remain objective and detached?"; 1 = *not at all*, 7 = *extremely*).

Results

Effectiveness of the perspective-taking manipulation

To check the effectiveness of the perspective-taking manipulation, we examined participants' answers to the three questions about their concentration while reading the story. Responses to the items were submitted to a 3 (Perspective: imagine-other vs. imagine-self vs. objective) x 3 (Concentration on: target's feelings vs. own feelings vs. objective) mixed-model ANOVA, with repeated measures on the second factor. A significant interaction effect emerged, $F(4, 324) = 9.98$, $p < .001$.

A one-way ANOVA was then performed for each item and the effect of perspective was found to be significant for all three items (*F* values and condition means are presented in Table 1). Indicating the effectiveness of the perspective-taking manipulation, attention given to target's feelings was higher in the two perspective-taking conditions compared to the objective one. Moreover, concentration on own feelings was significantly higher for participants in the imagine-self condition and, although marginally, for those in the imagine-other condition than for participants in the objective condition. Conversely, participants reported remaining objective more in the objective condition than in the two perspective-taking conditions.

We also compared the three answers within conditions. Participants in the imagine-other condition reported concentrating on target's feelings more than on remaining objective, $t(52) = 2.61$, $p < .05$, and at the same level as for concentrating on their own feelings, $t(52) = .70$, *ns*. Similarly, participants in the imagine-self condition reported concentrating on their own feelings more than on remaining objective $ts(59) = 3.20$, $p < .01$, and at the same level as for concentrating on target's feelings $t(59) = -1.15$, *ns*, but they still reported concentrating on imagining target's feelings more than on remaining objective, $ts(59) = 2.59$, $p < .05$. Finally, participants in the objective

condition reported more concentration on being objective than on imagining target's or their own feelings, *ts*(52) > 2.68, *ps* < .05.

We concluded that our perspective-taking manipulation was effective in directing participants' attention, even if some overlaps between the two types of perspective-taking sets emerged (for a similar result, see Batson, Early et al., 1997).

Table 1. Manipulation check (Study 1)

	Condition Means				
Concentration on:	Imagine-Other	Imagine-Self	Objective	$F(2, 163)$	$p =$
Target's feelings	4.70_a	4.64_a	3.58_b	12.03	.001
Own feelings	$4.53_{(a)}$	4.88_a	3.94_b	5.12	.007
Objective	4.08_a	3.98_a	4.77_b	6.39	.002

Note. Response scale ranged from 1 to 7. In the same row, means with different subscripts are different with $p < .05$; in parentheses with $p < .06$.

Factor analysis of the emotional response scale

An exploratory factor analysis (principal axis method with oblimin rotation) was performed on the list of emotions, revealing the presence of two factors. Six items (*disappointment, bitterness, feeling of injustice, anger*, *sadness* and *indignation*) loaded on the same dimension, which we hypothesized to represent Parallel Empathy (eigenvalue = 5.63; alpha = .87). The second factor, containing the other five items (*warmth, sympathy*, *tenderness, understanding,* and *soft-heart*), reflected Empathic Concern (eigenvalue = 1.11; alpha = .83).

Effects of the perspective-taking manipulation on the dependent variables

The first part of the analyses aimed to test the effects of the perspective-taking manipulation on emotional responses, IOS, attitudes and support for prosocial policies. A one-way ANOVA (Perspective: imagine-other vs. imagine-self vs. objective) was applied to all the dependent variables. Results and condition means are presented in Table 2.

Table 2. Effects of the perspective-taking manipulation on the dependent variables (Study 1)

	Condition Means				
	Imagine-Other	Imagine-Self	Objective	$F(2, 163)$	p =
Empathic concern	4.30_a	4.30_a	3.63_b	6.47	.002
Parallel empathy	4.36_a	4.14_a	3.35_b	9.71	.001
Self-other closeness/IOS	$3.15_{(a)}$	3.22_a	2.66_b	2.97	.054
Attitude toward individual	5.22_a	$4.93_{(a)}$	4.60_b	4.76	.01
Attitude toward group	2.19	1.95	2.04	1.28	*ns*
Support for social policies	1.82_a	1.77_a	$1.43_{(b)}$	2.10	.126

Note. Response scales ranged: for empathic concern, parallel empathy, IOS, and attitude toward the individual from 1 to 7; for attitude toward the group and support for social policies from 0 to 4. In the same row, means with different subscripts are different with $p < .05$; in parentheses with $p < .10$.

The perspective-taking manipulation had a significant effect on emotional responses and a marginally significant effect on the IOS measure. Comparisons between the three conditions showed that participants in the imagine-self and imagine-other conditions experienced more empathic concern and parallel empathy than did those in the objective condition, with no reliable difference between the two perspective-taking conditions. Moreover, participants in the two perspective-taking conditions, especially those in the imagine-self condition, reported higher levels of self-other merging compared to participants instructed to remain objective. However, it is worth noting that, for all conditions, mean on the IOS scale was lower than 4, i.e. the middle point of the scale in which the two circle only touched (for imagine-other condition, $t(52) = -4.56$; for imagine-self condition, $t(59) = -4.57$; for objective condition, $t(52) = -7.59$, all $ps < .001$). This result suggests that participants instructed to take the other's perspective did perceive a sense of closeness with the target, but not an actual overlap of the representations. So, from now on, it seems more appropriate to label this construct as self-other *closeness*, rather than self-other merging.

The experimental manipulation had also a significant effect on attitude toward the individual target: evaluation was more positive in the imagine-self condition and, marginally, in the imagine-other condition compared to control. Contrary to our

expectations, the manipulation did not affect attitude toward the group in general. Finally, for the social policy measure a non-significant tendency emerged: participants in the two perspective-taking conditions expressed more support for prosocial policies benefiting North-African immigrants than did participants in the objective condition, although the differences did not reach the conventional level of statistical significance.

Mediation Analyses

In the second part of the analyses, with the aim of studying the relations between constructs, we adopted Structural Equation Modeling (SEM) with latent variables (LISREL 8.71; Jöreskog & Sörbom, 2004).

We tested a model in which the perspective-taking manipulation was entered as predictor, emotional responses and the IOS score as mediators, while attitudes toward the individual and the group, so as support for social policies, were considered as outcomes or criterion variables. Although the effects of the manipulation did not reach the level of statistical significance for the two group-level variables (i.e., attitudes toward the group and support for social policies), we included them to test the possibility that the manipulation influenced them through an indirect route. Given that the analysis of variance showed that the two types of perspective-taking instructions yielded comparable effects on the dependent variables, we created a dummy variable that merged together the two imagine conditions, compared to the objective condition (1 = imagine-other; 1 = imagine-self; 0 = objective). In addition, as all constructs (except for IOS) were measured by several items, to smooth measurement error and keep an adequate ratio of cases to parameters, we applied the partial disaggregation procedure (Bagozzi & Heatherton, 1994). This consisted in creating subsets of items that were averaged to form two indicators for each construct. The covariance matrix was used as input (see Appendix A) and estimates were derived using maximum likelihood method.

The goodness of fit was assessed using several fit indices. The first one is Chi-square, that evaluates the degree of difference between the reproduced covariance matrix and the observed covariance matrix. A nonsignificant chi-square test is indicative of a satisfactory fit (see Hu & Bentler, 1999), although a *p*-value ranging between .01 and .05 is also considered indicative of an acceptable fit (Schermelleh-Engel,

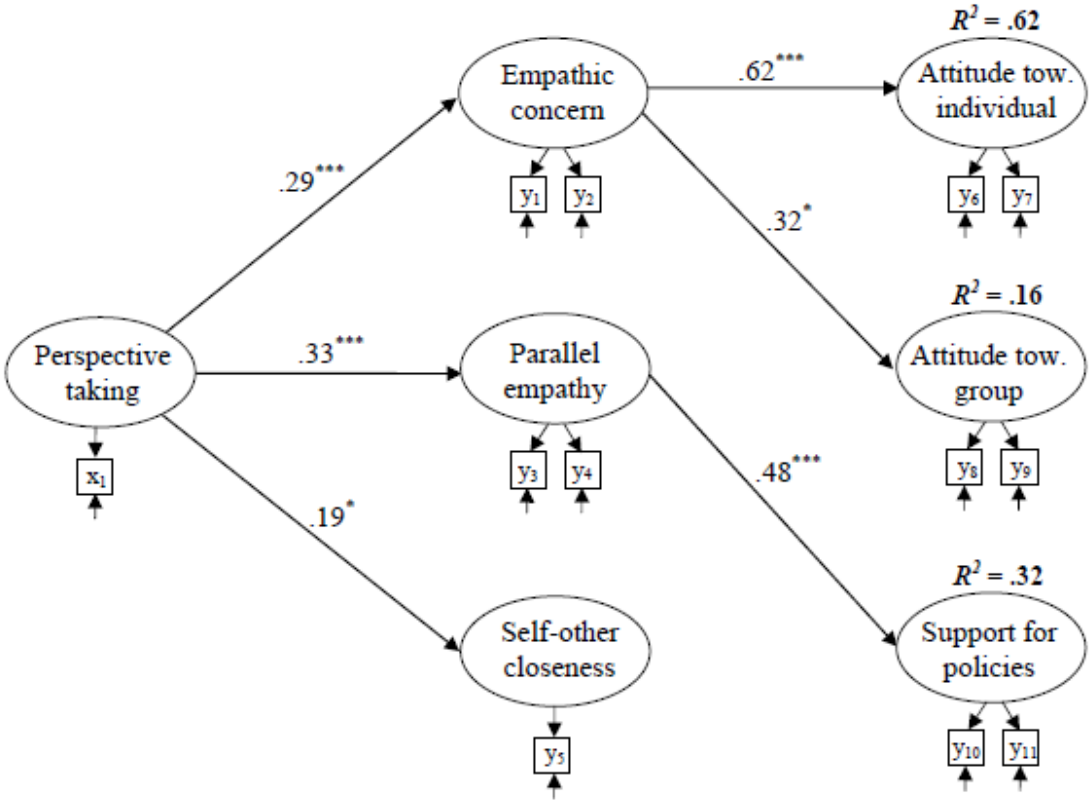
Moosbrugger & Muller, 2003). However, this index is particularly sensitive to sample size and model complexity (i.e. the more parameters to estimate, the smaller value of χ^2) and has been often criticized (e.g., Jöreskog & Sörbom, 1996). For this reason, we considered also other fit indices, i.e., the Comparative Fit Index (CFI), the Root Mean Squared Error of Approximation (RMSEA), and the Standardized Root Mean Square Residual (SRMS). Model fits are considered satisfactory when CFI is greater than .95, RMSEA is lower than .06 and SRMS is lower than .08 (see Hu & Bentler, 1999).

In the proposed model, the potential mediators – empathic concern, parallel empathy and self-other closeness (IOS) – were all entered at the same level, as well as all the criterion variables – attitude toward the individual, attitude toward the group and support for prosocial policies. In this model, direct paths from the perspective-taking manipulation to the criterion variables were not estimated; hence, the model is fully mediated. The model fitted the data very well, $\chi^2(38) = 36.12$, $p = .56$, RMSEA = .00, SRMR = .03, CFI = 1.00. As presented in Figure 1, perspective taking predicted higher levels of empathic concern ($\gamma = .29$, $p < .001$), which in turn lead to more positive attitudes toward the individual ($\beta = .62$, $p < .001$) and toward the group ($\beta = .32$, $p < .05$). Perspective taking also affected parallel empathy ($\gamma = .33$, $p = .001$), which was then associated with greater endorsement of social policies ($\beta = .48$, $p < .001$). Finally, the manipulation had also a positive effect on self-other closeness ($\gamma = .19$, $p < .05$), but this did not have any effect on the criterion variables. Overall, the model accounted for 62% of the variance in attitude toward the individual, 32% of the variance in support for social policies, and for a more modest portion in attitude toward the group (16%).

To assess the overall effect exerted by each variable on the criterion variables and the strength of the mediation effects, we carried out an effects decomposition analysis (Loehlin, 1998). The total covariance between each pair of variables was decomposed into direct causal effects (the effect of one variable on another controlling for all prior variables and all mediating variables) and indirect causal effects (the total causal effects minus the direct effect). This analysis revealed that the indirect effects of the perspective-taking manipulation on the criterion variables were all positive and significant (for attitude toward the individual, IE = .25, $p < .001$; for attitude toward the group, IE = .12, $p < .01$; for support for policies, IE = .19, $p < .001$). This confirms that perspective taking played a significant role in predicting also group-level outcomes:

specifically, its impact passed through empathic concern for individual and group attitudes, and through parallel empathy for support for social policies.

Figure 1. Mediated effects of perspective taking: Structural equation model (Study 1)



Note. All parameters reported are standardized. Only significant paths are reported. * $p < .05$; ** $p < .01$; *** $p < .001$. χ^2 (38) = 36.12, p = .56, RMSEA = .0, SRMR = .03, CFI = 1.00

Discussion

The present study tested the hypothesis that taking the perspective of a needy individual, member of a stigmatized group, would promote prosocial responses toward this individual and the group to which he or she belongs. In particular, perspective taking was expected to be associated with improved attitudes toward both the individual target and the group as a whole, and with endorsement of prosocial policies benefiting the entire group. Furthermore, we examined the role of different potential mediators, i.e., different empathic feelings and self-other merging, and tested their contribution in explaining the effects of perspective taking on prosocial responses.

Taken together, the results were quite supportive of predictions: encouraging participants to adopt the perspective of a young Moroccan woman, while she described her difficulties associated with being immigrant, led them to experience higher levels of empathic feelings for her, to perceive a greater closeness with her – but not an actual merging of self-other representations – and, finally, to evaluate her more positively. Moreover, after perspective taking participants tended to express more support for prosocial policies that were beneficial for the group as a whole, i.e., North-African immigrants. Perspective taking, though, was not directly associated with improved outgroup attitudes, as we had expected. However, when analyzing the mediation process, we found some evidence that perspective taking yielded an indirect effect on the group-level outcomes. Results indicate that perspective taking affected prosocial outcomes through increased empathic concern and parallel empathy, not through greater self-other closeness. Specifically, empathic concern was found to predict more positive attitudes toward the individual and the group, while parallel empathy predicted greater support for prosocial policies.

Interestingly, the two types of perspective-taking instructions had comparable effects on participants' responses: whether participants imagined how the target was feeling in her plight or how they would feel if they were in such a situation did not produce different emotional responses or perceptions of self-other closeness, nor influenced attitudinal outcomes. This finding is consistent with results of Finlay and Stephan (2000), suggesting that, at least when the other person is a stranger and belongs to a different, stigmatized group, the two types of perspective taking might be equally effective in eliciting empathic feelings and promoting prosocial responses. As Batson and Ahmad (2009) explained, it is possible that "when you know little about the other person, imagining how you would feel in his or her situation (i.e., imagine-self perspective) may provide a useful, possibly essential, stepping-stone to sensitive understanding of the other's plight." (p. 146)

Overall, the results of this first study were encouraging, but we need to acknowledge some limitations. First, we did not find direct evidence of the expected effect of perspective taking on attitudes toward the group, and evidence of the effect on support for prosocial policies was limited. One reason for why perspective taking was not very effective on the group-level outcomes may be that, in this study, the target was

not perceived as typical of her group. However, previous research has demonstrated that perspective taking was effective in improving attitudes toward the group as a whole even if the target was not prototypical of the group (e.g., Batson, Polycarpou et al., 1997, Study 1) or even when stereotypes were endorsed (e.g., Vescio et al., 2003). We suspect that perspective taking did not produce the expected effects on group-level outcomes because of the content of the story. Indeed, Malika expressed some negative judgments about Italians and she overtly complained about her treatment in Italy: the tone of her narration was quite recriminating and she concluded by saying she regretted her choice to migrate to Italy. Therefore, in the next studies we will use a story centered on the difficulties and troubles faced by the person, while making milder the tone of narration. Moreover, to ensure that target's membership is salient and make generalization from the interpersonal to the intergroup level more likely, we will highlight the typicality of the target.

The second limitation concerns the emotional responses. In this study, we measured empathic concern felt for the needy target and a range of emotions paralleling those that the target was experiencing. However, the affective states composing the parallel empathy index were quite heterogeneous, including feelings associated with sadness as well as feelings associated with anger and perceived injustice. A possible explanation for this heterogeneity may be that the target actually expressed a great variety of emotions, and this may have contributed to the impossibility to empirically distinguish these affective states. Moreover, in this study, we did not take into consideration personal distress, which is often elicited when witnessing another person's suffering. Examining the effect of perspective taking on this type of emotional response, though, might be extremely important, as personal distress has been proposed as an alternative, egoistic factor that motivates prosocial responding (e.g., Hoffman, 1981; Piliavin et al., 1981; see, for a review, Batson, 1987). In the next study, we will employ a more complete list of emotional responses and we will test the possibility that personal distress could account for the effects of perspective taking on prosocial outcomes.

STUDY 2

Introduction

The aims of Study 2 were to replicate, clarify and extend the findings of Study 1. The same procedure was adopted: participants' perspective was manipulated before they were exposed to a needy immigrant woman, named Habìba, describing her difficulties and troubles. However, several changes were incorporated in Study 2 to address some methodological and theoretical issues. First, a different story was used: compared to Malika's plight presented in Study 1, the situation of Habìba is more needy, as she has two children to take care of, and more typical of North-African immigrants. Moreover, the tone of the narration is less recriminating and Habìba does not express any negative judgments or complains about Italians. Second, with the aim of assessing more accurately emotional reactions potentially experienced by participants, the list of emotions employed in Study 2 was extended and included some items reflecting personal distress. In addition, to understand whether the greater closeness between the self and the other person resulting from perspective taking was due to a perception of the self as moving toward the other or vice versa, or both, we used a new graphical scale of self-other closeness that permits to analyze separately the approaching movements of the self and of the other. Finally, we used different scales to assess attitudes toward both the individual target and the group as a whole.

In general, we expected that the manipulation of perspective taking would affect participants' emotional reactions, as well as their perceptions of closeness with the target. We also expected that perspective taking would be associated with improved attitudes both toward the individual target and the group as a whole, and also with greater endorsement of prosocial policies benefiting the group. In line with results of Study 1, we hypothesized that the two types of perspective-taking instructions would not produce relevant differences on participants' responses. However, as Batson, Early et al. (1997) found, it is possible that the imagine-self perspective would elicit a greater amount of personal distress than the imagine-other perspective.

Method

Participants

Participants were 179 young women (*M* age = 25.35 years, *SD* = 5.70), who accepted voluntarily to read a text and complete a questionnaire. Participants were randomly assigned to one condition of the experimental design.

Procedure

The procedure of the study was the same of Study 1. Participants were introduced to research and were invited to read an article, apparently taken from a newspaper page, describing the experience of a young Moroccan woman who migrated to Italy. Before reading the text, participants were given the same written instructions as in Study 1: in the two experimental conditions, participants were instructed to take the target's perspective by either imagining how the target was feeling in her plight (imagine-other condition) or imagining how they would feel if they were in her position (imagine-self condition), whereas, in the objective condition, participants were instructed to remain detached and objective. After these instructions, participants were presented with the story of Habìba and were then asked to complete a questionnaire. The content of the story was slightly different from the one used in Study 1 and some changes were introduced in the questionnaire to improve measurement of the dependent variables. Finally, participants were thanked and debriefed.

The story of Habiba. All participants read the same text narrating the story of Habìba, a Moroccan woman of 28 years, who migrated to Italy in order to seek a job and a better future. She described the difficulties of her condition, explaining that she really urged to work and earn some money because she was alone and had to take care of two children. She told that she was not able to find a stable job and so could not pay the bills regularly. She also expressed her worries about future, especially for her children "who are very little and, if they get sick, I don't know how I could cure them". Compared to Study 1, the narration of Habìba focuses more on her troubles and worries, and does not contain recriminating affirmations against Italians. In addition, with the purpose of making salient her group membership, she explicitly stated that she was Muslim, she dressed the veil and followed the religious rules, and that she thought it

was very important to conform to the shari'a "especially now that I live in Italy, because I feel necessary to keep my roots alive".

Measures of potential mediators

Emotional response scale. After reading the story, participants completed the same emotional response scale of Study 1, integrated with some new items. The list included 17 emotions referring to empathic concern (e.g., *tenderness*, *warmth*), feelings of injustice and sadness (e.g., *anger*, *indignation*, *sadness*) and, in addition, personal distress (e.g., *distress*, *worry*). Participants rated the degree to which they had experienced each emotion on a 7-point Likert scale (1 = *not at all*, 7 = *extremely*).

Self-other closeness was measured using a new graphical scale, inspired to the IOS scale, that allowed us to measure not only self-other closeness/distance, but also to differentiate between the approaching movement of the self and the approaching movement of the other. It consisted of 10 circles, touching but not overlapping, drawn horizontally. In the initial figure, it was explained and showed graphically that the first circle (on the left extremity) represented the self and the last one (on the right extremity) represented Habìba before the reading of the story. Participants were then asked to indicate, in a blank figure, the positions of themselves and Habìba after having read the story, by crossing the circle that represented the self and blackening the circle that represented Habìba. Approaching scores were calculated by subtracting, separately, the position of the self and the position of the other chosen by participants to the respective positions in the initial figure. Thus, scores could range from 0 to 9, with higher scores denoting greater approach. Starting from this measure, it was possible to compute also a distance score that corresponds to the number of circles separating the chosen positions of the self and the other and could vary from 0 (when the two positions coincided) to 9.

Measures of criterion variables

Attitude toward the individual target. Participants were asked to rate to which degree their attitude toward Habìba was *negative*, *friendly*, *positive*, *favorable* (0 = *not at all*, 4 = *extremely*). Opportune items were reverse scored and responses were then averaged to form an index, with higher scores representing positive attitudes (alpha = .87).

Attitude toward the group. As in Study 1 the differential semantic scales did not work well, we used a different measure to assess attitudes toward North-African immigrants in general. Participants were asked to rate to which extent their attitude toward the group was *liking*, *cold*, *supportive*, *hostile*, associated with a 5-points Likert scale (0 = *not at all*, 4 = *extremely*). After reverse scoring, a single index was created, with higher scores indicating positive attitude toward the group (alpha = .81).

Support for prosocial policies. Finally, participants were asked to state how much they were favorable to grant some social rights to North-African immigrants in general (0 = *totally contrary*, 4 = *extremely favorable*). The rights considered were three: two items were the same as in previous study, (preferential inclusion in tenement-houses list and administrative vote) and one was slightly different (facilitated national insurance). Responses to the items were then averaged in a single index (alpha = .75).

Finally, the manipulation check questions were administered as in Study 1.

Results

Effectiveness of the perspective-taking manipulation

To check the effectiveness of the perspective-taking manipulation, we examined participants' answers to the three questions about their concentration while reading the story. The responses were submitted to a 3 (Perspective: imagine-other vs. imagine-self vs. objective) x 3 (Concentration on: target's feelings vs. own feelings vs. objective) mixed-model ANOVA with repeated measures on the second factor. A significant interaction effect emerged, $F(4, 352) = 37.79$, $p < .001$, as well as a main effect of the *within subjects* factor concentration, $F(2, 352) = 11.16$, $p < .001$.

A one-way ANOVA was then performed for each item and the effect of the perspective was found to be significant for all three (*F* values and condition means are presented in Table 3). Indicating the effectiveness of the perspective-taking manipulation, attention given to target's feelings was higher in the imagine-other condition compared the other two conditions, and also in the imagine-self condition compared to the objective one. Moreover, reported concentration on their own feelings was significantly higher for participants in the imagine-self condition than for those both in the imagine-other and in the objective condition, and also for participants in the

imagine-other condition compared to those in the objective one. Conversely, participants reported remaining objective more in the objective condition than in the two perspective-taking conditions.

The answers to the three manipulation check items were also compared within conditions. Participants in the imagine-other condition reported concentrating on target's feelings more than on remaining objective, $t(60) = 6.70$, $p < .001$, and on their own feelings, $t(60) = 2.08$, $p < .05$, but they still reported concentrating on their own feelings more than on remaining objective, $t(60) = 5.88$, $p < .001$. Participants in the imagine-self condition reported more concentration on their own feelings than on target's feelings and on remaining objective, $ts(61) > 3.85$, $ps < .001$, but they still reported concentrating on target's feelings more than on remaining objective, $t(61) = 6.21$, $p < .001$. Finally, participants in the objective condition reported more concentration on being objective than on the target's and own feelings, $ts(55) > 4.60$, $ps < .001$.

We concluded that our perspective-taking manipulation was effective in directing participants' attention, even in differentiating between imagine-other and imagine-self conditions.

Table 3. Manipulation check (Study 2)

	Condition Means				
Concentration on:	Imagine-Other	Imagine-Self	Objective	$F(2, 176)$	$p =$
Target's feelings	5.08_a	4.60_b	3.66_c	16.95	.001
Own feelings	4.57_a	5.26_b	3.59_c	25.33	.001
Objective	3.21_a	3.19_a	5.18_b	39.08	.001

Note. Response scale ranged from 1 to 7. In the same row, means with different subscripts are different with $p < .05$.

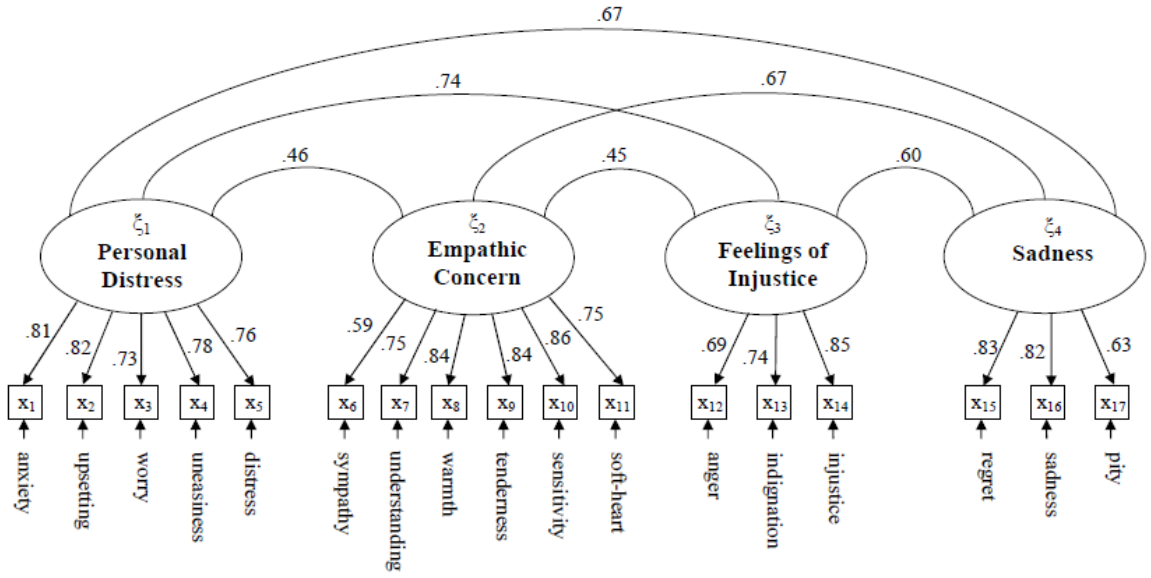
Factor analyses of the emotional response scale

A preliminary exploratory factor analysis (principal axis method with oblimin rotation) on the emotional responses revealed the presence of four factors. The first

factor referred to Personal Distress and was measured by *anxiety, distress*, *upsetting*, *uneasiness* and *worry* (eigenvalue = 7.61; alpha = .88). The second factor that emerged was Empathic Concern and included the items *sensitivity, tenderness, warmth, soft-heart, understanding* and *sympathy* (eigenvalue = 2.34; alpha = .90). The other six items, which represented Parallel Empathy in Study 1, loaded on two distinct dimensions: one factor, containing the items *indignation*, *feeling of injustice* and *anger*, represented Feelings of Injustice (eigenvalue = 1.03, alpha = .81), while the second factor reflected Sadness, being measured by *sadness*, *sorrow*, *pity* (eigenvalue = 1.01, alpha = .79).

We also performed a confirmatory factor analysis (CFA) to test the four-factor structure of the emotional scale, using LISREL 8.71 (Jöreskog & Sörbom, 2004; maximum likelihood estimation method). The model included 17 observed variables (i.e., the list of emotions) and 4 latent constructs, and the CFA was applied to the covariance matrix. The model obtained the following fit indexes: $\chi^2(113) = 186.26$, $p <$ .001, RMSEA = .059, SRMR = .056, CFI = .98. Although the chi-square was significant, the other indexes were satisfactory. Furthermore, factor loadings were all high and consistent (see Figure 2), ranging from .59 to .86. We concluded then that the four-factor model was indeed a good fit to the data.

Figure 2: Confirmatory Factor Analysis of the emotional response scale (Study 2)



Note. All parameters reported are standardized and significant with $p <$. 001.
χ^2 (113) = 186.26, $p <$ .001, RMSEA = .059, SRMR = .056, CFI = .98

Effects of the perspective-taking manipulation on the dependent variables

To test the effects of the perspective-taking manipulation on emotional responses, self-other closeness, attitudes and support for rights, a one-way ANOVA (Perspective: imagine-other vs. imagine-self vs. objective) was applied to the dependent variables. Results and condition means are presented in Table 4.

Table 4. Effects of the perspective-taking manipulation on the dependent variables (Study 2)

	Condition Means				
	Imagine-Other	Imagine-Self	Objective	$F(2, 176)$	$p =$
Empathic concern	5.01_{a}	4.58_{a}	3.89_{b}	10.51	.001
Feelings of injustice	3.85_{a}	3.86_{a}	3.12_{b}	4.09	.018
Sadness	4.83_{a}	4.86_{a}	4.05_{b}	7.96	.001
Personal distress	3.78_{a}	3.77_{a}	2.71_{b}	10.46	.001
Self-other distance	3.73_{a}	4.44_{a}	5.43_{b}	6.75	.001
Approach of the self	3.46_{a}	3.31_{a}	2.24_{b}	5.73	.004
Approach of the other	1.81_{a}	1.25_{b}	$1.33_{(b)}$	2.40	.094
Attitude toward individual	2.73_{a}	2.58_{a}	2.20_{b}	7.50	.001
Attitude toward group	2.72_{a}	2.67_{a}	2.19_{b}	9.51	.001
Support for social policies	$1.76_{((a))}$	$1.82_{(a)}$	1.44_{b}	2.12	.123

Note. Response scales ranged: for empathic concern, feelings of injustice, sadness and personal distress from 1 to 7; for self-other distance, approach of the self and of the other from 0 to 9; for attitude toward the individual target, attitude toward the group and support for social policies from 0 to 4. In the same row, means with different subscripts are different with $p < .05$; in parentheses with $p < .10$; in double parentheses with $p < .11$.

As expected, the manipulation yielded a significant effect on all the four types of emotional responses: participants in the two perspective-taking conditions reported having experienced more empathic concern, feelings of injustice, sadness and personal distress than those in the objective condition.

Perspective taking also affected the perception of self-other closeness: in general, participants in the two perspective-taking conditions perceived less distance between the self and the target than those in objective one. The analyses of the distinct

approaching movements of the self and of the target showed that the movement of the self toward the other was greater than the reciprocal movement of the other in all conditions, *ts* > 2.89, *ps* < .01. However, while in both perspective-taking conditions the self moved closer to the other significantly more than in the objective condition, only in the imagine-other condition participants perceived that also the target moved toward the self, although the difference from the objective condition was only marginally significant.

Concerning the outcome variables, the experimental manipulation had a significant effect on attitude toward the individual target: the evaluation was more positive in the imagine-self condition and in the imagine-other condition compared to control. The same result was found at the group level: participants in the two perspective-taking conditions expressed more positive attitudes toward North-African immigrants in general than did those in the objective condition. Finally, a non-significant tendency emerged for the prosocial policies measure: participants in the two perspective-taking conditions expressed more endorsement of social rights benefiting North-African immigrants than those in the objective condition, although this difference was marginal.

To summarize, the manipulation had a significant effects on all the dependent variables, except for endorsement of rights, which, however, showed a tendency in the predicted direction.

Mediation Analyses

As for Study 1, we analyzed the relations between constructs by adopting Structural Equation Modeling (SEM) with latent variables, using the maximum-likelihood estimation method (LISREL 8.7; Jöreskog & Sörbom, 2004). As for Study 1, we applied the partial disaggregation procedure (Bagozzi & Heatherton, 1994). For each construct, except for the approach of the self and of the other, subsets of items were averaged and two indicators were computed (see Appendix B). Given that previous analyses showed that the two types of imagine instructions yielded very similar effects on the dependent variables, we created a dummy variable that merged together the two perspective-taking conditions, compared to the objective condition (1 = imagine-other;

1 = imagine-self; 0 = objective). SEM analyses were applied to covariance matrices and the goodness of fit was assessed using several indexes (see Study 1 for a description).

Starting from the results of Study 1, we computed a model in which the perspective-taking manipulation was entered as predictor (Level 1), and the potential mediators – the four types of emotional responses and approaching movements of the self and of the other – were all entered at the same level (Level 2), as well as all the criterion variables – attitude toward the individual, attitude toward the group and support for social policies (Level 3). The model is fully mediated and fitted the data very well, $\chi^2(80) = 101$, $p = .056$, RMSEA = .034, SRMR = .033, CFI = .99. Results indicated that perspective taking predicted higher levels of empathic concern, feelings of injustice, sadness and personal distress, as well as a greater approach of the self toward the other. On their turn, empathic concern was positively associated with the two types of attitude, while feelings of injustice were associated with support for social policies; the approaching movement of the self was also predictive of improved attitudes toward the group. However, in this model perspective taking was not a significant predictor of the movement of the other toward the self ($\beta = .06$, *ns*), although this variable was positively associated with attitudes toward both the individual and the group (respectively, $\beta = .13$, $p < .05$ and $\beta = .22$, $p < .01$).

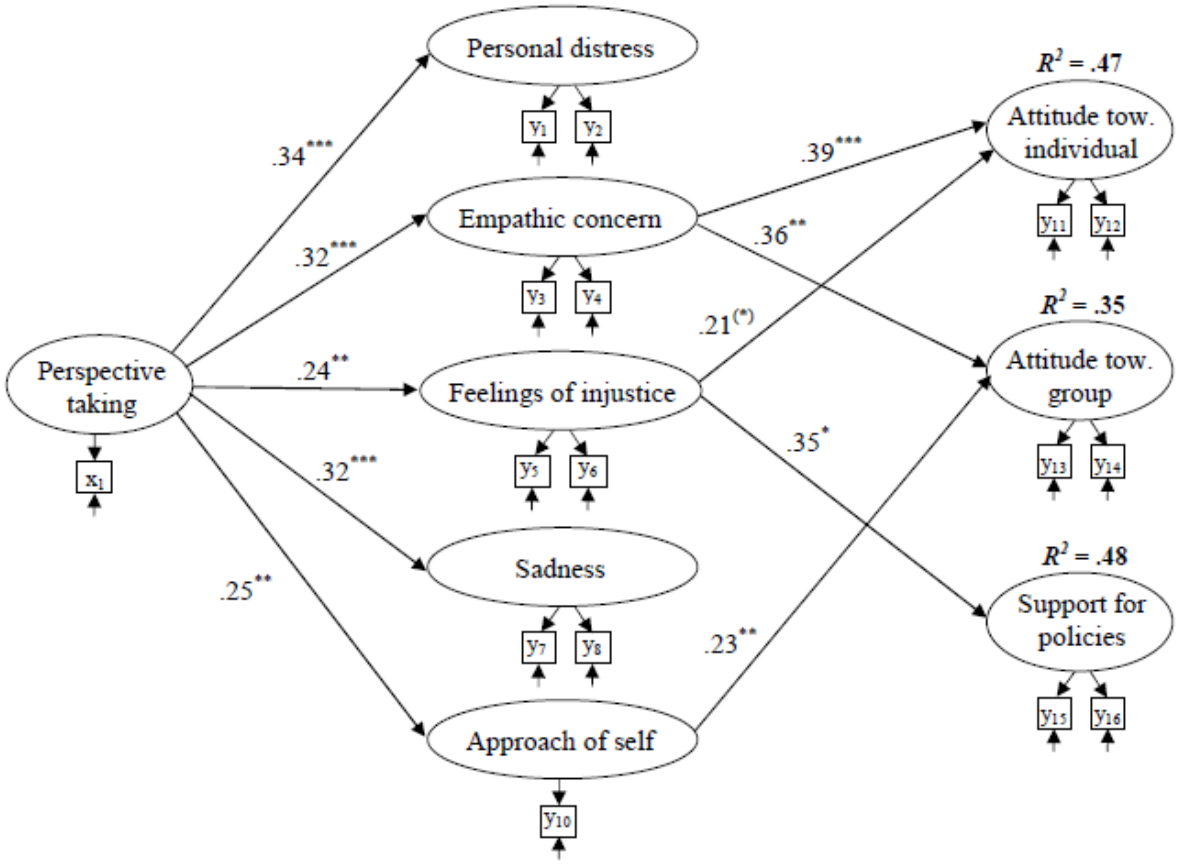
Thus, we computed a model in which the approach of the other score was taken out. This model fitted the data very well, $\chi^2(73) = 92.24$, $p = .064$, RMSEA = .035, SRMR = .034, CFI = .99.

As presented in Figure 3, perspective taking predicted higher levels of empathic concern ($\gamma = .32$, $p < .001$), which in turn was associated with more positive attitudes toward the individual target and toward the group (respectively, $\beta = .40$, $p < .001$ and $\beta = .36$, $p < .01$). Furthermore, perspective taking predicted an increase in reported feelings of injustice ($\gamma = .24$, $p < .01$), which then led to more support for prosocial policies ($\beta = .36$, $p < .01$) and, although only marginally, to a positive evaluation of the target ($\beta = .23$, $p < .10$). These results replicate the findings of Study 1, providing further evidence of the differential mediation roles played by empathic concern and feelings of injustice. Interestingly, the perspective-taking manipulation also positively predicted sadness and distress (respectively, $\beta = .32$ and $\beta = .34$, *ps* $< .001$), but these feelings did not influence any of the criterion variables. This finding suggests that these

two types of emotional responses, although aroused by perspective taking, did not yield any impact on the outcomes. Finally, perspective taking positively predicted the approaching of the self toward the other (β = .25, p < . 001), which in turn was positively associated with attitude toward the group (β = .19, p < . 01)

Overall, the model accounted for 47% of the variance in attitude toward the individual, 38% in attitude toward the group, and 48% in support for social policies. Effects decomposition analysis revealed that the indirect effects of perspective taking on the criterion variables were all positive and highly significant (for attitude toward the individual, IE = .24, p < .001; for attitude toward the group, IE = .22, p < .001; for support for policies, IE = .24, p < .001).

Figure 3. Mediated effects of perspective taking: Structural equation model (Study 2)



Note. All parameters reported are standardized. Only significant paths are reported. * p < .05; ** p < .01; *** p < .001; (*) p < .10. χ^2 (73) = 92.24, p = .064, RMSEA = .035, SRMR = .034, CFI = .99

Discussion

Study 2 was designed to provide a replication of the first study, while addressing some methodological weaknesses and trying to clarify some theoretical issues. Specifically, we wanted to test whether personal distress could account for the effects of perspective taking on prosocial responses and we wanted to obtain a more accurate measure of parallel empathic feelings: to do so, we included a more articulate scale of emotional responses. In addition, to understand whether the greater closeness between the self and the other person resulting from perspective taking was due to a perception of the self as approaching the other or vice versa, or both, we introduced a new measure of self-other closeness.

The results confirmed and strengthened those of Study 1. Participants who adopted the perspective of an immigrant woman, describing her daily difficulties and needs, subsequently expressed more positive attitudes not only towards this particular woman, but also towards North-African immigrants in general. Moreover, these participants tended also to display more support for prosocial policies aimed at ameliorating North-African immigrants' welfare. Replicating the results of Study 1, mediation analyses showed that the effects of perspective taking on attitudes toward the individual target and the group were mediated primarily by empathic concern, while the effect on support for prosocial policies passed through feelings associated with injustice. However, in this study, the perception of increased self-other closeness played also a role: specifically, the approach of the self toward the other contributed to predict more positive attitudes toward the group as a whole. Finally, it is worth noting that although perspective taking was associated with greater sadness and personal distress, the arousal of these two affective states could not account for any effect on the outcome variables. Thus, it seems that sadness and personal distress, which are considered to be nonaltruistic motivators (e.g., Cialdini et al., 1997), could not foster nor, most importantly, hinder the prosocial consequences derived from perspective taking.

Interestingly, as in Study 1, the two types of perspective-taking did not produce relevant differences in participants' responses. In particular, although the manipulation check indicated that the two types of instructions directed participants' attention as requested (i.e., on target's feelings or on their own feelings), emotional responses to the target's need situation were virtually the same. This finding seems to be inconsistent

with that of Batson, Early et al. (1997), who demonstrated that the imagine-self perspective was associated with greater arousal of personal distress than the imagine-other perspective. However, it is possible that our measure of distress did not tap properly *personal* distress, but rather reflected *empathic* distress felt *for* the other. Alternatively, as we suggested for Study 1, the finding that the two types of perspective taking yielded very similar effects may be related to the fact the target is a stranger person, belonging to a stigmatized group, and her plight is likely to be unfamiliar to most of our respondents.

STUDY 3

Introduction

So far, the results of Study 1 and 2 provided support to the hypothesis that taking the perspective of a member of a stigmatized group, i.e., an immigrant woman in a difficult plight, can improve attitudes toward both the individual target and the group, and can promote endorsement of prosocial policies benefiting the group as a whole. However, we did not test whether perspective taking would also increase motivation to help the needy individual. In the present study, we tested this possibility.

Moreover, results of the previous two studies indicate that the effects of perspective taking on attitudes were mediated primarily by increased empathic concern felt for the target, while the indirect effect on support for prosocial policies passed through self-reported feelings of injustice. We also found that a general perception of self-other closeness could not account for the effects of perspective taking (Study 1), whereas a perception of the self as approaching the other seemed to play a role in predicting more positive attitudes toward the group (Study 2). In the present study, we sought to delve into the mediation process, with the aim of understanding which constructs, among those that have been proposed in literature, could better account for the beneficial consequences of perspective taking.

Therefore, we examined the role of different affective and cognitive constructs, which are considered to be associated with an altruistic or nonaltruistic motivation. Specifically, we took into account self-reported emotional responses to the target's plight, including an altruistic factor – empathic concern – a nonaltrustic factor – sadness – as well as feelings of injustice, whose motivational nature is still controversial (see Batson & Ahmand, 2009; Dovidio et al., 2004). As in Study 1 and 2, we also measured perception of self-other closeness and merging using two graphical scales. In addition, we included a more cognitive measure of overlap between representations of the self and of the target, based on trait ascription (e.g., Batson, Sager et al., 1997; Davis et al., 1996; Galinsky & Moskowitz, 2000), and several measures that have been

hypothesized to be associated with the perception of merged self-other identities, i.e. a sense of oneness. Finally, we included one item to check the possibility that responses to the IOS scale, and possibly also to our self-other approaching scale, may reflect care for the other.

In sum, in this study we tested the hypothesis that adopting the perspective of a needy stigmatized group member would lead to (a) more positive attitudes toward this specific individual; (b) enhanced intentions to help this person; (c) more positive attitudes toward the group to which the individual belongs; (d) greater support for policies aimed at helping the group as a whole. Additionally, we examined which constructs among those hypothesized as mediators could account for the effects of perspective taking on prosocial outcomes. In general, and in line with the results of the previous two studies, we did not expect relevant differences between the two perspective-taking modalities.

Method

Participants

Participants were 170 young women (*M* age = 25.15 years, *SD* = 6.02), who accepted voluntarily to take part in the research. Participants were randomly assigned to one condition of the experimental design.

Procedure

All participants were provided with an experimental booklet and were conducted through the procedure individually. As a first task, they were asked to describe themselves on a list of adjectives. Afterwards, in a separate page, participants were given an introduction to the second part of the research and were invited to read an article, apparently taken from a journal column, that described the experience of a young Maroccan woman who migrated to Italy (see previous studies). Before reading the story, participants were given the same instructions as in Study 1 and 2: in the two experimental conditions, participants were instructed to take the target's perspective by either imagining how the target was feeling in her plight (imagine-other condition) or imagining how they would feel if they were in her plight (imagine-self condition),

whereas, in the objective condition, participants were instructed to remain detached and objective. They were then presented with the story of Habìba, which was almost the same as that used for Study 2. The only noteworthy difference was the inclusion of two sentences in which Habìba explained that she felt that sometimes people looked at her "in a strange way" and that "maybe, one reason for why I haven't found a job yet is because I am a foreigner". Although these sentences pointed at Habìba being member of a stigmatized group and potentially victim of discrimination, her tone was not recriminating nor hostile. After reading the story, participants were asked to fill a questionnaire and, in the last page, they were asked to describe Habìba on the same list of adjectives previously used for the self. Finally, participants were thanked and debriefed.

Measures of potential mediators

Self and Target descriptions. Before receiving the perspective-taking instructions and reading the story, participants were asked to describe themselves on a list of 8 adjectives, associated with a 5-point Likert scale. The adjectives were *efficient*, *competent*, *friendly*, *kind*, *appreciable*, *agreeable*, *unpleasant*, *superficial*. Participants had to indicate to which extent each trait was descriptive of them (0 = *not at all*, 4 = *extremely*). Participants then read the text narrating the story of Habìba and completed a questionnaire. In the last page of the experimental booklet, they were asked to describe Habìba using the same list of adjectives provided at the beginning for the self-description, presented in a different order. For each trait, the absolute difference between the ratings of oneself and of the target was calculated and then the differences across the traits were averaged.

Emotional response scale. Participants completed the same emotional response scale used in Study 2, without the items relative to personal distress. Thus, the list included 12 emotions referring to *empathic concern*, *feelings of injustice* and *sadness*. Participants were asked to rate the degree to which they had experienced each emotion while reading the story of Habìba on a 7-point Likert scale (1 = *not at all*, 7 = *extremely*).

Self-other closeness, similarity, care for the other, and oneness. Several measures of self-other closeness, similarity, care for the other and oneness were

included in separate and distant sections of the questionnaire. As in Study 1, the adapted version of Inclusion of Other in the Self scale (IOS) was administered. Participants were asked to indicate which figure better represented the relationship between them and the target, choosing among seven pictures that ranged from two separate and distant circles (1) to two quite completely overlapping circles (7). As in Study 2, the new graphical scale of *self-other approaching* was presented. This time, the scale consisted of 16 circles, since we added three circles to the left extremity and three to the right one, i.e. to the circles representing respectively the position of the self and that of the target before the story. In this way, when participants were asked to indicate in the blank figure the position of themselves and of Habìba after having read the story, they had the possibility to display either an approaching or a distancing movement of the self and/or the target, or even no change. Approaching/distancing scores were calculated by subtracting the positions of the self and of the other chosen by participants to the respective positions in the initial figure. Thus, scores could range from -3 to 9, with negative values denoting distancing and positive values denoting approaching.

Following Cialdini et al. (1997; see also Maner al al., 2002) and Batson, Sager et al. (1997; see also Batson et al., 2005), we also included one item that asked participants to indicate to which extend they would use the pronoun "we" to describe their relationship with Habìba (0 = *not at all*, 4 = *extremely*). In addition, we measured *perceived similarity* between the self and the target by asking to participants "How similar to you do you think Habìba is?" (0 = *not at all*, 4 = *extremely*). Finally, we assessed *care for the other's welfare* by including the item "How much do you care about Habìba's welfare?" (0 = *not at all*, 4 = *extremely*).

Measures of criterion variables

Attitude toward the individual target and helping intentions. Participants were asked to rate to which degree their attitude toward Habìba was *negative*, *friendly*, *positive*, *favorable* (0 = *not at all*, 4 = *extremely*). Opportune items were reverse scored and responses were then averaged to form an index, with higher scores representing positive attitudes (alpha = .79). To assess intentions to provide aid to Habìba, a measure of hypothetic helping behaviors was included. Participants were told "Now, consider what Habìba said about her situation. If you happened to meet her, what would you do

for her?" and were then asked to state how much they would help her, in terms of six hypothetical behaviors. The items were: "I would help her to look for a job, going together to an employment exchange", "I would introduce her to someone who can offer a job, warranting for her", "I wouldn't do much: it's better if she faces her problems with her resources" [R], "I would watch her kids, while she is looking for a job", "I wouldn't do anything: it's up to her to solve her problems"[R], "I would help her financially, to pay the bills" (1 = *definitely not,* 7 = *definitely yes*). Responses to the six items were averaged to form a single index (alpha = .75).

Attitude toward the group and support for prosocial policies. Participants were asked to report their attitude toward North-African immigrants in general, using the four items *liking*, *cold*, *supportive*, *hostile*, associated with a 5-points Likert scale (0 = *not at all*, 4 = *extremely*). After reverse scoring, a single index was created, with higher scores indicating positive attitudes toward the group (alpha = .82). Participants were also asked to state how much they were favorable to grant some social rights to North-African immigrants in general (0 = *totally contrary*, 4 = *extremely favorable*). The rights considered were four: free education for their sons, preferential inclusion in tenement-houses list, administrative vote and facilitated national insurance. Responses to the items were then averaged in a single index (alpha = .68).

Manipulation check and order

Three items were included at the end of the questionnaire to check the effectiveness of the manipulation (see previous studies). To control for order effects, five different versions of the questionnaire were administered. The order of all dependent measures was systematically varied, with the exception of the self- and target- descriptions that were always presented respectively as the first and the last measure. No systematic order effects were detected.

Results

Effectiveness of the perspective-taking manipulation

To check the effectiveness of the perspective-taking manipulation, we examined participants' answers to the three questions about their concentration while reading the

story. The responses were submitted to a 3 (Perspective: imagine-other vs. imagine-self vs. objective) x 3 (Concentration on: target's feelings vs. own feelings vs. objective) mixed-model ANOVA with repeated measures on the second factor. A significant interaction effect emerged, $F(4, 334) = 29.18$, $p < .001$, as well as a main effect of the *within subjects* factor concentration, $F(2, 334) = 3.81$, $p < .03$.

A one-way ANOVA was then performed for each item and the effect of the perspective was found to be significant for all three (F values and condition means are presented in Table 5). Indicating the effectiveness of the perspective-taking manipulation, attention given to target's feelings was significantly higher in the imagine-other condition compared the objective one, and also marginally in the imagine-self condition compared to the objective one. Moreover, reported concentration on their own feelings was significantly higher for participants both in the imagine-self and imagine-other conditions than for those in the objective condition. Conversely, participants reported remaining objective more in the objective condition than in the two perspective-taking conditions.

Table 5. Manipulation check (Study 3)

	Condition Means				
Concentration on:	Imagine-Other	Imagine-Self	Objective	$F(2, 167)$	$p =$
Target's feelings	4.68_a	$4.48_{(a)}$	4.02_b	3.36	.037
Own feelings	4.64_a	4.54_a	3.24_b	19.15	.001
Objective	3.54_a	3.21_a	5.24_b	36.94	.001

Note. Response scale ranged from 1 to 7. In the same row, means with different subscripts are different with $p < .05$; in parentheses with $p < .08$.

Within condition comparisons revealed that participants in the imagine-other condition reported concentrating equally on imagining target's and their own feelings, $t(58) = .20$, *ns*, and significantly more than on remaining objective, $ts(58) > 3.78$, $ps < .001$. Similarly, participants in the imagine-self condition reported concentrating equally on imagining their own and target's feelings, $t(55) = .27$, *ns*, and significantly more than on remaining objective, $ts(55) > 4.63$, $p < .001$. Finally, participants in the objective

condition reported more concentration on being objective than on imagining target's and their own feelings, *ts*(54) > 4.60, *ps* < .001.

We concluded that our perspective-taking manipulation was effective in directing participants' attention, with no relevant differences between the two perspective-taking conditions.

Factor analyses of the potential mediators

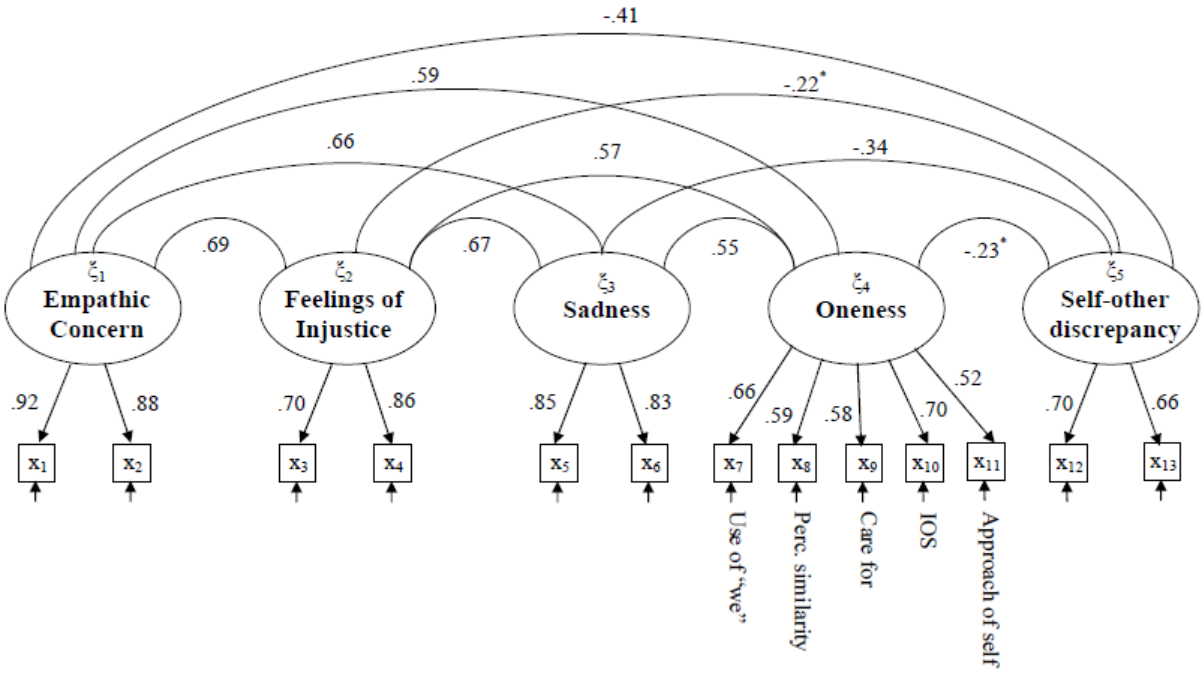
To explore the structure and relations of variables hypothesized as mediators, an exploratory factor analysis (principal axis method with varimax rotation) was conducted on the emotional response scale, the different measures of closeness, similarity, care for the other, and the self-other discrepancy on the traits[4]. The analysis revealed the presence of five factors. The first factor referred to Empathic Concern and included the items *warmth, tenderness, sensitivity*, *understanding, soft-heart,* and *sympathy* (eigenvalue = 6.80; alpha = .82). Five measures loaded on the second factor: the IOS score, the approach of the self score, the similarity item, the care for item, and the "we" item (eigenvalue = 1.72, alpha = .75, after standardization). In line with previous work (e.g., Cialdini et al., Maner et al., 2002), we hypothesized that this factor represented Oneness, although the fact that it included an item measuring care for the other's welfare is also consistent with the idea that the IOS and approaching scales might tap care about the other's welfare (see Batson, Sager et al., 1997). The third factor that emerged was Sadness, being measured by *sadness, sorrow*, *pity* (eigenvalue = 1.52, alpha = .82). The fourth factor represented Feelings of Injustice, including the items *indignation*, *feeling of injustice* and *anger* (eigenvalue = 1.15, alpha = .75). Finally, the two subsets of items relative to self-other difference on the traits loaded on the last factor, i.e. Self-other Discrepancy (eigenvalue = 1.34, alpha = .50).

In addition, in order to test the five-factor structure of the mediators emerged from the exploratory analysis, we conducted a confirmatory factor analysis using LISREL. For the tree emotional factors and for the self-other discrepancy on the traits, we randomly combined subset of items and create two indicators for each factor, while for oneness we used the five items. Therefore, the model included 13 observed variables and 5 latent constructs. The covariance matrix was used as input and estimates were

[4] For the discrepancy on the traits, two subsets of items were created.

derived using the maximum likelihood method. The model tested provided a good fit to the data: $\chi^2(55) = 102.37$, $p = .00011$, RMSEA = .068 SRMR = .055, CFI = .97. Although the chi-square was significant, the other indexes were all satisfactory. Furthermore, factor loadings were all high and consistent (see Figure 4), and so we concluded that the model was indeed a good fit to the data.

Figure 4: Confirmatory Factor Analysis of the mediators (Study 3)



Note. All parameters reported are standardized and significant with $p <$. 001 (unless indicated, * $p < .05$). χ^2 (113) = 186.26, $p < .001$, RMSEA = .059, SRMR = .056, CFI = .98

Effects of the perspective-taking manipulation on the dependent variables

As for previous studies, we performed a one-way ANOVA on the dependent variables, with Perspective (imagine-other vs. imagine-self vs. objective) as *between subjects* factor. Results and condition means are presented in Table 6.

As expected, the manipulation had a significant effect on all the emotional responses. Participants instructed to take the other's perspective, by either imagining target's feelings or their own feelings as if they were in her shoes, reported having experienced greater empathic concern, sadness and feelings of injustice compared to those in the objective condition. There were no significant differences between the two perspective-taking conditions.

Table 6. Effects of the perspective-taking manipulation on the dependent variables (Study 3)

	Condition Means				
	Imagine-Other	Imagine-Self	Objective	$F(2, 167)$	$p =$
Empathic concern	4.52_{a}	4.63_{a}	3.97_{b}	4.89	.009
Feelings of injustice	4.17_{a}	4.20_{a}	3.58_{b}	3.06	.050
Sadness	5.16_{a}	4.96_{a}	4.48_{b}	4.69	.010
Oneness	$.18_{a}$	$.10_{a}$	$-.30_{b}$	8.07	.001
Self-other closeness	3.46_{a}	3.45_{a}	2.51_{a}	10.08	.001
Approach of the self	2.97_{a}	3.46_{a}	1.93_{b}	8.33	.001
Approach of the other	1.10	.96	.83	< 1	*ns*
Use of "we"	$1.79_{((a))}$	1.72_{ab}	1.49_{b}	1.22	.299
Perceived similarity	$1.63_{(a)}$	$1.63_{(a)}$	1.29_{b}	2.29	.104
Care for other's welfare	$2.73_{(a)}$	2.63_{ab}	2.38_{b}	3.50	.157
Self-other discrepancy (traits)	$.77_{((a))}$	$.72_{a}$	$.87_{b}$	2.73	.068
Attitude toward individual	3.04_{a}	3.12_{a}	2.77_{b}	5.23	.006
Helping intentions	4.44^{a}	4.51_{a}	4.02_{b}	3.43	.035
Attitude toward group	2.71_{a}	2.78_{a}	2.39_{b}	4.65	.011
Support for social policies	2.06_{a}	$2.03_{(a)}$	1.70_{b}	2.80	.064

Note. Response scales ranged: for empathic concern, feelings of injustice, sadness, personal distress, self-other closeness (IOS), and helping intentions from 1 to 7; for approach of the self and of the other from -3 to 9; for use of "we", perceived similarity, care for the other's welfare, attitude toward the individual target, attitude toward the group and support for social policies from 0 to 4; oneness score was standardized. In the same row, means with different subscripts are different with $p < .05$; in parentheses with $p < .06$; in double parentheses with $p < .15$.

Moreover, perspective taking had a significant effect on the oneness index: participants in the two perspective-taking conditions displayed higher levels of oneness than did those in the objective condition. Looking separately at the measures that compose the index, the analyses showed that perspective taking yielded some influence even on the single measures. Specifically, compared to participants who remained objective, those who adopted the perspective of the target reported greater self-other closeness, as measured with the IOS scale. However, as for Study 1, results indicate that

participants did not perceive an actual overlap between them and the target: for all conditions, mean scores of IOS were lower than 4, i.e. the middle point of the scale in which the two circle only touched (imagine-other condition: M = 3.46, different from 4 $t(58) = -3.16$; imagine-self condition: M = 3.45, $t(55) = -3.32$; objective condition M = 2.51, $t(54) = -8.67$, all $ps < .002$). Concerning the second measure of approaching, the analyses revealed that perspective taking affected only the approaching movement of the self, but not the reciprocal movement of the other. Participants in the imagine-other and imagine-self conditions displayed a greater approach toward Habìba than did those who remained objective. Furthermore and consistent with the results of Study 2, the approach of the self was greater than the approach of the other in all conditions, $ts > 4.93$, $ps < .001$. It is also worth noting that mean scores were all positive, indicating that participants did not choose a distancing strategy.

The analyses on the other three items composing the oneness index showed that, although between-conditions differences did not reach the level of statistical significance, means were in the predicted direction. Participants who imagined their own feelings as if they were in the other's situation tended to use the pronoun "we" to describe their relationship with Habìba more than did those who remained detached, while responses reported by participants in the imagine-other condition were not different from those in the other two conditions. Moreover, participants in the two perspective-taking conditions perceived that Habìba was similar to them to a greater degree than did those in the objective condition, although the difference was marginal. Finally, participants in the imagine-self condition reported more care for the target's welfare than those in the objective condition, while scores of participants in the imagine-other condition were somewhat higher, although not reliably, than responses in the objective condition, $t(112) = 1.30$, $p = .19$.

With regard to the discrepancy between representations of oneself and Habìba, a marginally significant effect of perspective taking emerged. The degree of self-other discrepancy was significantly lower in the imagine-self condition compared to the objective one, while the difference between responses of participants in the imagine-other condition and those in the objective one was in the same direction but did not reach the level of statistical significance.

Finally, the manipulation had a significant effect on all four outcome variables. Participants in the two perspective-taking conditions, compared to those who remained objective, reported more positive attitudes toward both the individual target and the membership group. Furthermore, participants in the two perspective-taking conditions expressed more willingness to offer some help to the target and greater support for policies benefiting the entire group than did participants who remained objective and detached.

Mediation Analyses

As for previous studies, we analyzed the relations between constructs by adopting Structural Equation Modeling (SEM) with latent variables, using the maximum-likelihood estimation method (LISREL 8.7; Jöreskog & Sörbom, 2004). As for previous studies, we applied the partial disaggregation procedure (Bagozzi & Heatherton, 1994) and for each construct subsets of items were averaged and two indicators were computed (see Appendix C). Given that previous analyses showed that the two types of imagine instructions yielded comparable effects on the dependent variables, we created a dummy variable that merged together the two perspective-taking conditions, compared to the objective condition (1 = imagine-other; 1 = imagine-self; 0 = objective). SEM analyses were applied to covariance matrices and the goodness of fit was assessed using several indexes (see Study 1 for a description).

First, we computed a model in which the perspective-taking dummy was entered as predictor (Level 1), and the potential mediators – the three types of emotional responses, the oneness index, and the self-other discrepancy index – were all entered at the same level (Level 2), as well as all the criterion variables – attitudes toward the individual and the group, helping intentions, and support for social policies (Level 3). The model is fully mediated and provided a good fit to the data, $\chi^2(112) = 150.97$, $p = .0083$, RMSEA = .035, SRMR = .0353, CFI = .99.

As presented in Figure 5, perspective taking was positively associated with empathic concern ($\gamma = .24$, $p < .01$) and with feelings of injustice ($\gamma = .24$, $p < .01$), which then predicted more support for social policies ($\beta = .39$, $p < .05$). The manipulation predicted also an increase of reported sadness ($\gamma = .25$, $p < .01$), but this

was not associated with any of the outcomes. Furthermore, perspective taking had a strong effect on perception of oneness ($\gamma = .32$, $p < .001$), which was then positively and highly associated with all the criterion variables (for attitude toward the individual, $\beta = .36$, $p < .01$; for helping intentions, $\beta = .70$, $p < .001$; for attitude toward the group, $\beta = .70$, $p < .001$; for support for social policies, $\beta = .61$, $p < .001$). Finally, perspective taking predicted a decrease of self-other discrepancy in terms of trait descriptions ($\gamma = -.24$, $p < .05$), but this did not yield any influence on the outcomes. Decomposition analyses revealed that the indirect effects of perspective taking on the criterion variables were all positive and significant (for attitude toward the individual, IE = .12, $p < .001$; for helping intentions, IE = .25, $p < .001$; for attitude toward the group, IE = .20, $p < .001$; for support for social policies, IE = .23, $p < .001$). Overall, the model accounted for 52% of the variance in attitude toward the individual, 57% in helping intentions, 43% in attitude toward the group, and 54% in support for prosocial policies.

Starting from this point, we then computed two alternative fully mediated models, with the goal of understanding the causal order within the proposed mediators. In the first model, emotional responses preceded oneness and self-other discrepancy, whereas in the second one the reversed order was tested. The first model fitted the data very well, $\chi^2(126) = 180.56$, $p = .001$, RMSEA = .044, SRMR = .048, CFI = .98, whereas the second one fitted the data less well, $\chi^2(123) = 187.89$, $p = .00015$, RMSEA = .046, SRMR = .042, CFI = .98, and presented some problems in the estimation of parameters (i.e., the estimated standardized parameters were greater than 1).

Figure 6 depicts the first model. The perspective-taking manipulation had a positive effect on empathic concern ($\gamma = .25$, $p < .01$), which in turn lead to increased oneness and decreased self-other discrepancy (respectively $\beta = .29$, $p < .05$ and $\beta = -.50$, $p < .01$). Perspective taking also increased feelings of injustice ($\gamma = .25$, $p < .01$) and sadness ($\gamma = .26$, $p < .01$); feelings of injustice were positively associated only with oneness ($\beta = .35$, $p < .01$), whereas sadness did not influence oneness and self-other discrepancy. Finally, oneness was a strong predictor of all four criterion variables (for attitude toward the individual, $\beta = .70$, $p < .001$; for helping intentions, $\beta = .73$, $p < .001$; for attitude toward the group, $\beta = .65$, $p < .001$; for support for social policies, $\beta = .68$, $p < .001$), whereas the reduced self-other discrepancy did not predict any of them.

Figure 5. Mediated effects of perspective taking: Structural equation model (Study 3)

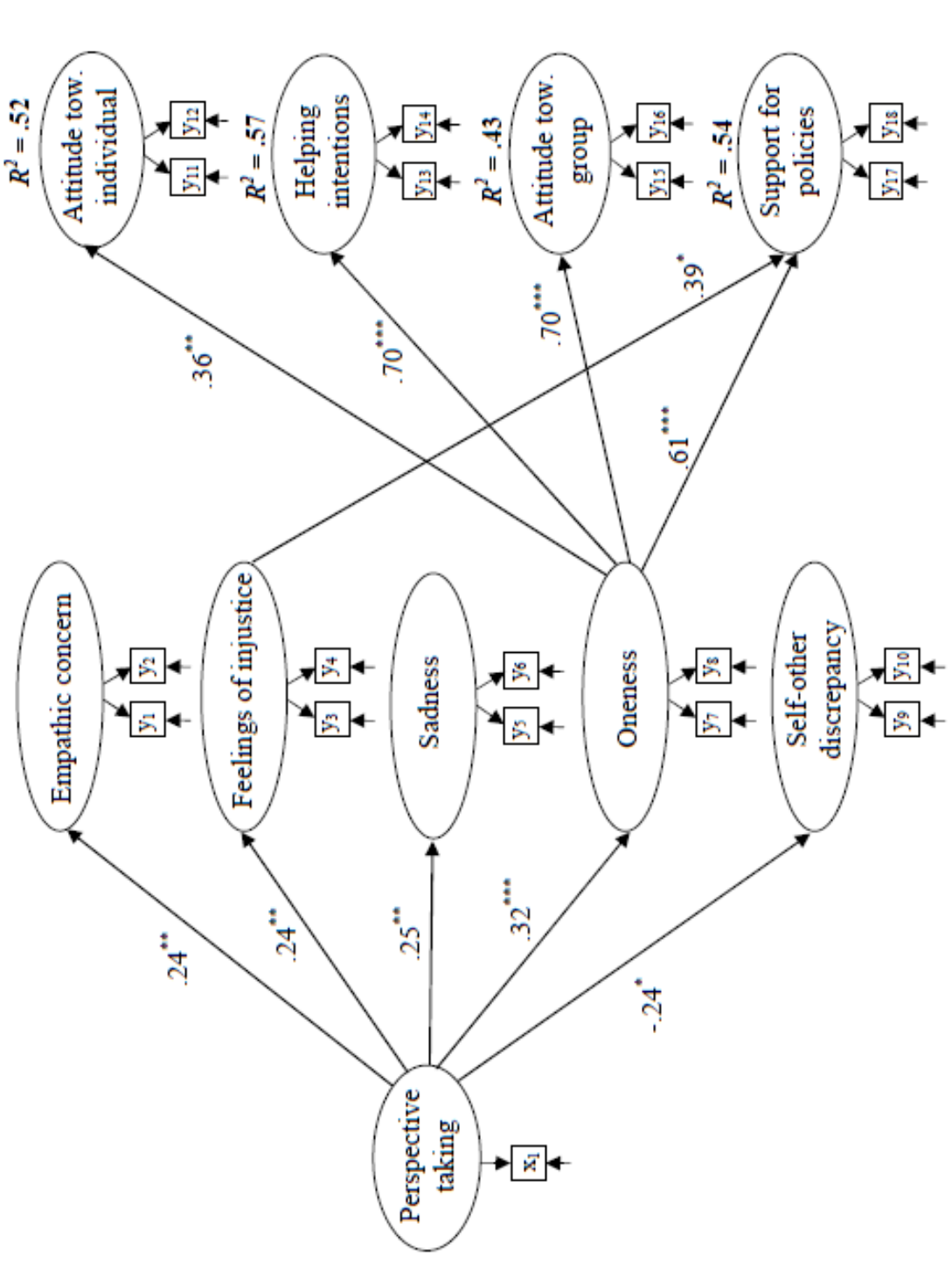
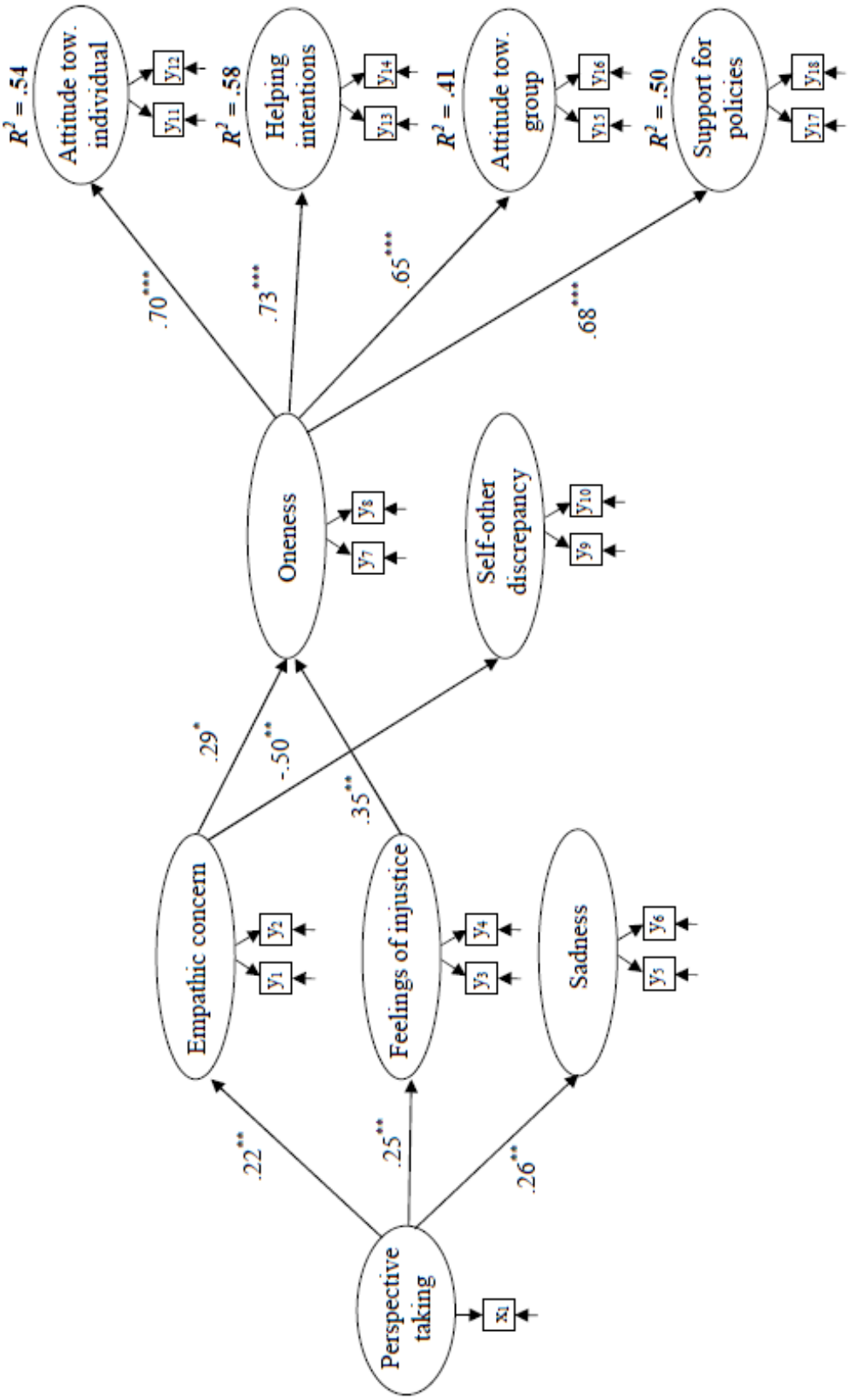


Figure 6. Two-step mediation model of the effects of perspective taking (Study 3)



Note. All parameters reported are standardized. Only significant paths are reported. * $p < .05$; ** $p < .01$; *** $p < .001$
χ^2 (126) = 180.56, p = .001, RMSEA = .044, SRMR = .048, CFI = .98

Decomposition analyses revealed that the indirect effects of perspective taking on the criterion variables were all positive and significant (for attitude toward the individual, IE = .15, $p < .01$; for helping intentions, IE = .16, $p < .001$; for attitude toward the group, IE = .13, $p < .01$; for support for social policies, IE = .15, $p < .01$). This confirms that the influence of the perspective taking manipulation was present throughout the mediation process. Furthermore, the indirect effects of empathic concern on outcomes were also all positive and significant (for attitude toward the individual, IE = .25, $p < .01$; for helping intentions, IE = .25, $p < .01$; for attitude toward the group, IE = .17, $p < .05$; for support for social policies, IE = .23, $p < .05$), as well as the indirect effects of feelings of injustice (for attitude toward the individual, IE = .25, $p < .05$; for helping intentions, IE = .25, $p < .05$; for attitude toward the group, IE = .23, $p < .05$; for support for social policies, IE = .23, $p < .05$). Overall, this model explained 54% of the variance in attitude toward the individual, 58% in helping intentions, 41% in attitude toward the group, and 50% in support for social policies.

Discussion

Overall, the findings of the present study replicate and extended those of previous studies, while shedding light on the mechanisms that contribute to explain the relationship between perspective taking and prosocial responses.

First, these results provide strong evidence that adopting the perspective of an immigrant woman while she described her difficulties and troubles can promote (a) more positive attitudes toward this specific individual; (b) enhanced intentions to help her; (c) more positive attitudes toward North-African immigrants in general; and (d) greater support for policies aimed at helping North-African immigrants.

Results further indicate that perspective taking lead to increased emotional arousal, eliciting empathic concern for the target, feelings associated with social injustice and sadness. Perspective taking was also associated with perceptions of oneness, i.e., a sense of merged or interconnected personal identities between oneself and the target whose perspective is assumed, and with a reduced discrepancy between cognitive representations of oneself and the target. However, when examining the mediation process in the relationship between perspective taking and prosocial

outcomes, not all constructed played a role. If all potential mediators were considered at the same level, oneness appeared to be the most powerful predictor of all types of prosocial responses, while among emotional responses only feelings of injustice were associated with one outcome, i.e., with more support for prosocial policies. However, when testing a two-steps mediation model, it turned out that perspective taking lead first to an increase of emotional reactions, which were then associated with greater oneness, which was finally a strong, proximal predictor of the four types of prosocial outcomes. Notably, both empathic concern and feelings of injustice had significant indirect effects on prosocial outcomes, indicating that their influence was present throughout the mediation process. On the contrary, the nonaltruistic motive related to sadness, although elicited by perspective taking, could not account for its effects on prosocial responses.

It is also important to note that cognitive self-other overlap seemed not to play a mediation role. Even if a decrease of discrepancy between representations of the self and of the target was present and associated with empathic concern, this cognitive merging could not account for the effects of perspective taking on prosocial responses. This finding is consistent with Batson's claim (e.g., Batson, Sager et al., 1997; Batson et al., 2005) that empathy does not imply a loss of self-other distinction or a identification with the target, and that the decrease in differentiation of representations resulting from perspective taking does not eliminate the role of empathic concern.

Finally, consistent with previous work (Maner et al., 2002, Galinsky & Moskowitz, 2000; see also Cialdini et al., 1997), we found that perspective taking resulted in an enhanced perception of oneness, i.e., merging of identities. This perception was also found to mediate the effects of perspective taking on prosocial responses. However, the fact that our oneness index included one item measuring care for the other's welfare is also consistent with the idea that the IOS and approaching scales might be interpreted as a measure of caring for the other (see Batson, Sager et al., 1997). Thus, oneness resulting from perspective taking might tap a sense of interconnectedness with the target rather than a merge of identities, suggesting that this construct is more affect-based than hypothesized by Cialdini and his collaborators.

STUDY 4

Introduction

The aim of the present study was to understand better the role played by emotional reactions to the target's plight and perceptions of similarity between oneself and the target that lead to a sense of oneness. In the studies presented above, both these constructs were found to be influenced by perspective taking, and both seemed to mediate its effects on prosocial responses. Therefore, in this study, we simultaneously manipulated these two mediators, by manipulating participants' attentional focus on one of these two aspects. As in previous studies, participants were presented with the story of a needy immigrant woman. In this study, however, they were instructed to focus either on the emotions they experienced while reading or on the similarities they could see between themselves and the target or, in the control condition, they were asked to remain objective and neutral.

In general, we assumed that both types of focus would lead to an increase of prosocial responses, although possibly through different mediation paths. Specifically, we expected that focusing on feelings would affect primarily emotional reactions to the target's plight, while focusing on similarities would increase the perception of oneness with the target. However, as similarity has been successfully used in past research to induce empathic feelings for a distressed target (see Chapter 1), it is plausible that concentrating on similarities would also lead to an increase of emotional arousal. Conversely, as empathic feelings have been found to be associated with increased perceptions of self-other similarities (Study 3, see also Krebs, 1975), it is possible that concentrating on feelings would also lead to a sense of oneness with the target.

Additionally, we examined the role of affective and cognitive mediators considered in Study 3, with the exception of self-other discrepancy (in terms of trait attributions), which was not found to be a reliable mediator. With the aim of improving our measures of perceived similarity and care for the other's welfare, we added some items assessing these constructs.

Method

Participants

Participants were 151 young women (*M* age = 27.05 years, *SD* = 9.57) who accepted to participate in the research on a voluntary basis. Participants were randomly assigned to one condition of the experimental design.

Procedure

Participants were recruited for a research investigating the effects of written texts on readers and they were informed that their task would be to read a text and complete an evaluation questionnaire. Participants were led to believe that the text was taken from a weekly newspaper and that the story presented was real. They were also told that previous research had demonstrated that an important factor in determining reactions to texts was reading strategy and, therefore, they would be required to adopt a particular perspective while reading. They were then presented with written instructions concerning where to direct their attentional focus. After this introduction, participants read the text narrating the story of Habìba, a young woman migrated to Italy, and completed a questionnaire containing several dependent variables, which were almost the same as those assessed in Study 3, expect for the self-other descriptions. Finally, participants were thanked and debriefed.

Focus manipulation. Before reading the article, participants were provided with instructions regarding their focus while reading the text.

In the *feelings-focus* condition, participants were instructed as follows: "While you are reading this text, *focus on the emotions* arousing in you. Put aside your rationality and let yourself *get caught up in how you feels*. Try not to concern yourself with attending to all information presented: allow your *feelings* and *emotions* to carry you away"

In the *similarities-focus* condition, participants were instructed as follows: "While you are reading this text, focus on the *similarities between you and the person who is telling her story.* Pay attention to characteristics, experiences, wishes that you and this person may have *in common*, trying to find *similar aspects* between you and

her. Try not to concern yourself with attending to all information presented: just concentrate on the *similarities between you and this person*."

Participants in the *objective* condition read the following instructions: "While you are reading this text, try to *be as objective as possible about what has happened to the person who is telling her story*. Do not let yourself get caught up in the story. Try simply to remain *impartial and detached*."

The story of Habìba. After these instructions, participants were presented with the story of Habìba, a 23-year-old Moroccan woman who migrated to Italy in order to search for a job and a better future. The content of her narration was similar to that of stories used in Study 2 and 3: she described the difficulties she was facing in her search for a job, the economic troubles she was going through, the worries she had for his child. However, to let participants find similarities between themselves and Habìba, some changes were introduced. For instance, she talked about the difficulty of living apart from the family and the loneliness she felt – experience that is common among University students. She also stated that she had not find a stable job yet maybe because she was foreigner, but also because she was young and had few experience, and that she hoped things would get better in future because she really wished to have "a happy and peaceful life". Finally, she said that she was Muslim and followed the religious rules, and that she thought that "everyone has the right to express his or her own cultural, religious or spiritual identity".

Measures of potential mediators

Emotional response scale. Participants were asked to rate the degree to which they had experienced a range of emotions, referring to *empathic concern*, *feelings of injustice* and *sadness*, on a 7-point Likert scale (1 = *not at all*, 7 = *extremely*).

Self-other closeness, oneness, similarity and care for the other's welfare. Participants completed the adapted version of Inclusion of Other in the Self scale (IOS) and rated how they perceived the relationship between them and the Habìba, by selecting one of the seven increasingly touching and overlapping circles. Participants also completed the new graphical scale of self-other closeness, and approaching scores were calculated separately for movements of the self and of the other. To assess

perceived similarity between the self and the target, two items were included: “How similar to you do you think Habìba is?” and “How similar to Habìba do you think you are?” (0 = *not at all*, 4 = *extremely*). Participants were also asked to indicate the extent to which they would use the pronoun “we” to describe their relationship with Habìba (0 = *not at all*, 4 = *extremely*). Finally, to assess care for the other’s welfare, three items were used (derived from Batson et al., 1995): “How much do you care about Habìba’s welfare?”, “How important is it to you that Habìba is happy?”, “How important is it to you that Habìba does not suffer?” (0 = *not at all*, 4 = *extremely*).

Measures of criterion variables

Attitude toward the individual target and helping intentions. The same measures as for Study 3 were used to assess participants’ attitude toward Habìba (alpha = .74) and their intentions to provide help (alpha = .72).

Attitude toward the group and support for prosocial policies. As in Study 3, participants were asked to report their attitude toward North-African immigrants in general (alpha = .74) and to rate their willingness to grant some social rights to them (preferential inclusion in tenement-houses list, administrative vote and facilitated national insurance; alpha = .55).

Manipulation check

Three items were included at the end of the questionnaire to check the effectiveness of the manipulation (“While reading the text, to what extent did you concentrate on how you were feeling while reading?”, “While reading the text, to what extent did you concentrate on the similarities between you and Habìba?”, “To what extent did you remain objective and detached?”; 1 = *not at all*, 7 = *extremely*).

Results

Effectiveness of the focus manipulation

As in previous studies, to check the effectiveness of the focus manipulation, we examined participants’ answers to the three questions about their concentration while reading the story. The responses were submitted to a 3 (Focus: feelings vs. similarities

vs. objective) x 3 (Concentration on: feelings vs. similarities vs. objective) mixed-model ANOVA with repeated measures on the second factor. A significant interaction effect emerged, $F(4, 296) = 21.08$, $p < .001$.

A one-way ANOVA was then performed for each item and the effect of focus was found to be significant for all three (F values and condition means are presented in Table 7). Indicating the effectiveness of the manipulation, self-reported concentration on feelings was higher for participants in the feelings-focus condition than for both participants in the objective and in the similarities-focus condition, although the latter difference did not reach the level of statistical significance. Moreover, reported concentration on similarities was significantly higher for participants in the similarities-focus condition than for those both in the feelings-focus and in the objective conditions. Finally, participants reported remaining objective more in the objective condition than in the other two conditions.

Table 7. Manipulation check (Study 4)

	Condition Means				
Concentration on:	Feelings-Focus	Similarities-Focus	Objective	$F(2, 148)$	$p =$
Feelings	4.40_a	$4.04_{((b))}$	3.22_c	9.94	.001
Similarities	3.88_a	4.63_b	3.12_c	12.87	.001
Objective	2.73_a	3.79_b	4.57_c	16.43	.001

Note. Response scale ranged from 1 to 7. In the same row, means with different subscripts are different with $p < .05$; in double parentheses with $p = .15$.

Within condition comparisons confirmed that the manipulation of attentional focus was effective. Participants instructed to focus on feelings did report concentrating on feelings significantly more than on self-other similarities, $t(47) = 3.45$, $p < .01$, and on remaining objective, $t(47) = 5.74$, $p < .002$, but they still reported concentrating on similarities more than on being objective, $t(47) = 3.99$, $p < .001$. Participants instructed to focus on similarities between themselves and the target did report concentrating on similarities significantly more than on feelings, $t(51) = 2.38$, $p < .05$, and on remaining objective, $t(51) = 3.60$, $p < .002$. Finally, participants in the objective condition reported

more concentration on being objective than on feelings, $t(50) = 5.13$, $p < .001$, and on similarities, $t(50) = 4.60$, $p < .001$.

Factor analysis of the potential mediators

As for Study 3, to explore the structure and relations of variables hypothesized as mediators, we conducted an exploratory factor analysis (principal axis method with varimax rotation) on the emotional response scale, the different measures of self-other closeness, similarity and the items assessing degree of care for the other's welfare. The analysis revealed the presence of five factors, which were somehow different from those of the previous study. The first factor that emerged was Empathic Concern, containing the items *warmth, sympathy, tenderness, soft-heart, understanding, sensitivity* and (eigenvalue = 8.11; alpha = .88). The second factor included the three care items and the approaching of the self score, which we hypothesized to reflect Caring for the Other (eigenvalue = 2.08, alpha = .82, after standardization). The two similarity items and the item regarding the use of the pronoun "we" to describe the relation with the target loaded on a third, separate factor, which we hypothesized to be associated with perceptions of Similarity/Oneness (eigenvalue = 1.98; alpha = .84). The fourth factor that emerged was Sadness, being measured by *sadness, sorrow, pity* (eigenvalue = 1.36, alpha = .79). The last factor represented Feelings of Injustice and included the items *indignation, feeling of injustice, anger* and *bitterness* (eigenvalue = 1.21, alpha = .81). The IOS score and the approach of the other score did not load on any factor, so we decided to keep them separate.

Effects of the focus manipulation on the dependent variables

To test the effects of the manipulation on the dependent variables, we performed one-way ANOVAs with Focus (feelings vs. similarities vs. objective) as *between subjects* factor. Results and condition means are presented in Table 8.

The manipulation of attentional focus significantly affected all types of emotional responses, although in an expected way. In fact, both participants instructed to focus on feelings and those instructed to focus on similarities reported having experienced greater empathic concern, sadness and feelings of injustice than those in the objective condition. This result suggest that, even if participants in the two experimental

conditions did concentrate on different aspects (i.e., feelings vs. similarities), the amount of aroused emotional responses was similar.

Moreover, participants in the feelings-focus condition reported caring for the target's welfare more than both participants in the similarities-focus and in the objective conditions, while participants in the similarities-focus condition reported caring for the other more than those in the objective condition.

Participants in both feelings-focus and similarities-focus conditions displayed greater levels of self-other closeness, as measured by the IOS scale, than those in the objective condition. However, as for Study 1 and 3, results indicated that participants did not perceive an actual overlap between them and the target, as mean scores were inferior to the middle point of the scale in which the two circle only touched, *ts* < 2.94, *ps* < .01.With regard to the second measure of closeness, the analyses revealed that participants who focused on feelings displayed a greater approach toward Habìba than those in the similarities-focus condition, who approached more than those in the objective condition. Differently, the approaching movement of the other (Habìba) toward the self was greater in the similarities-focus condition than in the other two conditions. However, consistent with results of Study 2 and 3, for both participants in the feelings-focus and in the similarities-focus conditions the approach of the self was greater than the reciprocal approach of the other, respectively, $t(47) = 5.20$, $p < .001$ and $t(51) = 3.38$, $p < .05$.

The degree of self-other similarity/oneness was significantly higher for participants in the similarities-focus condition than for those in the objective condition, while responses of participants in the feelings-focus condition did not differentiate from those of participants in the other two conditions.

Finally, the manipulation had a significant effect on all four outcome variables. With respect to the individual-level outcomes, responses in the two experimental conditions did not differentiate from each other: both participants in the feelings-focus and in the similarities-focus conditions reported more positive attitudes toward the individual target and expressed more willingness to offer some help than participants who remained objective. However, the effect of the manipulation was different on the two group-level outcomes: only participants in the feelings-focus condition reported more positive attitudes toward North-African immigrants and expressed greater support

for policies benefiting the entire group than did participants who remained objective and detached. Responses of participants in the similarities-focus condition were not significantly different from those of participants in the other two conditions.

Table 8. Effects of the focus manipulation on the dependent variables (Study 4)

	Condition Means				
	Feelings-Focus	Similarities-Focus	Objective	$F(2, 148)$	$p =$
Empathic concern	4.78_a	4.84_a	3.76_b	12.54	.001
Feelings of injustice	3.40_a	3.46_a	2.81_b	3.26	.041
Sadness	4.60_a	4.52_a	3.65_b	8.25	.001
Self-other closeness/IOS	3.48_a	3.46_a	2.75_b	8.88	.002
Approach of the other	1.21_{ab}	1.63_b	$.98_a$	2.84	.060
Care for target's welfare	$.39_a$	$.10_b$	$-.46_c$	17.20	.001
Approach of the self	3.15_a	2.37_b	1.51_c	10.30	.001
Caring for the other	3.13_a	2.89_a	2.32_b	14.50	.001
Similarity/Oneness	1.32_{ab}	1.60_a	1.14_b	3.74	.026
Perceived similarity	1.30_{ab}	1.58_a	1.12_b	3.63	.029
Use of "we"	1.35_{ab}	1.63_a	1.20_b	2.34	.100
Attitude toward individual	3.15_a	3.04_a	2.67_b	5.23	.006
Helping intentions	4.68_a	4.57_a	3.75_b	3.43	.035
Attitude toward group	2.92_a	2.77_{ab}	2.59_b	4.65	.011
Support for social policies	1.94_a	1.68_{ab}	1.48_b	3.26	.041

Note. Response scales ranged: for empathic concern, feelings of injustice, sadness, IOS and helping intentions from 1 to 7; for perceived similarity/oneness, caring for the other, attitude toward the individual target, attitude toward the group and support for social policies from 0 to 4; for approach of the self and of the other from -3 to 9; the score for caring for the target's welfare was standardized. In the same row, means with different subscripts are different with $p < .05$.

Mediation Analyses

As for previous studies, we analyzed the relations between constructs by adopting Structural Equation Modeling (SEM) with latent variables, using the maximum-likelihood estimation method (LISREL 8.7; Jöreskog & Sörbom, 2004). Following the partial disaggregation procedure (Bagozzi & Heatherton, 1994), for each

construct, except for self-other closeness (IOS) and approach of the other, subsets of items were averaged and two indicators were computed (see Appendix D). As the analysis of variance indicated that some of the dependent variables were affected differentially by the manipulation of attentional focus, we decided to maintain the three conditions separated. Thus, we created two dummy variables, one representing the feelings-focus condition (1 = feelings-focus; 0 = similarities-focus; 0 = objective) and one corresponding to the similarities-focus condition (0 = feelings-focus; 1 = similarities-focus; 0 = objective). SEM analyses were applied to covariance matrices and the goodness of fit was assessed using several indexes (see Study 1 for a description).

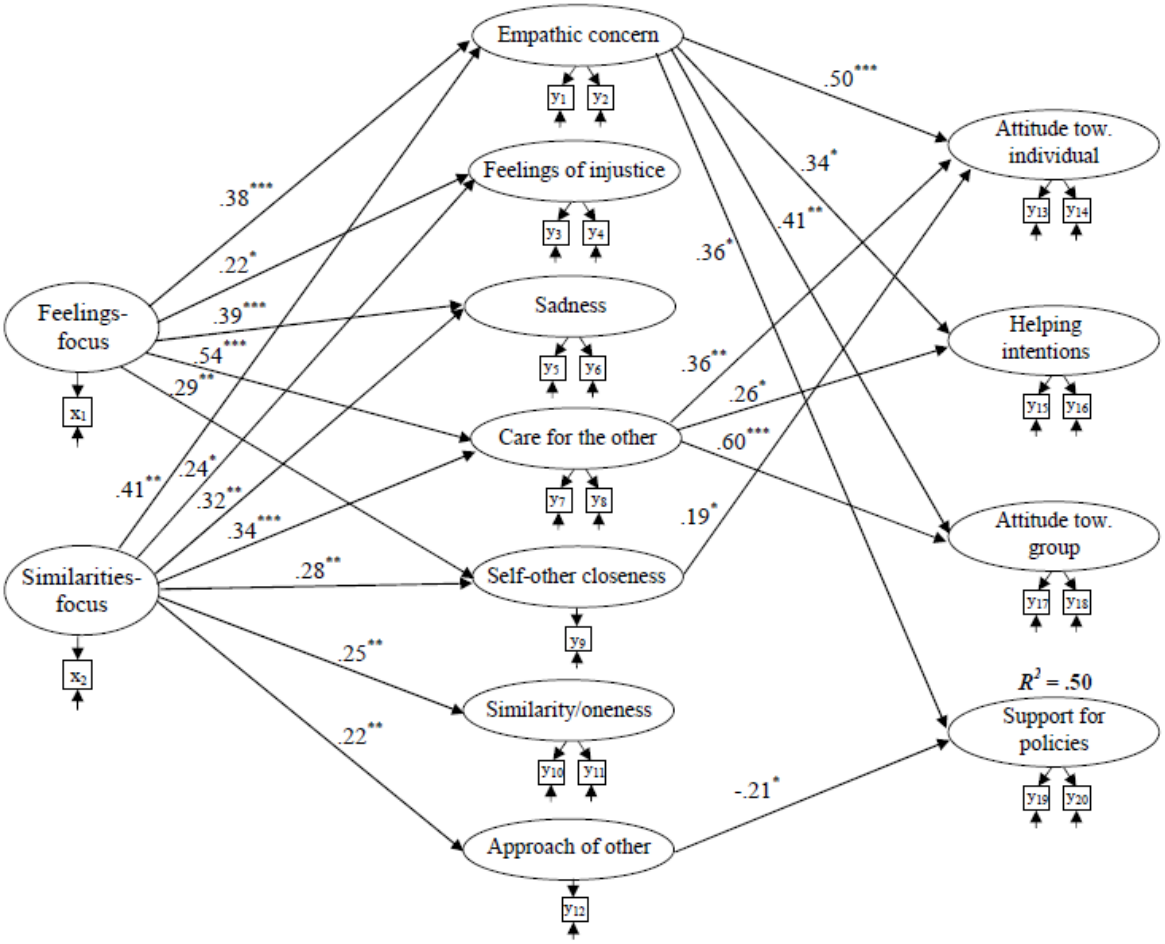
First, we computed a model in which the two dummy variables were entered as predictors (Level 1), and the potential mediators – the three types of emotional responses, self-other closeness (the IOS scale), approach of the other, the similarity/oneness index, and the index of care for the other's welfare – were all entered at the same level (Level 2), as well as all the criterion variables – attitudes toward the individual and the group, helping intentions, and support for social policies (Level 3). The model is fully mediated and fitted adequately the data, $\chi^2(143) = 258.07$, $p < .001$, RMSEA = .066, SRMR = .046, CFI = .97.

As presented in Figure 7, the feelings-focus dummy variable was positively associated with empathic concern ($\gamma = .38$, $p < .001$), feelings of injustice ($\gamma = .22$, $p < .05$), and sadness ($\gamma = .39$, $p < .001$), and also with care for the other's welfare ($\gamma = .54$, $p < .001$) and self-other closeness ($\gamma = .29$, $p < .01$). The similarities-focus dummy variable was also positively associated with the three types of emotional responses (for empathic concern, $\gamma = .41$, $p < .001$; for feelings of injustice, $\gamma = .24$, $p < .05$; for sadness, $\gamma = .32$, $p < .01$), as well as with care for the other's welfare ($\gamma = .34$, $p < .001$) and self-other closeness ($\gamma = .28$, $p < .01$). Additionally, focusing on the similarities was associated with higher levels of similarity/oneness ($\gamma = .25$, $p < .01$) and greater approach of the other ($\gamma = .22$, $p < .05$).

Further on the mediation chain, empathic concern was a significant predictor of all four the criterion variables (for attitude toward the individual, $\beta = .50$, $p < .001$; for helping intentions, $\beta = .34$, $p < .01$; for attitude toward the group, $\beta = .41$, $p < .01$; for support for social policies, $\beta = .36$, $p < .05$), while care for the other's welfare predicted

three of them (for attitude toward the individual, β = .36, $p < .01$; for helping intentions, β = .26, $p < .05$; for attitude toward the group, β = .60, $p < .001$). A more positive attitude toward the individual target was also predicted by the increase of self-other closeness, measured with the IOS scale (β = .19, $p < .05$). Finally, the approaching movement of the other toward the self was negatively associated with endorsement of prosocial policies (β = -.21, $p < .05$). Interestingly, feelings of injustice and sadness did not mediate the effects of the focus manipulation on the criterion variables, although the impact exerted by both dummy variables on these affective states was quite strong. Furthermore, although the similarities-focus dummy variable lead to an increase of similarity/oneness, this variable did not mediate any of the effect on the outcomes.

Figure 7. Mediated effects of attentional focus: Structural equation model (Study 4)



Note. All parameters reported are standardized. Only significant paths are reported. * $p < .05$; ** $p < .01$; $p < .001$
χ^2 (143) = 258.07, $p < .001$, RMSEA = .066, SRMR = .046, CFI = .97

Decomposition analyses revealed that the indirect effects of both predictors on the criterion variables were all positive and significant (Effects of the feelings-focus dummy variable on: attitude toward the individual, IE = .44, $p < .001$; helping intentions, IE = .36, $p < .001$; attitude toward the group, IE = .37, $p < .001$; support for social policies, IE = .31, $p < .001$. Effects of the similarities-focus dummy variable on: attitude toward the individual, IE = .37, $p < .001$; helping intentions, IE = .31, $p < .001$; attitude toward the group, IE = .24, $p < .01$; support for social policies, IE = .26, $p < .01$). Overall, the tested model accounted for 70% of the variance in attitude toward the individual, 49% in helping intention, 56% in attitude toward the group, and 50% in support for prosocial policies.

Starting from this point, we then computed two alternative fully mediated models, with the goal of understanding the causal order within the proposed mediators. For both models, the two dummy variables were entered as predictors (Level 1) and the four types of prosocial responses were simultaneously considered as criterion variables (Level 4). However, in the first model, the three types of emotional responses (Level 2) preceded the four variables referring to self-other closeness (the IOS scale), approach of the other, similarity/oneness, and care for the other's welfare (Level 3), whereas in the second one the reversed order was tested. For both tested models, the goodness-of-fit indices were satisfactory and comparable, thus we cannot conclusively state that one is preferable over the other.

For the first model (Model A), the goodness-of-fit indices were the following: $\chi^2(163) = 331.11$, $p < .001$, RMSEA = .079, SRMR = .065, CFI = .96. As showed in Figure 8, both feelings- and similarities- focus dummy variables were related to higher levels of emotional responding, i.e., they elicited greater empathic concern (respectively, $\gamma = .39$ and $\gamma = .42$, *ps* $< .001$), feelings of injustice (respectively, $\gamma = .22$ and $\gamma = .23$, *ps* $< .05$) and sadness (respectively, $\gamma = .41$, $p < .001$ and $\gamma = .33$, $p < .01$). On their turn, empathic concern was associated with all the second-step mediators (for IOS, $\beta = .57$, $p < .001$; for care for the other, $\beta = .44$, $p < .001$; for similarity/oneness, $\beta = .35$, $p < .01$; for approach of the other, $\beta = .44$, $p < .001$), while sadness was positively associated only with increased care for the other ($\beta = .46$, $p < .001$). At the end of the chain, the most powerful predictor appeared to be caring for the other's welfare, which promoted more positive attitudes both toward the individual target ($\beta = .64$, $p < .001$)

and her membership group (β = .51, $p < .001$) and increased both intentions to help the individual (β = .73, $p < .001$) and endorsement of prosocial policies benefiting the entire group (β = .60, $p < .001$). Self-other closeness contributed to improved attitudes toward both the individual and the group (respectively, γ = .23 and γ = .29, *ps* < .01), although the effects were more modest in size. Overall, the tested model accounted for 66% of the variance in attitude toward the individual, 55% in helping intentions, 38% in attitude toward the group, and 45% in support for prosocial policies.

The second model (Model B) obtained the following goodness-of-fit indices: $\chi^2(165) = 314.77$, $p < .001$, RMSEA = .073, SRMR = .062, CFI = .97. As showed in Figure 9, focusing on similarities was related to perceptions of increased similarity/oneness (γ = .25, $p < .01$), of self-other closeness (γ = .22, $p < .01$), and of the other as approaching (γ = .37, $p < .05$), as well as to greater caring for the other's welfare (γ = .28, $p < .01$). Differently, focusing on feelings was related only to a greater sense of self-other closeness and, even more strongly, to more caring for the other's welfare (respectively, γ = .29, $p < .01$ and γ = .55, $p < .001$). On their turn, care for the other was associated with the three types of emotional responses (for empathic concern, β = .47; for feelings of injustice, β = .62; for sadness, β = .69; all *ps* < .001), while self-other closeness and the approaching movement of the other contributed, although to a lower extent, to explain increased empathic concern only (respectively, β = .21, $p < .01$ and β = .14, $p < .05$). Finally, empathic concern was the proximal predictor of attitudes both toward the individual target (β = .72, $p < .001$) and her group (β = .65, $p < .001$), of helping intentions (β = .44, $p < .001$) and support for prosocial policies (β = .45, $p < .001$). Overall, this model accounted for 64% of the variance in attitude toward the individual, 54% in helping intentions, 31% in attitude toward the group, and 43% in support for prosocial policies.

Figure 8. Two-step mediation model of the effects of attentional focus (Model A; Study 4)

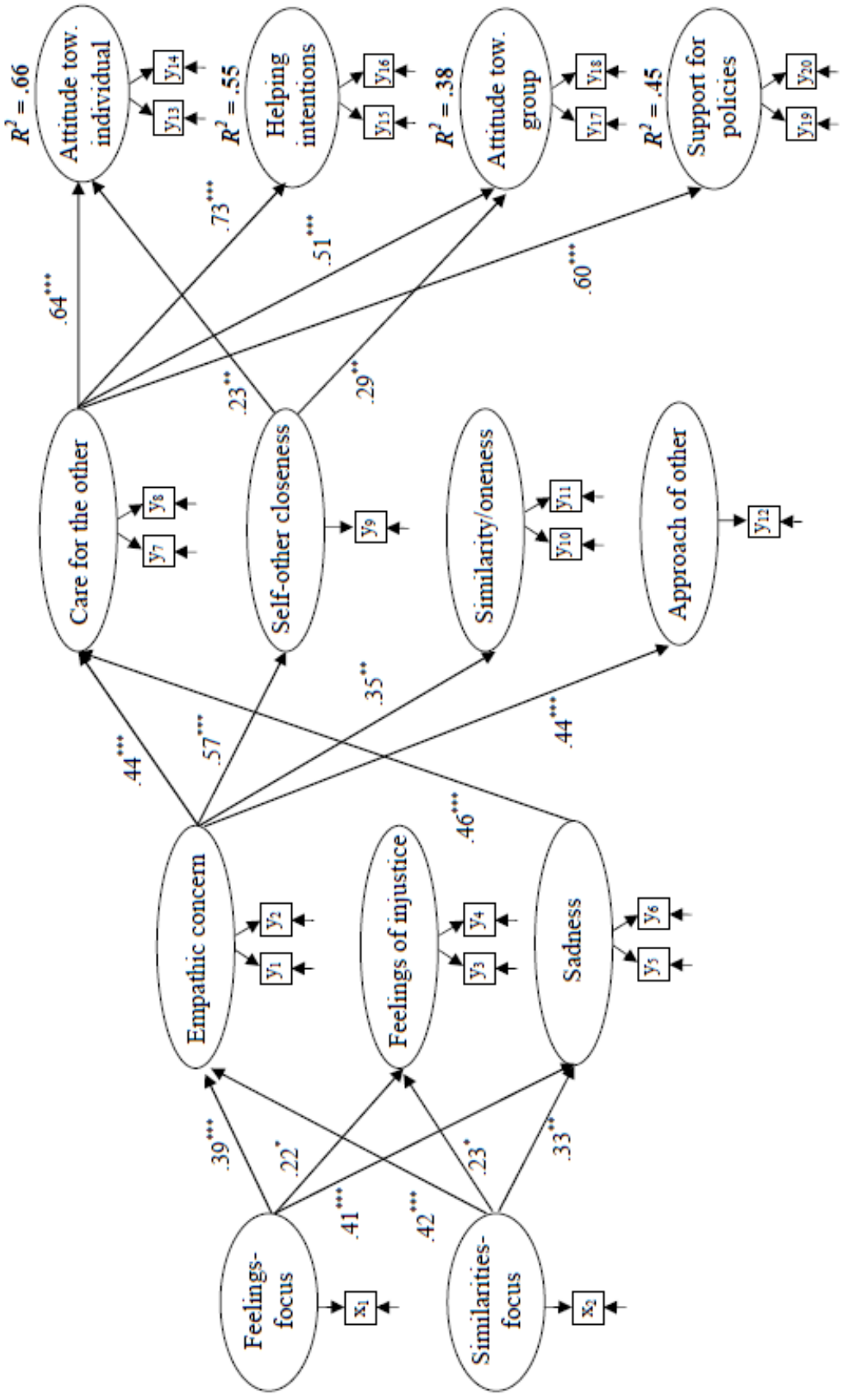
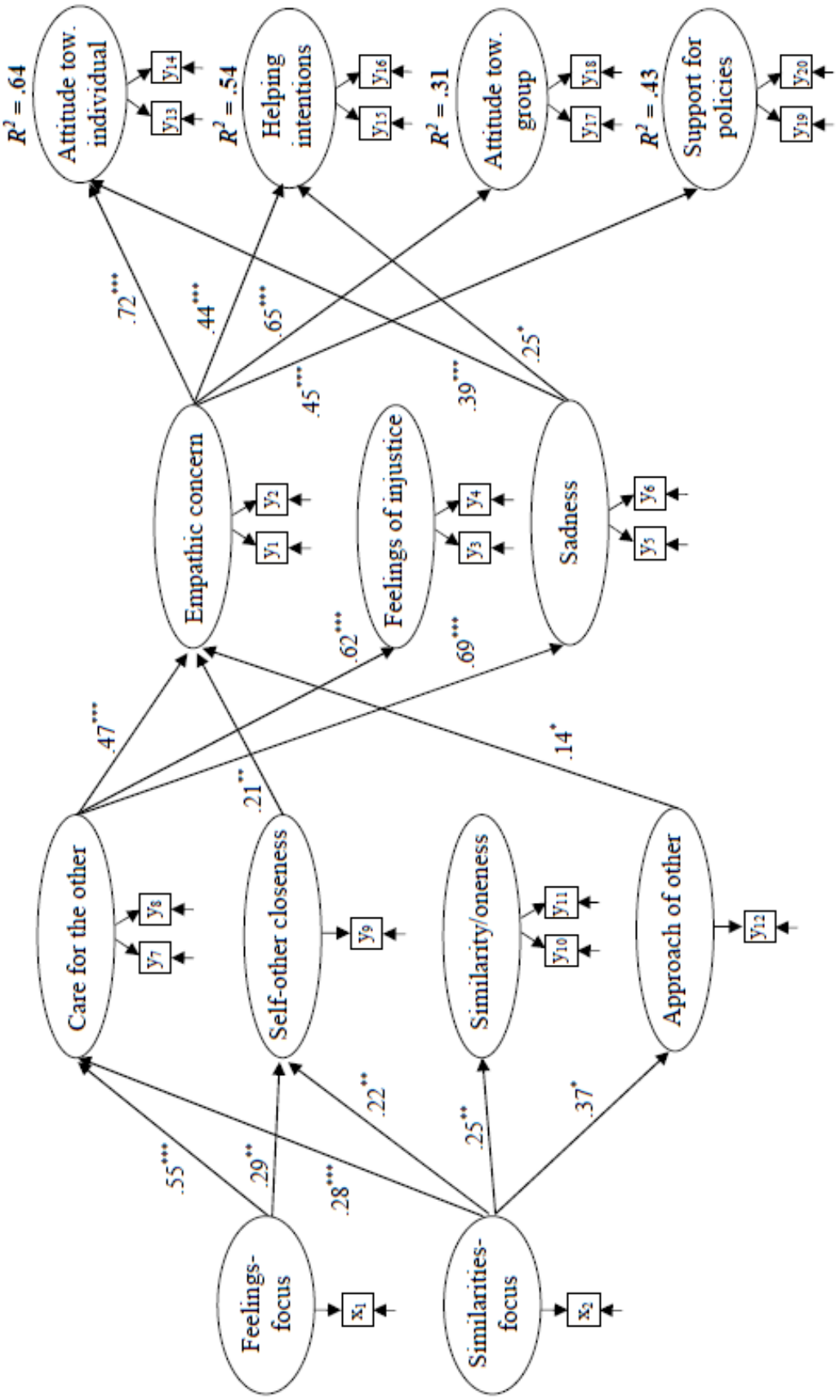


Figure 9. Two-step mediation model of the effects of attentional focus (Model B; Study 4)



Discussion

The aim of the present study was to delve in the mediating mechanisms that account for the relationship between perspective taking and prosocial responses. Thus, we sought to directly manipulate two of the key mediators: emotional reactions to the target's plight and perceptions of similarities between oneself and the target that lead to a sense of oneness. To this end, before exposing participants to a needy target, member of a stigmatized group, we instructed them to focus either on the emotions they were feeling or on the similarities they could see between them and the target (or, in the control condition, they were asked to remain objective and neutral).

Overall, results indicate that focusing on feelings and focusing on similarities between oneself and the target, compared to an objective attentional focus, resulted in greater arousal of emotional responding to the target's plight, eliciting higher levels of empathic concern, feelings of injustice and personal sadness. This finding is consistent with previous work in which perceived similarity was used as a manipulation to induce empathy for a distressed target (e.g., Batson et al., 1981; Batson et al., 1995, Studies 1-2; Krebs, 1975; Stotland, 1968). Moreover, both types of focus lead also to greater care for the target's welfare and a sense of self-other closeness, while only focusing on similarities lead to a perception of oneness and of the target as moving toward the self. With regards to the prosocial outcomes, the analyses of variance indicated that both participants in the feelings-focus condition and those in the similarities-focus condition reported more positive attitudes toward the individual target and expressed more willingness to offer some help than did participants who remained objective. The effect of attentional focus manipulation, however, was different on the two group-level outcomes: only participants in the feelings-focus condition reported more positive attitudes toward North-African immigrants and expressed greater support for prosocial policies than did participants in the objective, control condition.

In particular, when examining the mediation process in the relationship between attentional focus and prosocial outcomes and considering all the potential mediators at the same level, empathic concern and care for the target's welfare appeared to be the most powerful predictors of prosocial responses. Additionally, self-other closeness (measured with the IOS scale) was also found to mediate the effects of focus on attitudes toward the group. Then, to explore the causal order of mediators, we tested two

alternative models: in the first model emotional responses preceded care for the other, perceptions of closeness, approach and oneness, whereas in the second model the reverse order was tested. Both models appeared to be acceptable, and we cannot conclusively choose one over the other. The first model provided a conceptual replication of the mediation chain emerged from the data of Study 3: emotional reactions increased perceptions of oneness and self-other closeness, but also to enhance care for the target's welfare, which then predicted prosocial outcomes. However, the reverse order of mediators was also plausible, as suggested in the second model: perceptions of self-other closeness and felt care for the target's welfare lead to an increase of empathic concern and sadness, which then were proximal predictors of prosocial responses. These results are not completely consistent with those of Study 3, although it is possible that some of the differences are attributable to the use of a different manipulation.

Overall, the results of this study provide further evidence of the role of emotional responses to the other's plight, and in particular of empathic concern, in predicting prosocial responses. Additionally, they are consistent with the idea that perceptions of self-other closeness and oneness are amplified by emotional reactions, but it is care for the other's welfare, a more affective variable, to account more strongly for prosocial responses.

CHAPTER 5
CONCLUSIONS

A growing body of research provides converging evidence that adopting the perspective of an individual, member of a stigmatized group, can lead to improved attitudes toward the group as a whole (e.g., Batson, Polycarpou et al., 1997; Dovidio et al., 2004; Finlay & Stephan, 2000; Vescio et al., 2003), decrease stereotypical responding (Galinsky & Moskowitz, 2000) and promote willingness to help group members in general (e.g., Batson et al., 2002). These beneficial effects have been explained through a variety of mechanisms. These involve a range of emotional reactions to the other person's plight, e.g., empathy and feelings associated with recognizing social injustice, as well as altered representations of the self and the other, i.e., a merging of identities. Besides, a well-established literature has shown that empathy is positively associated with helping behaviors and more benevolent evaluations of others (see, for reviews, Batson, 1991; Davis, 1994; Eisenberg & Miller, 1987b; see also Dovidio et al., 2006). This empathy-helping association has been proved to derive from a genuine concern for the other's welfare, that is an altruistic motivation to improve the other's condition, although several others egoistic alternative factors, e.g., reduction of aversive emotional states and perception of oneness, have been proposed challenging this view.

The present work aimed at integrating these two lines of research, by examining the effectiveness of perspective taking in the context of interethnic relationships in Italy. Specifically, we tested whether adopting the perspective of a needy young Moroccan woman would lead to improved attitudes toward her and stronger intentions to help her, and whether these effects could also generalize to North-African immigrants in general. Additionally, using a structural equation modeling approach, we investigated which constructs among those hypothesized as mediators could better explain the beneficial consequences of perspective taking.

Taken together, the results of the first three studies were supportive of expectations. Participants encouraged to take the perspective of a young Moroccan woman, while she described her difficulties associated with being immigrant, reported more positive attitudes both toward her (Studies 1-3) and toward North-African immigrants in general (Studies 2-3); moreover, they expressed stronger intentions to help the needy woman (Study 3) and greater support for prosocial policies aimed at benefiting the whole category of North-African immigrants (Studies 1-3).

For the first two studies, mediation analyses indicated that the effects of perspective taking on improved attitudes were mediated primarily by increased empathic concern felt for the target, while the indirect effect on support for prosocial policies passed through self-reported feelings of injustice. These results are congruent with Batson's claim that empathic concern, as an emotional response, may constitute a privileged route to attitude change, as it gets to the core of the affective component of attitudes (Batson, Polycarpou et al., 1997). At the same time, these findings provide also support to the idea that feelings associated with recognizing injustice may play an important role in interethnic contexts, when the other's suffering often stems from discrimination and mistreatment (Dovidio et al., 2004; Stephan & Finlay, 1999). Notably, although perspective taking lead to greater sadness and personal distress, the arousal of these two affective states – widely considered as egoistic motivators (e.g., Piliavin et al., 1981; Cialdini et al., 1987) – could not account for any effect on the outcome variables.

As regards the role of self-other merging, results varied according to the measures employed. We found that a general perception of self-other closeness could not account for prosocial consequences of perspective taking (Study 1), whereas a perception of the self as approaching the other predicted improved attitudes toward the group (Study 2). In Study 3, increased perception of oneness, measured by a composite index, emerged as a powerful, proximal predictor of prosocial responses. These results are congruent with those of Cialdini et al. (1997) and Maner et al. (2004) and indicate that perception of oneness is important in explaining the prosocial consequences of perspective taking. However, it is important to note that, using two different versions of the IOS scale, no evidence of an actual overlap between the self and the other was found. Additionally, the fact that our measure of oneness included one item assessing

care for the other's welfare is also consistent with Batson's argument that oneness, as operationalized, might tap caring about the other's welfare (see Batson, Sager et al., 1997). Thus, oneness resulting from perspective taking might reflect a sense of interconnectedness with the other rather than a merge of identity. This also suggests that oneness may be more affect-based than hypothesized by Cialdini and his collaborators. Supporting this idea, we also found that reduced discrepancy in cognitive representations of the self and the other, based on trait attribution, could not account for the effects of perspective taking on prosocial responses. Furthermore, when we examined the order of mediators, it turned out that the perception of oneness was increased, or in other words nourished, by empathic concern and feelings of injustice.

In the fourth study, with the aim of distinguishing the contribution of emotional reaction to the other's plight and perceptions of interpersonal similarity, we manipulated directly these two key mediators by manipulating participants' attentional focus. Supporting the idea that the mediating power of oneness emerged in Study 3 was due to care for the other's welfare, in this study we found that the key predictors of prosocial responses were self-reported empathic concern and felt care for the target's welfare. In contrast, perception of increased oneness based on interpersonal similarity did not mediate the effects of the manipulation on prosocial responses.

Across three studies, we did not find evidence that the two forms of perspective taking influenced differently participants' responses: whether participants imagined how the target was feeling in her plight or how they would feel if they were in such a situation did not produce relevant differences in self-reported emotional reactions, perceptions of self-other closeness (Studies 1 and 2) or oneness (Study 3), nor prosocial responses to the target and her membership group. This finding, which is consistent with results of Finlay and Stephan (2000), suggests that, at least when the other person is a stranger and belongs to a different group, the two forms of perspective taking are equivalently beneficial. However, the fact that in our studies the two types of perspective-taking instructions had comparable effects on participants' responses does not mean that these two modalities are the same *tout court*. Indeed, previous work has shown that the two forms of perspective taking elicited different amount of personal distress (Batson, Early et al., 1997) and different types of cognitions (Davis et al., 2004), and evidence form neuroimaging studies provide further evidence of their

distinguishableness in terms of neural activity (e.g., Jackson et al., 2006). Empirically, though, it seems difficult to instruct people to engage in one form of perspective taking and prevent them from spontaneously engaging in the other form. As Batson and Ahmad (2009) suggested, it is possible that, when the other is a stranger, imaginatively putting ourselves in his or her shoes and thinking about how we would feel in his or her place (i.e., imagine-self perspective) would help us to understand how the other person is feeling (i.e., imagine-other perspective). The reverse is also possible: when the other's plight is unfamiliar to us, we might imagine how we would feel in such a situation (i.e., imagine-self perspective) on the basis of what this person feels (i.e., imagine-other perspective).

The present work contributes to our understanding of emotional reactions experienced when people are exposed to another person's suffering. Indeed, factor analyses conducted on the emotional responses scale – especially those in Study 2 – pointed out the existence of four distinct affective reactions: empathic concern, feelings associated with perception of injustice, sadness and personal distress. Importantly, items loading on each factor (i.e., type of emotional response) were essentially the same across the four studies. However, additional research is need to further elucidate the nature and the motivational power of these emotional reactions.

Our findings support the idea that empathic concern, defined and assessed as an other-oriented emotion congruent with the perceived welfare of the other, is associated with altruistic motivation, as it lead to the expression of more benevolent attitudes, both at the individual and at the group level (Studies 1-4), and of supportive behaviors (Studies 3 and 4). In contrast, personal distress and sadness, defined as self-oriented emotions associated with egoistic motivation, were not predictive of increased prosocial responding. However, as we have already noted, it is possible that our measures of distress and sadness reflected affective states felt *for* the target, thus they might be considered as empathic. As Dovidio and collaborators (2004) suggested, "rather than being considered inherently egoistic or altruistic, different measures may vary in their motivational properties and consequences in different contexts." (p. 1543) We think that, unlike other forms of empathic feelings (e.g., empathic concern and empathic anger), empathic sadness and distress may be not sufficiently "energizing", i.e., might be associated with passive forms of behavioral tendencies, or with no action tendencies

at all. This may explain why, in our studies, these two affective states had very little impact on prosocial outcomes. Finally, feelings associated with injustice were found to positively predict prosocial outcomes. Finlay and Stephan (2000) and Dovidio et al. (2004) suggested that feelings such as anger and annoyance reported by individuals exposed to a target victim of discrimination and unfair treatment represent a sense of outrage from witnessing social injustice. However, as Dovidio and his colleagues acknowledged, these feelings were stronger for those participants encouraged to take the victim's perspective and, thus, they may reflect empathic feelings. Indeed, Batson and Ahmad (2009) argued that these feelings may be better understood as *empathic anger*, i.e., anger at harm done to someone whose welfare one cares, and may constitute a particular form of empathic concern (see Batson, Kennedy et al., 2007). Both interpretations might be true and our studies do not provide clear evidence for one interpretation over the other. However, the fact that feelings of injustice were consistently associated with prosocial responses, and in particular with support for policies aimed at benefiting the target and her membership group, suggests that they might be considered as empathic, as they were coordinated with the perceived welfare of the other and oriented to improve it.

Additional research is also needed to better distinguish cognitive and affective components of oneness. In Study 3 and 4, measures of perceived similarity, self-other closeness, and care for the other were related to each other in different ways. Indeed, it is likely that these constructs influence and foster each other.

To conclude, we would like to end with a positive, hopeful remark. Regardless of which processes operate as the main mediating mechanisms, this work provides clear evidence that perspective taking is an effective strategy for improving intergroup relations, as it promotes sensitive understanding of the stigmatized others and motivates prosocial responding.

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APPENDIX

Appendix A: Correlation matrix between variables for Study 1

	1	2	3	4	5	6	7	8	9	10	11	12
1. Perspective taking	—											
2. Empathic concern (1)	.227**	—										
3. Empathic concern (2)	.289***	.736***	—									
4. Parallel empathy (1)	.310***	.622***	.575***	—								
5. Parallel empathy (1)	.301***	.617***	.591***	.839***	—							
6. Self-other closeness/IOS	.186*	.385***	.398***	.364***	.314***	—						
7. Attitude tow. indiv. (1)	.203**	.598***	.596***	.513***	.477***	.368***	—					
8. Attitude tow. indiv. (2)	.168*	.489***	.448***	.532***	.518***	.231**	.653***	—				
9. Attitude tow. group (1)	.023	.332***	.281***	.278***	.231**	.236**	.331***	.315***	—			
10. Attitude tow. group (2)	.001	.318***	.277***	.277***	.248***	.231***	.321***	.293***	.816***	—		
11. Support for policies (1)	.146(*)	.395***	.341***	.519***	.459***	.279***	.397***	.449***	.429***	.463***	—	
12. Support for policies (2)	.150(*)	.387***	.294***	.403***	.339***	.234**	.387***	.394***	.399***	.439***	.760***	—
SD	.468	1.147	1.343	1.420	1.315	1.333	1.186	1.117	.820	.886	1.144	1.130

* $p < .05$; ** $p < .01$; *** $p < .001$; (*) $p < .10$

Appendix B: Correlation matrix between variables for Study 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Perspective taking	—																
2. Empathic concern (1)	.287***	—															
3. Empathic concern (2)	.282***	.803***	—														
4. Feelings of injustice (1)	.165*	.269***	.259***	—													
5. Feelings of injustice (2)	.241***	.403***	.428***	.685***	—												
6. Sadness (1)	.264***	.433***	.480***	.392***	.432***	—											
7. Sadness (2)	.265***	.564***	.569***	.366***	.470***	.675***	—										
8. Personal distress (1)	.302***	.426***	.406***	.580***	.577***	.512***	.468***	—									
9. Personal distress (2)	.319***	.389***	.389***	.541***	.524***	.570***	.457***	.792***	—								
10. Approach of self	.246***	.447***	.459***	.323***	.386***	.354***	.389***	.281***	.278***	—							
11. Approach of other	.060	.053	.074	.064	.128	.185*	.054	.118	.064	-.055	—						
12. Attitude tow. indiv. (1)	.285***	.487***	.553***	.356***	.459***	.445***	.471***	.402***	.369***	.405***	.200**	—					
13. Attitude tow. indiv. (2)	.221**	.463***	.566***	.255***	.379***	.359***	.434***	.333***	.297***	.389***	.134(*)	.827**	—				
14. Attitude tow. group (1)	.303***	.453***	.499***	.200**	.259***	.390***	.384***	.272***	.254***	.381***	.237***	.618***	.575***	—			
15. Attitude tow. group (2)	.290***	.365***	.456***	.251***	.364***	.332***	.355**	.301***	.263***	.431***	.203**	.567***	.546***	.775***	—		
16. Support for policies (1)	.180*	.378***	.427***	.416***	.480***	.381***	.456***	.481***	.435***	.332***	.150*	.573***	.488***	.441***	.478***	—	
17. Support for policies (2)	.076	.310***	.373***	.326***	.425***	.326***	.397***	.340***	.318***	.281***	.141(*)	.513***	.426***	.301***	.387***	.640***	—
SD	.465	1.472	1.466	1.669	1.955	1.579	1.296	1.558	1.648	2.156	1.539	.900	.747	.788	.824	1.108	1.297

* $p < .05$; ** $p < .01$; *** $p < .001$; (*) $p < .10$

Appendix C: Correlation matrix between variables for Study 3

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Perspective taking	—																		
2. Empathic concern (1)	.221**	—																	
3. Empathic concern (2)	.221**	.814***	—																
4. Feelings of injustice (1)	.147(*)	.453***	.443***	—															
5. Feelings of injustice (2)	.217**	.522***	.555***	.608***	—														
6. Sadness (1)	.235**	.487***	.483***	.410***	.482***	—													
7. Sadness (2)	.190*	.521***	.511***	.368***	.498***	.708***	—												
8. Oneness (1)	.341***	.442***	.371***	.314***	.349***	.402***	.295***	—											
9. Oneness (2)	.154*	.443***	.403***	.300***	.449***	.412***	.352***	.578***	—										
10. Self-other discrep. (1)	-.147(*)	-.262***	-.196*	-.133(*)	-.075	-.075	-.171*	-.294***	-.150(*)	—									
11. Self-other discrep. (2)	-.136(*)	-.304***	-.234**	-.145(*)	-.155*	-.132(*)	-.155*	-.224**	-.030	.463***	—								
12. Attitude tow. indiv. (1)	.252***	.506***	.451***	.315***	.452***	.371***	.429***	.387***	.430***	-.113	-.111	—							
13. Attitude tow. indiv. (2)	.193*	.479***	.419***	.302***	.448***	.350***	.416***	.369***	.469***	-.203**	-.217**	.712***	—						
14. Helping intentions (1)	.159*	.404***	.359***	.237**	.411***	.309***	.299***	.510***	.484***	-.185*	-.153*	.430***	.496***	—					
15. Helping intentions (2)	.197**	.369***	.328***	.260***	.328***	.290***	.243***	.437***	.450***	-.249***	-.108	.482***	.448***	.679***	—				
16. Attitude tow. group (1)	.243***	.296***	.301***	.133(*)	.321***	.303***	.197**	.407***	.445***	-.069	-.118	.487***	.507***	.513***	.524***	—			
17. Attitude tow. group (2)	.188*	.358***	.325***	.183*	.292***	.270***	.194*	.450***	.462***	-.132	-.082	.437***	.447***	.524***	.466***	.793***	—		
18. Support for policies (1)	.205**	.236**	.181*	.224**	.344***	.242***	.237**	.331***	.368***	-.159*	-.200**	.279***	.296***	.357***	.320***	.435***	.386***	—	
19. Support for policies (2)	.116	.227**	.314***	.350***	.309***	.234**	.213**	.322***	.434***	-.118	-.105	.345***	.342***	.372***	.309***	.458***	.459***	.491***	—
SD	.469	1.259	1.289	1.662	1.713	1.426	1.299	.757	.837	.399	.405	.605	.717	1.063	1.295	.753	.788	1.005	1.106

* $p < .05$; ** $p < .01$; *** $p < .001$; (*) $p < .10$

Appendix D: Correlation matrix between variables for Study 4

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1. Feelings-focus	—																					
2. Similarities-focus	-.495***	—																				
3. Empathic concern (1)	.159(*)	.196*	—																			
4. Empathic concern (2)	.165*	.215**	.845***	—																		
5. Feelings of injustice (1)	.103	.082	.503***	.469***	—																	
6. Feelings of injustice (2)	.059	.136(*)	.516***	.534***	.713***	—																
7. Sadness (1)	.151(*)	.169*	.459***	.469***	.413***	.464***	—															
8. Sadness (2)	.190*	.064	.222**	.345***	.450***	.488***	.648***	—														
9. Care for the other (1)	.245**	.099	.411***	.496***	.441***	.414***	.403***	.426***	—													
10. Care for the other (2)	.356***	.060	.438***	.527***	.498***	.495***	.438***	.541***	.690***	—												
11. Self-other closeness/IOS	.145(*)	.143(*)	.413***	.479***	.131	.279***	.162*	.196*	.323***	.411***	—											
12. Similarities/oneness (1)	-.041	.189*	.313***	.422***	.280***	.290***	.293***	.323***	.333***	.394***	.386***	—										
13. Similarities/oneness (2)	-.001	.203*	.268***	.382***	.198*	.202*	.206*	.307***	.251**	.339***	.390***	.809***	—									
14. Approach of other	-.033	.182*	.328***	.325***	.154(*)	.163*	.194*	.099	.222**	.168*	.375***	.276***	.224**	—								
15. Attitude tow. indiv. (1)	.242**	.108	.555***	.625***	.317***	.354***	.309***	.259***	.457***	.536***	.520***	.347***	.371***	.222**	—							
16. Attitude tow. indiv. (2)	.235**	.114	.523***	.602***	.348***	.412***	.411***	.448***	.465***	.569***	.453***	.399***	.378***	.186*	.738***	—						
17. Helping intentions (1)	.252**	.090	.548***	.494***	.471***	.464***	.468***	.389***	.451***	.536***	.309***	.247**	.231**	.205*	.477***	.535***	—					
18. Helping intentions (2)	.194*	.216**	.590***	.541***	.472***	.423***	.403***	.328***	.384***	.456***	.349***	.317***	.304***	.275***	.438***	.536***	.751***	—				
19. Attitude tow. group (1)	.194*	-.026	.353***	.413***	.148	.182*	.185*	.075	.384***	.423***	.409***	.190*	.137(*)	.069	.494***	.488***	.452***	.329***	—			
20. Attitude tow. group (2)	.159(*)	.089	.380***	.454***	.173*	.216**	.231**	.134	.432***	.436***	.359***	.208*	.180*	.102	.533***	.532***	.419***	.343***	.732***	—		
21. Support for policies (1)	.177*	-.006	.459***	.457***	.282***	.431***	.122	.132	.288***	.384***	.275***	.128	.136(*)	.129	.337***	.431***	.417***	.394***	.325***	.354***	—	
22. Support for policies (2)	.144(*)	-.020	.326***	.358***	.331***	.305***	.366***	.383***	.233**	.411***	.171*	.365***	.290***	-.052	.166*	.402***	.422***	.416***	.191*	.211**	.493***	—
SD	.467	.477	1.395	1.330	1.616	1.517	1.391	1.680	.881	.876	1.201	.894	.917	1.409	.558	.596	1.043	1.146	.699	.591	.924	1.184

* $p < .05$; ** $p < .01$; *** $p < .001$; (*) $p < .10$