UNIVERSITÀ
DEGLI STUDI
DI PADOVA

Administrative Office: University of Padua
Department of Developmental and Socialization Psychology

DOCTORATE SCHOOL OF PSYCHOLOGICAL SCIENCES
XXVI CYCLE

PROSOCIAL BEHAVIOR: A DUAL PROCESS ACCOUNT OF HOW OTHERS' ACTIONS INFLUENCE DONATION DECISIONS

School director : Ch.ma Prof.ssa Francesca Peressotti
Supervisor :Ch.mo Prof. Rino Rumiati

Doctorate student : Dorina Hysenbelli

Abstract

Charity giving decisions are complex and often biased by people's cognitive and affective processes; they have to consider a large amount of information about the recipient, his/her situation, the charity organization, and this might require a lot of effort. For this reason, heuristics are often used to make a similar process easier. The present dissertation focuses on how anchors, presented as social information can influence decisions related to charity giving. On the one side, individuals can simply anchor to numbers they read on a sheet of paper (which represent the average amount of money that others' donate) as a result of the intuitive thinking. On the other hand, they have to think about the appropriateness of their decision, the objective need of the victim, and other dimensions of the charitable cause, which are difficult to appraise. Therefore, donors are likely to follow the reference made by an anchor referring to other people's behavior and, thanks to the anchoring and adjustment heuristic, there is room to increase donations. The dissertation tested this hypothesis and also explored some of the boundaries of the effect of anchoring and social influence on donation decisions.

In three experiments I explored participants' choices when different anchors are used (or not). In Experiment 1, two groups of participants were informed about low versus high average donations of other people, and a third control group did not receive any information about others' behavior. The results showed that participants were willing to donate significantly more in the high-anchor condition compared to the low-anchor condition, as well as about the same amount of money in the low-anchor condition and no-anchor condition. Experiment 2 and 3 showed that high anchors are more effective when the information about others' donations informs about the behavior of members of an ingroup rather than an outgroup. However, the group belongingness of the charity target did not have

a significant effect on the results. The theoretical relevance of the results is discussed in relation to the past work on prosocial behavior. Furthermore, the practical implications for the humanitarian aid organizations and fund raising campaigns are discussed.

Riassunto

Le decisioni che riguardano le donazioni in beneficenza sono complesse e spesso influenzate dai processi cognitivi ed emotivi delle persone. Infatti, tenere in considerazione l'ingente quantità di informazioni riguardanti il ricevente, la sua situazione, l'organizzazione caritevole, può richiedere uno sforzo notevole. Per rendere tale processo più semplice spesso vengono usate le euristiche. Questa tesi di dottorato si focalizza sul modo in cui l'utilizzo di ancore, presentate come informazione sociale, possono influenzare le decisioni riguardo alle donazioni in beneficenza. Da un lato, le persone possono intuitivamente utilizzare come ancora i numeri che leggono su un foglio di carta (che rappresenta quanto le altre persone donano in media). Dall'altro lato, gli individui devono pensare all'appropriatezza della loro decisione, al bisogno oggettivo della vittima, e ad altre dimensioni relative alla causa caritevole che sono più difficili da valutare. Per questo motivo, i donatori tendono ad utilizzare come riferimento l'ancora costituita dal comportamento delle altre persone e, grazie alla euristica dell'ancoraggio e d'aggiustamento, è possibile che le donazioni vengano incrementate. In questo progetto di ricerca ho testato questa ipotesi, esplorando anche alcuni limiti dell'effetto di ancoraggio e di influenza sociale sulle decisioni di donazione.

In tre esperimenti ho esplorato come cambiavano le scelte dei partecipanti al variare delle ancore presentate. Nell'Esperimento 1, due gruppi di partecipanti venivano informati riguardo alle donazioni medie di altre persone (basse versus alte), mentre un terzo gruppo non riceveva nessuna informazione riguardo al comportamento degli altri. I risultati hanno mostrato che i partecipanti erano più propensi a donare nella condizione in cui era presentata un'ancora alta rispetto alla condizione di ancora bassa. Gli Esperimenti 2 e 3 hanno mostrato che le ancore alte sono più efficaci quando l'informazione relativa alla donazione riguarda membri del proprio gruppo versus membri dell'outgroup. In ogni caso, il gruppo d'appartenenza del target di beneficenza non ha mostrato un effetto significativo sui risultati.

La rilevanza teorica dei risultati viene discussa in relazione a ricerche precedenti sul comportamento prosociale. Inoltre, vengono discusse le implicazioni pratiche per le organizzazioni di aiuto umanitario e le campagne di raccolta fondi.

Acknowledgments

I would like to extend my thanks to:

Prof. Enrico Rubaltelli, who was not officially my supervisor, but behaved as one; he believed in me as a researcher more than anyone else, followed me in this wonderful path from the beginning till the end, and was not only an academic mentor, but also a good friend.

Prof. Rino Rumiati, my official supervisor, the vice rector of the University of Padova. Even though he was unable to be constantly present during my doctorate due to his commitment, he was there for me when I really needed him and he is a person I could always rely on.

Prof. Paul Slovic and Decision Research Institute in Eugene (OR) where I spent a year of my doctorate program, learning new ways how to do research, important values in life, and allowing me to enjoy this experience in the best way.

Mom and Dad, who brought me to life, gave me the possibility to start having a basic education which allowed me to get where I am today, and tried to support me as much as they could during my PhD, despite the long physical distance.

Valerie and George Dayhuff, two wonderful people I met during my experience in Eugene, who substituted my parents during that period, and are now my "American parents".

My beloved sister, the person who I dedicate most of the things I have reached in life, doctorate included. She has always been an important example to me, the most patient, hard worker, sensitive, strong person I have ever met. I feel blessed to have her in my life.

Friends I have from all over the world: Anerta, Bettie, Becky, Marina, Dani, Ana, Olsi, Arber, Ida, Leo, Ivano, Narda, Saimo, Iva, Mario, Pam, Matt, Ari, Cri, Silvia, Laurel, Pedro, Andrea, Tiz, Piera, all my PhD colleagues,

my cousins and volleyball teams. My life would not be so great without your presence.

My boyfriend, Carlo, who has been the most present in my life in the last year, but it feels like we have already spent a lifetime together. The one who cooked for me when I was tired, who hold my head when I was sick, and even helped me to create tables in LaTeX, checked for errors in my paper, searched for analysis lectures that I needed, and much more.. Thank you!

Table of contents

1. DECISION MAKING AND PROSOCIAL BEHAVIOR

Many questions related to charity giving behavior have been addressed by the scientific community over the past years: do people choose the right person or the right program to help? Are they influenced by irrelevant topics while making this type of decisions? Do they ponder all the alternatives in a precise way or do they just base their choices on intuition?

Surely, when giving help, people want to make the best choice, because they are always providing a resource (in terms of money, time, or social/affective involvement) that they give away, and feeling that it can make a difference can be an important motivation to their charity action. Since resources are not unlimited, people try to manage them in the best possible way. The literature review will show that this is not easy to achieve, and particularly, I will describe some key issues which better illustrate certain limits of human cognition.

1.1 Bounded rationality and decision making

In 1738, Daniel Bernoulli showed through the St. Petersburg paradox that, differently from what our intuition suggests, people are not willing to take an action which would provide an infinite expected payoff. Later on, von Neumann and Morgenstern (1944) suggested that a rational agent has a utility function defined by possible outcomes for each option, and preferences are characterized by maximizing the expected value. In 1955, Simon introduced the notion of bounded rationality, explaining that people try to achieve satisfactory solutions rather than optimal ones, mainly because they have a limited amount of information, cognitive resources, and (often) time to make decisions. Simon (1986) explained that classical and neoclassical economy is focused on substantive rationality, instead, cognitive psychology is focused on procedural rationality. The first one describes rationality as a maximization of the subjective expected value. Individuals must have a consistent ordering of preferences over all possible alternatives and they choose the alternative whose expected utility is the greatest. In this case, people are not interested in the process, but only

in the final result. Alternatively, procedural rationality describes how individuals choose the most satisfactory alternative, using an incomplete information, and having limited computational abilities. In this last situation, individuals are rational if they reach the goal with some reasonable efficiency.

In 1979, Tversky and Kahneman extended the research on the utility function making a distinction between alternatives that involve risk or not. In prospect theory, these authors explained that people set a reference point and then consider outcomes falling below it as losses and outcomes falling above the reference point as gains, and losses have a bigger weight than gains. Furthermore, the decision making process goes through two main stages: editing and evaluating. The first one is subject to framing effects (presenting the options as a gain or a loss), and in the second one people calculate each option utility based on the subjective potential outcomes and their respective probability.

During the editing stage people rely on a number of heuristic principles which reduce the complex tasks of assessing probabilities predicting values to simpler judgmental operations. Heuristics are considered cognitive strategies which are very useful most of the time because they help people to make fast and fairly accurate decisions saving time and effort. However, they sometimes lead people to rely on irrelevant information and to make systematically unreasonable mistakes (Tversky & Kahneman, 1974; Gigerenzer, Todd, & the ABC Group, 1999; Gilovich, Griffin, & Kahneman, 2002). Heuristic reasoning is based on previous experiences and most of the time people rely unconsciously on intuitions, emotions, and contextual information rather than processing information in a more deliberative fashion when making decisions (Chaiken & Trope, 1999; Kahneman, 2003; Slovic, Finucane, Peters, & MacGregor, 2002).

1.1.1 Representativeness heuristic

Representativeness heuristic describes how the probability of representative exemplars is judged higher because they are more representative of their category (Tversky & Kahneman, 1974). People do not accurately predict the likelihood of an event because they look for similarities between a new event and a standard one, and ignore the general rules of probability. In a classical experiment Tversky and Kahneman (1974) described to participants a person named Linda as following: "Linda is 31 years old, single, outspoken, and very bright. She majored in philosophy. As a student, she was deeply concerned with issues of discrimination and social justice, and also participated in anti-nuclear demonstrations". Subsequently, they asked them to choose between two options: 1) Linda is a bank teller or 2) Linda is a bank teller and is active in the feminist movement. Objectively, the probability of two events happening together (conjunction probability) is always less than or equal to the probability of either one occurring alone, but 90% of the participants chose the second option, because that is more representative for the category.

1.1.2 Availability heuristic

Availability heuristic states that an event is considered more likely because it is more familiar or available to people's minds. According to this heuristic, the easier it is to recall the consequences of something, the greater we perceive its consequences. For example, if you ask someone which is the disease that provokes more deaths between cancer and heart diseases, there are high probabilities that he/she responds cancer, because it receives a higher coverage in the media, and it is characterized by more traumatic symptoms. In other words, cancer is the more vivid death cause of the two, so it remains more available to peoples' mind. In reality, according to the World Health Organization (WHO, 2013) heart diseases remained the first cause of death during 2000 and 2011. Specifically, there were 7 million

people who died from ischemic heart disease during this time frame and 1.5 million people who died from lung, trachea, and bronchus cancer.

1.1.3 Anchoring and adjustment heuristic

A third heuristic, which is particularly important for the present dissertation, is the anchoring heuristic (Tversky & Kahneman, 1974). It describes how people can rely on irrelevant information and use it as an anchor while making judgments. When using the anchoring and adjustment heuristics, people rely more than necessary on arbitrary values, called anchors, even when they are clearly irrelevant to the question they have been asked to answer.

For example, in one of their experiments, Tversky & Kahneman (1974) asked participants to estimate the percentage of African countries represented at the United Nations. Before providing an estimate, participants were asked to spin a "wheel of fortune," which would return a value between 10 and 65. The number, extracted by chance from the wheel, was not relevant to the question participants were asked; however, their responses were still influenced by it. Those who were presented with the low value versus the high value as starting numbers estimated respectively a median of 25 and 45 percent of African countries represented at the United Nations, therefore showing to be influenced by the irrelevant numbers extracted by the "wheel of fortune" which should have been ignored. In studies like those conducted by Kahneman and Tversky, anchors were provided by the experimenters; however Epley and Gilovich (2006) reported that, when no starting value is present, people can self-generate an anchor in order to have a cue from which to start reasoning. For instance, Epley & Gilovich (2004) asked participants to respond to a series of 12 questions for which they did not know the correct answers but for which they could easily generate their own anchors. For example, most American citizens do not know when George Washington was elected president, but they do know that the Declaration of Independence was in 1776 and

that it is close to the date of George Washington's election. Therefore, they can hypothetically start from this date and then adjust it in the direction of the correct answer.

Self-generated anchors are more prone to adjustment, because the subject knows that the number that popped up in his/her mind is likely to be wrong and is simply a starting point he/she is using to reach the correct answer. Instead, when people have no previous knowledge about a certain topic and others provide an anchor for them, they start from the hypothesis that the anchor is a hint to the correct answer, assuming that the speaker should only provide relevant information (Epley & Gilovich, 2006).

More generally, the most accepted explanation for the anchoring bias is that the adjustment is often insufficient and requires effort (Ariely, Loewenstein, & Prelec, 2003; Sunstein, Kahneman, Schkade, & Ritov, 2003; Tversky & Kahneman, 1974). Recent studies have shown that this bias works because people search for information which is consistent with the anchor (Mussweiler, Strack, & Pfeiffer, 2000), and they stop adjusting once they think they have reached a plausible value (Epley & Gilovich, 2006). Often, people rely on anchors while they are interpreting ambiguous or conflicting social contexts, or when they have information about what other individuals do in a particular situation. This is typically likely to happen when a situation involves moral evaluations (e.g., sexuality, human cloning, tax evasion, charitable giving). Sunstein (2005) explained that, in these circumstances, people anchor to some authority's opinion; for example, Christian religion has shaped public attitudes toward abortion for two thousand years, or euthanasia was initially influenced by the philosophers (Socrates, Plato, Hippocrates), later on by Judeo-Christian tradition, and additionally by doctors.

1.2 Theories of prosocial behavior

A first definition of prosocial behavior defines it as "voluntary actions which aim to give help to another individual or group of individuals" (Eisenberg & Mussen, 1989). Instead,

a second definition refers to prosocial behavior as an altruistic behavior and underlines that it is present when those who give help do not expect to receive a benefit in the moment they decide to help the other person (empathy-altruism hypothesis; Batson, Batson, Singlsby, Harrell, Peekna, & Todd, 1991). For example, in the "dictator game", often individuals choose to give money to another person even though it results in their disadvantage. The way people make decisions related to charity giving is related to the reason why people decide to help. Below there will be described three major perspectives that aim to explain prosocial behavior.

1.2.1 The evolutionary hypothesis

The evolutionary hypothesis supports the idea that human beings are genetically programed to give help. In 1859 Darwin stated that because of natural selection organisms often act in line with their self-interests. Organisms that survive and successfully reproduce pass on their traits over time; traits that are the most adaptive become more representative within a population, whereas those that are the least adaptive eventually disappear. Subsequently, Hamilton (1964) recognized that an individual's total fitness depends on his/her own reproductive output plus the total reproductive output of all kin who share some of the individual's genes, and that explains why people manifest a predisposition to help those who share a higher number of genes with them (kin selection). In other words, the main goal is not to satisfy an egoistic or individualistic necessity, but to maximize transmission of genes to the next generation. Burnstein, Crandall, & Kitayama (1994) hypothesized that we do not only help those who are genetically more similar to us, but also, we choose to help those individuals who are healthier, to make sure that they have high possibilities to reproduce. Furthermore, Trivers (1971) suggested that people derive benefits under an evolutionary perspective to help strangers if the favor is returned in a second moment.

In 1998, Sober and Wilson introduced a model of group selection: there are instances in which specific groups of people, rather than individuals, are the primary units of selection. In this case, the members of "successful" groups are more reproductively successful than members of less prosperous groups. According to the authors, the probability that group selection evolved depends, in certain cases, on three parameters: a) the amount of personal costs associated with making sacrifices for the group, b) the amount of personal benefits associated with doing so, and c) the proportion of altruistic versus non-altruistic members within the group.

Other authors think that reciprocal altruism is a genetic expression and this could be verified from the presence of a universal reciprocity norm in all the cultures, which is, everyone is entitled to a fair treatment and the responsibility to ensure justice to others (Bornstein, 2002; Gouldner, 1960). Later on, Richerson and Boyd (2005) proposed that group selection occurs through the joint operation of genetic and cultural evolution. In other words, cultural variants (i.e., cultural knowledge, skills, and ideas) that enhance survival and reproduction are more likely to continue within a culture due to selection-like processes. However, cultural variants are also vulnerable to biased transmission in which certain variants become more successful because of their content (easier to remember, therefore more likely to use), their frequency (commonness within a population), and the people who model them (group leaders vs. followers).

1.2.2 Empathy-altruism model

As introduced before, this model upholds the idea that there is pure altruism only when the helper does not expect a reward while giving help to someone else. In this case, the main explanation of why people decide to help is affective and based, in particular, on empathic reactions (Eisenberg & Miller, 1987). Empathy is defined as the "emotional reaction of an individual induced from the emotional expression of another individual" (Shelton e Rogers,

1981). Batson and colleagues (Batson et al, 1989; Batson, Bolen, Cross, Neuringer-Benefiel, 1986; Batson, Duncan, Ackerman, Bucldey, & Birch, 1981; Batson et al., 1991) conducted several studies in which they found support for the "empathy-altruism" theory. Based on this theory, individuals tend to establish a sharing relationship with the other that allows them to feel what he/she feels, and motivates them to reduce his/her discomfort. The authors explained that if the others' sufferance induces an "egoistic displeasure", we would mainly be motivated to reduce our stress, and if possible, avoid the stressful situation. Instead, if the goal is the reduction of the others' sufferance, the possibility to avoid a stressful situation would not influence the choice to give help to the one who needs it. In order to test this hypothesis Batson and collaborators (Batson et al., 1981) ran a study where participants had to observe a girl named Elaine (confederate of the experimenter) while she was receiving an electric shock. After a while Elaine left the experimental room, went to the next one where there was the observer, and started to tell her painful experience adding that, anyway, she was willing to continue. Immediately after, the experimenter came in and proposed to the observer to take Elaine's place if he/she wanted to help. At this point, Batson and colleagues introduced their experimental manipulation: whether participants had the possibility to escape or not. Half of participants were informed that the experiment was almost finished (easy escape condition), instead to the other half it was said that there was still some time before the end of the test (difficult escape condition).

Results showed that when the empathy level was low, the help given to Elaine was low as well, independently from the possibility to escape or not. Instead, when the empathy level was high, the help offered by participants was high, even when it was easy to escape and avoid the stressful situation.

1.2.3 Egoistic-altruism theories

This third perspective supports the idea that helping behavior has the final goal of providing a personal advantage. Thibaut and Kelley (1959) suggested that individuals help for personal interest. If a certain behavior did produce advantages in the past, and the circumstances are repeated again, it is much more likely that people repeat the same behavior in the future. Some type of advantages that people might receive while giving help are the possibility to be helped in the future, social approval, higher self-esteem, and feeling relieved about a good action.

Negative state relief model. Within this theoretical approach, Cialdini and colleagues (Cialdini, Schaller, Houlihan, Arps, Fultz, & Beaman, 1987) proposed that a helping behavior is more likely to happen when the person is in a bad mood, and doing something good to others makes him/her feel better. This theory underlines the fact that people should know if their help was effective for others. Smith, Keating, and Scotland (1989) corrected this hypothesis saying that giving help to others does not have as a unique goal the personal relief from a negative mood, but simply experience the feelings of joy when they observe that others are feeling better (empathic-joy theory).

Warm-Glow theory. This theory reveals different egoistic motives that explain why people help others (Andreoni 1990; Andreoni, 1995). In a series of experiments, Andreoni (1990) showed that individuals are mostly influenced by social pressure, the desire to earn prestige, friendship or respect, so, they would help much more in the presence of others rather than when they are alone. Warm glow, in this context, is defined as an increase in utility resulting from the act of giving in addition to utility generated by the increase of the total supply of the public good. Utility depends on private consumption, total public goods, and own public contribution. In one of his experiments Andreoni (1995) gave participants the possibility to manage some money and use them to contribute either in private or public

goods. He created two groups with identical incentives, but different frames. In a positive frame participants were told that their own private consumption would have not affected others, but public contributions would have produced a positive outcome for others. Instead, in the negative frame condition participants were told that private consumption would have deprived others from public consumption, but public contribution would have not affected others. The final outcome for private and public goods between the two frames was similar, but subjects in the positive frame contributed about twice as much to public consumption as did those in negative frame. This results proved that people do not only care for the others' final outcome, but also for the act of doing good, and on the contrary to the pure altruism theory, warm-glow theory explains that doing a good deed (warm-glow) provides a higher utility than not doing a bad deed (cold-prickle).

1.2.4 Two-stage model of donation decision

Dickert, Sagara e Slovic (2011) integrated the models described above, that is, the pure altruism theory and egoistic altruism theory, suggesting that decisions related to charity giving are developed in two stages: in the first stage donors decide if they want to donate or not, whereas, in the second one, they decide how much to donate. The main differences between these two stages are based on the specific cognitive and motivational processes underneath them. The decision to donate or not seems to be determined by more egoistic feelings, like personal mood, because the degree to which a donation would make the donor feel better was predictive of the donation decision in Stage 1. Instead, in the second stage people decide how much to donate, based on their empathic feelings. Thus, the decision to donate or not is primarily determined by affective responses that are focused on the self (e.g., how much better a person feels after helping someone else) and the amount donated is primarily determined by emotions that are focused on others (e.g., sympathy and compassion).

1.3 The importance of affect

Previous literature on charity giving reports affect as one of the key factors which motivates people to engage in a helping behavior. Most of the works have found that higher affective reactions result in higher helping behavior as well (Batson et al., 1991; Kogut & Ritov, 2005a, b; Slovic, 2007). Batson and colleagues (Batson et al., 1981; Batson et al., 1986; Batson et al, 1989; Batson et al., 1991) concluded over several experiments that higher empathy toward the victim motivates people give more help. Participants in Kogut and Ritov studies (2005a, 2005b) reported higher feelings of distress and empathic concern for a single identified victim rather than an identified group of victims, which also explained higher donations toward the first ones. Slovic (2007) writes that just like in the psychophysical principle described by Fechner and Weber law (Weber, 1834; Fechner, 1860) people show a marginal decreasing sensitivity which might explain their inability to appreciate losses of life as they become larger. Furthermore, limitations in the ability to experience compassion might even provoke a collapse in the willingness to help when the number of victims increases. Other authors have reported that self-focused feelings like anticipated regret (Miller & Taylor, 2002), warm-glow feelings (Andreoni, 1990), or general positive feelings related to the act of giving rather than the victims' well-being are also important motivators of helping behavior (Thibaut & Kelley, 1959; Cialdini et al, 1987; Smith et al.,1989).

Affect is a quick, easy, and efficient indicator that people can use to operate in a complex world, that is why people often rely on it when making decisions (Slovic et al., 2002). Without affect information may lack meaning, and people would have difficulties to manage their everyday life (Loewenstein, Weber, Hsee, & Welch, 2001; Slovic et al., 2002). Affect is mainly processed in an unconscious way through the intuitive thinking process, which is also labeled as System 1 or experiential system (Epstein, 1994; Kahneman, 2003; Kahneman & Frederick, 2002; Petty & Cacioppo, 1986; Sloman, 1996; Stanovich & West,

2000). People's memory constantly searches for information and the affective value of the associations arising from these searches are used to categorize stimuli as either pleasant or unpleasant. As suggested by Epstein (1994), if the activated feelings are pleasant, they motivate actions and thoughts expected to reproduce these feelings. However, if the activated feelings are unpleasant, they are more likely to motivate actions and thoughts expected to avoid these feelings.

There are two different types of feelings related to a victim that influence prosocial behavior: self-focused affect and other-focused affect (Andreoni, 1990; Batson et al., 1991; Cialdini et al., 1987; Dickert et al., 2011). The first one motivates helping behavior as a way to reduce an unpleasant emotional state, whereas the second one motivates helping behavior through the concern about the victim. Importantly, these two different types of feelings are often both involved in the decision to give and seem to influence prosocial behavior at different stages of the decision process (Dickert et al., 2011). Self-focused affect is easier to access and less effortful than other-focused affect (Batson et al., 1991; Hodges & Wegner, 1997; Sabbagh & Taylor, 2000). Instead, other-focused affect depends on people's perspective taking and cognitive appraisal (Batson et al., 1991; Dickert et al., 2011; Lamm, Batson, & Decety, 2007).

Affect can also direct peoples' attention toward specific stimuli: accordingly, highly relevant stimuli seem to be processed faster and hold attention longer (Fox, 2002; Eastwood, Smilek, & Merikle, 2001; Loewenstein et al., 2001). However, the influence of emotions on attention is not always correlated with the importance of a stimulus. In fact, it has been reported than affective reactions are strongly related to imagery, or differently, to peoples' ability to create a concrete mental representation of objects and events (Damasio, 2004; MacGregor, Slovic, Dreman, & Berry, 2000; Slovic et al., 2002). As a consequence, priority is given to vivid stimuli rather than actually important but not vivid ones. This explains why

people tend to report higher affective reactions toward a single identified victim compared to identified groups of victims (Dickert & Slovic, 2009; Slovic, 2007).

The relationship between affect and attention is bidirectional: not only affect can orient attention, but attention can also influence affective reactions (Fenske & Raymond, 2006). For example, Cameron and Payne (2011) have shown that when participants expect the need for help to be overwhelming they engage in emotion regulation to prevent themselves from experiencing higher levels of negative emotion. Another study has found that sympathy ratings were lower and reaction times were higher when targets were presented with a distractor in a computer task (Dickert & Slovic, 2009). Additional analysis revealed that affective responses were higher when sympathy judgments about the target were made online (on the moment of the target presentation) than when they were made from offline (from memory).

1.3.1 Affect heuristic and charity giving

Because of the characteristics of affect mentioned above, people make many decisions every day based on it (Epstein, 1994; Finucane, Alhakami, Slovic, & Johnson, 2000; Kahneman, 2003; Slovic et al., 2002). Zajonc (1980) said that affective reactions to stimuli are often the very first reactions, occurring automatically and subsequently, guiding information processing and judgment, and later on Damasio (1994) added that affective feelings and emotions are associated with anticipated consequences of people's actions (somatic marker hypothesis).

In charitable giving, affect is often used to make decisions about helping others, but not always this results in a positive outcome. Small, Loewenstein, and Slovic (2007) asked participants to make a contribution in three different conditions: 1) a single identified victim 2) statistics related to lives at risk 3) or a single victim accompanied by the statistical information. The results showed that in the third experimental condition, statistical

information decreased the willingness to donate for the single victim. Furthermore, in a subsequent study, Small and colleagues (2007) made the participants undergo either an affective or analytical task before reading the scenario in order to activate respectively their System 1 or System 2. This time, the authors found that the affective task did not produce an increase in favor of the "statistical victims" but the analytical task reduced donations for the single victim. In sum, both these studies demonstrate how difficult it is to increase empathy and help toward a group of victims and how easy it is to decrease them.

Other studies have found the implications of affect in the amount of help given to identified and unidentified victims (Kogut & Ritov, 2005a, Small & Loewenstein, 2005), but Slovic (2007) stated that identifiability may not be the only explanation for people's affect deficiency. Slovic and colleagues presented a group of participants the picture of a single victim named Rokia, a second group with the picture of another victim named Moussa, and a third group with both victims (Rokia and Moussa). Results indicated that already in the presence of two victims, even though they were identified with a picture and a short story, participants showed a diminished sensibility toward the victims and donated significantly less in the third condition compared to the other two conditions. This, according to the authors, indicates a possible collapse of compassion much earlier than expected, only for a number of two victims.

1.4 Other heuristics in charity giving

Although it looks easy to decide who we want to donate, how are we going to do this and so on, people might run into certain difficulties to accomplish their goals. This often happens because there are many other heuristics which we make use while deciding about this topic which make people lose some important information or focus too much into irrelevant information related to the charity issue. Below, there will be described some of the main heuristics identified in charity giving literature.

1.4.1 Evaluability heuristic

According to Hsee (1996) when comparing two objects that have more than one attribute in which one is hard to evaluate independently (as a single attribute) and the other one is easy to evaluate independently there might be a preference reversal between joint and separate evaluation. For example, imagine two different charity organizations that want to help the same number of children in Africa, one is asking €10 and 5% of this money goes to managerial costs instead the other one is asking €15 and only 2% of the money goes to managerial costs. If you compare these choices independently and you have no idea about the managerial costs of a charity organization (difficult to evaluate attribute) you might choose the first option because it helps the same number of children for a smaller amount of money and you probably cannot estimate if the managerial costs are too high or too low. Differently, if you compare these options together, you will be more able to compare the managerial costs between the two organizations, and probably choose the second option because it makes a better use of your money.

Similarly, the unit-asking method proposed by Hsee, Zhang, Lu, and Xu (2013) confirmed the influence that evaluability can have in the field of donation decisions. These authors found that it was possible to increase people's donations to a group if they were first asked how much they were willing to donate for one needy child. In this way, it was possible to make them scope sensitive and induce them to donate more to the group compared to a situation in which they were not asked to report the donation amount for the single child before. These results can be explained on the basis of people's internal desire for consistency, which leads to increase the donation to a group compared to the reference point established by the donation to the single child (Ariely et al., 2003; Freedman & Fraser 1966). The unit-asking method is different from the identifiability victim effect, because the authors used an image in both conditions, therefore the identifiability of the children was already high. Also,

this effect is different from the foot-in-the-door effect (Freedman & Fraser, 1966), because it concerns attitudinal consistency; people keep donating money to the needy individuals because they have publicly expressed their interest in doing that. Instead, the unit-asking effect is more related to analytical consistency. This does not guarantee that they would donate 20 times more if they are presented with 20 children in need after stating how much they would donate to a single child. However, people seem to become more scope sensitive and donate more when the unit-asking method is used.

1.4.2 Bias against forced charity

Often people tend to oppose to government aid programs supported by taxes because they consider it as "forced charity". However, Baron (1997) argued that sometimes programs organized at a political level can be more efficient than direct contributions to the beneficiaries. From an economic point of view, the expected utility of a charity program is computed as the size of the possible benefits times the probability of obtaining those benefits. Depending on the helping programs, sometimes the personal contributions can be more efficient than political actions and other times it can be the opposite. In the case of personal contributions there are costs which people tend not to take in consideration, like finding the right charity cause, reaching the recipient and so on. Baron and Szymanska (2009) said that this bias might arise from a belief in freedom, which means that people would like to make themselves the decisions about helping others. For this reason they consider governmental programs as imperfect substitutes of their personal contributions, and believe that they would be better at making the right charity choices.

1.4.3 Diversification heuristic

In investment, allocating money in different companies reduces risk, and sometimes people tend to think about donations like investments. Not only, but people also attach more utility or positive affect when giving to different institutions rather than one (warm-glow

theory; Andreoni, 1990). If they donate to only one institution, they experience just once the positive effect of their good deeds, regardless from giving a big or a small amount. Furthermore, people often confound allocation wit+h maximization. In a study made by Ubel, DeKay, Baron, and Asch (1996) participants were told that "kidney transplants are more likely to succeed if they are transplanted into patients who 'match' the kidney donor, and that the number of successful transplants one year after transplant is 8/10 for patients with a complete match and 7/10 for patients with a partial match". The subjects were asked to allocate 100 available kidneys among two groups: 100 patients with a complete match (80% success rate) and 100 patients with a partial match (70% success rate). Most subjects allocated 50 kidneys to each group. Furthermore, when they were asked how they should allocate the kidneys to maximize their distribution, only 20% of the subjects gave the correct response, and even these participants showed a tendency to allocate the kidneys equally between the partial match and complete match groups.

1.4.4 Proportion dominance heuristic

Another confusing factor to the charity giving decisions might be related to the proportions of the victims saved compared to the absolute numbers of lives at risk. Slovic, Fischhoff, & Lichtenstein (1980) asked a group of participants to think about an illness that kills 100 people out of 100, and to another group to think about an illness that kills 100 people from a town, and found that they were more willing to help when the information was presented as 100/100 than 100/town. Additionally, Fetherstonhaugh and colleagues (Fetherstonhaugh, Slovic, Johnson, & Friedrich, 1997) asked participants if they were more willing to help 9,000 lives from 15,000 lives at risk compared to helping 100,000 lives from 290,000 lives at risk. From the prospect theory, the subjective value associated with saving a certain numbers of lives is bigger for a smaller tragedy compared to a big one (Kahneman & Tversky, 1979) and people are more worried when the reference group becomes smaller,

because this consist in a bigger relative loss. In the case of a single individual, the victim becomes the reference of a group composed only by him/herself, and this could make the loss more painful and therefore more important to avoid (Jenni & Loewenstein, 1997).

Furthermore, saving a small numbers of victims that belong to a wider population makes the proportion of saved lives look smaller and induce people to experience the "drop in the bucket" effect. This type of reasoning inhibits the helping behavior and induces people to think that their contribute is not sufficient compared to the severity of the humanitarian crisis, making their actions look useless (Small et al., 2007).

1.4.5 Certainty effect

According to prospect theory (Kahneman & Tversky, 1979) people give more weight to the reduction of probabilities when an outcome previously certain becomes uncertain than when an already uncertain prospect becomes even less likely. Thus 100% - 10% = 90% has more psychological impact than 90% - 10% = 80%, and the same is true in the opposite direction: going from 0% to 10% has a bigger impact than going from 10% to 20%. In the charitable giving context, it has been proposed that when people are presented with an identified victim it is possible to know for sure if there is an intervention to help the victim, instead, when information about statistical victims is presented, by definition, it can only be probabilistic. This might be an alternative explanation to why people are more sensitive to an identified victim rather than to the statistic information used to report the overall need.

1.5 Emotion regulation and charity giving

A few recent studies have shown that the lack of feelings toward a group of victims is not always a result of the use of the heuristics described above. Cameron and Payne (2011) reported that the insensitivity toward a group of victims might not depend from the collapse of compassion, but from strategies of emotion regulation aimed at preventing the possibility to experience excessive levels of negative emotions, like the pain induced from the sufferance

of many people. Emotion regulation is defined as a set of processes by which the individual modulates the emotions he/she feels, when he/she feels them, how he/she feels them, and how he/she expresses these emotions (Gross, 1998). Shaw, Batson & Todd (1994) have found that when the help is perceived as materially expensive, people actively avoid to feel emotions that can induce them to act. Furthermore, when people experience a high psychological cost (for instance, very intense feelings of compassion or concern), the situation becomes difficult to manage, and as a consequence, emotion regulation strategies become an important resource to manage an overwhelming feeling of sadness or powerlessness.

The choice of emotion regulation strategy can influence in different ways how people face and solve the conflict between the moral principle to help a person in need and the economic costs they may have to face. To test such an hypothesis, Rubaltelli and Agnoli (2012) ran a series of experiments. In the first experiment participants were presented with two or three charity giving programs (depending on the experimental condition). In the first condition a first program asked for a donation of €150 to an African women affected by HIV/AIDS, instead a second program asked for a donation of €450 to three African women affected by the same disease. In the second experimental condition participants were presented with three alternative programs, the two already described above and an additional one which was a decoy option and asked for €500 to help two African women. Results showed that in the condition with two alternatives the majority of participants chose the program with the lower cost (64%), whereas, in the condition with three alternatives, the majority of participants chose the program which helped a higher number of women (67%). In a second study the authors replicated the same results and, in addition, measured participants' emotion regulation strategies suppression and reappraisal (Gross, 1998). Results showed that in the condition with two alternatives, participants who showed a tendency to use

reappraisal were more likely chose to help three women, whereas those who showed a tendency to use suppression decided to help only one woman. In the condition with three alternatives, emotion regulation strategies did not predict the choice of the helping program. Once the decoy was provided, participants had an external justification to accept the higher cost and the majority of them choose the program that helped three women.

1.6 Summary

In this first chapter I introduced some basic notions related to judgment and decision making, from the St. Petersburg paradox (Bernoulli, 1738) to prospect theory (Kahneman & Tversky, 1979). Then I described three main heuristics (representativeness, availability, and anchoring and adjustment), with a particular focus on the anchoring and adjustment heuristic, which will be further discussed in the present work.

In order to better understand charity giving behavior is important to first comprehend why people help others. For this reason this chapter discussed the three main theoretical perspectives developed to explain altruistic behavior: the evolutionary hypothesis (Bornstein, 2002; Burnstein et al., 1994; Gouldner, 1960; Hamilton, 1964; Trivers, 1971), the pure altruism hypothesis (Batson et al., 1981; 1986; 1991), and the egoistic-altruism hypothesis (Andreoni 1990, 1995; Cialdini et al., 1987, Smith et al., 1989; Thibaut & Kelley, 1959). The first one focuses on biological factors as the main reasons motivating people to behave altruistically, the second model focus on empathy-based feelings, whereas the last one emphasizes the egoistic motives like feeling better, increasing one's self-esteem, prestige, or receiving a benefit at a following time.

Most of these theories highlight the importance of affect in charity giving and prosocial behavior in general (Andreoni, 1990; Batson et al., 1981, 1986, 1989, 1991; Cialdini et al., 1987; Thibaut & Kelley, 1959). Slovic (2007) argues that the capacity to experience affect reflects one of the fundamental mechanisms which can provide serious deficiencies in our

humanity, and most of the time this is a results of the heuristics we use while making charity giving decisions. Furthermore, the literature reveals that it is not always affect that guides our thoughts and choices toward a charity cause, but sometimes it can be the opposite: when people realize that the help needed is overwhelming they regulate their emotions based on the charity request (Cameron & Payne, 2011). Also, depending on the emotion regulation strategy (suppression vs. reappraisal) they respond differently to the same charity scenario (Rubaltelli & Agnoli, 2012).

Both anchoring heuristic and affect are important to this dissertation because participants in the present studies will be presented with a social information to which they could anchor, with a potential impact on their affective reactions as well. The next few chapters aim to explore the factors that will be manipulated in the studies described later on.

2. SOCIAL INFLUENCE

People often compare themselves with others in order to reduce uncertainty (Festinger, 1954). Many times, they accept others' responses because they do not have all the required information, but on other occasions people simply conform to others' thoughts, attitudes, or behavior in order to be accepted and liked by them (Deutsch & Gerard, 1955; Epley & Gilovich, 2006; Latané, 1981). Others influence is based on how people around us behave, what they can forgive, and someone's internal standard and sanctions for good conduct (Cialdini & Trost, 1998).

In a classical experiment of conformity, Asch (1955) showed that the influence of social pressure can be so strong to reduce subjects' trust in their own visual perception. When a group of three or more confederates were unanimously providing a clearly incorrect answer, 32% more participants gave the incorrect answer about the length of a series of lines compared to situations where there was no pressure to conform. Similarly, Darley and Latané (1968) illustrated the strength of social influence when they described the "bystander effect." In emergency situations, the bigger the number of bystanders, the smaller the probability that they will help people in need. The authors explained that, since every person is waiting for others to intervene, they infer that there is no need for help because somebody else will intervene if needed.

In most of the western countries conforming to others opinions is considered a weakness, but in fact, it can be effective and time-saving because group consensus is often the most reliable route to goal strategy (Cialdini & Trost, 1998; Festinger, 1954). Consensus indicates correctness, so whenever there are different sources that hold the same position and there are no other plausible explanations, it is an easy heuristic to assume that those sources are likely to be correct (Asch, 1955; Cialdini, 1993; Ross, Bierbrauer & Hoffman, 1976). There are also situations, like in the Asch's study where it is more convenient for participants

to hold on their opinion, but, according to Cialdini and Trost (1998), such an extreme form of conformism is not easily found out of the laboratory context. First of all, it is quite implausible that, in a similar situation, everyone beside the respondent would accept others' wrong statement regarding to the length of certain lines, and unanimity is of a crucial importance in conformism: if one of the group participants is against the group opinion the subject might think that the group opinion is not an absolute truth, so he/she might deviate from it (Cialdini & Trost, 1998). Second, social influence is less strong in private responses rather than public responses (Deutsch & Gerard, 1955), which means that for many issues people would conform less if the responses are private.

2.1 Informational vs. normative social influence

There are two main ways in which social influence exerts its effect on our behavior: a person agrees with others because he/she considers the information obtained from them as an evidence of reality (informational social influence) or because he/she wants to conform to others' positive expectations (normative social influence; Deutsch & Gerard, 1955; Goodwin, Kukucka, & Hawks, 2013; Lord, Lee, & Choong, 2001; Nolan, Schultz, Cialdini, Goldstein, & Griskevicius, 2008). Informational social influence arises from people's desire to know what is right, whereas normative social influence arises from people's need to feel accepted by others. Furthermore, informational social influence affects behavior when there are ambiguous correct answers whereas normative social influence arises even when correct answers are relatively unambiguous (Asch, 1951; Sherif, 1935). In this case, conforming to others expectations leads to feelings of self-esteem and self-approval, while non-conforming leads to feelings of anxiety or guilt (Deutsch & Gerard, 1955). These type of feelings are based on individuals prior experiences. For example, when a child conforms to his parents expectations he gains their approval, and that becomes a source of satisfaction and positive feelings. Lastly, when a task is considered important, from a subjective point of view,

informational social influence increases and normative social influence decreases (Baron, Vandello & Brunsman, 1996).

2.2 Three categories of social influence

According to Kelman (1961) there are three type of responses to social influence which are compliance, identification, and internalization. Although the changes in attitudes and actions produced by the induced behavior may appear the same, differences between them correspond to differences in the process. The determinants of the three processes can be distinguished from one another in terms of the importance of the anticipated effect, the power of the influencing agent, and the manner in which the induced response has become predominant.

When individuals conform to the expectations of another to receive a reward (or not receive a punishment), but they actually keep their distinct opinion private, it is considered as compliance. The major component of compliance is power: people are more willing to comply with someone who's higher in the social hierarchy since he/she has more power. Furthermore, people are more willing to comply when they are in a good mood (Isen, Clark, & Schwartz, 1976; George & Brief, 1992). In other situations, compliance is used to receive a favor from someone after doing something for them (reciprocity norm; Cialdini, 1993).

Identification takes place when individuals adopt a behavior from someone they like because that behavior is associated with a satisfying self-defining relationship to the other, which means that the role of that relationship between the individual and the other is beneficial to the individual self-concept (Kelman, 1961). The individual believes in the responses which he adopts through identification, but their specific content is more or less irrelevant. He adopts the induced behavior because it is associated with the desired relationship.

Finally, there is internalization when the individual is affected by social influence because others' opinions or behaviors are perceived as "inherently conducive to the maximization of his values"; that is, the content is perceived as being inherently instrumental to the attainment of his/her goals (Kelman, 1961, p. 65). The individual accepts the induced behavior because it is congruent with his value system and tend to be integrated with the individual's existing values. Credibility of the source is of a particular importance here.

In an attempt to connect these notions to the type of social influence described by Deutsch and Gerard (1955), we can relate informational social influence to a process that leads to enhancing individual knowledge. This means that the individual would make others knowledge his own, therefore internalizing it. Instead normative influence could be the result of either a process of compliance or identification. If the individual is interested to gain a reward or avoid a punishment the normative influence is more likely to take the shape of compliance. However, if the individual wants to enhance his self-esteem and he is expected to associate himself with a positive referent for that, the normative influence is more likely to take the shape of identification.

2.3 Social impact theory

Latané (1981) created a mathematical model which explains conformity based on number, strength, and immediacy of other people in the group. According to his research, when people are exposed to informational social influence, as the number of the people in the group increases each additional individual becomes less powerful at influencing others. Latané (1981) explained that in this case, the impact grows in approximate proportion to the square root of the number of people involved. On the contrary, when people are exposed to normative social influence the group size matters: the larger the group, the stronger the pressure to conform.

The strength of the group depends on how important the group is to individuals. The more meaningful the group is to someone, more likely people are to conform to it (Aronson, Wilson & Akert, 2007). Because of this, the strength of the influence depends mainly from the characteristics of the individuals who are the sources of influence. For example, in a working environment, a co-worker has less influence on someone than the supervisor. Furthermore, normative social influence is stronger when there is agreement among the group members.

Immediacy indicates that social influence depends on the type of relationship between the source of influence and the target. Factors like clarity of the communication channels, the lack of barriers, and most importantly, closeness in space make the social influence more immediate (Latané, 1996). For example, it is easier to receive a suggestion from a roommate rather than someone who is talking on the television. Latané (1996) clarified that if other factors are held constant, influence is proportional to the immediacy of the source of influence.

Social impact theory suggests that the greatest level of influence occurs when there are several people in close proximity and there is high group strength. In addition, this theory reveals that social presence is an inverse function of the number of targets, proximity and group strength. Latané (1996) also showed how being influenced by nearby rather than faraway people gives rise to local patters and creates subcultures. Based on a computer simulation designed to conduct a dynamic simulation of social influence the author showed how complex systems exhibit four forms of self-organization: clustering, correlation, consolidation, and continuing diversity.

2.4 Cialdini's "Weapons of influence"

Later on, Cialdini and Goldstein (2004) outlined three core motivations that determine individual's susceptibility to social influence: 1) accuracy, which describes peoples' desire to

perceive accurately the reality in order to achieve effectively their goals, 2) affiliation, which relates to the peoples' desire to be part of a social group, and 3) maintenance of a positive self-concept related to the positive image of oneself. Based on these motivations Cialdini (1984) defined six principles which he considers as "weapons of influence". Some of them are more related to informational social influence, instead others are more related to normative social influence; under certain circumstances they are considered as compliance, but people can also identify with the source of information and internalize the information; and lastly, the number of people of the influence source, its strength and immediacy can be applied to the use of all these principles in different measures.

a) *Reciprocity*: in many societies people are taught to return the favors they receive from others. Based on the reciprocity principle, people feel obligated to do so, otherwise they would feel indebted. For example, if someone offers to give you a ride, and the next time he/she asks you the same type of favor, most probably you would feel bad if you do not respond positively to this request. Garner (2005) sent to one-third of participants some surveys with a hand-written sticky note requesting completion, one-third with a blank sticky note, and one-third without a sticky note. The response rate to the survey was 69% of those who received a hand-written sticky, 43% of those who received a blank sticky note, and 34% of those who did not receive a sticky note with their survey.

b) *Commitment and consistency*: Cialdini (1984) explains that once a person takes a decision, he/she prefers to be consistent with it. For some reason people have this interior desire for consistency; they associate consistency with strength and inconsistency with weakness. For example, if someone starts supporting a charity project, he/she is more inclined to keep supporting it rather than change, because that would probably mean that he/she did not make the right choice previously. Obviously, public commitments have a much higher chance of inducing people to behave in a consistent way than private ones.

c) *Social proof*: when people are not sure what is the best thing to do, they are more likely to conform to what others do. This principle is particularly related to the concept of informational social influence. Goldstein, Cialdini, and Griskevicius (2008) ran an experiment to see which type of signs would have most encourage Arizona hotel visitors to reuse towels. The percentage of those who reused towels was higher when it was printed on signs positioned on washroom towel racks "Join your fellow guests in helping to save the environment. Almost 75% of guests who are asked to participate in our new resource saving program do help by using their towels more than once." (44%) then when it was written "Help save the environment. You can show your respect for nature and help save the environment by reusing your towels during your stay." (35%).

d) *Liking*: people are more willing to accept something if they like the person who is advocating a particular stance. It can be someone who is similar to them or whom they are physically attracted. This principle is mostly related to how our emotions work. According to another study by Garner (2005) those who received a survey from someone with a similar-sounding name were nearly twice as likely to fill out and return a packet as those who received the surveys from dissimilar sounding names (56% compared to 30%), and previous research has found that similarity is strongly related to liking (Amodio & Showers, 2005).

e) *Authority*: authoritarian figures have a strong influence on peoples' decisions. Professional uniforms (e.g., a doctor's overall), job titles, or even accessories like cars can have an effect on peoples' behaviors. Apparently, many of us are more likely to believe something when it is reported by individuals who have some kind of authority or expertise. A classic experiment that evidences this principle is the one of Milgram in 1974. Two-third of participants in Milgram's study inflicted a full dose of 450 volts to some "victims" (which were actors in reality) because they were receiving instructions by people dressed in white lab coats which emphasized their high authority.

f) *Scarcity*: this principle describes that people are more attracted to something when its availability is limited. For example, in 1985, the Coca-Cola Company created a new formula called "New Coke". Their taste tests indicated that the people preferred more the new Coke than the old one. Later, when the company replaced the old Coke with the new Coke the first one became peoples' favorite, because they could not have it anymore (Mowen, 1988).

Nevertheless, these principles do not always work similarly but they depend from the nature of the influence attempt (whether it is interactive or static), the amount of prior exposure between the influence agent and target, and whether the influence agent is perceived as a member of the target's ingroup (Guadagno & Cialdini, 2005).

2.5 Minority influence

So far we have been talking about social influence, implicitly meaning that it depends on the actions of a majority. However, societies mentality changes over time and new ideas often reflect the rise of a minority viewpoint, which eventually the rest of the group accepts later. The influence of a larger group on a smaller one is defined as majority influence, but a minority can influence a larger group, too. Minority influence is usually based on informational social influence (Wood, Lundgren, Ouellette, Busceme, & Blackstone, 1994). Past studies have also shown that exposure to minority views stimulates divergent and original thinking (Nemeth & Kwan, 1985). This because majority views make individuals feel much more stress than minority views and, as a consequence, induce individuals to give more conventional responses and inhibit the original ones.

According to Moscovici (1980) minority influence is stronger if the opinions of the minority members are consistent, confident, unbiased, and resist to social pressure. He considers consistency the most important factor and underlines two types of it: consistency over time, which means that opinions should not change over time, and consistency between members, which means that all members in the minority share similar opinions. Furthermore,

minorities have good chances to influence the majority if they induce majorities to think more analytically about an argument; if they are seen as more cooperative and reasonable; if they are flexible and try to consider others point of view; and if majorities identify more with minority's members (McLeod, Baron, Marti, & Yoon, 1997; Smith, Tindale, & Dugoni, 1996).

Conversion theory (Moscovici, 1980) says that when minorities judgments show that they have a clear view of reality, they are committed to this view, and they are unwilling to compromise with respect to their position, it creates a conflict between the source and the target of influence. This conflict is intensified when there is no easy way to reject it and, if someone encounters a minority with a different viewpoint from their own, they are motivated to reduce this conflict. Differently from majorities processes, minorities opinions go through a validation process and a careful examination of their arguments because they break the unanimity of the majority. Only in this way, the minority point of views can capture the attention of a majority. Finally, trying to understand what the minority believes, the majority starts believing in the same things.

2.6 Culture, social influence, and prosocial behavior

There have been over 20 cross-cultural studies of conformity using Asch's experimental design. To some extent, culture seems to have an impact in social behavior (Milgram, 1963). In particular, moral issues are usually under the influence of the culture to which individuals belong because they do not have universally consistent norms (Hofstede, 1991). Ferrell, Gresham, and Fraedrich (1989) demonstrated that the social and cultural environment affects moral perception, moral evaluation, moral judgment, moral intention, and moral behavior. According to Hofstede (1984) there are four major cultural dimensions that establish peoples' values and behavior: individualism, power distance, masculinity, and uncertainty-avoidance.

The first dimension, individualism-collectivism describes the difference between individualistic societies where people are primary concerned with their own interest and their immediate family, and collectivist societies in which people believe that individuals belong to many "in-groups" (extended family and different organizations) that help protecting the interest of their members (Hofstede, 1984). People in individualist cultures are susceptible to loneliness, and people in collectivist cultures can have a strong fear of rejection. The fear of rejection might determine the fact that collectivist countries tend to show higher levels of conformity than individualist countries (Bond & Smith, 1996). Besides this, individualistic countries emphasize the desirability of individuals to be responsible for their own well-being and have a sense of personal identity. Regarding to the connection of this dimension with prosocial behavior, Kemmelmeier, Jambor, and Letner, (2006) found that giving is more common in individualistic rather than collectivistic societies.

The second dimension of a culture, which is power distance, is related to the extent to which the less powerful individuals in a society accept inequality in power and consider it as normal. Arabic-speaking nations, most of Latin America (except Argentina), Russia, and nearly all of Asia are high in power distance, instead most of Europe, Canada, Australia and Israel are low in power distance. Japan and Mediterranean-Europe fall in the middle range. Hofstede (1984) found that the power-distance index is positively correlated with conformity. Brammer & Pavelin (2005) argued that a country like US where power-distance is low, and individualism is high, represents a good combination for charity contributions. Such a combination promotes a greater tendency for social issues to be addressed through individual contributions, rather than collective actions like governmental taxes.

The third dimension, masculinity, is considered by Hofstede (1984) as the expectation of a society for men to be assertive, ambitious, competitive, materialistic, and powerful. On the contrary, women are expected to serve, care for children, and focus on relationships.

Feminine cultures accept an overlap between these two roles for both sexes. This dimension of society makes easier to understand the results described by Nelson, Brunel, Supphellen, and Manchanda (2006) who found that men in masculine cultures preferred the egoistic motives to help and women preferred the altruistic motives to help, whereas, in feminine cultures, it was the opposite. Furthermore, given that more masculine societies place greater value on men achievements, and their motivation is related to innovativeness and assertive acquisition of money and power, conformity is lower for them, particularly under the surveillance of others, because in this situation others can make a judgment about their masculinity based on the society prototype (Eagly, Wood, & Fishbaugh, 1981).

Finally, the uncertainty-avoidance dimension is explained as a difficulty that certain cultures have to accept the absence of structure, rules, and predictability of events. These cultures are emotional, aggressive, security-seeking, and try to adopt beliefs of absolute truth. Higher levels of uncertainty make people less willing to try new experiences, and, as a result, more prone to conformity (Jankowicz, 1994). Also, higher levels of uncertainty-avoidance suggest a lower human orientation and compassion. Brodbeck, Frese and Javidan (2002) have found that the German culture, which shows high level of uncertainty-avoidance, believes to sayings like "tough on the issue, tough on the person", which means that in this culture to be successful, reach goals and avoid risk, people retain appropriate to avoid sensibility toward other's needs.

An important point to discuss here is how the culture can influence the sensibility toward others need and the moral behavior of its members. Early behaviorists suggested that children can learn prosocial behavior through conditioning. Hartmann et al., (1976) found that reinforcement and punishment can promote prosocial behavior and Aronfreed (1970) found the same results in relation to empathy. Additionally, Bandura (1986) claimed that people can learn to behave morally through observation and verbal communication. Children

usually imitate their parents or other important people in their life, and adults imitate friends or people they admire. Furthermore, Bandura (1986) said that people learn by experience which factors are morally relevant and how much value to attach to each of them. Some recent studies argue that people can be encouraged to be prosocial since a very early age (0-3 years old; McMullen et al, 2009). Finally, Krebs (1970) described that providing 'models' (e.g. a celebrity seen to be offering support) can also influence contributions by leading to the creation of social norms thereby legitimizing and encouraging giving behavior.

2.7 Social influence in charity giving

Different theories have been proposed in the charitable-giving context to explain the relationship between others' contributions and an individual's own contribution (Shang & Croson, 2009). On the one hand, substitute models state that, as the contributions of others increase, one's own contribution should decrease (Andreoni, 1990; Becker, 1974; Roberts, 1984; Warr, 1982). On the other hand, complement models state that individuals use the contributions of others as an indicator of the appropriate contribution. Therefore, if others donations increase, these "observers" should give more, too (Bernheim, 1994; Croson, 2007; Shang & Croson, 2009; Sugden, 1984; Vesterlund, 2003). In substitute models, individuals use others' contributions as a guide to maximize the equality between private and public goods, while in complement models they use others' contributions as a reference point to understand how to behave when the proper action is unclear.

On this latter point, Desmet and Feinberg (2003) specified that the relation between what one asks for (the donation appeal) and what one receives is difficult to anticipate. Furthermore, the amount of money that people decide to donate when presented with a charitable-giving request is established by both internal and external resources. Internal resources are what someone knows by herself (i.e., if they have previous donation experiences how well their money was managed, how much the donation helped to change

the situation, how grateful the receiver was), whereas external resources are what someone is told about a certain charitable-giving situation (Sherif, Taub, & Hovland, 1958). People usually do not ignore external resources, since they can be instrumental in judging the appropriate donation amount, particularly when the situation is ambiguous (Crutchfield, 1955).

In addition, people are influenced the most about the amount of money they decide to donate when they believe others' judgments are valid and reliable (Abrams, Wetherell, Cochrane, Hogg, & Turner, 2011; Cason & Mui, 1998). If the request is too high, people may perceive the proposed donation amount as unfair or excessive, and compliance rates will decrease (Weyant and Smith, 1987). Several authors suggested that legitimizing really small contributions can improve compliance in face-to-face forms of solicitation (Reingen, 1978; Shearman & Yoo, 2007; Weyant, 1984), meanwhile Weyant and Smith (1987) concluded that this approach is less effective in other less personal forms of fundraising. If the anchor is low, refusing to help may be perceived as socially embarrassing (Briers, Pandelaere, & Warlop, 2007). Fraser, Hite and Sauer (1988) found that solicitors can improve responses to charity giving by either making a moderately large, but believable, anchorpoint request or by adding a phrase to legitimize paltry increases response magnitudes. The first increases the size of response, and the second increases the rate of compliance.

2.8 Summary

People are influenced by others because they want to be liked and accepted by them, or because they do not have the required information about a certain topic (Deutsch & Gerard, 1955; Epley & Gilovich, 2006; Latané, 1981). Kelman (1961) suggested that the importance of the anticipated effect, the power of the influencing agent, and the manner in which the induced response has become predominant defines three different types of social influence which are compliance, identification and internalization. Furthermore, Latané (1981) created

a mathematical model which allows to calculate the social influence based on the number of influence sources, their strength, and immediacy (the type of relationship between the source and the target of influence). Cialdini (2003) combines all these theoretical foundations to create six practical principles of influence, which he defines as "weapons of influence".

Social influence can be created by a majority or a minority group, and culture is strongly connected to it (Ferrell et al., 1989; Hofstede, 1991; Milgram, 1963). Two main models of social influence in charity giving have been proposed so far: substitute models and complement models (Andreoni, 1990; Becker, 1974; Bernheim, 1994; Croson, 2007; Roberts, 1984; Shang & Croson, 2009; Sugden, 1984; Vesterlund, 2003; Warr, 1982). The first ones state that people usually tend to match others' donation about a charity cause, instead complement models state the opposite: people should donate less if others are already giving and donate more if others are not yet donating. The present dissertation aims to test which of these models prevails. Participants could have been influenced by others because they were not sure about their own opinion, or because they liked the reference group, but the most important thing is to understand if participants will follow the same direction of others opinions, and if yes, to what extent.

3. GROUP BELONGNINGNESS

3.1 Group development

A group is defined as two or more people who interact with each-other, have a common goal and collectively have a sense of unity (Tajfel & Turner, 1979). Groups are formed based on social needs, security needs, esteem needs, proximity, attraction, or economic benefits (Crockenberg, 1981; Festinger, 1954; Frederickson & Turner, 2003; Granovetter, 2005; Hogg, 1992). According to Tuckman (1965) the process of a group formation goes through four main steps which will be described below. Each step builds on the previous one and prepares for the performing stage and skipping any of these steps effects performing negatively.

1. In the first step, called forming, group members get to know each-other and there is no trust yet. Team members typically wonder how they fit into the group and what kind of expectations are expected of them because of their membership in the group (Maples, 1988). Many group members experience dependence on each other and have uncertainties about the driving motivations for the change (Fall & Wejnert, 2005). In this stage individuals are starting to collect information and impressions, and they also are interested to be accepted by others. Group members avoid serious issues and first impressions are decisive.
2. In the second stage, called storming, confusion and frustration are at the highest level, because the group starts to actually face the problems it is supposed to solve (Fall & Wejnert, 2005). This is a really delicate stage because in case group members do not show tolerance there is a high risk for the group to fail. However, it is a prerequisite for the subsequent development of a stronger cohesion and cooperation (Tuckman & Jensen, 1977). In some groups storming can finish quickly, but in others it can last forever. Group members start to identify their

resources, express their different ideas, feelings, and opinions, and improve communication skills and how to react to leadership. Roles and responsibilities are articulated, problem solving does not work well yet, competition is high because people push for position and power and team spirit is still not very strong.

3. At the third stage, norming, the group finally finds an agreement about a common plan. Tasks are divided within group members, and they share vision, values, goals, and expectations. Decisions are made through negotiation and consensus building, the team has all the resources for reaching the goals, team confidence is high, leaders reinforce team behavior, and the team gains commitment from all members on direction and goals. Because group members are so open to one another, this becomes a problem-solving stage (Bonebright, 2010)
4. In the last stage, named performing, roles are specific, goals are clear, and results are noted. Team members are now motivated and competent to carry out their role (Tuckman & Jensen, 1977). Members work collaboratively, care about each-other, a unique identity is established, and members are interdependent. The team feels very motivated, is very efficient, individuals take pleasure in the success of the team, and there is high trust in other group members.

Group processes and outcomes depend on many constructs like the group composition (Bell, 2007), hierarchy within the group (Halevy, Chou, & Galinsky, 2011), group size (Ingham, Levinger, Graves, & Peckham, 1974), roles (Leavitt, 1951), and group norms (Douglas & McGarty 2001). However, the construct which has more attracted researchers interest over several years is group cohesiveness (Festinger, Schachter, & Back, 1950; Hogg, 1992; Jung & Sosik, 2002; Martens & Peterson, 1971; Mullen & Copper, 1994). Festinger and colleagues (Festinger et al., 1950) described group cohesion as "the total field of forces which act on members to remain in the group." (p. 164). The group cohesiveness theory

(Festinger et al., 1950) predicts that people who invest in their group will become committed to it and seek for information that defend their commitment till they resolve the discomfort. Cohesiveness is enhanced by the sense of belongingness in a group, when there is a special kind of attraction between members, and when there is a sense of responsibility to the group effort. A cohesive work environment increases the likelihood of employee satisfaction and lack of cohesion is certain to result in unnecessary stress and tension among the group members.

Later on, Hogg (1992) developed the self-categorization theory. According to his theory group identification triggers a de-individuated state in which group members reference their attitudes and behaviors to the prototypical norms that are most characteristic of the group. Group members bring their attitudes and behaviors into conformity with their ingroup prototypes and, thus, generate the positive attitudinal consensus and behavioral uniformity that are indicative of cohesive groups. Interpersonal interactions are not theoretically central in the mechanism that Hogg (1992) describes.

3.1.1 Why people form social groups

Tuckman (1965) specified that the main reason why people join groups is to reach their goals, and this is particularly true for formal groups. Goal-setting theory suggests that goals are associated with enhanced performance because they mobilize effort, direct attention, and encourage persistence and strategy development (Locke & Latham, 1990). Locke and Latham (1990) found that specific and difficult goals led to better task performance than vague or easy goals. Further, to ensure a progress is achieved it is important that participants in a group with a common goal are clearly aware of what is expected from them.

In a classic experiment called Robert Cave study (Sherif, Harvey, White, Hood, & Sherif, 1961) the experimenters divided in two groups some 12 year old boys who registered in a summer camp. Initially groups were kept apart for one week. In the second week the

experimenters introduced some competitive activities between them like baseball and touch-football. Until the third week, there was genuine hostility between these two groups. In the third week, the experimenters arranged intergroup contact under noncompetitive conditions and noticed that this mere contact was not sufficient to change the relations between the two groups, but only when a new common goal was established attitudes changed and became positive. The main result of this study was that superordinate goals were able to bring together the group more than any other technique tried by the experimenter before that.

Other authors emphasized that the most important reason driving people's decision to become part of a group (particularly an informal one) is related to their need for affiliation, social comparison, and self-esteem (Baumeister & Leary, 1995; Schachter, 1959). The need to belong is one of the fundamental human motivation and it effects emotional and cognitive well-being (Epstein, 1992; Maslow, 1968). Ostrom, Carpenter, Sedikides, and Li (1993) found that information about ingroup is processed based on the personal attributes, instead information about the outgroup is processed based on group attributes. Consistently, Tice, Butler, Muraven, and Stillwell (1995) found that when people interact with friends (vs. strangers) they change the way they present information about themselves: with close friends people are more modest and tend to be more original, instead with strangers they rely on self-enhancement. According to several studies, people with high levels of intimacy motivation tend to enjoy higher levels of happiness and subjective well-being and, on the contrary, exclusion from social groups may provoke anxiety (Baard, Deci, & Ryan, 2004; Barden, Garber, Leiman, Ford, & Masters, 1985; McAdams & Bryant, 1987; Ryan & Deci, 2000).

Furthermore, Turner, Sachdev, and Hogg (1983) emphasize social attraction as another important component of group formation, and recently, the attention is moving toward the economic benefits of group formation (Granovetter, 2005; Heckman, Stixrud, & Urzua, 2006; Pretty, 2003).

3.1.2 Formal vs. informal groups

Groups can be broadly classified in two types: formal and informal (Axelrod, 1956; Deaux, Reid, Mizrahi, & Ethier, 1995; Schein, 1965). The first ones have a structure, well-defined tasks, and they are created consciously and deliberately. When objectives are fulfilled these groups disappear. Instead, informal groups are based on interest and friendship, they do not have explicit regulations, and they are mostly created spontaneously, without a conscious analysis. Formal groups tend to be much larger in size compared to informal groups. Also, formal groups have a formal structure, instead in informal groups everyone is more or less equal. Finally, communication in formal groups is prescribed through certain channels, instead for informal groups there are many informal channels to communicate between group members. A study by Sheldon and Bettencourt (2002) found that members of formal groups felt less personal autonomy, but more group distinctiveness, compared to informal group members. Furthermore, groups in which everyone is connected to everyone else through informal socializing outside of a formal organization are expected to have more bounded solidarity, stronger reciprocity norms, and greater trust (Burt, 2000; Coleman, 1990).

3.2 Group influence on individuals behavior

As mentioned before, individuals become part of a group for many reasons like esteem needs, proximity, attraction, economic benefits, or to reach different type of goals. Most of the times groups are really useful to help people reach these goals, but other times, group dynamics lead to some unexpected phenomena that oblige the group members to confront with new issues in addition the main ones that actually represent the real motive of the group existence. Similar phenomena are social facilitation and social loafing.

3.2.1 Social facilitation

Others presence can be a great stimulus to improve the performance of an individual (Zajonc, 1965). Previous studies have found that increased population intensity is associated

with adrenocortical activity and endocrine manifestation, which in turn is associated with the arousal enhancement (Leiderman & Shapiro, 1964; Selye, 1946). For example, Triplett (1898) showed how cyclists produced faster times when performing in pairs than when alone. Allport (1924) revealed that only when the task was simple, the performance was best in front of others. Similarly, Zajonc and colleagues (Zajonc, Heingartner, & Herman, 1969) found that simple mazes were completed faster when in the presence of other animals while complex mazes were done better when alone. According to Zajonc (1965), the dominant response, which is defined as the most common response in a certain situation, is more emphasized in the presence of others. When the dominant response is generally correct the performance improves, but when the dominant response is generally incorrect (during learning usually) it can negatively impact the performance.

Duval and Wicklund (1972) offered a different explanation related to the others' presence and self-awareness. They proposed that when in front of other people, the immediate response is to focus on oneself. This motivates people to compare how he or she would perform ideally with how they actually perform. If there is a significant difference between the ideal and reality, the subject tries various means of correcting his behavior (providing the correct response). However, the positive effect that the presence of others' can have on someone's performance is limited to easy tasks. Complex tasks require learning and searching for an appropriate behavior, and this distracts from the learning process leading to performance decrements. Subsequent studies have demonstrated that mechanical recordings like videotaping or mirrors can increase evaluation apprehension and self-awareness, causing this way a similar effect to the presence of an audience (Constantinou, Ashendorf, & McCaffrey, 2002; Gelso & McKenzie, 1973).

Finally, Baron (1986) suggested that the presence of others leads to increased cognitive load which limits the attentional focus on task-relevant stimuli characteristics. Again,

performance increases in simple tasks, and decreases in complex tasks because in the latter the presence of other people is a distractor and individuals cannot manage all the information to which they are presented.

3.2.2 Social loafing

In 1913, Ringelmann found for the first time that members of a group reduce their performance when contributions are pooled with the other group members. In his first experiment, Ringelmann (1913) showed that a group of men did not pull as hard the rope when they were in a group compared to when they were alone. However, this experiment could not identify if this result was because individuals put less effort or because they could not coordinate easily in a group. Only about 60 years later, Ingham and colleagues (Ingham et al., 1974) could demonstrate that social loafing was caused by the first rather than the second explanation. One of the main causes of this effect is considered to be the concept of de-individualization, which is a person's loss of its sense of individuality and the reduction of normal constraints against deviant behavior. Johnson and Downing (1979) found that the effect of group behaviors depends on the specific context. Participants who dressed in Ku Klux Klan robes shocked a research confederate more, but participants who dressed as nurses actually shocked less regardless of whether they were identifiable or anonymous. The authors explained these results as a product of contextual cues, namely the costumes. In general, social loafing is less likely to occur when: individuals find the task important or meaningful; believe that their own efforts are necessary for a successful outcome; the group is cohesive; people believe that their own performances can be identified and evaluated by themselves or by others (Forsyth, 2009; Karau & Williams, 1993; Kerr & Bruun, 1983).

According to Robbins (1995) there might also be another explanation to the reason why people decide to put less effort when they are doing a group performance: individuals do not want to be the only ones who puts effort on a task, so they wait to see how much effort others

are putting in the task before they start doing the same. Furthermore, if group members feel that other members are not doing enough they will lower their effort, in order to match what others are doing (Jackson & Harking, 1985). Going back to the difference between complement and substitute models described above, this explanation is in line with the former since it entails the decision by individuals to donate a similar sum as other members of their group. On the contrary, substitute models would predict a differentiation between what individuals and their group fellows do (individuals should donate less when they know that others have already given money to the same charitable cause).

Based on this literature, to avoid social loafing it would be useful to increase the identifiability of group members giving to each of them a particular task, underlining the importance of their task, give to individuals the opportunity to choose their own task, and make group members believe that their effort is important for a successful performance.

3.3 Intergroup relations

Intergroup relations refer to the way in which people in groups perceive, think about, feel about, and act toward people in other groups (Hogg, 2003). Conflictual relations between groups can vary from some friendly rivalry to deep hate and violent conflict. Some early studies hypothesized if there might be an authoritarian personality syndrome related to aggressive attitude toward the other groups (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Titus & Hollander, 1957). Adorno and collaborators (1950) suggested that emotional manipulative experiences during childhood may provoke this syndrome. On the other hand Pettigrew (1958) concluded that prejudice and intergroup relations are not a result of the personality, but of the society where the individual is grown, which legitimizes prejudice. Further, a more recent theory (social dominance theory; Pratto, Sidanius, Stallworth, & Malle, 1994) described that there might be an individual difference related to how people accept or reject societal ideologies.

A second stream of research explained intergroup behavior based on the goal relations between groups (Blake & Mouton, 1961; Fisher, 2006; Sherif et al., 1961). As described above in the Robert Cave study, when groups have a conflictual goal between them they have higher chances to become rivals, but when a common goal is activated, the conflicts between groups disappear, and a new common group emerges.

An important consequence of group differences is inter-group bias, which is a systematic tendency to evaluate one's own membership group more favorably than a non-membership group (the outgroup). This bias brings consequences in the cognition (stereotyping), attitude (prejudice), and behavior (discrimination). Most of the time, individuals develop automatic category representations of their own group and outgroups. These representations are characterized by abstract features, assumed to be true from the group as a whole, and are also known as group stereotypes (Fiske & Taylor, 1991; Hamilton & Sherman, 1996). Stereotypes are a basic component of prejudice and ingroup bias, where people tends to favor members of one's group over members of other groups. Furthermore, stereotypes contribute to the ultimate attribution error: good acts are attributed to a disposition if performed by ingroup members and to situational factors if performed by outgroup members, whereas the opposite holds for bad acts (Hewstone & Ward, 1985).

Intergroup relations are almost always associated with differential status, resources, power, prestige, and so forth (Hogg, 2003). Dominant groups have a good experience from this, but small minority groups can carry a stigma which has bad consequences on their self-concept. Stigmatized individuals possess some attributes which are devalued in specific social contexts (Crocker, Major, & Steele, 1998). Because these groups know the negative stereotypes that other groups have toward them, they experience stereotype threat, which makes them worried about specific important tasks, and in turn, impairs the performance and confirms the stereotype (Steele & Aronson, 1995). Stigmatized individuals are vulnerable to

low self-esteem, have a sense of reduced efficacy, diminished life satisfaction, and in some extreme cases they suffer from depression (Jost & Kramer, 2003).

In order to overcome intergroup relation problems it was created a contact hypothesis which describes that close and pleasant intergroup contact can help build social harmony (Allport, 1954; Cook, 1985; Hewstone & Brown, 1986). Although stereotypes can stimulate anxiety during intergroup contact (Stephan & Stephan, 1985) encouraging people to decategorize themselves can reduce ingroup discrimination (Gaertner, Dovidio, Anastasio, Bachman, & Rust, 1993). However, intergroup contact is a difficult situation to manage, and should happen under a number of specific conditions like lower anxiety and increased perspective taking (Islam & Hewstone, 1993).

3.4 The influence of ingroup and outgroup on people's opinions

Public good experiments show that individual contribution varies with the mean contribution of the group (e.g. Keser & van Winden, 2000; Sutter & Weck-Hannemann, 2003). People have a natural tendency to feel part of social groups and to categorize other individuals as either members of these groups or of an outgroup. Such categorization has important implications for decisions related to social issues and can be activated with rather subtle and arbitrary manipulations (Tajfel, Billig, Bundy, & Flame, 2006). Ingroup members have a stronger influence than outgroup members (Barnum & Markovsky, 2007; Tajfel & Turner, 1979). They are likely to be perceived as more trustworthy and are judged more positively than outgroup members (Dovidio, Gaertner, Kawakami, & Hodson, 2002; Hewstone, Rubin, & Willis, 2002). Furthermore, individuals process arguments that are part of a discussion among people belonging to the ingroup more carefully than arguments proposed in a discussion among outgroup members (Mackie, Gastardo-Conaco, & Skelly, 1992), perceive more beliefs in common with an ingroup member rather than an outgroup

member (Brown, 1984; Brown & Abrams, 1986) and have a better memory for positive information about individuals that belong to their group (Howard & Rothbart, 1980).

Moreover, Abrams et al. (2011) suggested that feeling like part of an ingroup helps when people want to obtain approval because they know what other members expect from them. Social identity theory explains that people develop a bias which favors their own group because they want to maintain positive self-esteem (Tajfel & Turner, 1979). Furthermore, people choose ingroups that maximize their positive social identity (Tajfel, 1978). Tajfel and Turner (1979) identified three main processes to describe their theory: 1. Categorization, in which the individual builds belongingness categories based on different factors, like gender, social position, and nationality, that maximize the similarities between people inside a category and the differences from people outside these categories. 2. Identification, in which belonging to a category or group provides a psychological base for people's social identity. 3. Social comparison, in which the individual constantly compares the ingroup to the outgroup, and considers the first one superior to the second. This last process indicates that it is more likely for individuals to be influenced by ingroup, rather than outgroup, behaviors. In particular, in the domain of prosocial behavior, a person can be judged negatively for not helping, but can also find justifications to explain his or her behavior. In other words, it should be easier to ignore the social pressure when the source is the outgroup and less easy to ignore the behaviors of other members of the ingroup, whose judgment generally has a stronger impact on a person's self-identity.

Schervish & Havens (1997) claimed that moral decisions are rooted in the communities to which the individual is associated, like family, extended family, friends, associates, and different type of community groups. Usually, these are the communities that individuals directly benefit as well, so they are motivated to look at their actions and understand which is the most suitable action in a specific moral situation. This is consistent with the warm-glow

theory (Andreoni, 1990) which shows how important is other people's presence when individuals are interested to make a good impression to them, to earn prestige, social approval, and recognition.

3.5 Helping an ingroup vs. outgroup individual

When collective identities are salient, categorization becomes the most important source for evaluating others (Brewer & Gardner, 1996). Brewer and Gardner (1996) activated the sense of "we"-ness in a group of participants, instead of "they" or "it" in two other groups of participants and found that the first group felt greater closeness and responsibility, and the emotional response toward others distress was higher. Furthermore, Dovidio, Gaertner, Validzic, Motoka, Johnson, & Frazier (1997) found that recategorization reduced intergroup bias in evaluations, self-disclosure, and helping. People help more those who are similar to themselves and common group membership with a victim will increase the likelihood of helping in an emergency settings (Dovidio et al., 1997).

Keser and van Winden (2000) created two different experimental conditions in which the first one (partners condition) the same subjects were playing a repeated public good game, and in the other condition (strangers condition) participants played the game changing group formations. The authors found that subjects in the partners condition contributed from the first part of the game significantly more to the public good than subjects in the strangers condition and that subject in the strangers condition showed a continual decay, while those in the partners conditions oscillated on a high level until the final parts of the game where they decreased the contributions. Keser and van Winden (2000) explained that this results were due to conditional cooperation which is characterized by two aspects, future oriented behavior and reactive behavior. The first one is dependent on the subjects' perception of future interaction. The tendency to cooperate is greater when subjects anticipate prolonged

interaction with subjects of a group. And the second one is based on the reciprocity principle: someone's behavior refers to the average behavior to the group member previously.

Consistent with these findings, Kogut and Ritov (2011) found that the identifiability effect leads to different results for in-groups and out-groups depending on the presence or absence of a conflict between the two groups. In rival groups, an unidentified ingroup member is helped more than an identified one, while an unidentified outgroup member is helped less than an identified one. However, for non-rival groups an identified ingroup member is helped more than an unidentified one, while an identified outgroup member is helped less than an unidentified one.

3.6 Summary

In the third chapter I initially described some basic concepts related to group formation, the four steps identified by Tuckman (1965), the two types of social groups (formal vs. informal), and the main reasons why people form social groups. Afterwards, it was shown that a social group can have different influences on individuals' performance, like social facilitation and social loafing. Social facilitation is related to a better performance in presence of others (Allport, 1924; Baron, 1986; Duval & Wicklund, 1972; Triplett, 1898; Zajonc, 1965), instead social loafing is related to a worse performance when working together with a group (Ingham et al., 1974; Johnson & Downing, 1979: Ringelmann, 1913; Robbins, 1995).

Furthermore, I explained some important processes like intergroup relations, the influence of an ingroup vs. an outgroup member on someone's opinions, and prosocial behavior toward an ingroup vs. an outgroup individual. The need to belong to a social group develops an ingroup bias and makes individuals more influenced by the ingroup opinion rather than outgroup opinion.

4. PURPOSE AND OUTLINE

In the present dissertation I examined how the use of anchors influences charity giving behavior. The anchors selected in the current studies are not just irrelevant numbers, but they indicate the average donation of a group of people. Therefore, anchoring is applied in a way that exploits two additional effect from social psychology and decision-making: social influence and group belongingness. Previous research has shown that the way others influence our charity giving behaviors is categorized in two main models, which are substitute and complement models (Andreoni, 1990; Becker, 1974; Bernheim, 1994; Croson, 2007; Roberts, 1984; Shang & Croson, 2009; Sugden, 1984; Vesterlund, 2003; Warr, 1982). Substitute models describe that when others contributions increase, someone's own contribution decreases, instead complement models claim that when others contributions increase, someone's own contribution increases as well. Furthermore, the literature shows that the influence from ingroup members is stronger than the influence exerted by outgroup members (Barnum & Markovsky, 2007; Howard & Rothbart, 1980; Mackie et al., 1992; Tajfel & Turner, 1979), and people are more willing to help ingroup members rather than outgroup members (Dovidio et al., 1997; Keser & van Winden, 2000; Kogut & Ritov, 2007, Ritov & Kogut, 2011).

The present dissertation aims to clarify which of the two models (substitute vs. complement) explains better charity behavior, how anchors related to the charity behavior of ingroup vs. outgroup members produce a different influence on donors, how does the victim's group belongingness influence donations decisions, and how affective reactions are influenced by the presence of these anchors.

Even though affective reactions are recognized as the key indicator of prosocial behavior (Batson, 1991, Kogut & Ritov, 2005a, 2005b; Slovic, 2007), there is no research that describes what happens when social information is presented together with the charity

cause. For many reasons (to compare oneself with others, to be liked, to get useful information, etc.) social information could be particularly important in prosocial behavior, but in the present thesis I am in particular interested to test if this information impairs the affective reactions and donation decision for the charity cause or not.

Hypothesis overview

In Experiment 1, the anchors related to how much other ingroup members donate to a charitable cause were manipulated. The main hypothesis of the first study was that participants in the high-anchor condition should donate, on average, more than participants in the other two conditions (low-anchor and control condition). In Experiment 2, I added the group variable and participants were presented with information about the average donation made by either ingroup (Italians) or outgroup (Germans) members. In addition, it was tested participants' tendency to conform to the prosocial behavior of ingroup and outgroup members when the target of the charity cause did not belong to any of the two groups used to manipulate the reference social information. More specifically, in Experiment 2, the target was an outgroup member (African child) for the participants (who were all Italians), however, this outgroup was not similar to the one used as a social information source (German citizens). The hypothesis of Experiment 2 was that, regardless from the reference group, participants should anchor to others' opinions when the anchor is low. However, when the anchor is high, participants should anchor more when this information refers to the opinion of other members of their group (ingroup) rather than members of another group (outgroup). Experiment 3 provided a replicate of Experiment 2, but this time the target of the charity cause was an ingroup member (an Italian child).

Furthermore, I decided to measure participants' affective reactions and assess whether they varied when the anchors where present or not. Previous research (Kogut & Ritov, 2005a, 2005b; Small et al., 2007; Dickert et al., 2011) has shown that feelings of empathy and

concern are crucial to charitable behavior, but, to my knowledge, there is no literature that explains the relation between anchors in charity giving and affective reactions. Based on limited-capacity attentional resources theory (Broadbent & Broadbent, 1987; Conway, 1996; Raymond, Shapiro, & Arnell, 1992), I hypothesized that anchorpoints presented as social information describing others' donations should reduce affective reactions because they shift attention from the victim's picture and story to the social appropriateness of the decision to help. This hypothesis is also consistent with complement models (Bernheim, 1994; Croson, 2007; Shang & Croson, 2009; Sugden, 1984; Vesterlund, 2003) and the fact that other people's behavior becomes a reference point used to interpret which is the correct behavior in situations in which it is not clear how much a person should donate. In other words, people should pay more attention to information about others' donations and attend less to their own empathic feelings, since the former is a more reliable information of how much it is worth giving (Crutchfield, 1955).

5. EXPERIMENT 1

4.1 Method

4.1.1 Participants and design

A hundred thirty-seven students from the University of Padova (M = 19.56, SD = 1.62; 94 females) completed a paper questionnaire during a lecture break. Participants were randomly assigned to one of the three experimental conditions: 50 in the No Anchor condition (NA), 47 in the Low Anchor condition (LA), and 40 in the High Anchor condition (HA).

4.1.2 Materials and procedure

Participants read the story of a child named Elena who was affected by brain damage and in need of financial help. After a brief explanation of Elena's situation, accompanied by her picture, participants read a sentence related to their ingroup average donation (other Italians), and were asked whether they were willing to donate a sum of money to help her. Those who answered yes were then asked how much they were willing to donate. Depending on the experimental condition, one of the following statements was reported below the picture: "On average, Italians donate €10 to support this project" (LA condition) or "On average, Italians donate €90 to support this project" (HA condition). In the NA condition, there was no information about the average donation made by other Italians. A prize-draw methodology was used to make the donation decision more realistic; one from all participants was chosen by chance to win an amount of money equal to €100 minus the amount the participant decided to donate to the charity cause in the experiment.

Mood and happiness. Before reading the scenario, participants completed two 9-point items which measured mood (-4 = *very bad mood*; +4 = *very good mood*) and happiness (-4 = *very unhappy*; +4 = *very happy*). Given the positive correlation between the two items (*r* =

.64, $p < .001$), they were averaged together and it will be called only Mood in the results section.

Affective reactions. (Dickert et al., 2011). After deciding how much they were willing to donate, participants responded to six items related to their affective reactions toward the scenario (e.g., "I feel worried, upset, or sad thinking about Elena" or "Donating money to help Elena makes me feel better") on 7-point scales ranging from 1 (*not at all*) to 7 (*very much*). Cronbach's alpha for these items was .74.

Participants were also asked to answer a series of control questions: 1) how familiar they were with brain-injury illnesses; 2) how important they found the information about the average donations made by other Italians; and, 3) how realistic they found the average amount donated by other Italians (these last two questions were asked only in the LA and HA conditions). Responses were provided on a 7-point scale from 1 (*Not at all*) to 7 (*Very much*).

4.2 Results

Mood showed a positive correlation with the amount of money donated ($r = .20$, $p = .02$). Therefore, it was decided to add it as a covariate in the following analyses. Initially, I ran a Chi-square analysis to test if there were differences in the Yes-No answers between the three experimental conditions. The results indicated that there were no significant differences (χ^2 (2, 137) = 4.30, $p = .12$). In all conditions, the majority of participants decided to donate (94% Yes in NA condition; 89% Yes in LA condition; 80% Yes in HA condition).

To test the effect of the anchors on willingness to donate, it was performed an analysis of variance with the experimental conditions (LA, HA, and NA) as the independent variable, mood as covariate, and donation amount as the dependent variable. In this analysis were also included people who did not donate setting their donation amount to zero. Results showed a significant effect of condition, F (2,136) = 4.39; $p = .01$; $\eta^2_p = .06$ (see Figure 1 below). A test of planned contrasts revealed that participants in the HA condition ($M = 32.22$; SD =

33.98) donated an average sum of money that was significantly larger than the sum of money donated by participants in either the LA (M = 22.13; SD = 23.61) or the NA (M = 19.46; SD = 14.98) conditions: respectively, t (134) = 2.44; p = .02; d = .42 for the comparison between the HA and NA conditions and t (134) = 1.90; p < .06; d = .42 for the comparison between the HA and LA conditions.

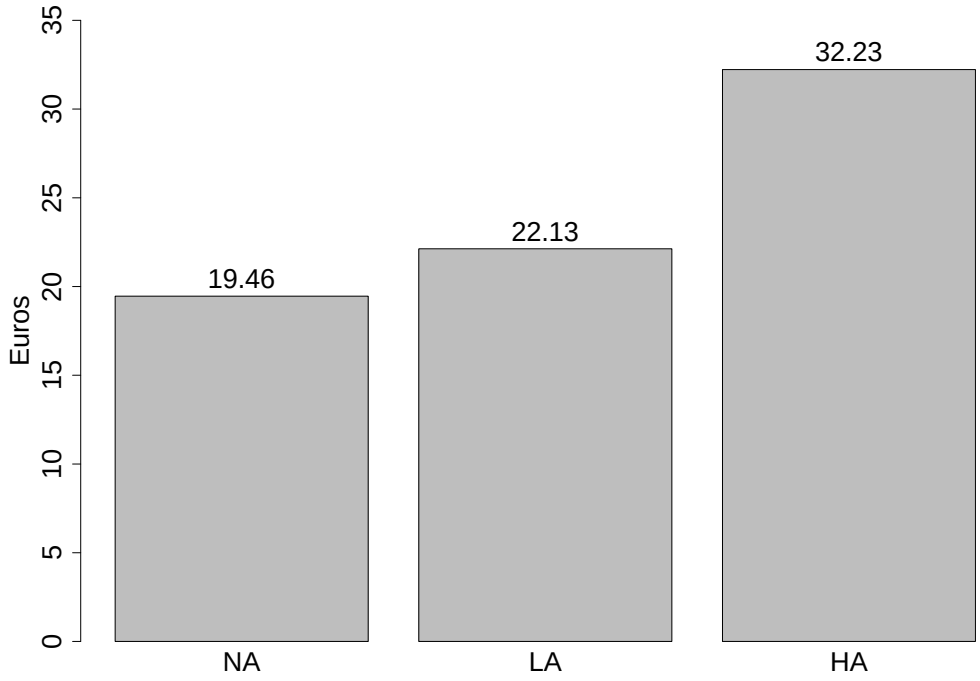

Figure 1. Average willingness to donate in the three conditions of Experiment 1

Further, I hypothesized that the presence of the anchor would have had an effect on participants' affective reactions. To assess this hypothesis, it was carried a second analysis of variance, which showed a significant effect of the experimental condition on affective reactions (F (2,136) = 4.75; p = .01; η^2_p = .07). Contrast effects indicated that affective reactions were significantly more intense in the NA condition (M = 4.60; SD = 1.09) than in either the HA (M = 3.98; SD = .92) or the LA (M = 4.17; SD = .95) condition: respectively, t

(134) = 2.96; $p < .01$; $d = .51$ for the comparison between the NA and HA conditions and t (134) = 2.11; $p < .04$; $d = .37$ for the comparison between NA and LA conditions.

Participants were asked whether they were familiar with brain injuries in order to avoid the influence of this variable on the anchoring effect. As expected, a further analysis of variance did not show any difference in familiarity with brain injuries across the three experimental conditions ($M_{NA} = 2.60$; $SD_{NA} = 1.34$ versus $M_{LA} = 2.17$; $SD_{LA} = 1.40$ versus $M_{HA} = 2.08$; $SD_{HA} = 1.35$; F (2,136) = 2.32; $p = .10$; $\eta^2_p = .03$).

Finally, it was executed an analysis of variance to see whether the anchor was perceived differently in the two conditions in which it was presented. This analysis showed that there was no difference related to how important participants considered others' donation between LA ($M = 3.26$; $SD = 2.04$) and HA ($M = 2.69$; $SD = 1.63$; F (1,85) = 2.08, $p = .15$) conditions, but there was a significant difference related to how realistic participants found the information about other people's behavior ($M_{LA} = 3.81$; $SD_{LA} = 1.69$ and $M_{HA} = 2.40$; $SD_{HA} = 1.37$, F (1,86) = 17.55, $p < .01$, $\eta^2_p = .17$).

4.3 Discussion

The goal of Experiment 1 was to show how individuals are influenced by others' behavior when deciding how much they are willing to donate in the presence of a low versus a high anchor. Despite the fact that the high anchor (€90) was considered less realistic than the low anchor (€10), it still affected donations significantly (M_{HA} = €32.22 and M_{LA} = €22.14), a result that is consistent with the anchoring heuristic (Strack & Mussweiler, 1997). Moreover, willingness to donate in the LA condition (M = €20.25) was not significantly different from the willingness to donate reported by participants in the NA condition (M = €17.80). There was also a significant difference between NA and HA condition, which shows that the high anchor can increase willingness to donate compared to a situation in which participants have no information about others' donations.

Furthermore, participants in both the HA and the LA conditions showed less intense affective reactions comparing to the NA condition. It seems that simply providing information about other peoples' donations, regardless of the magnitude of the anchor, makes people emotionally less involved with the charity cause. This result can be explained by the limited attentional resources theory (Broadbent & Broadbent, 1987; Conway, 1996; Raymond et al., 1992). According to this perspective, the anchor attracts attentional resources more than the victims' picture, likely because, for participants, concern regarding adherence to social norms is more important than concern about the victim. Moreover, since the anchor is a more useful information to understand how much it is worth contributing to the social cause, it has the potential to be particularly attention grabbing. Therefore, if the anchor had this effect on people's attention, they may have looked less at the picture of the victim experiencing less intense affective reactions in the LA and HA conditions than in the NA condition.

Experiment 1 allowed to show that reporting the average donation made by other people can serve as an anchor donors use to decide how much it is worth giving to a particular victim. In Experiment 2, it will be tested how the high and low anchors influence donations when they refer to the behavior of a people belonging to either an ingroup or an outgroup.

6. EXPERIMENT 2

The goal of Experiment 2 was to replicate the difference between high and low anchors in modulating donation decisions while at the same time adding the group membership dimension. As previously reported, ingroup members have a stronger influence than outgroup members (Barnum & Markovsky, 2007; Tajfel & Turner, 1979). Given that nationality seems to be a robust ingroup-outgroup indicator, here it is used as a manipulation of group membership (Barrett, Wilson, & Lyons, 2003; Hagendoorn, 1995; Lee & Fiske, 2006; Van Oudenhoven, Grounewoud, & Hewstone, 1996).

This time, both the high and low anchor referred to the behavior of either ingroup or outgroup members. I hypothesized that, regardless of group membership, willingness to donate should be higher in the HA condition than in the LA condition. However, I also hypothesized an interaction between high/low anchor and ingroup/outgroup behavior. From Experiment 1, it is known that donation amounts in the LA condition are very close to the average donations reported in the no-anchor condition, therefore participants should find very easy to conform to the low anchor and no difference between ingroup and outgroup should be found. On the contrary, when the anchor is high (HA condition), people should not just donate more than in the LA condition, but should also be more willing to donate when the reference point is the average donation made by members of the ingroup. Therefore, I hypothesized that, in the HA condition, willingness to donate should be higher when participants are presented with the average donation made by ingroup members rather than the average donation made by outgroup members. This should depend on the tendency of an individual to conform more to the behavior of individuals belonging to the ingroup because of the need to feel in tune with the values and beliefs of one's own group as well as the pressure of being accepted by other ingroup members (Tajfel & Turner, 1979).

6.1 Method

6.1.1 Participants and design

A hundred ninety-eight students from the University of Padova (mean age M = 21.46, SD = 2.59; 117 females) completed a paper questionnaire during class hours. They were randomly assigned to one of the four experimental conditions: 49 in the Low Anchor-Ingroup condition (LA-I), 49 in the High Anchor-Ingroup condition (HA-I), 51 in the Low Anchor-Outgroup condition (LA-O), and 49 in the High Anchor-Outgroup condition (HA-O).

6.1.2 Materials and procedure

In Experiment 2, participants read the same scenario as in Experiment 1. However, the information about the average donation made by other people could refer to either members of an ingroup (Italians) or members of an outgroup (Germans). Ingroup and outgroup were decided on the basis of a pilot test in which Italian students perceived themselves as belonging more to the Italian group (M = 3.20) than the German one (M = .85), $t(20) = 3.81$; $p < .01$, d = 1.70. Both participants in the ingroup condition and those in the outgroup condition were presented with either a low anchor or a high anchor. Therefore, Experiment 2 had a 2 x 2 design and four different conditions. Furthermore, I decided to present participants with a needy child who did not belong to either the ingroup (Italians) or the outgroup (Germans). For this reason, in Experiment 2, participants were asked to help Amina, a little African girl (they were also presented with a picture of Amina). Depending on the experimental condition, below the image of the child was written "On average, Italians (Germans) donate €10 (€70) to support this project." Because in the previous experiment the high anchor was perceived as less realistic than the low anchor and the average donations of the participants were more distant from the anchorpoint in the HA condition (€57.88 lower than the anchor) compared to the LA condition (€10.13 higher than the anchor), it was

decided to lower the high anchor from €90 to €70 in this second experiment and assess if that could influence the results.

As in Experiment 1, participants completed the mood and happiness scales first (Mood; $r = .61$, $p < .001$), then read the scenario about Amina and decided whether they wanted to make a donation and how much they wanted to donate. Finally, participants answered the questions related to their affective reactions (Dickert et al., 2011; Cronbach's alpha for these items was .82), and responded to the same control questions as in Experiment 1 (1) how familiar they were with brain-injury illnesses; 2) how important they found the information about the average donations made by other Italians; and, 3) how realistic they found the average amount donated by other Italians.

6.2 Results

Unlike Experiment 1, Mood did not correlate with the amount of money participants were willing to donate ($r = -.006$, $p = .93$). Therefore, it will not be considered as a covariate variable in the following analysis.

First of all, I ran a loglinear analysis to test the Yes/No responses (whether participants wanted to donate or not) by Group and Anchor variables. The three-way interaction model was significant (χ^2 (1) = 9.01, $p = .003$). Separate chi-square tests for ingroup and outgroup showed that when the reference group was German, there were less participants who decided to make a donation in the HA condition compared to the LA condition ($\chi^2 = 11.22$, $p = .001$), but when the reference group was Italian, there was no significant difference between the HA and LA conditions ($\chi^2 = .45$, $p = .51$; see Figure 2). Furthermore, most of the participants in the LA-I and HA-I conditions decided to make a donation (87.8% in the LA-I condition versus 91.8% in the HA-I condition) therefore replicating the results found in Experiment 1.

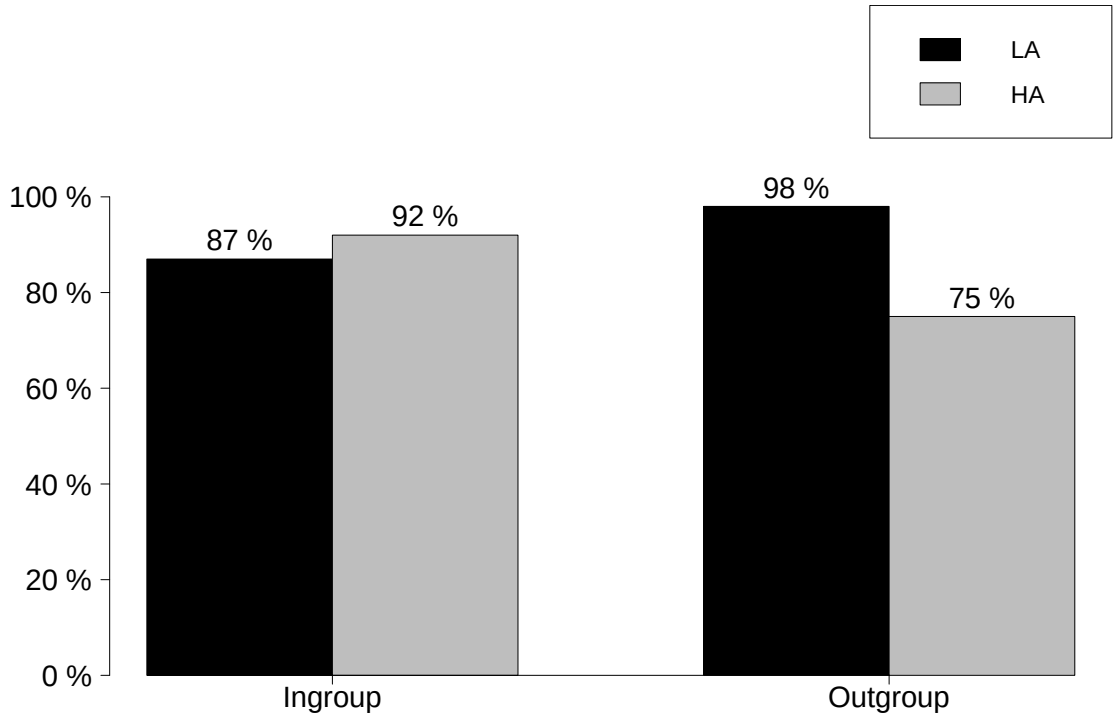

Figure 2. Proportions of the decision to donate or not in the four conditions

To test the role of anchors and group on willingness to donate, it was performed a two (Anchor: low vs. high) x two (Group: ingroup vs. outgroup) analysis of variance with the amount of the donation as the dependent variable. Like in Experiment 1, even this time participants who did not want to make a donation were included, and their donation amount was set to zero. This analysis showed a main effect of Anchor, F (1,197) = 22.33, p < . 001, η_p^2 = .10 (see Figure 3). The group variable was not significant, F(1,197) = 1.81, p = .18, whereas there was a marginally significant interaction between the Anchor and Group factors, F(1,197) = 2.91, p = .09; η_p^2 = .02 (This is of course significant one tailed, and my hypothesis is reasonably considered to be one tailed).

Participants donated significantly more in the HA condition than in the LA condition. Planned contrast effects were executed to investigate the interaction between Anchor and Group. The results showed that, both in the ingroup and in the outgroup conditions,

participants donated more money when presented with a high donation rather than a low donation: respectively, $t(197) = 4.53$, $p < .001$, $d = .65$ for participants presented with average donations made by ingroup members and $t(197) = 2.15$, $p = .03$, $d = .31$ for participants presented with average donations made by outgroup members. There was no significant difference between the two conditions in which participants were presented with the low anchor, whereas there was a difference between the two conditions in which participants were presented with the high anchor: respectively, $t(197) = .26$, $p = .80$, $d = .04$ when participants were presented with a low anchor and $t(197) = 2.15$, $p = .03$, $d = .31$ when participants were presented with a high anchor (see Figure 3).

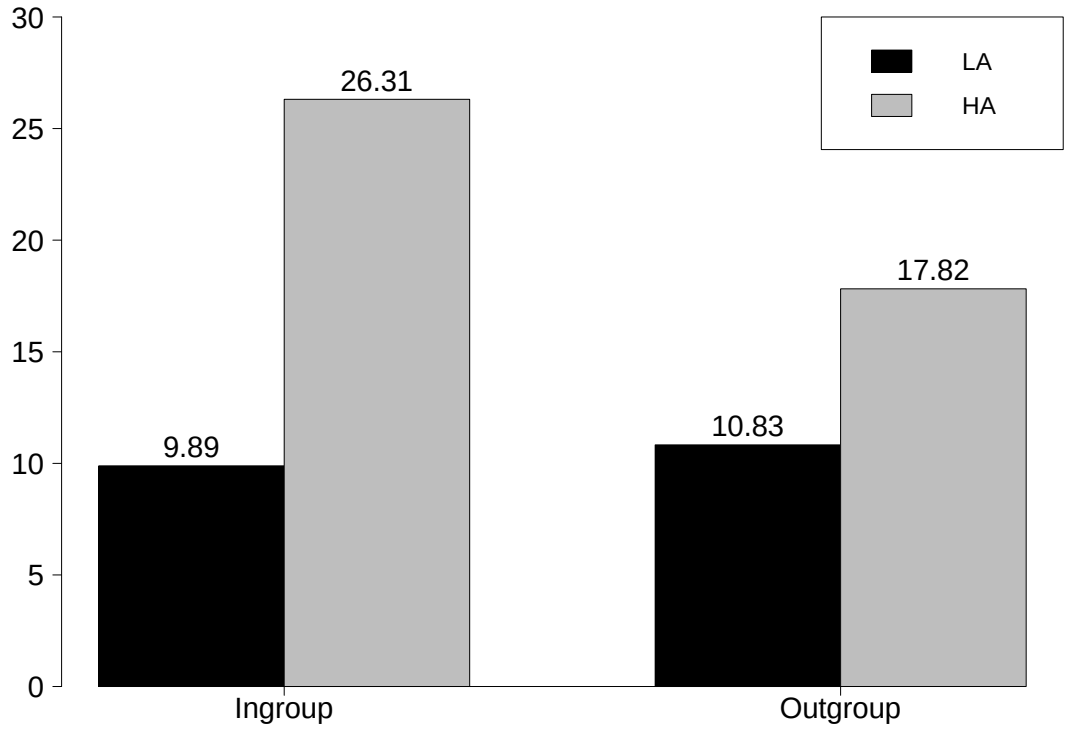

Figure 3. Average willingness to donate in the four conditions of Experiment 2

A second analysis of variance was further performed to test the effect of Anchor and Group on participants' affective reactions. Results showed a significant interaction effect between the independent variables, $F(1,197) = 6.87$; $p = .009$; $\eta^2_p = .034$. Both main effects

of Anchor and Group were not significant: respectively, F (1,197) = .001; p = .97 for the Anchor factor and F (1,197) = .50; p = .48 for the Group factor. Planned contrast effects showed that affective reactions were higher for the HA-I than HA-O condition (t(197) = 2.34, p = .02, d = .33). Participants who were presented with a high average donation made by the ingroup showed higher affective reactions than participants presented with a high average donation made by the outgroup (see Table 1).

Table 1. Average responses and standard deviations for the affective reactions, familiarity with brain injury diseases, and perception of anchors in Experiment 2

	Ingroup				Outgroup			
	Low anchor (LA-I)		High anchor (HA-I)		Low anchor (LA-O)		High anchor (HA-O)	
	M	SD	M	SD	M	SD	M	SD
Affective reactions	3.83	1.09	4.23	1.15	4.13	.96	3.71	1.20
Familiarity with brain injury diseases	1.94	1.33	2.18	1.41	2.06	1.53	1.71	1.03
Importance of others donation decision	3.73	1.81	3.29	1.96	3.94	2.00	2.43	1.84
Realism of others donation decision	3.92	1.69	2.80	1.40	3.90	1.49	2.87	1.55

Similarly to Experiment 1, I conducted an analysis of variance to explore if there were differences in familiarity with brain-injury diseases across conditions. Neither the Anchor nor the Group factors showed a significant effect: respectively, F (1,197) = .08; p = .78 for the Anchor and F (1,197) = .86; p = .35 for the Group. The interaction was not significant as well; F (1,197) = 2.43; p = .12 (see Table 1).

Finally, an analysis of variance tested if the perceived importance of others' donations was influenced by the Anchor and Group variables. The results showed only a significant effect of the Anchor variable (F(1,195) = 13.00; p < .001; η^2_p = .06), revealing that participants in the HA condition considered others' donation decisions less important

compared to the LA. Also, it was completed an additional analysis of variance to assess how realistic participants considered others' donations and found the same result as in Experiment 1 (M_{LA} = 3.81; SD_{LA} = 1.69 and M_{HA} = 2.40; SD_{HA} = 1.37): others' donations were considered more realistic in the LA condition compared to the HA condition ($F(1,194)$ = 23.93; $p < .001$; η^2_p = .11; see Table 1). There was no significant effect either for the main effect of Group or for the interaction between Anchor and Group.

6.3 Discussion

In Experiment 2 it was found that, in the LA condition, participants willingness to donate was similar regardless from the average donation being referred to the members of an ingroup or an outgroup. However, in the HA condition, the same difference was significant: participants were more likely to make a donation ("Yes" responses) and also reported higher donation amounts when the average donation referred to ingroup members rather than outgroup members. Even though participants found the high anchor overall less important and less realistic than the low anchor, the social pressure to conform to others behavior was higher in the ingroup than in the outgroup condition. Consistent, participants reported higher affective reactions in the HA-I condition than in the HA-O condition.

It is interesting to notice here that the difference between ingroup and outgroup for the HA conditions emerged already in the categorical responses; participants accepted less often to make a donation when the reference group was the outgroup rather than the ingroup. According to previous research (Dickert et al., 2011) this first step of donation decision (donate or not) is be driven by more egoistic motivations (feeling good about oneself). In a situation like the one tested here participants had the chance to feel better about themselves if they accepted to donate even if it was a really small donation (like 1 cent for example). The fact that they refused to make a donation when the outgroup is a reference group might indicate that something else became more salient in the moment of decision, and reduced

participants need to consider their feelings when deciding whether to make a donation or not. It is possible that high costs and the impossibility to match the average donation made by the outgroup induced some sort of negative feelings. When the average donation made by the ingroup is high some people may interpret it in a positive fashion, for instance, inferring that the cause must be worth being supported. Since the donation is made by the ingroup it is likely to be met with a positive attitude and also to create some sort of social norm that motivates the behavior of the members of the group. On the contrary, when the high average donation is made by the outgroup, people do not bother to find a positive justification, because they feel authorized to have a different opinion compared to the outgroup members (Brown, 1984; Brown & Abrams, 1986; Festinger et al., 1950).

For what concern the affective reactions experienced by the participants, these results cannot be compared with the findings from Experiment 1 because in Experiment 2 I did not test a condition without the anchor. Therefore it is impossible to say whether the presence of the anchor (either high or low) reduced participants affective reactions or not compared to a condition in which the anchor is not present. Still, it was replicated the result showing that regardless from the anchor (high or low) affective reactions are not significantly different.

A possible problem with Experiment 2 is that it was used an African needy child as the target of the charity scenario to avoid her to belong to either the ingroup or the outgroup. It is possible that, in Experiment 2, the results were influenced by the fact that, compared to the participants, the target of the charity scenario was part of an outgroup. Because of this confounding, I decided to replicate the second experiment asking participants to help an Italian child, like in the Experiment 1.

7. EXPERIMENT 3

Experiment 3 manipulated the same variables and has the same hypotheses as Experiment 2, however, this time the target of the charity action was a member of the ingroup. Participants were all Italians. Half of them were presented with an Italian reference group, whereas the other half were presented with a German reference group. Furthermore, given the different financial situation between Italy and Germany. I decided to measure participant's perception of the wealth of the reference group. All the other dependent variables were the same as in Experiment 2.

7.1 Method

7.1.1 Participants and design

A hundred forty-seven students from the University of Padova (mean age $M = 23.5$, $SD = 4.65$; 111 females) completed a paper questionnaire during class hours. They were randomly assigned to one of the four experimental conditions: 36 in the Low Anchor-Ingroup condition (LA-I), 38 in the High Anchor-Ingroup condition (HA-I), 35 in the Low Anchor-Outgroup condition (LA-O), and 38 in the High Anchor-Outgroup condition (HA-O).

7.1.2 Materials and procedure

Materials used in Experiment 3 were same as in the previous experiment except for the fact that the needy child this time was Italian. In addition, participants were asked to rate how rich they perceived the reference group in a scale from 1 (*not at all*) to 7 (*very much*). Mood and happiness showed a significant correlation ($r = .56$, $p < .001$) so they were averaged together (Mood) and affective reactions showed a good reliability (Cronbach's alpha equal to .79)

7.2 Results

Mood was significantly correlated with the donation amount (r = .19, p = .02) therefore it was added as a covariate in the following analyses.

A loglinear analysis of the Yes/No responses (whether participants wanted to donate or not) by Anchor and Group variables showed that only the model of the main results was significant (χ^2 (7) = 131.21, p > .001). Most participants said that they were willing to donate to the charity cause (z = -8.08, p > .001). Two-way and three-way interactions models were not significant, respectively χ^2 (4) = .31, p = .99 for the two-way interactions and χ^2 (1) = .00, p = .98 for the three-way interaction.

An analysis of variance with Anchor and Group as independent factors, Mood as a covariate, and donation amount as a dependent variable showed a main effect of Anchor (F(1,144) = 37.53, p < .001, η^2_p = .21) and a significant effect of Group (F(1,144) = 5.16, p < .03, η^2_p = .04) indicating that participants donated more in the HA and in the ingroup condition. Furthermore, there was a significant interaction between Anchor and Group considering a one-tail hypothesis (F(1,144) = 3.45, p = .032, η^2_p = .024). Regardless of the reference group they were presented with, participants were willing to donate about the same amount of money in the LA conditions (M = 9.61 and SD = 5.11 for the ingroup, M = 8.19 and SD = 6.29 for the outgroup), whereas they were more willing to donate in the ingroup (M = 28.95 and SD = 23.75) than the outgroup (M = 17.47 and SD = 12.56) condition when presented with a HA (see Figure 4). Once again, like in previous experiments, participants who did not want to make a donation were included in the analysis and their donation amount was set to zero.

Planned contrasts showed that all contrasts were significant except LA-I vs. LA-O (t(144) = -.42, p= .67). For LA-I vs. HA-I t(144) = -5.86, p < .001, d = .98; for HA-O vs.

LA-O , $t(144) = 2.72$, $p = .01$, $d = .45$; and for HA-O vs. HA-I $t(144) = -3.61$, $p < .001$, $d = .60$.

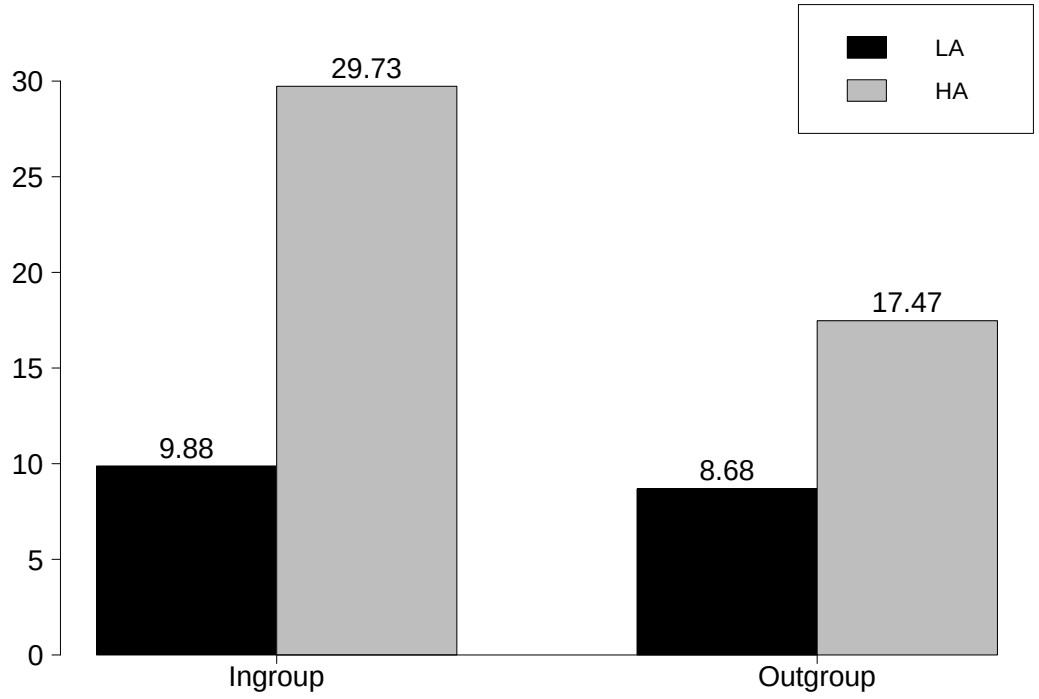

Figure 4. Average willingness to donate in the four conditions of Experiment 3

An analysis of variance with Anchor and Group as independent factors, Mood as a covariate, and affective reactions as the dependent variable showed only a main effect of the Group variable ($F(1,144) = 4.99$, $p < .023$, $\eta^2_p = .01$) indicating that affective reactions were higher for the ingroup conditions ($M = 4.43$ and $SD = 1.02$) compared to the outgroup conditions ($M = 4.06$ and $SD = 1.16$). As in Experiment 2, the Familiarity variable was not significantly different through the experimental conditions. Furthermore, participants found other's behavior more important in the LA condition compared to the HA condition ($F(1,143) = 3.88$, $p = .05$, $\eta^2_p = .03$) and they found other's behavior more realistic in the LA condition compared to the HA condition ($F(1,143) = 6.63$, $p = .01$, $\eta^2_p = .05$; see Table 2).

Table 2. Average responses and standard deviations for the affective reactions, familiarity with brain injury diseases, perception of anchors and wealth of the reference group in Experiment 3

	Ingroup				Outgroup			
	Low anchor (LA-I)		High anchor (HA-I)		Low anchor (LA-O)		High anchor (HA-O)	
	M	SD	M	SD	M	SD	M	SD
Affective reactions	4.38	1.10	4.46	.94	4.21	1.15	3.99	1.19
Familiarity with brain injury diseases	3.00	1.91	2.26	1.25	2.41	1.60	2.76	1.82
Importance of others donation decision	3.46	2.08	2.97	1,70	3.46	1.99	2.63	1.76
Realism of others donation decision	4.14	1.38	3.34	1.60	4.00	1.48	3.50	1.48
Perceived wealth of the reference group	1.82	1.14	2.87	1.73	2.79	2.06	4.16	1.85

Finally, results confirmed that German citizens were perceived as significantly richer than Italians ($t(141) = -3.77$, $p < .01$), but adding this variable as a covariate did not influence either the donation decision ($F(1,140) = .81$, $p = .37$) or the affective reactions ($F(1,140) = 2.22$, $p = .14$; see Table 2).

7.3 Discussion

Experiment 3 showed that most of the participants were willing to make a donation, independently from the experimental condition, however, similar to Experiment 2, there was a difference in the amount of money participants were willing to donate depending on the Group and Anchor variables. Specifically, they decided to donate about the same amount between the ingroup and outgroup in the LA conditions, but they anchored more to others' opinions (and donated a higher amount of money) in the HA conditions when the reference group was the ingroup, then when it was the outgroup.

According to the literature on charity giving research (Dickert et al., 2011; Evangelidis & Van den Bergh, 2013) categorical responses seem to be governed by different mechanism

than continuous responses; initially, self-focused motivations (like mood management) guide peoples' decisions regarding whether to make a donate or not, and at a subsequent stage, other focused motivations (like empathic feelings) influence the decision regarding how much a person wants to help (e.g., which donation amount he/she decides to give). The difference between the present experiment (where most of the participants accepted to make a donation, and experimental conditions made a difference only on willingness to donate) and Experiment 2 (where condition also influenced the categorical variable measuring whether participants were willing to help or not) might be explained by the different target of the fund raising campaign. It is possible that the ingroup victim activated stronger feelings of guilt, which makes more difficult for people to refuse helping (Brewer & Gardner, 1996; Dovidio et al., 1997; Kogut & Ritov, 2007; 2011).

Moreover, affective reactions in Experiment 3 did not show a difference depending on the anchoring condition (low vs. high anchor), replicating the results found in the previous two experiments. Additionally, this time, there was a main effect of the group variable revealing that, overall, affective reactions were higher when the reference group was the ingroup rather than outgroup and this difference is in the same direction as the donation amounts. Results for affective reactions are also slightly different in Experiment 3 compared to Experiment 2, where affective reactions were higher for the ingroup than outgroup, but only in the HA conditions. As the literature suggests, a victim's group belongingness might have an important impact on donation decisions (Kogut & Ritov, 2007), so an ingroup victim (Experiment 3) might activate more intense affective reactions toward the social cause than an outgroup victim (Experiment 2). However, similar to the group belongingness of other people who made a donation, also the group the victim belong to, or other contextual information related to the charity might result important only when the donation decision is difficult (for example request for high donation amounts, like in the HA conditions).

Rubaltelli and Agnoli (2012) have shown that in a situation where people are living a conflict between high costs and the desire to help others even a decoy (a dominated option) might result important to resolve the conflict, because this additional information makes the choice easier. On the other hand, when the donation amount is easier to match, people might not need to consider further information related to the charity context, because there is a reduced need to give meaning to the fund raising campaign.

Like in the previous experiments, participants reported that they found less realistic and less important the others' opinion in the HA condition than in the LA condition, but, on average, they kept donating more in these conditions. Finally, in Experiment 3, I found that participants perceived Germans richer than Italians. However, this variable did not influence results concerning donation amounts and affective reactions. The actual financial situation of Italy and Germany could have been a confounding to the present results. Strack and Mussweiler (1997) showed that the direction in which the anchors influence the judgments depends on whether target and context stimuli are similar. When the target and stimuli are identical, participants' judgments are assimilated toward the anchors. However, in this context, results reject convincingly this alternative explanation of the effect of others' opinions on donation decisions.

8. GENERAL DISCUSSION

The findings of the three experiments described in the present dissertation are consistent with the literature on the anchoring effect (Epley & Gilovich, 2006; Tversky & Kahneman, 1974): when people are given a high anchor, they are willing to donate more compared to a condition in which they are given a low anchor or no anchor. Furthermore, I found that the low anchor did not make a significant difference compared to a condition in which no anchor was presented. In Experiment 1, participants donated, on average, €22.13 in the LA condition and €19.46 in the NA condition. Although this difference was not significant, participants experienced lower affective reactions in the LA condition (and in the HA condition) compared to the NA condition. I argue that this could be related to limitations in the attentional resources (Broadbent & Broadbent, 1987; Conway, 1996; Raymond et al., 1992). Information about others' donations might become more relevant when deciding the worth of contributing to a social cause; therefore, while focusing on others' behavior, participants pay less attention to the target of their helping action and subsequently feel emotionally less involved. Additionally, the anchor can be used as feedback on the correct donation amount, therefore reducing the need to attend to one's affective reactions, which are often used as information on how much to donate (Kogut & Ritov, 2005a, b; Dickert et al., 2011).

Although it is difficult to tell if participants were influenced by the anchor in the LA condition or simply respected their baseline donations, it can be concluded that, in the HA condition, they made a significantly larger donation compared to the NA condition; therefore, we can consider this manipulation effective at increasing willingness to donate. In addition, donations in the HA condition were much lower than the anchorpoint compared to the LA condition. In Experiment 1, the average donation amount was €58 less than the high anchor (€90), in Experiment 2, it was about €48 less than the high anchor (€70) and, in Experiment

3, participants donated on average about €46 less than the high anchor (€70). At the same time, in all three experiments, donations in the LA condition exceeded what other people had reportedly donated, probably because it was quite a low amount of money (€10). From Experiment 1 we also know that donations in the LA condition were not significantly different from donations in the NA condition, therefore this could have made easier for the participants to give a sum larger than the low anchor. Consistent with these results, and despite the effect found for the willingness to donate, participants indicated that the anchor was less realistic in the HA condition compared to the LA condition, and, in Experiment 2 and 3, participants reported that they perceived the importance of others' donations lower in the HA condition than the LA condition. Despite being considered less realistic the high anchor had an effect on how much participants were willing to donate and this result is consistent with previous research showing that even extremely implausible anchor values produce a strong assimilation effect (Strack & Mussweiler, 1997).

Additionally, in Experiment 2 and 3, consistent with the hypotheses, it was found that participants in the HA-O condition donated less money than participants in the HA-I condition. As described in the hypothesis section, when the reference donation is low (€10) it is closer to the no-anchor average donation and it is easier to match independently from the reference group, but when the reference donation is high (€70) and the decision is presumably more difficult, participants' donations are higher in the ingroup condition. The anchors used in my experiments were not irrelevant numbers, but were presented as average donations made by other people, which means that they should be considered in light of social-comparison motivations. If we consider the anchor as information that generated social pressure, it is reasonable to find that people conformed more easily to the behavior of members of their group than to the behavior of members of an outgroup (Deutsch & Gerard, 1955; Lewis, Langan, & Hollander, 1972). Beside this, participants reported less intense

affective reactions toward the victim in the HA-O condition than in the HA-I condition (Experiment 2) and lower affective reaction overall for the outgroup than ingroup (Experiment 3). Since in Experiment 2 and 3 anchors were presented in all conditions and each participant saw exactly the same amount of information, we cannot consider the limited attentional resources as an explanation to these results. In this case, I hypothesized that the difference in the affective reactions experienced when presented with an ingroup versus an outgroup should depend on a justification that participants apply to their donation decision when the group variable is added. Cameron and Payne (2011) found that, when people consider the request to be in an amount which is too large for them to help, they regulate their emotions in order to avoid a cognitive-emotional conflict.

The fact that in the HA conditions participants considered other people's opinions only when the reference group was the ingroup might indicate that an external information (like the reference group) facilitates the decision in a situation where others' donations are difficult to match. Rubaltelli and Agnoli (2012) found that people live a conflict between moral intuitions (e.g., fulfilling moral obligations and helping as many individuals in need as possible) and the cost entailed by following one's moral intuitions (e.g., spending money). When the authors introduced a decoy (a third dominated alternative) the conflict was reduced, and participants chose the option which helped more victims and asked for a higher donation. It is possible that knowing the average donation given by other people belonging to either an ingroup or outgroup had a similar effect in the present studies. If this is true, other variables similar to group belongingness or decoy can be used to increase willingness to help because they offer to the donor a reason to accept a higher cost (that is, provide a motivation to give up a bigger chunk of his/her resources).

Looking to previous models that investigated how others' behavior influences a donor's contribution, it is possible to conclude that this findings are more supportive of complement

models than substantive models (Bernheim, 1994; Croson, 2007; Shang & Croson, 2009; Sugden, 1984; Vesterlund, 2003). Consistent with complement models, participants showed a tendency to conform to the behavior of others and to use this information as a reference point to decide how much money should be donated, rather than simply reducing their contributions. In the HA condition, participants donated much less than the anchor, but still more than in the LA and NA conditions. I believe this is a reasonable result, especially in a situation in which people are asked to answer an open-ended question about how much they are willing to donate. It is likely that people find it difficult to establish how much it is worth to contribute to a specific social cause. Therefore, they need a reference point or any other information that can help them make sense of the situation. In most cases, the lack of more reliable information leads people to use their own affective reactions as an indicator of how much they should donate (Batson et al., 1991; Kogut & Ritov, 2005a, b; Dickert et al., 2011). By knowing how much others donate, potential donors have a more reliable piece of information at their disposal and can simply conform to it.

Furthermore, an alternative explanation to the results of the present studies might be the compatibility effect (Tversky, Sattath, & Slovic, 1988; Slovic, Griffin, & Tversky, 1990; Willemsen, Böckenholt, & Johnson, 2011). According to this effect, when the response scale is compatible to certain attributes presented previously in the attentional span, they are assigned greater weight because they are more easily mapped onto the response. This means that having an information about others' donations in euros and asking participants to report their willingness to donate in euros should make the information about the average amount given by other people particularly salient and useful.

Finally, this results show that people's choice in a similar situation is not explained by altruism (pure or impure). According to substitute models individuals derive utility both from their own private consumption (the amount of help someone gives) and the consumption of

others (the amount of help someone receives; Becker, 1974). Pure altruism should bring a complete crowding out; as the level of public good provided by others increases, the marginal value from additional contribution toward the public good should decrease proportionally (Roberts, 1984; Warr, 1982). This because if we are exclusively interested in the victim's wellbeing (Batson et al, 1991) and someone else offered help previously to him/her, there is no need for us to give help. Instead, impure altruism explains a partial crowding out (Andreoni, 1990); if others are giving their contribution for a certain charity cause the value from an individual gift is much lower. In this case the individual will not have the exclusivity of being the only donor, which means less prestige, social reward, and less warm-glow. Complement models explain that people do to not consider the victim's situation since they do not lower their contributions when others are already helping, but they relate positively their giving with the others' giving because of reciprocity (Sugden, 1984) conformity (Bernheim, 1994), or just making the appropriate or necessary contribution in order to achieve social approval (Vesterlund, 2006).

8.1 Implications

When people are considering to donate money for a charity cause they are obviously interested to know how would other people behave in the same situation. Knowing others' donations is an indirect way to understand what are the others' opinions regarding that cause (above the victim's need, the charity organization and so on). Does learning that others' are donating a high (versus a low) amount of money increase someone's donation? The present studies suggest that it does, even when other people's donation is not perceived as too realistic (HA condition). Most importantly, high anchors increase donations comparing to a situation where no anchors are given, so using anchors in general can have a positive effect on the overall amount of money collected by a fund raising effort.

However, there are side effects that come with the use of anchors, which might be a risk when a charity organization is interested in long-term donations rather than one-shot contributions. Anchors presented as social information in general might shift attentional resources from the charity cause to the social appropriateness of the donation decision, which means lower affective reactions toward the victim. As a consequence, this might include negative responses in future requests for donations. Several reasons can lead to a similar thing. First, the use of social influence can weaken the emotional connection between donors and victims, therefore reducing people's motivation to help the same charitable cause in subsequent occasions. Second, people may find it difficult to cope with repeated situations in which they feel (directly or indirectly) forced to give more than they would be willing to, only because the donation has become a way to express group belonging and to avoid feeling embarrassed.

On the other side, the present studies show that it is also possible to find alternative methods that can reduce cost perception or make people accept more easily high donation costs, like group belongingness in this case. Several studies have shown that the actual cost and the perceived cost can be different concepts, and reducing cost can help increasing donations (Havens, O'Herlihy & Schervish, 2006; Rubaltelli & Agnoli, 2012; Wiepking & Breeze, 2011). This can be particularly important for the charity giving decisions because economic costs can be a main inhibitor to the prosocial behavior. If costs are perceived as a loss, and benefits for oneself (warm-glow feelings, prestige, social recognition and so on) or the person in need are considered as a gain, according to prospect theory (Kahneman & Tversky, 1979) losses have a bigger weight than gains, and people are less disposed to help in this case. For this reason, lowering the perception of costs or increasing the perception of benefits might result highly important in the charity giving context.

8.2 Limitations

A limit of the present studies might be related to the fact, despite using a few strategies to make participants feel their donations as realistic as possible, in the end thy had to report a hypothetical value. As I explained in the methodology section of the previous experiments, a prize draw methodology was used; one participant was chosen randomly and he/she won 100 euros minus the donation amount he/she decided to give for the charity cause. This probably induced participants to give responses closer to real-life situation, but again, this could have been perceived as "earning less money" rather than "loosing less money", because the €100 was not money from their pocket, but money they would have earned from an experimental situation.

Another limitation might be that in the present studies it was used only a charity scenario, which describes a girl from Italy (or Africa) that was affected by a brain damage and in need of financial help. Familiarity of participants with the present illness was measured and it did not influence the results. However, it would be interesting to generalize the same effects to other charitable causes like different diseases, non-health care related issues (poverty, human rights, education and so on), and programs helping animals or fighting for environmental sustainability.

8.3 Future research

Future studies should try to understand why people did not conform more to the high anchors and should investigate whether in the HA condition participants experienced a conflict between how much they are willing to donate and how much others are reported to have contributed. If the conflict is present, as I believe to be the case, it would be important to investigate how people regulate this conflict. It is possible that individuals downplay the importance of their contribution when they are unable to match others' donations. Although in the present studies it was measured how important the anchor was for participants, I did

not measure participants' evaluation of the importance of their own donation. Several studies have shown that people donate more often when they think that their contributions are useful and would make a difference for the charity situation (Fetherstonhaugh et al., 1997; Markowitz, Slovic, Västfjäll, & Hodges, 2013). Fetherstonhaugh and colleagues (1997) have found that participants were more willing to help 9.000 out of 15.000 lives under risk rather than saving 100.000 out of 290.000 lives under risk.

Future research should also focus on manipulating anchors and group belonging in a real fundraising context as well as testing whether anchors unrelated to other people's behavior can influence donors' responses, or whether responses are further changed when different types of contributions are requested (for instance: money, time and effort).

Conclusion

The present experiments allowed to understand how people react when they are informed how much other people donate to a specific cause, particularly when anchors refer to the behavior of members of an ingroup or outgroup. The results showed that, when people are presented with high anchors, they are more likely to conform to the anchor and increase rather than reduce their donations. This behavior is particularly evident when the high anchor refers to the behavior of ingroup members.

Bibliography

Abrams, D., Wetherell, M., Cochrane, S., Hogg, M. A., & Turner, J. C. (2011). Knowing what to think by knowing who you are: Self-categorization and the nature of norm formation, conformity and group polarization. *British Journal of Social Psychology*, *29*, 97-119.

Adorno, T. W., Frenkel-Brunswik, E., Levinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality*. New York: Harper & Row.

Allport, F. H. (1924). Response to social stimulation in the group. In F. H. Allport (Ed.), *Social psychology* (pp. 260–291). Hillsdale, NJ : Erlbaum.

Allport, G. W. (1954). *The Nature of Human Prejudice*. Reading, MA: Addison-Wesley.

Amodio, D. M., & Showers, C. J. (2005). "Similarity breeds liking" revisited: the moderating role of commitment. *Journal of Social and Personal Relationships*, *22*(6), 817-836.

Andreoni J. (1995). Warm-Glow versus Cold-Prickle: The Effects of Positive and Negative Framing on Cooperation in Experiments. *Quarterly Journal of Economics*, *110*(1), 1-21.

Andreoni, J. (1990). Impure altruism and donations to public goods: a theory of warm glow giving. *Economic Journal*, *100*, 464–477.

Ariely, D., Loewenstein, G., & Prelec, D. (2003). "Coherent arbitrariness": Stable demand curves without stable preferences. *The Quarterly Journal of Economics*, *118*, 73-106.

Aronfreed, J. (1970). The socialization of altruistic and sympathetic behavior: Some theoretical and experimental analyses. In J. Macauley & L. Berkowitz (Eds.), *Altruism and helping behavior* (pp. 103-126). New York: Academic Press.

Aronson, E; Wilson, T. D., Akert, R. M. (2007). *Social Psychology* (6th ed.). NJ: Pearson Prentice Hall.

Asch, S. E. (1951). Effects of group pressure on the modification and distortion of judgments. In H. Guetzkow (Ed.), *Groups, leadership and men* (pp. 177–190). Pittsburgh, PA: Carnegie Press.

Asch, S.E. (1955). Opinions and social pressure. *Scientific American*, *193*, 35–35.

Axelrod, M. (1956). Urban structure and social participation. *American Sociological Review*, *21*(1), 13-18.

Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic need satisfaction: a motivational basis of performance and well-being in two work settings. *Journal of Applied Social Psychology*, *34*(10), 2045-2068.

Bandura, A. (1986). *Social foundations of thought and action*. Englewood Cliffs, NJ: Prentice-Hall.

Barden, R. C., Garber, J., Leiman, B., Ford, M. E., & Masters, J. C. (1985). Factors governing the effective remediation of negative affect and its cognitive and behavioral consequences. *Journal of Personality and Social Psychology*, *49*(4), 1040.

Barnum, C., & Markovsky, B. N. (2007). Group membership and social influence. *Current Research in Social Psychology*, *13*, 21-38.

Baron, J. (1997). Political action vs. voluntarism in social dilemmas and aid for the needy. *Rationality and Society*, *9*, 307–326.

Baron, J., Szymanska, E. (2009). Heuristics and biases in charity. In D. M. Oppenheimer & C. Y. Olivola (Eds). *Experimental approaches to the study of charity* (pp. 215-236). London: Taylor and Francis.

Baron, R. S. (1986). Distraction-conflict theory: Progress and problems. *Advances in experimental social psychology*, *19*, 1-39.

Baron, R. S., Vandello, J. A., & Brunsman, B. (1996). The forgotten variable in conformity research: Impact of task importance on social influence. *Journal of Personality and Social Psychology*, *71*(5), 915-927.

Barrett, M., Wilson, H., & Lyons, E. (2003). The development of national in-group bias: English children's attributions of characteristics to English, American and German people. *British Journal of Developmental Psychology*, *21*, 193-220.

Batson, C. D., Batson, J. G., Griffitt, C. A., Barrientos, S., Brandt, J. R., Sprengelmeyer, P., & Bayly, M. J. (1989). Negative-state relief and the empathy-altruism hypothesis. *Journal of Personality and Social Psychology*, *56*, 922-933.

Batson, C. D., Bolen, M.H., Cross, J.A., Neuringer-Benefiel, H.E. (1986). Where is the Altruism in the Altruistic Personality? *Journal of Personality and Social Psychology*, *50*, 212-220.

Batson, C. D., Duncan, B. D., Ackerman, P., Bucldey, T., Birch, K. (1981). Is empathic emotion a source of altruistic motivation? *Journal of Personality and Social Psychology*, *40*, 290-30.

Batson, C.D., Batson, J.G., Singlsby, J.K., Harrell, K.L., Peekna, H. M., Todd, R. M. (1991). Empathic joy and the empathy-altruism hypothesis. *Journal of Personality and Social Psychology*, *61*, 413-426.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological bulletin*, *117*(3), 497.

Becker, G. S. (1974). A Theory of Social Interactions. *The Journal of Political Economy*, *82*, 1063-1093.

Bell, S. T. (2007). Deep-level composition variables as predictors of team performance: a meta-analysis. *Journal of Applied Psychology*, *92*(3), 595-615.

Bernheim, B. D. (1994). A theory of conformity. *Journal of Political Economy*, *102*, 841-877.

Bernoulli, D. (1954) Exposition of a New Theory on the Measurement of Risk. *Econometrica*: *Journal of the Econometric Society*, 22(1), 22–36.

Blake, R. R., & Mouton, J. S. (1961). Loyalty of representatives to ingroup positions during intergroup competition. *Sociometry*, *24*(2), 177-183.

Bond, R., & Smith, P. B. (1996). Culture and conformity: A meta-analysis of studies using Asch's (1952b, 1956) line judgment task. *Psychological bulletin*, *119*(1), 111-137.

Bonebright, D. A. (2010). 40 years of storming: a historical review of Tuckman's model of small group development. *Human Resource Development International*, *13*(1), 111-120.

Bornstein, M.H. (2002) *Handbook of Parenting*. Mahwah, NJ: Lawrence Erlbaum Associates.

Brammer, S., & Pavelin, S. (2005). Corporate community contributions in the United Kingdom and the United States. *Journal of Business Ethics*, *56*(1), 15-26.

Brewer, M. B., & Gardner, W. (1996). Who is this" We"? Levels of collective identity and self-representations. *Journal of personality and social psychology*, *71*(1), 83-93.

Briers, B., Pandelaere, M., & Warlop, L. (2007). Adding exchange to charity: a reference price explanation. *Journal of Economic Psychology*, *28*, 15-30.

Broadbent, D. E., & Broadbent, M. H. (1987). From detection to identification: Response to multiple targets in rapid serial visual presentation. *Perception & Psychophysics*, *42*, 105-113.

Brodbeck, F. C., Frese, M., & Javidan, M. (2002). Leadership made in Germany: Low on compassion, high on performance. *The Academy of Management Executive*, *16*(1), 16-29.

Brown, R. J. (1984). The role of similarity in intergroup relations. In H. Tajfel (Ed.), *The social dimension: European developments in social psychology* (pp. 603-623). Cambridge, UK: Cambridge University Press.

Brown, R., & Abrams, D. (1986). The effects of intergroup similarity and goal interdependence on intergroup attitudes and task performance. *Journal of Experimental Social Psychology*, 22(1), 78-92.

Burnstein, E., Crandall, C., & Kitayama, S. (1994). Some neo-Darwinian decision rules for altruism: Weighing cues for inclusive fitness as a function of the biological importance of the decision. *Journal of Personality and Social Psychology*, *67*, 773-789.

Burt, R. S. (2000). The network structure of social capital. *Research in organizational behavior*, *22*, 345-423.

Cameron, C. D., & Payne, B. K. (2011). Escaping affect: how motivated emotion regulation creates insensitivity to mass suffering. *Journal of Personality and Social Psychology*, *100*, 1-15.

Cason, T. N., & Mui, V. L. (1998). Social influence in the sequential dictator game. *Journal of Mathematical Psychology*, *42*, 248-265.

Chaiken, S., & Trope, Y. (Eds.). (1999). *Dual-process theories in social psychology*. New York: Guilford Press.

Cialdini, R. B. (1984). *Influence: How and why people agree to things*. New York: Quill.

Cialdini, R. B. (1993). *Influence: Science and practice* (3rd ed.). New York: HarperCollins.

Cialdini, R. B., & Goldstein, N. J. (2004). Social influence: Compliance and conformity. *Annual Review of Psychology, 55,* 591-621.

Cialdini, R. B., & Trost, M. R. (1998). Social influence: Social norms, conformity and compliance. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.). *The handbook of social psychology*. 4th ed. Vol. 2, (pp. 151–192). New York: McGraw-Hill.

Cialdini, R. B., Schaller, M., Houlihan, D., Arps, K., Fultz, J., Beaman, A. L. (1987). Empathy-based helping: is it selflessly or selfishly motivated? *Journal of Personality and Social Psychology, 52,* 749-758.

Coleman, J. S. (1990). Rational organization. *Rationality and Society, 2*(1), 94-105.

Constantinou, M., Ashendorf, L., & McCaffrey, R. J. (2002). When the third party observer of a neuropsychological evaluation is an audio-recorder. *The Clinical Neuropsychologist, 16*(3), 407-412.

Conway, A. R. (1996). Individual differences in working memory capacity: More evidence for a general capacity theory. *Memory, 4,* 577-590.

Cook, S. W. (1985). Experimenting on social issues: The case of school desegregation. *American Psychologist, 40*(4), 452-460.

Crockenberg, S. B. (1981). Infant irritability, mother responsiveness, and social support influences on the security of infant-mother attachment. *Child development, 52*(3), 857-865.

Crocker, J., & Major, B. Steele., C.(1998). Social stigma. *The handbook of social psychology, 4*(2), 504-553.

Croson, R. T. (2007). Theories of commitment, altruism and reciprocity: Evidence from linear public goods games. *Economic Inquiry, 45,* 199-216.

Crutchfield, R. S. (1955). Conformity and character. *American Psychologist, 10,* 191-198.

Damasio, A. (1994). *Descartes' error: Emotion, reason, and the human brain*. New York: Putnam.

Damasio, A. R. (2004). *Looking for Spinoza: Joy, sorrow and the feeling brain*. New York: Harcourt.

Darley, J. M. & Latané, B. (1968). Bystander intervention in emergencies: Diffusion of responsibility. *Journal of Personality and Social Psychology*, *8*, 377–383.

Deaux, K., Reid, A., Mizrahi, K., & Ethier, K. A. (1995). Parameters of social identity. *Journal of personality and social psychology*, *68*(2), 280-291.

Desmet, P., & Feinberg, F. M. (2003). Ask and ye shall receive: The effect of the appeals scale on consumers' donation behavior. *Journal of Economic Psychology*, *24*, 349-376.

Deutsch, M., & Gerard, H. B. (1955). A study of normative and informational social influences upon individual judgment. *The journal of abnormal and social psychology*, *51*, 629-636.

Dickert, S., & Slovic, P. (2009). Attentional mechanisms in the generation of sympathy. *Judgment and Decision Making*, *4*(4), 297-306.

Dickert, S., Sagara, N., & Slovic, P. (2011). Affective motivations to help others: A two-stage model of donation decisions. *Journal of Behavioral Decision Making*, *24*, 361-376.

Douglas, K. M., & McGarty, C. (2001). Identifiability and self-presentation: Computer-mediated communication and intergroup interaction. *British journal of social psychology*, *40*(3), 399-416.

Dovidio, J. F., Gaertner, S. E., Kawakami, K., & Hodson, G. (2002). Why can't we just get along? Interpersonal biases and interracial distrust. *Cultural Diversity and Ethnic Minority Psychology*, *8*, 88-102.

Dovidio, J. F., Gaertner, S. L., Validzic, A., Matoka, K., Johnson, B., & Frazier, S. (1997). Extending the benefits of recategorization: Evaluations, self-disclosure, and helping. *Journal of Experimental Social Psychology*, *33*(4), 401-420.

Duval, S., & Wicklund, R. A. (1972). *A theory of objective self-awareness.* New York: Academic Press.

Eagly, A. H., Wood, W., & Fishbaugh, L. (1981). Sex differences in conformity: Surveillance by the group as a determinant of male nonconformity. *Journal of Personality and Social Psychology*, *40*(2), 384-394.

Eastwood, J. D., Smilek, D., & Merikle, P. M. (2001). Differential attentional guidance by unattended faces expressing positive and negative emotion. *Perception & psychophysics*, *63*(6), 1004-1013.

Eisenberg, N., & Mussen, P.H. (1989). *The roots of prosocial behavior in children*. New York: Cambridge University Press.

Eisenberg, N., Miller, M. P. (1987). The relation of empathy to prosocial and related behaviors. *Psychology Bulletin*, *101*(*1*), 91-119.

Epley, N., & Gilovich, T. (2004). Are Adjustments Insufficient? *Personality & Social Psychology Bulletin*, *30*, 447-460.

Epley, N., & Gilovich, T. (2006). The anchoring-and-adjustment heuristic Why the adjustments are insufficient. *Psychological Science*, *17*, 311-318.

Epstein, S. (1992). The cognitive self, the psychoanalytic self, and the forgotten selves. *Psychological inquiry*, *3*(1), 34-37.

Epstein, S. (1994). Integration of the cognitive and the psychodynamic unconscious. *American Psychologist, 49*, 709-724.

Evangelidis, I., & Van den Bergh, B. (2013). The number of fatalities drives disaster aid: increasing sensitivity to people in need. *Psychological science*, *24*(11), 2226–2234.

Fall, K. A., & Wejnert, T. J. (2005). Co-leader stages of development: An application of Tuckman and Jensen (1977). *The Journal for Specialists in Group Work*, *30*(4), 309-327.

Fechner, G. T. (1860). *Elemente der Psychophysik [Elements of psychophysics]*. Peipzig, Germany: Breitkopf & Härtel.

Fenske, M. J., & Raymond, J. E. (2006). Affective influences of selective attention. *Current Directions in Psychological Science*, *15*(6), 312-316.

Ferrell, O. C., Gresham, L. G., & Fraedrich, J. (1989). A synthesis of ethical decision models for marketing. *Journal of Macromarketing*, *9*(2), 55-64.

Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, *7*, 117-140.

Festinger, L., Schachter, S. & Back, K. W., (1950). *Social Pressure in Informal Groups: A study of human factors in housing.* New York: Harper and Row.

Fetherstonhaugh, D., Slovic, P., Johnson, S. M., & Friedrich, J. (1997). Insensitivity to the value of human life: A study of psychophysical numbing. *Journal of Risk and Uncertainty*, *14*, 283–300.

Finucane, M. L., Alhakami, A., Slovic, P., & Johnson, S. M. (2000). The affect heuristic in judgments of risks and benefits. *Journal of behavioral decision making*, *13*(1), 1-17.

Fisher, R. J. (2006). Intergroup conflict. In M. Deutsch, P. T. Coleman, & G. E. Marcus (Eds.), *The handbook of conflict resolution: Theory and practice* (pp. 176–196). San Francisco, CA: Jossey-Bass.

Fiske, S. T., & Taylor, S. (1991). *Social cognition*. New York: Mcgraw-Hill.

Forsyth, D. R. (2009). *Group dynamics*. Belmont, CA: Wadsworth, Cengage Learning.

Fox, E. (2002). Processing emotional facial expressions: The role of anxiety and awareness. *Cognitive, Affective, & Behavioral Neuroscience*, *2*(1), 52-63.

Fraser, C., Hite, R. E., & Sauer, P. L. (1988). Increasing contributions in solicitation campaigns: The use of large and small anchorpoints. *Journal of Consumer Research, 15*, 284-287.

Frederickson, N., & Turner, J. (2003). Utilizing the classroom peer group to address children's social needs: an evaluation of the circle of friends intervention approach. *The Journal of Special Education*, *36*(4), 234-245.

Freedman, J. L., & Fraser, S. C. (1966). Compliance without pressure: the foot-in-the-door technique. *Journal of personality and social psychology*, *4*(2), 195-203.

Gaertner, S. L., Dovidio, J. F., Anastasio, P. A., Bachman, B. A., & Rust, M. C. (1993). The common ingroup identity model: Recategorization and the reduction of intergroup bias. *European review of social psychology*, *4*(1), 1-26.

Garner, R. (2005). Post-It note persuasion: a sticky influence. *Journal of Consumer Psychology*, *15*(3), 230-237.

Gelso, C. J., & McKenzie, J. D. (1973). Effect of information on students' perceptions of counseling and their willingness to seek help. *Journal of Counseling Psychology*, *20*(5), 406-411.

George, J. M., & Brief, A. P. (1992). Feeling good-doing good: a conceptual analysis of the mood at work-organizational spontaneity relationship. *Psychological bulletin*, *112*(2), 310-329.

Gigerenzer, G., & Todd, P.M., & the ABC Research Group. (1999). *Simple Heuristics That Make Us Smart*. New York: Oxford University Press.

Gilovich, T., Griffin, D., & Kahneman, D. (Eds.). (2002). *Heuristics and Biases: The Psychology of Intuitive Judgment*. New York: Cambridge University Press.

Goldstein, N. J., Cialdini, R. B., & Griskevicius, V. (2008). A room with a viewpoint: Using social norms to motivate environmental conservation in hotels. *Journal of Consumer Research*, *35*(3), 472-482.

Goodwin, K. A., Kukucka, J. P., & Hawks, I. M. (2013). Co-Witness Confidence, Conformity, and Eyewitness Memory: An Examination of Normative and Informational Social Influences. *Applied Cognitive Psychology*, *27*(1), 91-100.

Gouldner, A. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, *25* (2), 161-178.

Granovetter, M. (2005). The impact of social structure on economic outcomes. *The Journal of Economic Perspectives*, *19*(1), 33-50.

Gross, J. J. (1998). Antecedent-and response-focused emotion regulation: divergent consequences for experience, expression, and physiology. *Journal of personality and social psychology*, *74*(1), 224-237.

Guadagno, R., & Cialdini, R. (2005). Online persuasion and compliance: Social influence on the Internet and beyond. In Y. Amichai-Hamburger (Ed.), *The social net: The social psychology of the Internet* (pp. 91-113). New York: Oxford University Press.

Hagendoorn, L. (1995). Intergroup biases in multiple group systems: The perception of ethnic hierarchies. *European review of social psychology*, *6*, 199-228.

Halevy, N., Chou, E. Y., & Galinsky, A. D. (2011). A functional model of hierarchy: Why, how, and when vertical differentiation enhances group performance. *Organizational Psychology Review*, *1*(1), 32-52.

Hamilton, D. L., & Sherman, S. J. (1996). Perceiving persons and groups. *Psychological review*, *103*(2), 336-355.

Hamilton, W. (1964). The Genetical Evolution of Social Behavior. *Journal of Theoretical Biology*, *7*(1), 17-52.

Hartmann, D. P., Gelfand, D. M., Smith, C. L., Paul, S. C., Cromer, C. C., Page, B. C., et al. (1976). Factors affecting the acquisition and elimination of children's donation behavior. *Journal of Experimental Child Psychology, 21*, 328-338.

Havens, J. J., O'Herlihy, M. A., & Schervish, P. G. (2006). Charitable giving: How much, by whom, to what, and how. *The nonprofit sector: A research handbook*, *2*, 542-567.

Heckman, J. J., Stixrud, J., & Urzua, S. (2006). The effects of cognitive and noncognitive abilities on labor market outcomes and social behavior. Journal of Labor Economics, 24 (3), 411-482.

Hewstone , M. Brown , R. J. (1986). Contact is not enough: An intergroup perspective on the "contact hypothesis.". In M. Hewstone and R. Brown (Eds.), *Contact and conflict in intergroup encounters* (pp. 1-44). Oxford, England: Basil Blackwell.

Hewstone, M., & Ward, C. (1985). Ethnocentrism and causal attribution in Southeast Asia. *Journal of Personality and Social Psychology*, *48*(3), 614-623.

Hewstone, M., Rubin, M., & Willis, H. (2002). Intergroup bias. *Annual review of psychology*, *53*(1), 575-604.

Hodges, S. D., & Wegner, D. M. (1997). Automatic and controlled empathy. *Empathic accuracy*, 311-339.

Hofstede, G. (1984). *Culture's Consequences: International Differences in Work-Related Values.* Beverly Hills CA: Sage Publications.

Hofstede, G. H. (1991). *Cultures and Organizations: Software of the Mind*. London: McGraw-Hill.

Hogg, M. A. (1992). *The social psychology of group cohesiveness: From attraction to social identity.* New York: New York University Press.

Hogg, M. A. (2003). Social identity. In M. R. Leary & J. P. Tangney (Eds), *Handbook of self and identity* (pp. 462-479). New York: Guilford Press.

Howard, J. W., & Rothbart, M. (1980). Social categorization and memory for in-group and out-group behavior. *Journal of Personality and Social Psychology*, 38(2), 301-310.

Hsee, C. K. (1996). The evaluability hypothesis: An explanation for preference reversals between joint and separate evaluations of alternatives. *Organizational Behavior and Human Decision Processes*, *67*(3), 247-257.

Hsee, C. K., Zhang, J., Lu, Z. Y., & Xu, F. (2013). Unit-asking: A method to boost donations and beyond. *Psychological Science*, *24*(9), 1801-1808.

Ingham, A. G., Levinger, G., Graves, J., & Peckham, V. (1974). The Ringelmann effect: Studies of group size and group performance. *Journal of Experimental Social Psychology*, *10*(4), 371-384.

Isen, A. M., Clark, M., & Schwartz, M. F. (1976). Duration of the Effect of Good Mood on Helping: Footprints on the Sands of Time. *Journal of Personality and Social Psychology*, *34*(3), 385-393.

Islam, M. R., & Hewstone, M. (1993). Dimensions of contact as predictors of intergroup anxiety, perceived out-group variability, and out-group attitude: An integrative model. *Personality and Social Psychology Bulletin*, *19*(6), 700-710.

Jackson, J. M., & Harkins, S. G. (1985). Equity in effort: An explanation of the social loafing effect. *Journal of Personality and Social Psychology*, *49*(5), 1199-1206.

Jankowicz, A. D. (1994). The new journey to Jerusalem: mission and meaning in the managerial crusade to Eastern Europe. *Organization Studies*, *15*(4), 479-507.

Jenni, K., & Loewenstein, G. (1997). Explaining the identifiable victim effect. *Journal of Risk and Uncertainty*, *14*(3), 235-257.

Johnson, R. D., & Downing, L. L. (1979). Deindividuation and valence of cues: effects on prosocial and antisocial behavior. *Journal of Personality and Social Psychology*, *37*(9), 1532-1538.

Jost, J. T., & Kramer, R. M. (2003). The system justification motive in intergroup relations. In D. M. Mackie & E. R. Smith (Eds.), *From prejudice to intergroup emotions: Differentiated reactions to social groups* (pp. 227-245). New York: Psychology Press.

Jung, D. I., & Sosik, J. J. (2002). Transformational leadership in work groups the role of empowerment, cohesiveness, and collective-efficacy on perceived group performance. *Small group research*, *33*(3), 313-336.

Kahneman D. (2003) A perspective on judgment and choice. *American Psychologist, 58,* 697-720.

Kahneman, D. & Frederick, S. (2002). Representativeness revisited: Attribute substitution in intuitive judgment. In T. Gilovich, D. Griffin & D. Kahneman (Eds.), *Heuristics and biases: The psychology of intuitive judgment* (pp. 49-81). New York: Cambridge University Press.

Kahneman, D., & Tversky, A. (1979). *Econometrica*, 47(2), 263-291.

Karau, S. J., & Williams, K. D. (1993). Social loafing: A meta-analytic review and theoretical integration. *Journal of personality and social psychology*, *65*(4), 681-706.

Kelman, H. C. (1961). Processes of opinion change. *Public opinion quarterly*, *25*(1), 57-78.

Kemmelmeier, M., Jambor, E. E., & Letner, J. (2006). Individualism and good works cultural variation in giving and volunteering across the United States. *Journal of Cross-Cultural Psychology*, *37*(3), 327-344.

Kerr, N. L., & Bruun, S. E. (1983). Dispensability of member effort and group motivation losses: Free-rider effects. *Journal of Personality and social Psychology*, *44*(1), 57-78.

Keser, C., & Van Winden, F. (2000). Conditional cooperation and voluntary contributions to public goods. *The Scandinavian Journal of Economics*, *102*(1), 23-39.

Kogut, T., & Ritov, I. (2005a). The "Identified victim" effect: An identified group, or just a single individual? *Journal of Behavioral Decision Making, 18,* 157–167.

Kogut, T., & Ritov, I. (2005b). The singularity effect of identified victims in separate and joint evaluations. *Organizational Behavior and Human Decision Processes, 97,* 106–116.

Kogut, T., & Ritov, I. (2007). "One of us": Outstanding willingness to help save a single identified compatriot. *Organizational Behavior and Human Decision Processes, 104,* 150-157.

Krebs, D. L. (1970). Altruism: An examination of the concept and a review of the literature. *Psychological bulletin*, *73*(4), 258-302.

Lamm, C., Batson, C. D., & Decety, J. (2007). The neural substrate of human empathy: effects of perspective-taking and cognitive appraisal. *Journal of cognitive neuroscience*, *19*(1), 42-58.

Latané, B. (1981). The psychology of social impact. *American Psychologist*, *36*, 343-356.

Leavitt, H. J. (1951). Some effects of certain communication patterns on group performance. *The Journal of Abnormal and Social Psychology*, *46*(1), 38-50.

Lee, T. L., & Fiske, S. T. (2006). Not an outgroup, not yet an ingroup: Immigrants in the stereotype content model. *International Journal of Intercultural Relations*, *30*, 751-768.

Leiderman, P. H., & Shapiro, D. (1964). Studies on the galvanic skin potential level: Some behavioral correlates. *Journal of Psychosomatic Research*, *7*(4), 277-281.

Lewis, S. A., Langan, C. J., & Hollander, E. P. (1972). Expectation of future interaction and the choice of less desirable alternatives in conformity. *Sociometry*, 35, 440-447.

Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting & task performance*. Englewood Cliffs, NJ: Prentice-Hall.

Loewenstein, G., Weber, E. U., Hsee, C. K., & Welch, E. S. (2001). Risk as feelings. Psychological Bulletin, *127*, 267-286.

Lord, K. R., Lee, M. S., & Choong, P. (2001). Differences in normative and informational social influence. *Advances in Consumer Research, 28,* 280-285.

MacGregor, D. G., Slovic, P., Dreman, D., & Berry, M. (2000). Imagery, affect, and financial judgment. *The Journal of Psychology and Financial Markets,1*(2), 104-110.

MacKie, D. M., Gastardo-Conaco, M. C., & Skelly, J. J. (1992). Knowledge of the advocated position and the processing of in-group and out-group persuasive messages. *Personality and Social Psychology Bulletin, 18*, 145-151.

Maples, M. F. (1988). Group development: Extending Tuckman's theory. Journal for Specialists in Group Work, 13(1), 17-23.

Markowitz, E. M., Slovic, P., Västfjäll, D., & Hodges, S. D. (2013). Compassion fade and the challenge of environmental conservation. *Judgment & Decision Making, 8*, 397–406.

Martens, R., & Peterson, J. A. (1971). Group cohesiveness as a determinant of success and member satisfaction in team performance. *International Review for the Sociology of Sport, 6*(1), 49-61.

Maslow, A. H. (1968). *Toward a Psychology of Being*. New York: D. Van Nostrand Company.

McAdams, D. P., & Bryant, F. B. (1987). Intimacy motivation and subjective mental health in a nationwide sample. *Journal of personality*, *55*(3), 395-413.

McLeod, P. L., Baron, R. S., Marti, M. W., & Yoon, K. (1997). The eyes have it: Minority influence in face-to-face and computer-mediated group discussion. *Journal of applied psychology*, *82*(5), 706-718.

McMullen, M. B., Addleman, J. M., Fulford, A. M., Moore, S. L., Mooney, S. J., Sisk, S. S., & Zachariah, J. (2009). Learning to Be" Me" while Coming to Understand" We": Encouraging Prosocial Babies in Group Settings. *Young Children*, *64*(4), 20-28.

Milgram, S. (1963). Behavioral study of obedience. *The Journal of Abnormal and Social Psychology*, *67*(4), 371-378.

Milgram, S. (1974). *Obedience to Authority: An Experimental View*. New York: Harper and Row.

Miller, D. T., & Taylor, B. R. (2002). Counterfactual thought, regret, and superstition: How to avoid kicking yourself. In T.Gilovich, D.Griffin, & D.Kahneman (Eds.), *Heuristics and biases: The psychology of intuitive judgment* (pp. 367-378). New York: Cambridge University Press.

Moscovici, S. (1980). Toward a theory of conversion behavior. *Advances in experimental social psychology*, *13*, 209-239.

Mowen, J. C. (1988). Beyond consumer decision making. *Journal of Consumer Marketing*, *5*(1), 15-25.

Mullen, B., & Copper, C. (1994). The relation between group cohesiveness and performance: An integration. *Psychological bulletin*, *115*(2), 210-227.

Mussweiler, T., Strack, F., & Pfeiffer, T. (2000). Overcoming the inevitable anchoring effect: Considering the opposite compensates for selective accessibility. *Personality and Social Psychology Bulletin*, *26*, 1142–1150.

Nelson, M. R., Brunel, F. F., Supphellen, M., & Manchanda, R. V. (2006). Effects of culture, gender, and moral obligations on responses to charity advertising across masculine and feminine cultures. *Journal of Consumer Psychology*, *16*(1), 45-56.

Nemeth, C. J., & Kwan, J. L. (1985). Originality of word associations as a function of majority vs. minority influence. *Social Psychology Quarterly*, *48*, 277-282.

Nolan, J. M., Schultz, P. W., Cialdini, R. B., Goldstein, N. J., & Griskevicius, V. (2008). Normative social influence is underdetected. *Personality and social psychology bulletin*, *34*(7), 913-923.

Ostrom, T. M., Carpenter, S. L., Sedikides, C., & Li, F. (1993). Differential processing of in-group and out-group information. *Journal of Personality and Social Psychology*, *64*(1), 21-34.

Pettigrew, T. F. (1958). Personality and sociocultural factors in intergroup attitudes: A cross-national comparison. *The Journal of Conflict Resolution*, *2*(1), 29-42.

Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change.* New York: Springer-Verlag.

Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of personality and social psychology*, *67*(4), 741-763.

Pretty, J. (2003). Social capital and the collective management of resources. *Science*, *302*(5652), 1912-1914.

Raymond, J. E., Shapiro, K. L., & Arnell, K. M. (1992). Temporary suppression of visual processing in an RSVP task: An attentional blink?. *Journal of Experimental Psychology: Human Perception and Performance*, *18*, 849-860.

Reingen, P. H. (1978). On inducing compliance with requests. *Journal of Consumer Research*, *5*, 96-102.

Richerson, P. J. & R. Boyd. 2005. *Not By Genes Alone: How Culture Transformed Human Evolution*. Chicago: University of Chicago Press.

Ringelmann, M. (1913). Research on animate sources of power: The work of man. *Annales de l'Instuit National Agronomique*, *12*, 1-40.

Ritov, I., & Kogut, T. (2011). Ally or adversary: The effect of identifiability in inter-group conflict situations. *Organizational Behavior and Human Decision Processes, 116,* 96-103.

Robbins, T. L. (1995). Social loafing on cognitive tasks: An examination of the "sucker effect". *Journal of Business and Psychology*, *9*(3), 337-342.

Roberts, R. D. (1984). A positive model of private charity and public transfers. *The Journal of Political Economy, 92,* 136-148.

Ross, L., Bierbrauer, G., & Hoffman, S. (1976). The role of attribution processes in conformity and dissent: Revisiting the Asch situation. *American Psychologist, 31*(2), 148-157.

Rubaltelli, E., & Agnoli, S. (2012). The emotional cost of charitable donations. *Cognition & Emotion, 26,* 769-785.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist*, *55*(1), 68-78.

Sabbagh, M. A., & Taylor, M. (2000). Neural correlates of theory-of-mind reasoning: an event-related potential study. *Psychological Science*, *11*(1), 46-50.

Schachter, S. (1959). *The psychology of affiliation: Experimental studies of the sources of gregariousness*. Stanford, CA: Stanford University Press.

Schein, E. H. (1965). *Organizational psychology*. Englewood Cliffs, NJ: Prentice-Hall.

Schervish, P. G., & Havens, J. J. (1997). Social participation and charitable giving: a multivariate analysis. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, *8*(3), 235-260.

Selye, H. (1946). The general adaptation syndrome and the diseases of adaptation. *Journal of Clinical Endocrinology and Metabolism, 6,* 117-230.

Shang, J., & Croson, R. (2009). A field experiment in charitable contribution: The impact of social information on the voluntary provision of public goods. *The Economic Journal*, *119*, 1422-1439.

Shaw, L. L., Batson, C. D., & Todd, R. M. (1994). Empathy avoidance: Forestalling feeling for another in order to escape the motivational consequences. *Journal of Personality and Social Psychology*, *67*, 879-887.

Shearman, S. M., & Yoo, J. H. (2007). "Even a penny will help!": Legitimization of paltry donation and social proof in soliciting donation to a charitable organization. *Communication Research Reports*, *24*, 271-282.

Sheldon, K. M., & Bettencourt, B. (2002). Psychological need-satisfaction and subjective well-being within social groups. *British Journal of Social Psychology*, *41*(1), 25-38.

Shelton, M.L., Rogers, R.W.(1981), Fear-Arousing and Empathy-Arousing Appeals to Help: The Pathos of Persuasion, *Journal of Applied Social Psychology*, 11, 366-378.

Sherif, M. A. (1935). A study of some social factors in perception. *Archives of Psychology, 27*, 1-60.

Sherif, M., Harvey, O.J., White, B.J., Hood, W., & Sherif, C.W. (1961). *Intergroup Conflict and Cooperation: The Robbers Cave Experiment*. Norman, OK: The University Book Exchange.

Sherif, M., Taub, D., & Hovland, C. I. (1958). Assimilation and contrast effects of anchoring stimuli on judgments. *Journal of Experimental Psychology*, *55*, 150-155.

Simon, H. A. (1955). A behavioral model of rational choice. *The Quarterly Journal of Economics*, 69 (1), 99-118.

Simon, H. A. (1986). Rationality in Psychology and Economics. *The Journal of Business*, 59 (4), S209-S224.

Sloman, S. A. (1996). The empirical case for two systems of reasoning. *Psychological Bulletin*, *119*(1), 3-22.

Slovic, P. (2007). "If I look at the mass I will never act": Psychic numbing and genocide. *Judgment and Decision Making*, *2*, 79–95.

Slovic, P., Finucane, M., Peters, E., & MacGregor, D. G. (2002). The affect heuristic. In T. Gilovich, D. Griffin, & D. Kahneman (Eds.), *Heuristics and biases: The Psychology of Intuitive Judgment* (pp. 397–420). New York: Cambridge University Press.

Slovic, P., Fischhoff, B., & Lichtenstein, S. (1980). Facts and fears: understanding perceived risk. In R. C. Schwing & W. A. Albers (Eds), *Societal risk assessment: How safe is safe enough?* (pp. 181-214). New York: Plenum Press.

Slovic, P., Griffin, D., & Tversky, A. (1990). Compatibility effects in judgment and choice. In R.M. Hogarth (Ed.), *Insights in decision making: A tribute to Hillel J. Einhorn*, (pp. 5-27). Chicago: University of Chicago Press.

Small, D. A., & Loewenstein, G. (2005). The devil you know: The effects of identifiability on punishment. *Journal of Behavioral Decision Making*, *18*(5), 311-318.

Small, D. A., Loewenstein, G., & Slovic, P. (2007). Sympathy and callousness: The impact of deliberative thought on donations to identifiable and statistical victims. *Organizational Behavior and Human Decision Processes*, *102*, 143–153.

Smith, C. M., Tindale, R. S., & Dugoni, B. L. (1996). Minority and majority influence in freely interacting groups: Qualitative versus quantitative differences. *British Journal of Social Psychology*, *35*(1), 137-149.

Smith, K.D., Keating, J.P., Scotland, E. (1989). Altruism reconsidered: The effect of denying feedback on a victim's status to empathic witnesses. *Journal of Personality and Social Psychology*, *57*(4), 641-650.

Sober, E. & Wilson, D.S. (1998). *Unto Others: The Evolution and Psychology of Unselfish Behavior.* Cambridge: Harvard University Press.

Stanovich, K. E., & West, R. F. (2000). Individual differences in reasoning: Implications for the rationality debate? *Behavioral and brain sciences*, *23*(5), 645-665.

Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of personality and social psychology*, *69*(5), 797-811.

Stephan, W. G., & Stephan, C. W. (1985). Intergroup anxiety. *Journal of social issues*, *41*(3), 157-175.

Strack, F., & Mussweiler, T. (1997). Explaining the enigmatic anchoring effect: Mechanisms of selective accessibility. *Journal of Personality and Social Psychology*, *73*, 437-446.

Sugden, R. (1984). Reciprocity: the supply of public goods through voluntary contributions. *The Economic Journal*, *94*(376), 772-787.

Sunstein, C. R. (2005). Moral heuristics. *Behavioral and Brain Sciences*, *28*, 531-541.

Sunstein, C. R., Kahneman, D., Schkade, D., & Ritov, I. (2002). Predictably incoherent judgments. *Stanford Law Review*, *54*, 1153-1215.

Sutter, M., & Weck-Hannemann, H. (2003). On the effects of asymmetric and endogenous taxation in experimental public goods games. *Economics Letters*, *79*(1), 59-67.

Tajfel, H. (1978). *Differentiation between social groups: studies in the social psychology of intergroup relations*. London: Academic Press.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The Social Psychology of Intergroup Relations* (pp. 33–47). Monterey, CA: Brooks/Cole.

Tajfel, H., Billig, M. G., Bundy, R. P., & Flament, C. (2006). Social categorization and intergroup behaviour. *European Journal of Social Psychology*, *1*, 149-178.

Thibaut, J., Kelley, H.(1959). *The Social Psychology of Groups*. New York: Wiley.

Tice, D. M., Butler, J. L., Muraven, M. B., & Stillwell, A. M. (1995). When modesty prevails: Differential favorability of self-presentation to friends and strangers. *Journal of Personality and Social Psychology*, *69*(6), 1120-1138.

Titus, H. E., & Hollander, E. P. (1957). The California F scale in psychological research: 1950-1955. *Psychological Bulletin*, *54*(1), 47-74.

Triplett, N. (1898). The dynamogenic factors in pacemaking and competition. *American Journal of Psychology*, *9*, 507-533.

Trivers, R.L. (1971). The Evolution of Reciprocal Altruism. *The Quarterly Review of Biology*, *46*(1), 33-57.

Tuckman, B. W. (1965). Developmental sequence in small groups. *Psychological bulletin*, *63*(6), 384-399.

Tuckman, B. W., & Jensen, M. A. C. (1977). Stages of small-group development revisited. *Group & Organization Management*, *2*(4), 419-427.

Turner, J. C., Sachdev, I., & Hogg, M. A. (1983). Social categorization, interpersonal attraction and group formation. *British Journal of Social Psychology*, *22*(3), 227-239.

Tversky, A. & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, *185*, 1124–1131.

Tversky, A., Sattath, S., & Slovic, P. (1988). Contingent weighting in judgment and choice. *Psychological review*, *95*(3), 371-384.

Ubel, P. A., DeKay, M. L., Baron, J., & Asch, D. A. (1996). Cost-effectiveness analysis in a setting of budget constraints--is it equitable? *New England Journal of Medicine*, *334*(18), 1174-1177.

Van Oudenhoven, J. P., Groenewoud, J. T., & Hewstone, M. (1996). Cooperation, ethnic salience and generalization of interethnic attitudes. *European Journal of Social Psychology*, *26*, 649-661.

Vesterlund, L. (2003). The informational value of sequential fundraising. *Journal of Public Economics*, *87*, 627-657.

Vesterlund, L. (2006). Why do people give. *The nonprofit sector: A research handbook*, *2*, 168-190.

Von Neumann, J., & Morgenstern, O. (1944). *Theory of Games and Economic Behavior*. Princeton, NJ: Princeton University Press.

Warr, P. G. (1982). Pareto optimal redistribution and private charity. *Journal of Public Economics*, *19*, 131-138.

Weber, E. H. (1834). *De pulsu, resorptione, auditu et tactu*. Leipzig: Koehler.

Weyant, J. M. (1984). Applying Social Psychology to Induce Charitable Donations1. *Journal of Applied Social Psychology*, *14*(5), 441-447.

Weyant, J. M., & Smith, S. L. (1987). Getting More by Asking for Less: The Effects of Request Size on Donations of Charity. *Journal of Applied Social Psychology*, *17*(4), 392-400.

Wiepking, P., & Breeze, B. (2011). Feeling poor, acting stingy: the effect of money perceptions on charitable giving. *International Journal of Nonprofit and Voluntary Sector Marketing*, *17*(1), 13-24.

Willemsen, M. C., Böckenholt, U., & Johnson, E. J. (2011). Choice by value encoding and value construction: Processes of loss aversion. *Journal of Experimental Psychology: General*, *140*(3), 303-324.

Wood, W., Lundgren, S., Ouellette, J. A., Busceme, S., & Blackstone, T. (1994). Minority influence: a meta-analytic review of social influence processes. *Psychological bulletin*, *115*(3), 323-345.

World Health Organization (2013). Top ten causes of death. Retrived online on Jannuary 16, 2014 from: http://www.who.int/mediacentre/factsheets/fs310/en/

Zajonc, R. B. (1965). Social facilitation. *Science*, *149*, 269-274.

Zajonc, R. B. (1980). Feeling and thinking: Preferences need no inferences. *American psychologist*, *35*(2), 151-175.

Zajonc, R. B., Heingartner, A., & Herman, E. M. (1969). Social enhancement and impairment of performance in the cockroach. *Journal of Personality and Social Psychology*, *13*(2), 83-92.

APPENDIX A

MATERIALS FOR EXPERIMENT 1

Please read the following scenario and answer the questions that you find in the next pages :

Imagine that you are asked to donate money for a humanitarian organization that you trust and that has put in place a series of projects to help brain-injured children. This disease includes brain damages, the causes of which are not identifiable, and it has various implications such as mental retardation, muscular dystrophy, emotional disturbances. In particular , these children may suffer from severe respiratory complications.

After careful studies, in order to improve the central control of respiration , it has been devised *a breathing machine*. Thanks to this machine you avoid the brain- injured child to contract lung infections escaping this way the frequent hospital admissions and which means also a big savings for the community.

In particular, your donation will be used for a project in support of Elena , a girl of 6 years old and lives with her parents in Verona .

On average, Italian citizens are willing to donate €10 in favor of this project[1]

Are you willing to make a donation towards the purchase of the breathing machine for Elena?

Yes [__] No [__]

Taking into account your monthly budget, how much are you willing to donate to help Elena?

_____ €

[1] The present sentence was presented to participants in the LA condition. In the HA condition it was written €90 instead of €10, and in the NA condition nothing was written below the image of Elena.

Please respond to the following questions in a scale from 1 (Not at all) to 7 (Very much).

1. How much do you feel worried thinking about Elena? (1 2 3 4 5 6 7)
2. How much do you feel sad thinking about Elena? (1 2 3 4 5 6 7)
3. How much sympathy and compassion did you feel thinking about Elena? (1 2 3 4 5 6 7)
4. Donating money to help Elena makes me feel better. (1 2 3 4 5 6 7)
5. Reading the story about Elena, provokes negative feelings in me. (1 2 3 4 5 6 7)
6. If I decided not to donate I would feel guilty. (1 2 3 4 5 6 7)
7. How familiar are you with the brain injures illness? (1 2 3 4 5 6 7)
8. How important did you find the other Italians average donation for your decision about the donation amount? (1 2 3 4 5 6 7)
9. How realistic did you find the average donation of other Italians? (1 2 3 4 5 6 7)[2]

[2] Question 8 and 9 where presented only when participants belonged to the LA or HA conditions.

APPENDIX B

MATERIALS FOR EXPERIMENT 2

Please read the following scenario and answer the questions that you find in the next pages :

Imagine that you are asked to donate money for a humanitarian organization that you trust and that has put in place a series of projects to help brain-injured children. This disease includes brain damages, the causes of which are not identifiable, and it has various implications such as mental retardation, muscular dystrophy, emotional disturbances. In particular , these children may suffer from severe respiratory complications.

After careful studies, in order to improve the central control of respiration , it has been devised *a breathing machine*. Thanks to this machine you avoid the brain- injured child to contract lung infections escaping this way the frequent hospital admissions and which means also a big savings for the community.

In particular, your donation will be used for a project in support of Elena , a girl of 6 years old and lives with her parents in Verona .

On average, Italian citizens are willing to donate €10 in favor of this project[3]

Are you willing to make a donation towards the purchase of the breathing machine for Elena?

Yes [__] No [__]

Taking into account your monthly budget, how much are you willing to donate to help Elena?

_____ €

[3] The present sentence was presented to participants in the LA-I condition. In the HA-I condition it was written “On average, Italian citizens are willing to donate €70 euro in favor of this project”, in the LA-O condition it was written ““On average, German citizens are willing to donate €10 euro in favor of this project”, and in the HA-O condition it was written ““On average, German citizens are willing to donate €70 euro in favor of this project”.

Please respond to the following questions in a scale from 1 (Not at all) to 7 (Very much).

1. How much do you feel worried thinking about Elena? (1 2 3 4 5 6 7)
2. How much do you feel sad thinking about Elena? (1 2 3 4 5 6 7)
3. How much sympathy and compassion did you feel thinking about Elena? (1 2 3 4 5 6 7)
4. Donating money to help Elena makes me feel better. (1 2 3 4 5 6 7)
5. Reading the story about Elena, provokes negative feelings in me. (1 2 3 4 5 6 7)
6. If I decided not to donate I would feel guilty. (1 2 3 4 5 6 7)
7. How familiar are you with the brain injures illness? (1 2 3 4 5 6 7)
8. How important did you find the other Italians average donation for your decision about the donation amount? (1 2 3 4 5 6 7)
9. How realistic did you find the average donation of other Italians? (1 2 3 4 5 6 7)

APPENDIX C

MATERIALS FOR EXPERIMENT 3

Please read the following scenario and answer the questions that you find in the next pages :

Imagine that you are asked to donate money for a humanitarian organization that you trust and that has put in place a series of projects to help brain-injured children. This disease includes brain damages, the causes of which are not identifiable, and it has various implications such as mental retardation, muscular dystrophy, emotional disturbances. In particular , these children may suffer from severe respiratory complications.

After careful studies, in order to improve the central control of respiration , it has been devised *a breathing machine*. Thanks to this machine you avoid the brain- injured child to contract lung infections escaping this way the frequent hospital admissions and which means also a big savings for the community.

In particular, your donation will be used for a project in support of Elena , a girl of 6 years old and lives with her parents in Verona .

On average, Italian citizens are willing to donate €10 in favor of this project[4]

Are you willing to make a donation towards the purchase of the breathing machine for Elena?

Yes [__] No [__]

Taking into account your monthly budget, how much are you willing to donate to help Elena?

_____ €

[4] The present sentence was presented to participants in the LA-I condition. In the HA-I condition it was written “On average, Italian citizens are willing to donate €70 euro in favor of this project”, in the LA-O condition it was written ““On average, German citizens are willing to donate €10 euro in favor of this project”, and in the HA-O condition it was written ““On average, German citizens are willing to donate €70 euro in favor of this project”.

Please respond to the following questions in a scale from 1 (Not at all) to 7 (Very much).

1. How much do you feel worried thinking about Elena? (1 2 3 4 5 6 7)
2. How much do you feel sad thinking about Elena? (1 2 3 4 5 6 7)
3. How much sympathy and compassion did you feel thinking about Elena? (1 2 3 4 5 6 7)
4. Donating money to help Elena makes me feel better. (1 2 3 4 5 6 7)
5. Reading the story about Elena, provokes negative feelings in me. (1 2 3 4 5 6 7)
6. If I decided not to donate I would feel guilty. (1 2 3 4 5 6 7)
7. How familiar are you with the brain injures illness? (1 2 3 4 5 6 7)
8. How important did you find the other Italians average donation for your decision about the donation amount? (1 2 3 4 5 6 7)
9. How realistic did you find the average donation of other Italians? (1 2 3 4 5 6 7)