Running head: Self-Offering and Positive Affect

“How Far Out of Your Way Will You Go? Variations in Self-offering and Positive Affect
in Helping Behaviour”

Lorena Ruci

Department of Psychology
Carleton University
Ottawa, Ontario

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Abstract

The “do good-feel good” hypothesis of helping behaviour has demonstrated the positive effects of voluntary helping on affect of the helper. In the present research, I examined the extent of helping provided by manipulating self-offering levels (low and moderate) and measured its effects on anticipated and current affect of the helper. The first study (N=63) used vignettes describing hypothetical helping situations and measured anticipated affect, whereas the second study (N=52) manipulated helping behaviour in a lab setting and measured actual current affect. The findings were supportive of the positive relationship between self-offering and anticipated un-activated positive affect, whereas with respect to actual current affect, the findings were not significant. I also looked at the predictive value of altruism and empathy and their relationship with positive affect resulting from helping. The findings supported the hypothesis that higher altruism and empathy scores predicted higher anticipated positive affect. However, this relationship was not supported on actual current affect. Methodological issues are discussed and suggestions are offered on the future of the self-offering hypothesis.

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Table of Contents

Abstract	ii
Acknowledgments.....	iii
Table of Contents	iv
List of Tables	vii
List of Figures	viii
Introduction.....	1
Theories of Helping	2
Models of Affect.....	8
Individual Differences in Helping Behaviour.....	10
The Present Research.....	12
Study 1: Social Dilemmas and Personality.....	14
Hypotheses	15
Method	15
Participants.....	15
Materials	15
Questionnaires	16
Empathy	16
Social Desirability.....	16
Altruism	16
Mood Measures.....	17

Vignettes	17
Procedure	19
Results.....	19
Preliminary Analyses	19
Vignettes	20
Analyses by Individual Vignette.....	22
Altruism and Empathy on Total Anticipated Positive Affect.....	23
Discussion	26
 Study 2: Pain Tolerance and Personality Difference	 30
Hypotheses.....	32
Method	32
Participants.....	32
Apparatus	33
Materials	33
Pain Measure.....	34
Procedure	35
Results.....	39
Preliminary Analyses	39
Post-Decision Overall Positive Affect.....	39
Post-Behaviour Overall Positive Affect.....	41
The Predictive Value of Altruism and Empathy on Positive Affect.....	43
Exploratory Hypotheses.....	45
Discussion	47

General Discussion	51
References.....	59
Appendix A: General Information	66
Appendix B: The Full Length Bees	67
Appendix C: Social Desirability Scale	69
Appendix D: Altruism Scale.....	71
Appendix E: Brief Mood Introspection Scale.....	72
Appendix F: Vignettes	73
Appendix G: Descriptive statistics and reliability analyses of affect scales for the three vignettes..	85
Appendix H: Pain Intensity Questionnaire	86
Appendix I: Brief Mood Introspection Scale (Long version)	87
Appendix J: Reactions to “Pain intensity and Personality” Study.....	89
Appendix K: Checking for Suspicion Note.....	90

List of Tables

Table	Description	Page
1	Means, standard deviations and reliability alphas for personality scales	20
2	Helping rates by vignette across conditions	20
3	Affect comparisons of both conditions for each vignette	23
4	Altruism and empathy regressed on anticipated positive affect	25
5	Means, standard deviations and reliability alphas for personality scales	39
6	Means and Standard Deviations across experimental and control conditions	42
7	Affect subscales comparisons by condition and self-offering level	43
8	Altruism regressed on both affect scales	44
9	Empathy regressed on both affect scales	45

List of Figures

Figure	Description	Page
1	Post-decision overall positive affect by condition	40
2	Post behaviour overall positive affect by condition	41

How far out of your way can you go? Variations in self-offering and positive affect in helping behaviour.

Helping behaviour has been regarded as one of the most powerful and admirable expressions of human nature. Every year numerous awards are given to people who exhibit extraordinary acts of altruism and philanthropy. Considering the social implications of such a behaviour, it is not surprising that helping behaviour has been a focus of several disciplines (e.g. social biology, sociology, behavioural economics and psychology). An ongoing debate among social psychologists has dealt with the question of whether helping can be “truly altruistic”, and two main schools of thought have emerged. On one side, there are the proponents of psychological egoism (Cialdini et al. 1997; Baumann, Cialdini & Kendrick, 1981), which claim that people behave in ways that benefit themselves when helping. On the other hand, the proponents of altruistic motivations argue that people are capable of behaviours where their main concern is the benefit of the other person and, thus, ignore their egoistic concerns (Batson, et al. 1997; Batson, 1991).

Another less explored aspect of helping behaviour is formulated as the “do good-feel good” hypothesis, which has originated from anecdotal reports that helping makes people feel good. This hypothesis proposes a connection between helping behaviour and positive affect as an end result for the helper, and has been supported numerous times (Yinon & Landau, 1987; Harris, 1977; Williamson & Clark, 1989; Batson, Coke, Jasnoski, & Hanson, 1978). People help because they have internalized norms shaped by socialization forces, which dictate that those who need help should be helped. As a result,

helping others is respected and admired and makes people feel good (Berkowitz, 1972, Cialdini & Kenrick, 1976; Schwartz & Howard, 1982).

The present study will expand on the “do good-feel good hypothesis” by focusing on the extent of help provided while keeping constant the amount of help received. The extent of help will be measured by the level of self-offering (or self-giving) provided by the helper where more self-offering would signify more going out of one’s way to engage in the helping behaviour. The present research will take the “do good-feel good hypothesis” a bit further in the sense that it will measure positive affect as a variation of self-offering while keeping all other motivational aspects of helping unaffected (e.g. empathy, current mood state, potential benefits). It is hypothesized that the greater the extent of helping (measured here as a level of self-offering), the greater the positive affect experienced as a result by the helper.

Theories of helping

Research in the social sciences, including psychology, had been dominated by the notion of self-interest for several decades. The self-interest assumption, which sees human beings as characterized mainly by self-interest in their interactions with the world, had been adopted as an unquestionable aspect of human nature. In the past several decades, this notion began to be questioned by several areas of research such as behavioural economics, sociology and especially social psychology. The self-interest hypothesis could not account for displays of altruism (a genuine concern about another’s welfare) or people’s tendency to take into account the preferences of others in their economic decisions (Rabin, 2002).

In economics, altruistic tendencies have been incorporated into the existing models describing people's choices with utility functions. Economists use utility as a measure of satisfaction or happiness gained from consuming goods and services (Case et al. 1998). Utility functions are mathematical representations of the combinations of people's preferences of goods and services (e.g. eating an apple, watching a movie or sleeping) and the satisfaction or utility that they yield. In recent economic analysis, people's altruistic preferences have been imbedded into their utility functions (Rabin, 2002).

While the economic models have adopted the notion of altruism as a modification to the existing theories dominated by self-interest, psychologists have developed new theories that incorporate altruism as a central feature. Currently one of the most influential models of pro-social behaviour is the Empathy-Altruism hypothesis put forward by Batson and his colleagues (see Batson, 1987; 1991 for reviews). According to this model, witnessing another person in distress produces empathic concern (e.g. sympathy, compassion). The empathic concern motivates people to help in order to relieve the other person's distress. In such a case, people who are empathically driven to help, have as a sole goal the benefit of the person in need. Thus, "if benefiting the other is the ultimate goal and the self-benefits are unintended consequences, then the motive for helping is altruistic" (Batson, 1991, p. 65).

The Empathy-Altruism hypothesis has been tested and supported in many experiments (Batson & Coke 1981; Batson, 1990; Batson, Batson, Slingsby, Harrell, Peekna & Todd, 1991; Dovidio, Allen & Schroeder, 1990; Batson & Weeks, 1996). Batson and his colleagues were able to establish that people who choose to help, do so

out of altruistic motivations and not out of ulterior motives. In a classic experiment, (Batson et al. 1981) people were placed in a situation where they had the opportunity to help someone else or escape, as helping was made either easy or difficult. They manipulated empathy level (low vs. high) and escape opportunity (easy vs. difficult). The Empathy-Altruism hypothesis would predict that helping behaviour would be high in both the easy and difficult escape conditions among participants feeling high empathy. Helping would be an indication of people's altruism because it would become evident if people would act out of concern for others or would escape helping, thus looking after their own self-interest. Furthermore it was hypothesized that helping would be lowest in the low empathy condition (because low empathy would not be enough to evoke truly altruistic motivation). The results of this experiment (Batson et al. 1981) and several other experiments using the Escape x Empathy design (Batson et al. 1983; Batson et al. 1988; Batson et al. 1989) have offered support for the Empathy-Altruism hypothesis.

The consideration of empathy as the motivational force towards pro-social behaviour is the main strength of the Empathy-Altruism hypothesis but also its main weakness. It is a weakness in the sense that it excludes other factors that have been found to influence helping behaviour, such as the cost of helping. In one of the experiments that Batson and his colleagues have conducted (Batson, O'Quin, Fultz, Vanderplas & Isen, 1983, Study 3), high empathy was not enough to induce helping behaviour. The crucial variable that impeded helping behaviour, even though empathy was high, was the *cost* of helping. In their experiment, participants were told that they would be given high-level shocks that were painful although not harmful, if they choose to help another participant. It was found that the motivation for helping was low even for individuals who had

previously reported high levels of empathy. Although the cost of helping clearly impeded the influence of empathy in motivating helping behaviour, it was not given much attention by Batson and his colleagues. They merely offered the suggestion that “concern for others is a fragile flower, easily crushed by self-concern” (p. 718) and did not further explore the interaction between cost of helping and empathy. Despite the fact that the cost of helping has been found to interact with the altruistic motivation of helping, Batson and his colleagues have not yet offered a more pluralistic explanation of helping behaviour by including both altruistic and egoistic motives.

An alternative explanation for the findings reported by Batson and his colleagues has been provided by the Negative-State Relief model (Baumann, Cialdini & Kenrick, 1981; Cialdini, Schaller, Houlihan, Arps, Fultz & Beaman, 1987; Cialdini, Darby & Vincent, 1973). The NSR model proposes that witnessing someone in need creates personal distress (negative mood, alarm) that needs to be removed. Furthermore, the personal distress motivates helping in order to relieve it. Thus, it is the egoistic desire to manage personal distress that causes the individual to engage in helping behaviour and not the empathic concern for the person in need. Empirical studies have provided evidence for this model as well (Baumann et al. 1981; Maner, Luce, Neuberg, Cialdini, Brown & Sagarin, 2002; Cialdini, Brown, Lewis, Luce & Neuberg, 1997).

This model can be considered as the opposite counterpart of the Empathy-Altruism model as it disregards any altruistic motives people have when helping others. Instead, any form of empathically aroused helping is attributed to the egoistic reason of making oneself feel “less negative”. According to this model, helping others is

instrumental to making ourselves feel good (Manucia, Baumann & Cialdini, 1984; Cialdini et al. 1973).

The NSR model explicates the accepted wisdom that voluntary helping behaviour that benefits another person leads to positive affect. However, studies supporting NSR model have assumed the presence of an already negative emotional state in order for helping behaviour to occur. This model would not explain the positive effects induced by helping in the absence of negative mood because in that case there would not be a negative mood state that needed to be reversed. However, by stating that helping relieves the distress created by seeing someone in need, this model makes the indirect statement that helping does create a positive affect in the helper. Positive affect as a consequence of helping is a common proposition of both the main theories of helping. The only difference is that the Empathy-Altruism hypothesis considers positive affect as an unintended consequence of helping, whereas the NSR model indirectly refers to it as a reduction in negative affect.

Although most of the research on helping behaviour has focused on the motivations that lead to it, there have been attempts to directly explore the connection between helping and positive affect (Harris, 1977; Yinon & Landau, 1987; Williamson & Clark; 1989). This exploration has led to the formulation of the “do good-feel good” hypothesis. This hypothesis mainly originated from anecdotal reports and the long held belief that helping makes people feel good. The studies that have supported this hypothesis have followed similar methodologies, where positive affect was measured as a result of providing vs. withholding help. The results of such studies have shown that participants who were given the opportunity to help would report a better mood

compared to those who were not given the opportunity to help (Yinon & Landau, 1987; Williamson & Clark, 1989; Williamson & Clark, 1992).

In one of the earliest studies exploring the “do good-feel good” hypothesis (Harris, 1977), participants were asked to indicate how they would feel if they engaged in several helping situations (e.g. giving money to charity, picking up papers, picking up a hitchhiker, giving street directions and giving money to a panhandler). Participants believed that all instances of helping, except giving money to a panhandler, would lead to a positive mood change. In a subsequent laboratory experiment, participants were placed in a situation where they gave street directions to a person, and in another experiment helped a female confederate search for a “lost” piece of paper. Harris found that giving street directions had no effect on participants’ mood whereas looking for the “lost” piece of paper lead to a positive mood change.

Harris proposed that helping leads to a positive mood only if the helping act has some personal altruistic value for the helper. For example, giving directions to a stranger can be classified as a helping act, but it is relatively a trivial behaviour that carries minimal altruistic value, and for this reason, it did not have any effect on mood. A meaningful act on the other hand carries a greater value from the point of view of the helper, because it would mean going out of one’s way to perform such an act. As a conclusion, Harris offered the suggestion that meaningful altruistic acts were better at improving peoples’ moods compared to trivial altruistic acts. For example, giving street directions would probably save someone from the distress and anguish of being lost, but from the point of view of the helper such an act is not considered very meaningful

(someone else would have given directions). Thus, not every kind of helping behaviour carries the same significance, nor does it have the same consequences for the helper.

It should be noted that personal significance of a helpful act is different from the *cost* of helping. Personal significance refers to the meaning or value of the specific act and is pertinent in situations that involve voluntary *giving*, whereas cost refers to situations in which the individual makes expenditure or situations that individuals view as a *loss* (even if helping is voluntary). The meaning of cost in helping behaviour can be better understood in reciprocal helping. In this kind of helping, the helper voluntarily benefits another person but with the expectation that the recipient will return the favor in the future. Voluntary giving, on the other hand, does not include such expectations.

To expand on Harris' distinction between meaningful and trivial altruistic acts, the present study will focus on two types of meaningful helping; helping that involves a low level of self-offering and helping that involves a moderate level of self-offering. Given the findings that meaningful acts lead to positive affect, the present study will expand on these findings by looking at different levels of meaningful altruistic acts and their effect on mood.

Models of Affect

There is a clear distinction in the literature between emotions and mood. Emotions are said to be "intentional" in a sense that they involve a subject-object relationship (Frijda, 1993). For example, happiness usually has an object (e.g. happy about something); anger is directed at someone (e.g. angry at someone) and surprise comes as a result of an event (e.g. surprised about something). Moods on the other hand are said to be free-floating affective states, which could be initiated by a specific object,

but they lack the specificity of emotions and represent broader emotional states. For example, helping behaviour leads to a good/positive mood for the person who engages in the behaviour. This positive mood might be the combination of many specific emotions, such as, happiness for witnessing a positive conclusion of a problematic situation, competence for being able to help, pride for having the courage in implementing internalized moral beliefs, etc.

Affect is one of the main components of mood. In the emotion literature, affect has been described in terms of arousal (pleasantness vs. activation; Russell & Feldman-Barrett, 1999) or valence (positive vs. negative emotional activation; Tellegen, Watson & Clark, 1999). Russell and Feldman-Barrett (1999) have proposed a two-dimensional model of affect. They propose that all emotions that make up the affective experience can be rotated along two dimensions, the pleasantness dimension (pleasant vs. unpleasant) and the activation dimension (activation vs. deactivation). According to this model, every emotion has a specific proportion of these two dimensions. For example, *happy* is said to be high in pleasantness and moderate in activation whereas *excited* is lower than *happy* in pleasantness but higher in activation.

Another approach emphasizes a different organization of mood, varying mainly along positive affect and negative affect (Tellegen, Watson & Clark, 1999). Positive and negative affect are considered to represent combinations of pleasantness and high activation and unpleasantness and high activation respectively. Although both models conceptualize affect in different terms, they both converge to describing the same thing but by emphasizing different dimensions. The dimensional model highlights the importance of both dimensions of mood (pleasantness and activation) whereas the uni-

dimensional model emphasizes valence as being the important feature (positive and negative).

The distinction between affective reactions directed at a specific target or broad feelings without a distinct object is an important issue to consider when choosing measurement tools. In this study, I adopt the dimensional model of affect, which measures affect along two dimensions (pleasantness and activation). In the present study, positive and negative affect are considered transitory and relatively short affective states and their affective components will be measured by the Brief Mood Introspection Scale (BMIS, Mayer & Gaschke, 1988) which measures current mood along valence and arousal/activation dimensions.

The affective properties of mood (activation and pleasantness) have yet to be explored in the context of helping behaviour. I adopt the dimensional model because I want to distinguish between the activation levels of affect that result from helping. For example, positive affect that results from helping might be high in pleasantness and low in activation (e.g. someone might feel *content* after helping), or positive affect could be high in pleasantness and high in activation (e.g. people who might feel *ecstatic* after helping). By adopting the dimensional approach in measuring affect, the present study will improve and expand on previous research (see Manucia, et al. 1984; Yinon & Landau 1987; Harris, 1977), which has measured affect along the valence dimension only (positive vs. negative).

Individual differences in helping behaviour

Individual differences in helping behaviour have been found to exist at the level of several personality characteristics, such as self-esteem, competence, moral

development and altruism (Staub, 1978; Rushton et al. 1981). There are undeniably many similarities between people who are more likely than others to help across many situations. This observation has led to the suggestion that the existence of an “altruistic personality” might account for these differences. “The altruistic personality” has been defined as a set of traits that predispose a person to think and act in a pro-social manner across a broad range of situations (cross-situational consistency) (Carlo, et al. 1991). Although not much support exists for this notion of “the altruistic personality” in the literature, studies have found that an altruistic approach to life is common in blood donors (Boe & Ponder, 1981) and among those who frequently help without compensation (Romer, et al. 1986). Furthermore, Oliner & Oliner (1988) found that rescuers of Jews were more helpful than non-rescuers even 40 years later. Lastly, people high on altruism consider helping situations to be more rewarding than people low in altruism and they also show persistence of helpfulness over a long time (Kerber, 1984).

Empathy has also been associated with higher predispositions towards pro-social behaviours (Vitaglione & Barnett, 2003) and has been shown to be positively related to helping (see Empathy-Altruism hypothesis, Batson et al 1997). Individual differences in empathy lie in the fact that some people are better at identifying with other people, they are more able to vicariously feel their distress and are more motivated to help (Staub, 1978). People high in empathy also value others more and feel more concern about their state. As a result, they develop a sense of responsibility about their welfare and are more likely to engage in pro-social behaviours (Staub, 1980). The relationship of empathy with helping behaviour has been extensively examined by the Empathy-Altruism hypothesis

and most researchers agree that high empathy leads to more helping (Batson, et al. 1981, 1990, Kruger, 2003; Frey & Meier, 2004).

Although there is evidence for the relationship between altruism, empathy and helping behaviour, there have been no attempts to explore these characteristics in the framework of positive affect as a consequence of helping. This study is unique because it explored individual differences in altruism and empathy on positive affect. I hypothesize that people who are high on altruism and empathy will experience more positive affect compared to people who are low. Altruism and empathy are considered to be stable factors of pro-social tendencies, have been recorded to be stable over time (e.g. Staub, 1978) and in this study will be assessed with trait measures.

The Present Research

The present research investigated the effect of helping behaviour on the people who offer something of themselves (the helper) in order to help someone else (the recipient). Two studies explored this relationship, one was a scenario study and the other one was conducted in a laboratory setting. I looked at the relationship between helping and positive affect by manipulating two levels of self-offering (low vs. moderate) and measured their effects on positive affect. I propose that there is a positive relationship between self-offering and positive affect of the helper, assuming that helping behaviour has occurred. I hypothesize that a moderate level of self-offering has a greater effect on positive affect compared to a low level of self-offering. A necessary condition for this relationship to hold is that helping behaviour is voluntary and not coerced (see Batson, et al. 1979).

Past research has documented that voluntary helping leads to an increase in positive affect (Williamson & Clark, 1992; Yinon, & Landau, 1987; Harris, 1977), but no study has explored this relationship by looking at different levels of self-offering. Furthermore, this relationship has been explored by comparing positive affect across helpers and non-helpers, thus not much attention has been given to detecting other variables (e.g. self-offering) that lead to the increase of positive affect (except for the behaviour itself). I propose that the extent of help provided (measured by different levels of self-offering) will be responsible for the creation of different levels of positive affect.

An important design feature of the present studies is that they kept constant the effect of helping on the recipient. Therefore, I was able to explore the mechanisms that generate positive affect among helpers only without having to control for external influences on this process, such as the effect of helping on the recipient. Furthermore, this design allowed me to indirectly investigate the motivations of helping. More specifically, if moderate self-offering compared to low results in higher positive affect in the helper, this would mean that the motivation for helping cannot be altruistic. The altruistic approach would not predict any difference in positive affect by the manipulation of self-offering, because according to this approach, helping is initiated due to concern for the other person's welfare and not for the helper's own. The egoistic approach on the other hand, may predict a change in positive affect of the helper arising from changes in self-offering, because the increase in self-offering would signify a greater personal contribution of the helper, thus resulting in greater reward (i.e. positive affect). I do not intend to directly test either model of helping in the present research; however, the

findings will be interpreted in light of either the altruistic approach or the egoistic approach.

To summarize, helping behaviour has been reported to lead to positive affect. This has been either directly indicated (Empathy-Altruism hypothesis), indirectly inferred (NSR model) and also empirically supported (“do good-feel good” hypothesis). The present studies expanded on the existing research by looking at the relationship between self-offering and positive affect of the helper. I propose that positive affect increases as a positive function of self-offering, while the end result for the recipient remains the same. As an aside, it is probable that the relationship between self-offering and positive affect is curvilinear. That is, positive affect increases as a positive function of self-offering up to a certain point, after which higher levels of self-offering would lead to decreases in positive affect. This would be the case when the helper still engages in helping behaviour, but the level of self-offering that is required for the helping to occur is too high or becomes costly, thus the helper does not feel good after helping. For example, the helper might feel that she/he is being taken advantage of, or realizes half way through the helping behaviour that the situation requires more self-offering from what was initially intended and as a result, helping does not necessarily lead to positive affect. However, the possible curvilinear pattern of this relationship was not examined in this project, the focus of which is “everyday” helping where more helping leads to more positive affect.

Study 1: Social Dilemmas and Personality

This study examined the relationship between low and moderate levels of self-offering and their effects on anticipated positive affect of the helper. I used vignettes to manipulate the level of self-offering where participants were asked to indicate their

behaviour after reading three helping scenarios. The scenarios were the same for the two conditions but were adapted to represent the two self-offering levels. After reading each scenario, participants decided if they would help or not and also indicated their emotional state corresponding to each scenario. For example, participants read about a woman with a stroller who needed help to go up the stairs of an apartment building. They were asked to make the choice of helping and indicate their emotional reaction from the encounter (e.g. Based on your decision to help/or not in the above situation, how would you describe your emotional state afterwards?).

Hypothesis 1: Anticipated positive affect will vary as a function of self-offering across the two conditions. In the moderate self-offering condition, anticipated positive affect following helping behaviour will be higher compared to the low self-offering condition.

Hypothesis 2: People high on altruism and empathy will anticipate an increased positive affect following helping compared to people low on altruism and empathy.

Method

Participants

Seventy-eight participants with ages ranging from 18 to 31, ($M = 19.5$, $SD = 2.48$), were recruited from the introductory psychology pool and were given experimental credits for their participation. Sixty-three (19 males and 44 females) were included in the analyses, 35 in the low self-offering and 28 in the moderate self-offering condition. Fifteen participants were excluded from the analyses due to incomplete data or suspicious responding (e.g. giving the same responses in all emotion scales).

Materials

Questionnaires

Basic demographic information, including age, gender and religious orientation were collected prior the commencement of the study (see Appendix A, General information).

Empathy. Emotional empathy was measured with the Balanced Emotional Empathy Test (BEES), a 30-question inventory developed by Albert Mehrabian in 1996 (see Appendix B). Participants were asked to indicate their behaviour by rating each question on a Likert scale (+4 through -4, agreement-disagreement scale).

Social desirability. Due to the nature of the study, which deals with pro-social behaviour and attitudes, it was important to control for people's tendencies to respond in a socially desirable manner due to fear of evaluation. Social desirability was measured with the Balanced Inventory of Desirable Responding (Paulhus, 1991), which comprises of the construct of self-deceptive positivity (the tendency to give self-reports that are honest but positively biased) and impression management (deliberate self-presentation to an audience). The BIDR has 40 items, which are stated as propositions, and respondents rate their agreement with each item on a 7-point scale. One point was added for each extreme response (6 or 7), thus computing self-deceptive positivity, impression management, the sum of which formed a total social desirability score. Overall, this scoring ensures that high scores are attained only by subjects who give exaggeratedly desirable responses (see Appendix C).

Altruism. Altruism was measured using the Self-Report Altruism Scale of Rushton, Chrisjohn and Fekken (1981). Specifically, the Self-Report Altruism Scale (see Appendix D) inquires about the frequency of altruistic behaviour towards strangers,

acquaintances, and organizations. The scale that was used in this study consists of 20 items scored on a 4-point scale (from *never* to *often*).

Mood Measures. Participants also completed the Brief Mood Introspection Scale (BMIS, Mayer & Gaschke, 1988) which measured current affect. The BMIS (see Appendix E) consists of 16 adjectives, which measure current mood along valence and arousal/activation dimensions of mood. The BMIS questionnaire was administered with state instructions (i.e. use the following adjectives to report how you are feeling *right now* at this moment?). Participants were asked to report their mood on a seven-point response scale: 1= definitely do not feel, to 7= definitely feel.

Vignettes. The vignettes described situations that participants could face in everyday life. Each of the three vignettes was one paragraph long and described a situation in which someone (a stranger to the participant) needed help. The situations in each one of the three vignettes were different. Each vignette manipulated three aspects of self-offering (e.g. comfort level, money, and valuable time). Self-offering level was adapted according to each of the two conditions. Thus, each vignette had 2 different endings, a low self-offering ending and a moderate self-offering ending. For example, the vignette manipulating comfort level described a situation where the participant was faced with the decision to help or not a woman carrying grocery bags who was trying to go up the stairs of an apartment building with a stroller. In the moderate self-offering condition, the participant was already carrying a heavy backpack and grocery bags whereas in the low self-offering condition the participant was not carrying any weights when she/he is faced with the situation (see scenario 1, Appendix F). The vignettes for both conditions can be found in Appendix F.

Participants were instructed to imagine that they were taking part in the stories described in the vignettes. After indicating their choice (i.e. helping or not helping), participants answered several questions regarding their personal evaluation of the situation. Questions inquired about the frequency of the situation (i.e. how likely is this situation to occur in everyday life?), their viewpoint of the encounter (i.e. how would you rate the pleasantness of this situation?), the reasons that they decided to provide or/not to provide help (i.e. based on what did you make your decision to help or not) and their anticipated emotions following the behaviour (how would you describe your emotional state following your choice?). The anticipated emotions following the behaviour comprised of adjectives from the BMIS questionnaire, which were further combined into the un-activated and activated positive affect.

Anticipated affect was computed as a total of all three vignettes. The 13 adjectives measuring anticipated mood were taken from the BMIS. From those, 5 were combined into a negative scale (grouchy, guilt, shame, nervous, tired), 4 into a positive non-activated scale (happy, caring, pride, content), 4 into a positive-activated scale (cheerful, lively, active, and optimistic). Total anticipated positive affect was a sum of the positive activated and positive un-activated emotions. The combination of the positive emotion items into activated and un-activated scales was intended to clarify the specific effects of helping on mood not only along the valence approach but along the activation level as well. See Appendix G for means, standard deviations and reliability analyses of these scales for the three vignettes.

Procedure

Students from introductory psychology courses were invited to participate in a study about social dilemmas and personality factors in return for course credit. Upon arriving at the laboratory, participants were randomly assigned to one of the two conditions. They were asked to sign the informed consent and were given the questionnaire package in the following order: The Demographics Questionnaire, the Empathy questionnaire, the Social Desirability scale and the Altruism scale followed by the vignettes. After completing the vignettes, participants were given the BMIS, which recorded current mood change followed by filler questionnaires. Participants completed the questionnaire package either alone or in a group setting of up to 5 students. The time required to complete the study was approximately 30 minutes. Upon completion, participants were debriefed, thanked and were asked not to discuss the experiment with anyone.

Results

Preliminary analyses

Reliability analyses were conducted on the empathy scale, altruism scale and social desirability scale. See Table 1 for means, standard deviations and reliability numbers on each of the scales and their subscales.

Table 1. Means, standard deviations and reliability alphas for personality scales.

Scales	Mean	S.D.	Alpha
Empathy	40.68	27.62	0.78
Altruism			
Toward strangers	2.10	0.64	0.75
Toward organizations	1.80	0.77	0.66
Toward acquaintances	1.70	0.77	0.53
Total	2.00	0.54	0.79
Social Desirability			
Self-deceptive positivity	4.70	3.10	0.75
Impression management	5.10	2.90	0.67
Total	9.80	4.90	0.75

Vignettes

For each of the three vignettes in each of the two self-offering conditions, I calculated the rate of helping. See Table 2 for means, and percentages of helping for each vignette in both conditions.

Table 2. Helping rates by vignette across conditions.

	Helping rate	Percentage
Vignette 1		
Low Self-offering	33/35	94%
Moderate Self-offering	26/28	92%
Total	59/63	94%
Vignette 2		
Low Self-offering	29/35	82%
Moderate Self-offering	25/28	89%
Total	54/63	87%
Vignette 3		
Low Self-offering	30/35	85%
Moderate Self-offering	21/28	75%
Total	51/63	81%

Self-offering was examined as a broad concept in this study and does not necessarily fall under one of the categories treated in each individual vignette (i.e. comfort level, money and valuable time). For this reason, anticipated positive affect from

each vignette was collapsed together into one affect score for all vignettes. I included in the analyses only those participants who helped in all three vignettes in both conditions. Thirty-eight participants out of sixty-three (60 %) helped in all three vignettes. The rest of the participants helped in some, but not in all of them.

The first focus of this study was to assess the effectiveness of the self-offering manipulation on anticipated positive mood. I hypothesized that anticipated positive mood would be higher in the moderate self-offering condition and this hypothesis was tested on participants who helped in all three vignettes. Those participants who did not help in all vignettes were not combined with those who helped in all three because the former displayed selective helping in some of the vignettes. Four ANCOVA's were run, each having as a dependent variable one of the four anticipated mood subscales for all vignettes. Total social desirability, was entered in the model as a covariate and the self-offering level was the fixed factor.

Overall anticipated positive affect, $F(1, 35) = 3.44, p = .072$, was not significantly different across the two conditions. Participants in the moderate condition ($M=4.36, SD=.67$) reported higher anticipated positive affect compared to the participants in the low self-offering condition ($M=3.78, SD=.84$). The effect of the covariate $F(1, 35) = 3.20, p = .082$ was not significant.¹

The self-offering manipulation had a significant effect on un-activated positive affect across the two conditions, $F(1, 35) = 5.62, p = .023$. Participants in the moderate self-offering condition ($M=4.50, SD=.69$), experienced more un-activated anticipated

¹ Self-deceptive positivity and impression management were also entered as covariates in separate ANCOVAs and their contribution was not different from the contribution of total social desirability.

positive affect compared to participants in the low self-offering condition ($M=3.80$, $SD=.82$). The effect of the covariate $F(1, 35) = 2.30$, $p = .138$ was not significant.

Activated anticipated positive affect, $F(1, 35) = 1.34$, $p = .253$, did not differ between the two conditions. Nonetheless, the mean difference was in the predicted direction, with participants in the moderate self-offering condition, $M=4.22$, $SD=.80$), reporting higher activated anticipated positive affect compared to participants in the low self-offering condition ($M=3.76$, $SD=.95$). Again the effect of the covariate, $F(1, 35) = 3.20$, $p = .082$, was not significantly related to the dependent variable. Anticipated negative affect, $F(2, 37) = 1.04$, $p = .314$, did not significantly differ between the moderate self-offering condition ($M=1.36$, $SD=.31$) and low self-offering condition ($M=1.48$, $SD=.44$).

Analyses by individual vignette. I compared the two self-offering conditions by looking at anticipated affect of each individual vignette. In this analysis, I included all participants who helped in each vignette. The means, standard deviations and p-values of the comparisons between the two conditions by vignette can be found in Table 3.

Table 3. Affect comparisons of both conditions for each vignette.

	Self-Offering Conditions				
	Low		Moderate		<i>p-value</i>
	Mean	S.D.	Mean	S.D.	
Anticipated Total Positive					
Vignette 1	4.30	0.84	4.62	0.72	0.200
Vignette 2	3.77	0.91	4.02	1.03	0.480
Vignette 3	3.19	0.97	3.81	0.94	0.060
Anticipated Un-Activated Positive					
Vignette 1	4.26	0.86	4.71	0.85	0.080
Vignette 2	3.92	0.93	4.26	1.00	0.290
Vignette 3	3.25	0.91	4.04	0.89	<.001
Anticipated Activated Positive					
Vignette 1	4.34	0.89	4.53	0.78	0.540
Vignette 2	3.62	1.06	3.79	1.17	0.750
Vignette 3	3.14	1.14	3.58	1.10	0.330
Anticipated Negative					
Vignette 1	1.45	0.48	1.46	0.45	0.840
Vignette 2	1.25	0.41	1.50	0.72	0.150
Vignette 3	1.87	0.80	1.84	0.80	0.780

It should be noted that the analyses of anticipated affect by vignette do not necessarily reflect the effect of the self-offering manipulation, because the analyses included even those participants who selectively helped in some but not all vignettes. Thus, the anticipated positive affect following not helping in one of the vignettes might have been carried over to the anticipated affect of the following vignette.

Altruism and empathy on total anticipated positive affect. The second hypothesis stated that, among those participants who choose to help, those who are high on altruism and empathy would anticipate higher positive affect compared to those who are low on

altruism and empathy. I controlled for social desirability by entering it as a control variable².

For this hypothesis, I included only for the participants who helped in all three vignettes and excluded from the analyses the participants who displayed selective helping behaviour. I did not test this hypothesis by condition due to the small sample size and the low power of the test. Thus, the analyses below are conducted for participants in both the low self-offering condition and the moderate self-offering condition.

Due to the high significant correlation between altruism and empathy ($r = .77$, $p < .05$) and the possible collinearity effects if regressed at the same time on the dependent variable, I analyzed them separately.³ Consistent with the hypothesis, altruism and empathy were significant predictors for anticipated total positive affect as well as for anticipated un-activated positive affect and anticipated activated positive affect. The effect of the control variable was significant in all regression analyses, but the predictive value of altruism and empathy were over and above that effect. See Table 4 for details of the regression analyses.

² The subscales of social desirability (self-deceptive positivity and impression management) were also entered as covariates in separate regressions and their contribution was not different from the contribution of social desirability.

³ When altruism and empathy were regressed at the same time, the effect of altruism on the dependent variable disappeared due to the high collinearity between the two predictor variables.

Table 4. Altruism and empathy regressed on anticipated positive affect.

Anticipated overall positive affect					
Step 1	β	<i>p</i> -value	Model F	<i>p</i> -value	R ²
Social Desirability	0.33	0.007	7.74	0.007	0.11
Step 2					
Altruism	0.45	<.001	13.29	<.001	0.30
Empathy	0.54	<.001	20.51	<.001	0.40
Anticipated un-activated positive affect					
Step 1	β	<i>p</i> -value	Model F	<i>p</i> -value	R ²
Social Desirability	0.32	0.009	7.30	0.009	0.10
Step 2					
Altruism	0.38	0.001	9.88	<.001	0.24
Empathy	0.54	<.001	19.70	<.001	0.40
Anticipated activated positive affect					
Step 1	β	<i>p</i> -value	Model F	<i>p</i> -value	R ²
Social Desirability	0.31	0.012	6.70	0.012	0.09
Step 2					
Altruism	0.48	<.001	13.80	<.001	0.32
Empathy	0.50	<.001	13.95	<.001	0.35

As part of the exploratory analyses, I compared actual mood scores measured by the BMIS across the two conditions. This hypothesis was tested only for those participants who helped in all three vignettes controlling for the effects of social desirability as the covariate. The ANCOVA, $F(1, 35) = 2.16, p = .150$, did not reveal any significant differences between the low self-offering and the moderate self-offering condition in current overall positive affect. The means of the two conditions were in the predicted direction: the moderate self-offering condition ($M = 5.01, SD = .88$) was higher

than the low self-offering condition ($M=4.48$, $SD=.78$). The effect of the covariate, $F(1, 35) = 5.16$, $p=.029$, was significantly related to current mood.

I also conducted exploratory analyses on the personality characteristics between the participants who helped in all three vignettes and those who helped in two or less. A One-Way ANOVA with personality characteristics as the dependent variables revealed differences between the two groups of participants. Specifically, those participants who helped in all three vignettes were higher on altruism, $F(1, 61) = 6.91$, $p=.011$ and higher on empathy, $F(1, 61) = 5.31$, $p=.025$ compared to participants who helped in two vignettes or less.

Discussion

This study had three goals. First, it intended to provide support for the differential effects of self-offering levels on anticipated positive mood. The results were significant for anticipated un-activated positive affect and in the predicted direction for activated anticipated positive affect. A second goal of this study was to expand on the already established proposition that empathy and altruism are positively related to helping. It was demonstrated that empathy and altruism predicted anticipated positive affect of people who helped. Moreover, altruism and empathy were also higher in people who helped more compared to those who helped less, confirming findings of past literature (Kerber, 1984; Batson, et al. 1981, 1990; Kruger, 2003; Frey & Meier, 2004). The third goal was to explore the dimensional theory of affect in the context of helping behaviour. It was found that helping had a greater effect on anticipated un-activated positive affect compared to anticipated activated positive affect.

This study provided encouraging results towards the hypothesis that a greater amount of helping leads to a greater increase in anticipated positive affect. Participants who helped in the moderate self-offering condition reported higher anticipated un-activated positive affect compared to participants who helped in the low self-offering condition. This finding is the first evidence on the differential effect of helping on positive affect. While I cannot equate anticipated affect with actual future affect, it cannot be denied that anticipated affect is an important indicator of future behaviour. When people anticipate feeling good about an action they have not taken yet, it is very likely that the anticipatory feelings will influence the action to be taken (Baron, 1992). In the context of helping behaviour, anticipated affect might influence the behaviour and as a result, it might be an indicator of the actual positive affect following the actual helping behaviour.

Anticipated affect can be thought of as one of many predecessors of actual future affect that results from the cognitive evaluation of the action to be taken. As such, anticipated affect is not a direct outcome of the behaviour but can be considered more as a result of the evaluation of the hypothetical behaviour. The findings of this study suggest that the extent of helping (even if helping is hypothetical) differentially influences people's anticipated non-activated affective states. These encouraging results with respect to anticipated affect set the foundation for further exploration of this hypothesis with respect to current affect.

Almost all theories of helping have recognized the positive relationship between altruism and empathy and willingness to help. People with altruistic tendencies and empathetic personality are more likely to help compared to people low on these

characteristics (Kerber, 1984; Vitaglione & Barnett, 2003). In the present study it was demonstrated that altruism and empathy predicted anticipated positive affect among people who helped in all vignettes. When I compared participants who helped in three or more vignettes with those who helped in two or less, I found significant differences in altruism and empathy. This finding is in line with past research, which has also demonstrated the positive relationship between altruism and empathy and willingness to help (Batson, et al. 1981, 1990; Frey & Meier, 2004). Past work has also found that people high on altruism (Kerber, 1984) and empathy (Staub, 1980) consider helping situations more rewarding than people low on those traits and they also show a persistence of helpfulness over time. The findings of the present study offer a direct explanation for the persistence of helpfulness over time of people high on altruism and empathy. By demonstrating that altruism and empathy predict positive affect of the helper, I suggest that this relationship might explain why these traits are related to helping behaviour. I suggest that people high on altruism and empathy show persistence of helping over time because they want to experience the positive aftereffects of helping every time they help. Although these findings are not intended to provide a direct support for the egoistic models of helping, they do suggest that even for people who have strong “altruistic tendencies” the motivation for helping might not be purely unselfish.

This study also opens new pathways in understanding the nature of positive affect that results from helping. The “do good-feel good” hypothesis has provided ample evidence about the positive effect of helping on mood, but that relationship has not been specified in terms of the nature of positive mood. Most research on helping behaviour has taken place several decades ago when views on positive affect were mainly focused on

the pleasantness/unpleasantness dimension of affect. Current views of affect on the other hand, have recognized the importance of both the pleasantness and activation dimensions of affect (Russell, 1980; Watson & Tellegen, 1985; Russell, & Barrett, 1999). The dimensional views of affect have never been applied in the helping literature, making the present research the first in bringing together the current views of affect and the helping literature by measuring positive affect along the two dimensions.

This study was able to distinguish between anticipated un-activated and activated positive affect that results from helping. Un-activated positive affect is high in pleasantness and low on activation (e.g. someone feeling *content* after helping) whereas activated positive affect is high in pleasantness and high in activation (e.g. someone feeling *elated* after helping). By measuring affect along two dimensions (pleasantness and activation) and providing evidence for the difference between the two, this study was successful in establishing the relationship between helping behaviour and anticipated un-activated positive mood.

Anticipated un-activated positive affect was higher than anticipated activated positive affect for participants who helped in all three vignettes. This suggests that it is more likely for someone to feel “content” rather than “elated” after helping. The anticipated un-activated affect generated by the hypothetical helping implies that helping is more likely to lead to a positive relaxed affective state rather than an energized affective state. Considering the fact that the helping behaviour itself does require the helper to engage in a certain level of activity (physical or cognitive), it would be expected that the successful completion of the behaviour would result in a relaxed, un-activated positive emotional state. The above suggestions are based on the analysis of anticipated

affect resulting from hypothetical helping and not actual current affect. For this reason, the above claims need to be validated with actual current affect resulting from helping, which was done in study 2.

The fact that the self-offering manipulation had an effect on anticipated un-activated positive affect provides initial support for the proposition that a greater amount of helping leads to a greater positive affect. In order to establish a stronger relationship between self-offering and positive affect, the relationship must be tested on real helping behaviour and its effect on affect must be measured in terms of actual current affect and not only in terms of anticipated affect. In summary, Study 1 was successful in achieving its goals with respect to un-activated anticipated affect. On the other hand, its findings are not necessarily generalizable to real life situations and current affect due to the fact that it was a scenario-based study. For this reason, I conducted study 2, which had the same goals as Study 1 but tested them with a different methodology. Instead of using vignette data and anticipated affect, I simulated helping behaviour in a laboratory setting and measured current mood change.

Study 2

Pain tolerance and personality differences

The purpose of this study was the same as study one: to examine the relationship between self-offering levels and positive affect. Study 2 took place in a laboratory setting where participants made the decision to help (or not) a female confederate. Participants were not told the real purpose of the study and arrived in the laboratory prepared to take part in a study measuring pain tolerance and personality differences. They were led to a room where another participant (the confederate) was completing questionnaire measures.

The confederate asked for permission to leave in the middle of the task due to a family emergency while the real participant continued with the task.

The experiment consisted of completing personality questionnaires and doing a cold pressor task. The cold pressor task required the participants to immerse their hand in icy water and record how painful the experience was. This particular cold pressor task was chosen in order to simulate the following helping situation: the participant was told that the other participant (the confederate) would not be able to complete the experiment and was asked to help the confederate by taking her place. If the participant chose to help, then the participant completed another round of the cold pressor task (shorter or longer depending on the condition they are in) as well as a series of questionnaires. Self-offering level was manipulated by the time spent on the cold pressor and the total amount of time spent helping. Two levels of self-offering were tested, low vs. moderate. The total amount of time spent helping in the moderate self-offering condition was approximately 10 minutes whereas in the low self-offering condition was approximately 5 minutes. Positive affect was measured immediately after the participant had made the decision to help as well as after the helping had finished. The rationale for measuring affect twice is the notion that post-decision positive affect might differentially change compared to the post-behaviour positive affect.

There were two control conditions, each one having the design of the low and moderate self-offering conditions respectively, but without the helping component. Participants in the control conditions spent the same amount of time on the cold pressor task and completed the same measures as the participants in the experimental conditions.

Hypothesis 1(a): Participants in the moderate self-offering condition will experience higher positive affect compared to participants in the low self-offering condition after helping.

Hypothesis 1(b): Participants in the experimental conditions will experience higher positive affect after helping compared to participants in the control conditions.

Hypothesis 2: People high on altruism and empathy will experience higher positive affect compared to people low on altruism and empathy after helping.

Exploratory hypothesis: Participants in the experimental conditions will have lower pain intensity ratings following helping behaviour compared to participants in the control conditions.

The exploratory hypothesis is introducing a new pathway for the effect of mood that results from helping on physical symptoms, such as pain. The experience of pain has been suggested to be affected by psychological variables, such as depression (Romano & Turner, 1985) and to involve both physical components as well as cognitive/affective components (Shacham, Dar, & Cleeland, 1984; Keefe et al. 1997). It remains to be seen if the positive affect, which may result from helping, would be strong enough to influence the experience of pain in this sample.

Methods

Participants

Seventy-six undergraduate students took part in this study. Fourteen participants were excluded from the analyses either because they did not follow instructions properly, did not complete the cold pressor task or they were suspicious about the purpose of the study. The final sample consisted of 62 participants (25 males and 36 females) with ages

ranging from 18 to 32 years, ($M = 19.40$, $SD = 4.04$). Thirty-one participants helped in the experimental conditions (15 in the low self-offering and 16 in the moderate self-offering) and thirty-one ended up in the control conditions (15 in the low control and 16 in the moderate control condition)

Apparatus

A medium size container holding ice water was used to induce pain and serve as a means of initiating helping behaviour. There was an ice chest with a screen partition in the middle of the container, which held the water, and one side of the container was filled with ice to maintain constant water temperature.

Materials

The same questionnaire measures that were used in the first study were administered in this study with the addition of four filler questionnaires. The filler questionnaires served to increase the plausibility of the cover story by inquiring on physiological symptoms of stress and other physical symptoms.

Participants completed two versions of the Brief Mood Introspection Scale (BMIS, Mayer & Gaschke, 1988) which measured current affect after the decision to help was made (post-decision affect) and after the helping had finished (post-behaviour affect). The BMIS (see Appendix E) consists of 16 adjectives, which measured current mood along valence and arousal/activation dimensions of mood. All adjectives were combined into: Pleasant-Unpleasant subscale, Arousal-Calm subscale, Positive-Tired subscale, Negative-Relaxed subscale as well as into a *Negative Mood* scale and a *Positive Mood* scale. The two mood scales and the four subscales of the BMIS were scored according to the specifications of Mayer and Gaschke (1988). Each of the subscales was scored by

adding adjectives of one of the dimensions and subtracting adjectives of the other dimension. For example, the Positive-Tired subscale was computed by adding the adjectives *active, caring, lively, loving, peppy* and subtracting the adjectives *drowsy, and tired*. Thus, every subscale represents a specific dimension value without the influence of the other. The un-activated and activated positive affect scales of the first study are different from the BMIS subscales in a sense that they represent only positive affect in the valence dimension and divide it into the two aspects of the activation dimension (activated and un-activated). The BMIS subscales on the other hand represent both the pleasantness and activation dimensions for both positive and negative mood. The hypothesis testing was conducted on the positive and negative scales as well as on the subscales.

Pain Measure

The McGill Pain Questionnaire (Melzack, 1975) measured pain on a multidimensional scale including sensory; affective and cognitive aspects. The original MPQ contains 20 items to produce scores in these dimensions. In the present study, the Short Form of the McGill Pain Questionnaire (MPQ-SF) was used (see Appendix H). The (MPQ-SF) was administered to participants immediately following the cold pressor task and they were asked to choose the word that best described their pain while holding their hand in the water. The MPQ-SF included 15 words from the Sensory (11) and Affective (4) categories. The participants was asked to rate if their pain has each word's "quality" or not, and if it is present, to rate it as "mild, moderate or severe". Participants also rated the overall intensity of pain on a visual-analogue scale (1 to 10), and also indicate "present pain intensity". There is substantial evidence for the validity, reliability and

discriminative abilities of the MPQ-SF when used with younger adults (Melzack & Katz, 2001).

Procedure

Participants were randomly assigned to one of four conditions, two of which were the experimental conditions and two were the control conditions. In the experimental conditions, self-offering was manipulated with the cold pressor task (in the low self-offering condition participants had to keep their hand in water for 30 seconds vs. 60 seconds in the moderate self-offering) as well as with the total time participants had to spend in order to help (approximately 5 minutes in the low self-offering vs. approximately 10 minutes in the moderate self-offering condition).

Participants in the control conditions were not given the opportunity to engage in helping behaviour but they still had to perform two sessions of the cold pressor task, each corresponding to the low and moderate self-offering conditions. They also completed the corresponding questionnaire measures of the experimental conditions. In order to justify the second cold pressor task in the control conditions, participants were told that the study was looking at personality factors and the effects of recurrent pain exposures.

On arrival, each participant was seated at one of two tables. At the other table, was the female confederate posing as a participant. While the real participant was being introduced to the study and given the consent form, the confederate was pretending to be absorbed in the task of completing the questionnaire measures. As soon as the experimenter was about to give the personality questionnaires to the real participant, the confederate announced that she was done filling the questionnaires. She looked at her watch and told the experimenter that she had to make an important phone call to her

home. She looked a bit distressed while speaking. The experimenter said that it was not usual practice to leave in the middle of the task, but nonetheless, told her she could make the phone call as long as she was back for her second part of the experiment. The confederate left the room as the real participant started completing the personality questionnaires in the same order as in the first study. That is, before the cold pressor task, participants completed the Demographics Questionnaire, the Empathy scale, the Social Desirability scale and the Altruism scale.

When the participant was done completing the questionnaires, the cold pressor task began. The experiment started with the cold pressor task with experimenter asking the participant to place one hand (not the hand they use to write) in the ice water for 30 seconds and afterwards indicate the reaction to the pain stimulus by completing the pain questionnaire. The participant was told that the task might hurt a bit but they should try to keep the hand in the water for the full 30 seconds. The initial immersion of the hand in ice water was intended to give participants a baseline concept of the experience based on which they could make the decision to help the confederate later on.

When the cold pressor task was over, the experimenter gave the participants the Pain Intensity Questionnaire, followed by the filler questionnaires. After giving the necessary instructions for each questionnaire, the experimenter pretended she was concerned about the continued absence of the other participant. The experimenter left the room while the participant started completing the questionnaires. Before leaving, the experimenter told the participant to place the completed questionnaire package in a drop box. Participants were informed that the experimenter would not have access to individual data until the data collection is over. This instruction was intended to ensure

participants of the privacy of their responses and help decrease any demand characteristics.

When the participant finished completing the questionnaires the experimenter entered the room and told her/him that she found the other participant (mentioning that her name is Jessica) and that she was on the phone trying to deal with a serious family problem. The experimenter then administered the helping condition manipulation. In the *low self-offering* condition, the experimenter said the following: “I told Jessica that if she took too much longer on the phone she won’t have time to finish her second part of the experiment. If you want to help her, you can complete her second part of the experiment so she can get credit for completing it too. Do not feel obliged to help her though, only if you want to. It wouldn’t make a difference to me since it’s all data to me”. In each of the experimental conditions, the experimenter informed the participant of the helping demands, either 30 seconds on the cold pressure and 5 minutes completing questionnaires for the low self-offering condition or 60 seconds and 10 minutes completing questionnaires for the moderate self-offering condition. While the experimenter said this, she was getting materials from the adjacent table next to the one the participant was sitting, thus avoiding eye contact with the participant while the helping decision was being made.

After the decision to help, the experimenter mentioned that Jessica’s task was slightly different than the one already completed by participant. Then the participant was administered a short version of the BMIS questionnaire, which recorded the mood change following the decision to help, along with another filler questionnaires. Afterwards, the participant had to keep the hand in water for 30 seconds and complete the Pain Intensity

measure along with another filler questionnaire package. A second measure of affect was administered at the end of the filler questionnaires, which was the same mood questionnaire as before (BMIS) but with more mood filler words so that it appeared different from the first one (see Appendix I). The second part of the experiment in which the participant thought she/he was helping Jessica lasted approximately 5 minutes.

The *moderate self-offering* condition was the same as the low self-offering condition except the duration of the cold pressor task (60 seconds compared to 30 seconds) and the total duration of the helping task (10 minutes compared to 5). The times spent on the cold pressor task (60 and 30 seconds) were determined with pilot testing and were chosen to reflect a low level and a moderate level of self-offering.

The control conditions had the same design as the experimental conditions but without the helping component. That is, after the confederate left the room, the participant was told the following: “Jessica will not be able to complete the experiment, so we can go ahead with the second part of the experiment without her”. The second part of the experiment involved the cold pressor task for 30 seconds or 60 seconds followed by the questionnaire package corresponding to the experimental conditions.

At the end of each manipulation, participants were given a questionnaire asking about general impressions of the task, checking for suspicion (see Appendix J) and asking for any possible demand characteristics from the part of the experimenter (see Appendix

K). Detailed oral and written debriefing followed at the end of the experiment; participants were asked not to discuss the task with anyone, were thanked and dismissed.

Results

Preliminary analyses

Reliability analyses were conducted on the empathy scale, altruism scale and social desirability scale. See Table 5 for means, standard deviations and reliability estimates on each of the scales and their subscales.

Table 5. Means, standard deviations and reliability alphas for personality scales.

Scales	Mean	S.D.	Alpha
Empathy	40.50	31.24	.82
Altruism			
Toward strangers	2.23	0.68	0.75
Toward organizations	1.84	0.71	0.51
Toward acquaintances	1.96	0.79	0.46
Total	2.06	0.57	0.80
Social Desirability			
Self-deceptive positivity	5.70	2.94	0.51
Impression management	5.60	3.07	0.67
Total	11.31	4.95	0.73

Before proceeding to the hypothesis testing, it was determined whether positive affect differed from time one (after the decision to help was made) to time two (after helping was concluded). The two scales of affect were positively correlated, $r = .71$, $p < .001$. A paired samples t-test, $t(61) = 3.12$, $p = .003$, revealed a significant difference between the two measures of affect. Positive affect measured right after the decision to help, ($M = 4.77$, $SD = 1.08$), was greater than the positive affect measured when the helping behaviour was completed ($M = 4.44$, $SD = 1.16$). For this reason, the hypothesis testing continues for each affect scale separately.

Post decision overall positive affect. It was hypothesized that participants in the moderate self-offering condition would experience higher positive affect compared to participants in the low self-offering condition after helping. It was also hypothesized that

participants in the experimental conditions would experience more positive affect following helping compared to participants in the control conditions. This hypothesis was tested on post-decision overall positive affect with 2 (low vs. moderate) X 2 (help vs. control) ANCOVA, with social desirability as the covariate. The main effect for self-offering level, $F(1, 56) = .46, p = .500$, was not significant. Participants in the moderate self-offering condition ($M = 4.68, SD = 1.26$) were not significantly higher than the low self-offering level ($M = 4.91, SD = .88$). Also, the main effect of condition, $F(1, 56) = .65, p = .421$, was not significant. Participants in the experimental conditions ($M = 4.88, SD = .98$) were not significantly higher in overall positive affect compared to control conditions ($M = 4.70, SD = 1.11$). The interaction, $F(1, 56) = .09, p = .763$, was also non-significant. The effect of the covariate, $F(1, 56) = 1.61, p = .200$, was not significant. See Figure 1 for a graphical representation of the post decision means of overall positive affect means in each condition.

Figure 1. Post-decision overall positive affect by condition

Post behaviour overall positive affect. The same hypothesis was tested with another 2 (low vs. moderate) X 2 (help vs. control) ANCOVA for the second affect scale that represented positive affect after helping was completed. The main effect for self-offering level, $F(1, 56) = .35, p = .552$, was not significant. Participants in the moderate self-offering condition ($M = 4.33, SD = 1.31$) did not report higher positive affect scores after helping compared to participants in the low self-offering condition, ($M = 4.56, SD = 1.00$). The main effect for condition, $F(1, 56) = 1.30, p = .251$, was also not significant. Participants in the experimental conditions ($M = 4.58, SD = 1.14$) were not significantly higher in positive affect compared to the control conditions, ($M = 4.31, SD = 1.14$). The interaction, $F(1, 56) = .56, p = .452$, was also not significant. The effect of the covariate, $F(1, 56) = 2.61, p = .112$, was not significant. See Figure 2 for a graphical representation for the post behaviour means of overall positive affect in each condition.

Figure 2. Post behaviour overall positive affect by condition

In order to assess the effect of helping behaviour on the activated and un-activated subscales of positive affect, I conducted 2 (low vs. moderate) X 2 (help vs. control) ANCOVA's on each subscale of the BMIS. Specifically, I looked at differences in affect ratings of the subscales Pleasantness-Unpleasantness, Arousal-Calm, Positive-Tired and Negative-Tired of both the first affect scale and the second affect scale. All mean differences in the affect subscales were non-significant (See Table 6 for means and standard deviations and Table 7 for the results of the ANCOVA's).

Table 6. Means and Standard Deviations across experimental and control conditions.

	Experimental Low S-O		Experimental Moderate S-O		Control Low S-O		Control Moderate S-O	
Affect 1 subscales	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Pleasant-Unpleasant	12.73	7.68	14.43	18.97	16.40	12.99	11.75	13.33
Arousal-Calm	25.60	10.70	22.18	7.15	22.20	7.22	21.37	7.53
Positive-Tired	13.60	5.36	13.06	9.26	14.06	7.96	11.43	7.01
Negative-Tired	8.460	7.11	5.75	7.28	5.06	5.48	6.53	6.33
Affect 2 subscales	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Pleasant-Unpleasant	17.40	8.29	15.12	17.08	12.80	13.15	13.73	12.25
Arousal-Calm	16.26	5.56	13.43	5.35	14.86	6.06	13.8	5.72
Positive-Tired	10.53	3.71	8.43	6.32	8.06	5.83	8.12	4.86
Negative-Tired	2.46	3.85	1.56	5.32	2.80	3.75	2.13	4.73

Table 7. Affect subscales comparisons by condition and self-offering level.

	Condition		Self-offering		Interaction	
	Main Effect F	p	Main effect F	p	F	p
Affect 1 subscales						
Pleasant-Unpleasant	0.00	0.943	0.04	0.835	0.44	0.508
Arousal-Calm	2.28	0.136	0.81	0.369	0.64	0.427
Positive-Tired	0.43	0.512	0.42	0.518	0.11	0.739
Negative-Tired	0.75	0.390	0.09	0.766	1.68	0.199
Affect 2 subscales						
Pleasant-Unpleasant	0.92	0.341	0.01	0.890	0.28	0.595
Arousal-Calm	0.49	0.483	1.35	0.250	0.75	0.389
Positive-Tired	1.62	0.207	0.38	0.537	0.89	0.350
Negative-Tired	0.10	0.746	0.41	0.524	0.02	0.884

The predictive value of altruism and empathy on positive affect. The second hypothesis states that people high on altruism and empathy will experience an increased positive affect compared to people low on altruism and empathy after helping. To test this hypothesis, I also computed an interaction term as a cross product of the total altruism score multiplied with the condition variable. The condition variable was coded with two values, the experimental conditions coded as 1's and the control conditions coded as 0's. The same procedure was followed for empathy. I followed this procedure because I wanted to test the interaction between the predictive value of altruism and empathy on positive affect between the experimental conditions and the control conditions. Due to the high correlation between altruism and empathy ($r = .644$, $p < .001$) and the possible collinearity effects if regressed at the same time on the dependent variable, I analyzed them separately.

Contrary to the hypothesis, altruism and empathy were not significant predictors of either post-decision positive affect or post-behaviour positive affect. The effect of social desirability as a control variable was not significant. The interaction between total

altruism and the condition variable as well as the interaction between total empathy and the control variable were non-significant. The results for both affect scales do not confirm the second hypothesis. See Table 8 and 9 for regression values. I conducted additional regressions with altruism and empathy as predictors and each of the post-decision and post-behaviour positive affect subscales as dependent variables. The results were non-significant for all the subscales.

Table 8. Altruism regressed on both affect scales.

Post-Decision positive affect					
Step 1	β	p	Model F	p	R^2
Social Desirability	0.17	0.202	0.85	0.469	0.04
Condition	0.10	0.420	0.85	0.469	0.04
Total Altruism	0.06	0.618	0.85	0.469	0.04
Step 2					
Altruism* Condition	-0.39	0.447	0.78	0.540	0.05
Post-Behaviour positive affect					
Step 1	β	p - value	Model F	p - value	R^2
Social Desirability	0.20	0.135	1.18	0.324	0.06
Condition	0.50	0.307	1.18	0.324	0.06
Total Altruism	0.16	0.397	1.18	0.324	0.06
Step 2					
Altruism* Condition	-0.39	0.447	1.02	0.401	0.07

Note: All variables in Step 1 of the regressions were also included in Step 2, but omitted from tables.

Table 9. Empathy regressed on both affect scales.

Post-Decision positive affect					
Step 1	β	p	Model F	p	R^2
Social Desirability	0.18	0.167	1.17	0.178	0.08
Condition	0.07	0.555	1.17	0.178	0.08
Total Empathy	0.21	0.107	1.17	0.178	0.08
Step 2					
Empathy*Condition	-0.13	0.66	1.30	0.280	0.09
Post-Behaviour positive affect					
Step 1	β	p - value	Model F	p - value	R^2
Social Desirability	0.20	0.113	1.56	0.207	0.07
Condition	0.12	0.344	1.56	0.207	0.07
Total Empathy	0.14	0.264	1.56	0.207	0.07
Step 2					
Empathy* Condition	-0.09	0.754	1.18	0.329	0.08

Note: All variables in Step 1 of the regressions were also included in Step 2, but omitted from tables.

Exploratory hypotheses. Although the focus of this study was not to examine the effects of pain tolerance on mood, I conducted exploratory analyses on the effect of helping on pain intensity. I conducted a 2 (low vs. moderate) X 2 (experimental vs. control) ANCOVA with social desirability as the covariate. For the emotional component of pain (where they had to rate the adjectives that most closely resembled the pain intensity) I compared participants in the experimental conditions (low $M=11.86$,

moderate $M=13.50$) and participants in the control conditions (low $M=10.26$, moderate $M=15.37$). The main effect of condition, $F(1, 56) = .002, p=.969$, was not significant. The main effect for self-offering level, $F(1, 56) = .128, p=.263$, was also not significant. The interaction, $F(1, 56) = .312, p=.579$, was not significant, and the effect of the covariate $F(1, 56) = .019, p=.980$, was not significant.

For present pain intensity on a visual analogue scale (e.g. circle along the scale the pain in your arm only), I conducted another 2 (low vs. moderate) X 2 (experimental vs. control) ANCOVA for the experimental (low $M=3.6$, moderate $M=4.31$) and control conditions (low $M=4.21$, moderate $M=5.00$). The main effect for condition, $F(1, 55) = .76, p=.386$, was not significant, and the main effect for self-offering level, $F(1, 55) = 1.17, p=.284$, was not significant. The interaction, $F(1, 55) = .006, p=.937$, was not significant, and the effect of the covariate, $F(1, 55) = .070, p=.793$, was also not significant.

Another 2 (low vs. moderate) X 2 (experimental vs. control) ANCOVA tested for differences in overall pain intensity (e.g. check the appropriate column for the overall intensity of pain experience) between the experimental (low $M=1.73$, moderate $M=2.25$) and control conditions (low $M=1.78$, moderate $M=2.26$). The main effect for condition, $F(1, 55) = .001, p=.969$, was not significant and the main effect for self-offering level, $F(1, 55) = 2.86, p=.096$, was not significant. The interaction, $F(1, 55) = .000, p=.995$, was not significant and the effect of the covariate, $F(1, 55) = .252, p=.618$ was not significant. These results show that the helping manipulation as well as the self-offering manipulation was not effective in decreasing participants' experience of pain.

Discussion

The main goal of this study was to test the proposition that a greater amount of helping, operationalized here as a level of self-offering, would lead to greater increases in positive affect. Positive affect resulting from helping was measured twice in this study. The first affect scale measured positive affect after making the decision to help (post-decision affect) while the second affect scale measured positive affect after the helping behaviour was completed (post-behaviour affect). The findings did not support my hypotheses. Positive affect in the moderate self-offering condition was not higher than positive affect in the low self-offering condition, suggesting that the self-offering manipulation was not effective. The helping manipulation effect on positive affect was also found to be non-significant. Participants in the experimental conditions were not significantly higher in positive affect compared to the control conditions. I also looked at the effect of the self-offering manipulation on the positive affect dimensions represented by the BMIS subscales. Contrary to the predictions, the findings did not provide evidence for differences in the pleasantness and activation dimensions of affect. The same reasons that might account for the null results of the self-offering manipulation on positive affect likely are to blame for the null results of the affect subscales.

These non-significant findings can be interpreted in two ways. First, it is possible that the self-offering manipulation did not yield the predicted results due to the way it was operationalized in this study. Participants in the experimental conditions had to go through a considerable amount of pain in order to help the confederate. It is possible that the positive affect difference that would result from helping was offset by the effect of pain participants had to go through while helping. While there is a trend for the

experimental conditions in being lower in pain ratings compared to the control conditions, this difference is larger for the moderate self-offering level. This pattern, although not significant, suggests that helping in the moderate self-offering condition generated more pain than helping in the low self-offering condition, taking into account the control conditions for both levels. Considering the non-significant pattern of results in all pain scales, it is not possible to conclude that pain was responsible for the null results of the affect scales. Nonetheless, it does suggest that pain would not be an ideal measure to manipulate self-offering levels in the future due to its unpredictable effects on positive affect.

Second, it is possible that the arbitrary levels of self-offering that were used in the study might not have accurately represented low and moderate levels of self-offering. Although I conducted pilot testing to determine the most appropriate levels of self-offering, it is possible that the two conditions did not accurately represent low and moderate self-offering levels. The low self-offering level yielded higher positive affect ratings compared to the moderate self-offering level and this trend was consistent for both affect scales, although not significant in either scale. This finding is not consistent with the hypotheses. A potential explanation for this trend could be the fact that the moderate condition does not represent a moderate level of helping but rather goes beyond the level of helping (i.e. the critical point) that generates positive affect. This explanation is consistent with the suggested curvilinear nature of the relationship between self-offering and positive affect. It is also possible that the low self-offering condition does not represent a low level of self-offering but a moderate level. For post-behaviour positive affect, the low self-offering condition was higher than the moderate self-offering

condition. Thus, if the moderate self-offering level was representing a high level and the low self-offering level was representing a moderate level, then it could not have been possible for the results of this study to confirm the hypothesis. Again, these explanations are speculative and in the absence of past research and a lack of significance in the present research, it is not possible to either support or refute them with confidence. The exploration of self-offering levels and their effect on positive affect is a novel endeavor and as such, its major drawback is determining the right levels of manipulation.

This study did not provide evidence that the self-offering manipulation leads to different levels of positive affect. In addition, there was no predictive effect of altruism and empathy for positive affect levels displayed as a result of helping. Considering the predictive value of altruism and empathy on anticipated positive affect, the non-significant results regarding altruism and empathy on current affect do not imply that this relationship does not exist. It is possible that the reasons accounting for the null effects of the self-offering manipulation could also account for the null results on the predictive value of altruism and empathy.

Considering the overwhelming null results of the study, the question arises: What did this study achieve? From a narrow perspective, this study did not achieve much. On a broader level though, the value of this study lies in the fact that it was the first one to explore the relationship between self-offering and actual positive affect. Due to the null results, I cannot draw any firm conclusions about the existence of such a relationship. Nonetheless, the possibility of such a link cannot be ruled out, also keeping in mind the encouraging findings of the first study.

A methodological note to be considered by future researchers is the use of pain as a self-offering measure. The experience of pain has unquestionable effects on mood and may not be the ideal choice for manipulating self-offering in future studies. It was used in this study because it was considered a reliable measure to quantify and it was deemed to reliably represent the concept of self-offering. However, the unpredictable effects of pain itself on positive affect were not foreseen to confound the self-offering manipulation. On the other hand, if the self-offering manipulation had had an effect on positive affect despite the confounding effects of pain, it would have been an impressive demonstration of the self-offering hypothesis. Furthermore, it should be stressed that the self-offering levels chosen for this study were arbitrary. The mean differences between the conditions, although not significant, indicate that the levels chosen might have not corresponded of the levels compared (i.e. low and moderate). Future studies should attempt to find the exact self-offering levels by incrementally increasing the level of self-offering and its effects on mood in order to best determine the low, moderate and high levels.

Although the results were not statistically significant, some interesting trends were evident from the analyses. For example, positive affect scores were consistently higher in the low compared to the moderate self-offering condition. As was pointed out earlier, a possible reason for this might be the choice of the self-offering levels represented in each condition. The moderate self-offering condition might in fact represent a level of helping that does not lead to increases in positive affect due to the possible curvilinear relationship between self-offering and positive affect.

In addition, post-decision positive affect scores were consistently higher compared to post-behaviour positive affect scores, indicating that the transition between

making the decision to help and completing the helping behaviour causes positive affect to decrease. This could also mean that the decision to help increases positive affect more compared to performing the actual helping behaviour. If post-decision positive affect represents the anticipated positive feelings prior to the behaviour, these findings could be comparable to the findings of Study 1 with respect to anticipated affect. In both studies, there was an increase in positive anticipatory feelings arising from the decision to help.

The positive anticipatory feelings prior to helping did not significantly differ in Study 2; however, it is important to note that across the two studies there is a tendency for positive affect to increase in response to the decision to help. Another interesting pattern with respect to pain ratings became evident between the experimental and control conditions. Participants in the experimental conditions reported lower pain ratings in all the pain subscales (affective, cognitive and overall) compared to the control conditions. These differences did not reach the significance needed for us to draw strong conclusions, but I could speculate that helping (the only component missing from the control conditions) did have an effect in lowering the pain ratings in the experimental conditions.

General Discussion

The present research expanded on the “do good-feel good” hypothesis of helping behaviour by proposing a relationship between levels of self-offering and positive affect. I manipulated self-offering levels and measured its effect of positive affect by keeping constant the amount of help received. It was hypothesized that a greater extent of helping would lead to greater increases on positive affect compared to a lower extent of helping. The findings of the two studies provided mixed results regarding this proposed relationship.

The vignette study was successful in showing the differential effects of self-offering level on anticipated positive affect. Participants in the moderate self-offering condition reported higher un-activated anticipated affect compared to participants in the low self-offering level. Anticipated activated positive affect also differed across conditions but this difference was not big enough to reach the significance level needed. Nonetheless, the vignette study provided initial support of the effects of self-offering on anticipated affect. These finding replicate previous research (Harris, 1977) by showing that hypothetical helping leads to increases in positive affect (through perspective taking). Furthermore, they expand on them by demonstrating that the extent of helping provided has differential effects on anticipated mood.

The same encouraging results were not evident for actual current mood measured as an aftereffect of real life helping behaviour. Neither the self-offering manipulation nor the helping manipulation had an effect on positive affect. The second study did not provide empirical support for the self-offering hypothesis concerning actual positive affect. I believe that the methodological issues discussed below account for these null results.

A combination of factors contributed to the non-significant effect of the self-offering manipulation on actual positive affect in study 2. The central weakness of the study was the choice of the self-offering levels that were tested in the low and moderate conditions. The trend of the results across the conditions suggests that participants in the low self-offering condition experienced more positive affect compared to those in the moderate self-offering condition. This trend is contrary to the hypotheses of the study, but on a closer examination, it does not necessarily go against the self-offering hypothesis.

I propose that the relationship between self-offering and positive affect could be curvilinear. I suggest that people who help by offering something of themselves feel good as a result of the behaviour only up to a certain level of self-offering. When the self-offering level reaches a critical point, where helping is voluntary but helpers feels they are taken advantaged of, positive affect is assumed to drop. Self-offering levels before this critical point are believed to lead to increases in positive affect whereas levels beyond this point could lead to decreases in positive affect and/or increases in negative affect.

Two things suggest the explanation that the self-offering levels of this study did not accurately represent the moderate and low conditions. First, the mean differences between the conditions, although not significant, show a consistent trend of the low self-offering level to be higher than the moderate self-offering level in both the post-decision and post-behaviour measures of affect. Second, several participants in the moderate self-offering condition found the 60 seconds spent on the cold pressor too painful. Some of them did not even keep their hand in the water for the whole duration of the task and commented afterwards that they found the experience extremely discomforting. This implies that the demands of the task were more likely representing a high level of self-offering rather than a moderate level. If indeed the task demands were too high, than this study was not really testing a low and moderate level of self-offering but low and high level of self-offering. Considering the mean difference in positive affect between the two self-offering conditions, it can be suggested that the moderate self-offering level could be well beyond the critical point in the self-offering curve. If my hypothesis about the differential effects of self-offering on positive affect is correct, the methodological issues

encountered in the second study could be responsible for the null results of the study. If, on the other hand, the extend of helping does not matter with regards to the positive affect it generates, then the self-offering manipulation of the second study would not lead to differential effects on positive affect. Still, the later explanation is not very likely to hold considering the effects of self-offering on anticipated affect in Study 1, as well as findings from past research suggesting the differential effects of meaningful altruistic acts on actual positive affect (Harris, 1977).

Another issue to consider with respect to the design of the second study is the utilization of pain as a measure of self-offering. Pain is an unpleasant experience for most people and could lead to decreases in current mood even if its occurrence is short lived and induced in an experimental setting (Wade, Price, Hamer, et al., 1990). Even though there were not any significant differences in pain ratings between the self-offering levels of the helping conditions, the possibility exists for the intrusive effects of pain on positive affect. As a result, the effects of pain on positive affect could have been responsible for the non-significant effects of the self-offering manipulation.

The present research also looked at the effects of altruism and empathy on positive affect. Considering the fact that the self-offering manipulation was successful on anticipated affect and not actual current affect, there are few conclusions to be drawn and several speculative observations to be made. In one study, it was found that people high on altruism and empathy anticipated higher positive affect compared to people low on altruism and empathy. In the other study, these findings were not replicated with respect to actual current affect. The predictive value of altruism and empathy on anticipated affect is the first evidence of the effects of these traits on emotional experiences. Until

now, individual differences in the context of helping behaviour have explained people's willingness to help or not (e.g. people high in altruism and empathy are more likely to help compared to people low in altruism and empathy, Batson et al 1997; Vitaglione & Barnett, 2003). Although there is some evidence that people high in altruism view helping situations as more rewarding compared to people low in altruism (Kerber, 1984), there have not been any systematic attempts to explore this relationship further. Therefore, the findings of the vignette study were able to replicate past research and also expand on them by demonstrating that altruism and empathy are good predictors of anticipated positive affect.

A significant contribution of this study to the “do good feel good” helping literature was the distinction between un-activated and activated positive affect. With respect to anticipated un-activated positive affect, this distinction proved successful. Participants in the moderate self-offering condition anticipated higher un-activated positive affect compared to participants in the low self-offering condition. These findings are supportive of the usefulness of the dimensional models of affect (Russell, 1980; Watson & Tellegen, 1985), and also are the first to distinguish positive affect that results from helping in the two activation dimensions. While the dimensional models of affect have been established as the dominant method of measuring affective experiences, most studies (e.g., Baumann, Cialdini & Kenrick, 1981; Yinon & Landau, 1987; Williamson & Clark, 1992) have measured affect as an increase or decrease in positive/pleasant affect. It is surprising that none of the studies that have examined the relationship between helping behaviour and positive affect have attempted to closely examine the type of positive affect generated by helping. By making the distinction between un-activated and

activated positive affect, even at the anticipated level, this study is bringing the helping literature up to date with the current views of the emotion research.

It has been argued that positive affect broadens the thought-action repertoire of an individual (Fredrickson, 2001), resulting in the building of the intellectual and social resources. Positive affect has also been linked with increases in the scope of cognitions (Isen, 1987) demonstrated by high performance in creative thinking and tests requiring high levels of imagination. Taken together with other findings demonstrating the stress buffering effects of positive affect (Fredrickson & Levenson, 1998; Folkman & Moskowitz, 2000), it is important to consider the pathways through which positive affect is experienced. Helping behaviour is a common expression of everyday interactions and its consequences have to be examined in both general terms (i.e. overall positive affect) as well as in specific terms (i.e. un-activated and activated levels).

The present research adopted a novel approach in studying helping behaviour by looking at consequences of helping in order to explore the motivations for helping. The self-offering manipulation was expected to provide new insight in determining the egoistic or altruistic motivations of helping. Although the vignette study was successful regarding anticipated positive affect, the results of the second study limit my confidence in drawing strong conclusions on the motivational bases of behaviour. Nonetheless, a few inferences based on the anticipated positive affect findings can be made.

The scenario-based data of Study 1 indicate that when people make hypothetical helping choices of a moderate self-offering level, they anticipate feeling better compared to those who make hypothetical helping choices of a low self-offering level. I can speculate that the motivation for helping in this case cannot have been purely altruistic.

An altruistically motivated person would not anticipate feeling better when the self-offering level changed from moderate to low because positive affect is an unintended consequence of helping. For the altruistically motivated person, the focus of the helping behaviour is the person in need and not the extent of helping offered in the process (Batson, 1990; Batson & Coke, 1981). The counterargument to this proposition is the possibility that for the altruistically motivated person, positive affect is an after-effect of helping even if self-offering levels change. Thus, the findings of Study 1 do not refute the altruistic explanations of helping either. Due to the inability to replicate the same findings with respect to actual current affect, this research cannot provide strong support for either the altruistic or the egoistic models of helping.

Across the two studies that tested the self-offering paradigm on anticipated and on actual current affect, I did find indications for the existence of the relationship between self-offering and anticipated positive affect. I suggest that in the absence of the methodological challenges encountered in the second study, the relationship may have replicated with respect to actual current affect as well. I propose several improvements for a future successful outcome of a study. First, I would manipulate self-offering with another measure other than pain that would have the least confounding effects on positive affect. It is very likely that by placing participants in the painful experience of the cold pressor task, positive affect might have dropped even before self-offering had any effect on positive mood. Second, I would determine that the levels of self-offering are indeed representative of the moderate and the low conditions respectively. This would be accomplished with pilot testing where I would incrementally increase the self-offering levels and examine the effects on positive affect. In order to have external validity for the

new levels of self-offering, I would also use open-ended questions in asking people of their low, moderate and high levels of self-offering. Third, I would increase the number of people in each condition in order to increase the power of the tests, something that was less than ideal for the analyses of the second study.

A major contribution of this research is its novel approach of the “do good-feel good” hypothesis by manipulating the extent of help provided and examining its effect on positive affect. The findings presented here are indicative of the relationship between self-offering and anticipated positive affect, although this relationship needs to be addressed further on actual affect with improved methodology. In the absence of past research on this particular topic, it is not possible to compare the findings with those reported by other investigators. The non-significant results of the second study, despite the encouraging results of the vignette study regarding anticipated affect, limit my ability to support the self-offering paradigm with respect to current affect. For this reason, the research reported here stands alone in an area of investigation yet to be explored. Future work on the self-offering paradigm should take into consideration the methodological challenges faced in this research but also build upon the trends observed across the two studies. The present research was not able to offer a definite answer to the question posed at the beginning of this thesis: “How far out of your way can you go?” Nonetheless, it was able to suggest many promising answers. My favorite is: “as far as it would take to make yourself and others feel happy”.

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Appendix A: General Information

Sex: Female/ Male (please circle one)

Age: _____

What is your major: _____

Would you characterize yourself as a religious person? YES/NO (please circle one)

If you answered yes to the above question, what is your religious denomination? _____

How many siblings do you have? _____

What is your birth order compared to that of your siblings? (e.g. 1st born of 3 siblings) _____

Have you spent most of your life in an *urban* or *rural* area? _____

Appendix B: The Full-Length (30 Item) BEES

Please use the following scale to indicate the degree of your agreement or disagreement with each of the statements below. Record your numerical answer to each statement in the space provided preceding the statement. Try to describe yourself accurately and in terms of how you are **generally** (that is, the average of the way you are in most situations—not the way you are in specific situations or the way you would hope to be).

- +4 = very strong agreement
 +3 = strong agreement
 +2 = moderate agreement
 +1 = slight agreement
 0 = neither agreement nor disagreement
 -1 = slight disagreement
 -2 = moderate disagreement
 -3 = strong disagreement
 -4 = very strong disagreement

- _____ 1. I very much enjoy and feel uplifted by happy endings
- _____ 2. I cannot feel much sorrow for those who are responsible for their own misery.
- _____ 3. I am moved deeply when I observe strangers who are struggling to survive.
- _____ 4. I hardly ever cry when watching a very sad movie.
- _____ 5. I can almost feel the pain of elderly people who are weak and must struggle to move about.
- _____ 6. I cannot relate to the crying and sniffing at weddings.
- _____ 7. It would be extremely painful for me to have to convey very bad news to another.
- _____ 8. I cannot easily empathize with the hopes and aspirations of strangers.
- _____ 9. I don't get caught up easily in the emotions generated by a crowd.
- _____ 10. Unhappy movie endings haunt me for hours afterwards.
- _____ 11. It pains me to see young people in wheelchairs.
- _____ 12. It is very exciting for me to watch children open presents.
- _____ 13. Helpless old people don't have much of an emotional effect on me.
- _____ 14. The sadness of a close one easily rubs off on me.
- _____ 15. I don't get overly involved with friends' problems.
- _____ 16. It is difficult for me to experience strongly the feelings of characters in a book or movie.
- _____ 17. It upsets me to see someone being mistreated.
- _____ 18. I easily get carried away by the lyrics of love songs.
- _____ 19. I am not affected easily by the strong emotions of people around me.
- _____ 20. I have difficulty knowing what babies and children feel.
- _____ 21. It really hurts me to watch someone who is suffering from a terminal illness.
- _____ 22. A crying child does not necessarily get my attention.
- _____ 23. Another's happiness can be very uplifting for me.
- _____ 24. I have difficulty feeling and reacting to the emotional expressions of foreigners.

- _____ 25. I get a strong urge to help when I see someone in distress.
- _____ 26. I am rarely moved to tears while reading a book or watching a movie.
- _____ 27. I have little sympathy for people who cause their own serious illnesses
(e.g., heart disease, diabetes, lung cancer).
- _____ 28. I would not watch an execution.
- _____ 29. I easily get excited when those around me are lively and happy.
- _____ 30. The unhappiness or distress of a stranger are not especially moving for me.

Appendix C. Social Desirability Scale (BIDR)

Using the scale as a guide below, write a number beside each statement to indicate how much you agree with it.

1	2	3	4	5	6	7
Not True			Somewhat True			Very True
_____						1. My first impressions of people usually turn out to be right.
_____						2. It would be hard for me to break any of my bad habits.
_____						3. I don't care to know what other people really think of me.
_____						4. I have not always been honest with myself.
_____						5. I always know why I like things.
_____						6. When my emotions are aroused, it biases my thinking.
_____						7. Once I've made up my mind, other people can seldom change my opinion.
_____						8. I am not a safe driver when I exceed the speed limit.
_____						9. I am fully in control of my own fate.
_____						10. It's hard for me to shut off a disturbing thought.
_____						11. I never regret my decisions.
_____						12. I sometimes lose out on things because I can't make up my mind soon enough.
_____						13. The reason I vote is because my vote can make a difference.
_____						14. My parents were not always fair when they punished me.
_____						15. I am a completely rational person.
_____						16. I rarely appreciate criticism.
_____						17. I am very confident of my judgments.
_____						18. I have sometimes doubted my ability as a lover.
_____						19. It's all right with me if some people happen to dislike me.
_____						20. I don't always know the reasons why I do the things I do.
_____						21. I sometimes tell lies if I have to.
_____						22. I never cover up my mistakes.
_____						23. There have been occasions when I have taken advantage of someone.
_____						24. I never swear.
_____						25. I sometimes try to get even rather than forgive and forget.
_____						26. I always obey laws, even if I'm unlikely to get caught.
_____						27. I have said something bad about a friend behind his or her back.
_____						28. When I hear people talking privately, I avoid listening.
_____						29. I have received too much change from a salesperson without telling him or her.
_____						30. I always declare everything at customs.
_____						31. When I was young, I sometimes stole things.
_____						32. I have never dropped litter on the street.
_____						33. I sometimes drive faster than the speed limit.
_____						34. I never read sexy books or magazines.
_____						35. I have done things that I don't tell other people about.
_____						36. I never take things that don't belong to me.

- ____ 37. I have taken sick-leave from work or school even though I wasn't really sick.
- ____ 38. I have never damaged a library book or store merchandise without reporting it.
- ____ 39. I have some pretty awful habits.
- ____ 40. I don't gossip about other people's business.

Appendix D. Altruism Scale

Please indicate how often you have engaged in the following behaviours:

	never	once	More than once	Often (3 or 4 times)	very often (5 or more times)
1. I have helped push a stranger's car out of the snow.					
2. I have given directions to a stranger.					
3. I have made change for a stranger.					
4. I have given money to a charity					
5. I have given money to a stranger who needed it (or asked me for it).					
6. I have donated goods or clothes to a charity.					
7. I have done volunteer work for a charity.					
8. I have donated blood.					
9. I have helped carry a stranger's belongings (books, parcels, etc.)					
10. I have delayed an elevator and held the door open for a stranger					
11. I have allowed someone to go ahead of me in a lineup (at Xerox machine, at supermarket).					
12. I have given an acquaintance a lift in my car.					
13. I have pointed out a clerk's error (in a bank, at the supermarket) in undercharging me for an item.					
14. I have let a neighbor whom I didn't know too well borrow an item of some value to me (e.g., a dish, tools, etc.).					
15. I have bought 'charity' Christmas cards deliberately because I knew it was a good cause.					
16. I have helped a classmate who I did not know that well with a homework assignment when my knowledge was greater than his or hers.					
17. I have before being asked, voluntarily looked after a neighbor's pet or children without being paid for it.					
18. I have offered to help a handicapped or elderly person across the street.					
19. I have offered my seat on a bus or train to a stranger who was standing.					
20. I have helped an acquaintance to move households.					

Appendix E. Brief Mood Introspection Scale (BMIS)

INSTRUCTIONS: Write a number next to each adjective that indicates how well each adjective or phrase describes your present mood.

definitely
do not feel

do not
feel

slightly
feel

definitely
feel

1

2

3

4

5

6

7

Lively _____

Happy _____

Sad

Tired

Caring _____

Content

Gloomy

Jittery

Drowsy_____

Grouchy_____

Peppy _____

Nervous _____

Calm _____

Loving _____

Fed up _____

Active

Overall, my mood is:

Very
Unpleasant

Very Pleasant

-10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10

Appendix F: Vignettes for **Moderate self-offering** Condition

Please read carefully the following scenarios and try to imagine that you are taking part in the story described. After reading the story, answer the questions following each scenario as honestly as possible.

Scenario 1

Imagine you are walking home from school carrying a heavy backpack. On your way home you stopped by the grocery store to pick up some food items. It's a cold winter day and you can't wait to get home, have supper and get some rest. When you approach the door of your apartment building, you see a young woman with a stroller and several bags in her hands trying go up the 5 small stairs leading to the front door of your apartment building. It's obvious that she needs help but you are already carrying a heavy load yourself. In this situation you have two choices:

- 1) Pretend that you did not see her distress and go up the other set of stairs.
- 2) You put your backpack down and all the weights you are carrying and offer to help her by carrying the stroller with her.

Questions

1. Which choice would you make in the above situation? _____

2. How great is the need of the person described in the above story? (Circle one)

not at all								extremely
1	2	3	4	5	6	7	8	9

3. For what reasons did you make the above decision (helping vs. not helping)?

4. How would you rate the pleasantness of the above encounter? (Circle one)

Very Unpleasant				Neutral				Very Pleasant
-3	-2	-1		0	1	2	3	

5. Based on your choice to help or not, how do you think the woman with the stroller would behave towards you afterwards?

6. In this situation, *how much* do you think you would *go out of your way* if you helped the woman with the stroller? (Circle one)

Not at all		Somewhat		A little bit		A lot
0	1	2	3	4	5	6

7. Based on your decision to help out/or not in the above situation, which emotions would better describe your feelings afterwards? (Circle all that apply)

1. **Grouchy** (not at all) 1-----2-----3-----4-----5-----6 (very much)
2. **Happy** (not at all) 1-----2-----3-----4-----5-----6 (very much)
3. **Caring** (not at all) 1-----2-----3-----4-----5-----6 (very much)
4. **Guilt** (not at all) 1-----2-----3-----4-----5-----6 (very much)
5. **Shame** (not at all) 1-----2-----3-----4-----5-----6 (very much)
6. **Pride** (not at all) 1-----2-----3-----4-----5-----6 (very much)
7. **Optimistic** (not at all) 1-----2-----3-----4-----5-----6 (very much)
8. **Cheerful** (not at all) 1-----2-----3-----4-----5-----6 (very much)
9. **Lively** (not at all) 1-----2-----3-----4-----5-----6 (very much)
10. **Content** (not at all) 1-----2-----3-----4-----5-----6 (very much)
11. **Active** (not at all) 1-----2-----3-----4-----5-----6 (very much)
12. **Nervous** (not at all) 1-----2-----3-----4-----5-----6 (very much)
13. **Tired** (not at all) 1-----2-----3-----4-----5-----6 (very much)
14. **Other** _____ (not at all) 1-----2-----3-----4-----5-----6 (very much)

8. Based on your decision to help out/or not in the above situation, what do you think the woman with the stroller would think of you?

Scenario 2

Imagine you are participating in an economics experiment. The experimenter gives you \$ 100 with the condition that you had to share it with another participant (whom you don't know and will not meet again). The money is given to you with the condition that you can share it only in two ways: You can either divide it 50-50 or you can keep \$ 30 to yourself and give the other \$ 70 to the other participant. Any attempt to share the money otherwise will disqualify you from the experiment. Just before you make the decision to share the money, you find out that the other person is in dire straits and really needs money to buy school supplies and groceries for the week. On the other hand, you don't really need the money to buy food and other necessities and you were thinking of spending your share in CD's and other entertainment.

If you choose to give the other person \$ 70 you would considerably help that person, whereas if you choose to spend the money 50-50, the other person would need more money to buy the weekly groceries. Considering the other person's financial situation, what decision would you make to share the money?

1. Would you divide the money: \$ 50 (you) - \$ 50 (other person)?
2. Would you help the other person by dividing the money: \$ 30 (you) – \$ 70 (other person)?

Questions

1. Which choice would you make in the above situation? _____

2. How great is the need of the person described in the above story? (Circle one)

not at all								extremely
1	2	3	4	5	6	7	8	9

3. For what reasons did you make the above decision (helping vs. not helping)?

4. How would you rate the pleasantness of the above encounter? (Circle one)

Very Unpleasant				Neutral				Very Pleasant
-3	-2	-1		0	1	2	3	

5. Based on your choice to help or not, how do you think the other student would behave towards you afterwards?

6. In this situation, *how much* do you think you would *go out of your way* if you helped the other person? (Circle one)

Not at all		Somewhat		A little bit		A lot
0	1	2	3	4	5	

7. Based on your decision to help out/or not in the above situation, which emotions would better describe your feelings afterwards? (Circle all that apply)

1. **Grouchy** (not at all) 1-----2-----3-----4-----5-----6 (very much)
2. **Happy** (not at all) 1-----2-----3-----4-----5-----6 (very much)
3. **Caring** (not at all) 1-----2-----3-----4-----5-----6 (very much)
4. **Guilt** (not at all) 1-----2-----3-----4-----5-----6 (very much)
5. **Shame** (not at all) 1-----2-----3-----4-----5-----6 (very much)
6. **Pride** (not at all) 1-----2-----3-----4-----5-----6 (very much)
7. **Optimistic** (not at all) 1-----2-----3-----4-----5-----6 (very much)
8. **Cheerful** (not at all) 1-----2-----3-----4-----5-----6 (very much)
9. **Lively** (not at all) 1-----2-----3-----4-----5-----6 (very much)
10. **Content** (not at all) 1-----2-----3-----4-----5-----6 (very much)
11. **Active** (not at all) 1-----2-----3-----4-----5-----6 (very much)
12. **Nervous** (not at all) 1-----2-----3-----4-----5-----6 (very much)
13. **Tired** (not at all) 1-----2-----3-----4-----5-----6 (very much)
14. **Other**_____ (not at all) 1-----2-----3-----4-----5-----6 (very much)

8. Based on your decision to help out/or not in the above situation, what do you think the other student would think of you?

Scenario 3

It is the end of the school year and you are preparing for the upcoming final exams. Your first exam is in 6 hours and you still have to review all the material from the start. You want to do well in this exam and have spent a lot of time preparing for it. As a last minute study session you decide to head to the library. You usually study in a remote corner of the library but today you couldn't find a quiet spot and decided to stay in the main floor of the library instead. Just as you are in the middle of reviewing your notes, another student approaches you and says that she is in the same class as you and wanted to ask you something she couldn't understand from the class notes. You haven't seen her before and probably will never meet this person again after the school year is over. She says that she is worried she won't be confident on the exam if she doesn't clearly understand all the material. She looks a bit stressed and is counting on you to help her out. She asks you if you can help her out with her questions. You still haven't finished all your reviewing and time is very valuable at that particular point as thus you are faced with two choices:

- 1) You put your studying aside and help the other student with her questions.
- 2) You tell her that you have no time to help her out because you haven't finished your studying yet.

Questions

1. Which choice would you make in the above situation? _____

2. How great is the need of the person described in the above story? (Circle one)

not at all								extremely
1	2	3	4	5	6	7	8	9

3. For what reasons did you make the above decision (helping vs. not helping)?

4. How would you rate the pleasantness of the above encounter? (Circle one)

Very Unpleasant				Neutral				Very Pleasant
-3	-2	-1		0	1	2	3	

5. Based on your choice to help or not, how do you think the other student would behave towards you afterwards?

6. In this situation, *how much* do you think you would *go out of your way* if you helped the other person? (Circle one)

Not at all		Somewhat		A little bit		A lot
0	1	2	3	4		5

7. Based on your decision to help out/or not in the above situation, which emotions would better describe your feelings afterwards? (Circle all that apply)

1. **Grouchy** (not at all) 1-----2-----3-----4-----5-----6 (very much)
2. **Happy** (not at all) 1-----2-----3-----4-----5-----6 (very much)
3. **Caring** (not at all) 1-----2-----3-----4-----5-----6 (very much)
4. **Guilt** (not at all) 1-----2-----3-----4-----5-----6 (very much)
5. **Shame** (not at all) 1-----2-----3-----4-----5-----6 (very much)
6. **Pride** (not at all) 1-----2-----3-----4-----5-----6 (very much)
7. **Optimistic** (not at all) 1-----2-----3-----4-----5-----6 (very much)
8. **Cheerful** (not at all) 1-----2-----3-----4-----5-----6 (very much)
9. **Lively** (not at all) 1-----2-----3-----4-----5-----6 (very much)
10. **Content** (not at all) 1-----2-----3-----4-----5-----6 (very much)
11. **Active** (not at all) 1-----2-----3-----4-----5-----6 (very much)
12. **Nervous** (not at all) 1-----2-----3-----4-----5-----6 (very much)
13. **Tired** (not at all) 1-----2-----3-----4-----5-----6 (very much)
14. **Other** _____ (not at all) 1-----2-----3-----4-----5-----6 (very much)

8. Based on your decision to help out/or not in the above situation, what do you think the other student would think of you?

Vignettes **Low self-offering** Condition

Please read carefully the following scenarios and try to imagine that you are taking part in the story described. After reading the story, answer the questions following each scenario as honestly as possible.

Scenario 1

Imagine you are walking home from school. It's a cold winter day but you are well-dressed for the occasion, with a warm coat and mittens in your hands. You can't wait to get home, have supper and get some rest. As you approach the door of your apartment building, you see a young woman with a stroller and several bags in her hands trying to go up the 5 small stairs leading to the front door of your apartment building. It's obvious that she needs help and as you are approaching her you have two choices:

- 3) Pretend that you did not see her distress and go up the other set of stairs, thinking that someone else will help her.
- 4) You offer to help her by carrying the stroller with her.

Questions

1. Which choice would you make in the above situation? _____

2. How great is the need of the person described in the above story? (Circle one)

not at all								extremely
1	2	3	4	5	6	7	8	9

3. For what reasons did you make the above decision (helping vs. not helping)?

4. How would you rate the pleasantness of the above encounter? (Circle one)

Very Unpleasant				Neutral				Very Pleasant
-3	-2	-1		0	1	2	3	

5. Based on your choice to help or not, how do you think the woman with the stroller would behave towards you afterwards?

6. In this situation, *how much* do you think you would *go out of your way* if you helped the woman with the stroller? (Circle one)

Not at all		Somewhat		A little bit		A lot
0	1	2	3	4	5	6

7. Based on your decision to help out/or not in the above situation, which emotions would better describe your feelings afterwards? (Circle all that apply)

1. **Grouchy** (not at all) 1-----2-----3-----4-----5-----6 (very much)
2. **Happy** (not at all) 1-----2-----3-----4-----5-----6 (very much)
3. **Caring** (not at all) 1-----2-----3-----4-----5-----6 (very much)
4. **Guilt** (not at all) 1-----2-----3-----4-----5-----6 (very much)
5. **Shame** (not at all) 1-----2-----3-----4-----5-----6 (very much)
6. **Pride** (not at all) 1-----2-----3-----4-----5-----6 (very much)
7. **Optimistic** (not at all) 1-----2-----3-----4-----5-----6 (very much)
8. **Cheerful** (not at all) 1-----2-----3-----4-----5-----6 (very much)
9. **Lively** (not at all) 1-----2-----3-----4-----5-----6 (very much)
10. **Content** (not at all) 1-----2-----3-----4-----5-----6 (very much)
11. **Active** (not at all) 1-----2-----3-----4-----5-----6 (very much)
12. **Nervous** (not at all) 1-----2-----3-----4-----5-----6 (very much)
13. **Tired** (not at all) 1-----2-----3-----4-----5-----6 (very much)
14. **Other**_____ (not at all) 1-----2-----3-----4-----5-----6 (very much)

8. Based on your decision to help out/or not in the above situation, what do you think the woman with the stroller would think of you?

Scenario 2

Imagine you are participating in an economics experiment. The experimenter gives you \$100 with the condition that you had to share it with another participant (whom you don't know and will not meet again). The money is given to you with the condition that you can share it only in two ways: You can either divide it 50-50 or you can keep \$ 45 to yourself and give the other \$ 55 to the other participant. Any attempt to share the money otherwise will disqualify you from the experiment. Just before you make the decision to share the money, you find out that the other person is in dire straits and really needs money to buy school supplies and groceries for the week. On the other hand, you don't really need the money to buy food and other necessities and you were thinking of spending your share in CD's and other entertainment.

If you choose to give the other person \$ 55 you would considerably help that person, whereas if you choose to spend the money 50-50, the other person would need more money to buy the weekly groceries. Considering the other person's financial situation, what decision would you make to share the money?

1. Would you divide the money: \$ 50 (you) - \$ 50 (other person)?
2. Would you help the other person by dividing the money: \$ 45 (you) – \$ 55 (other person)

Questions

1. Which choice would you make in the above situation? _____

2. How great is the need of the person described in the above story? (Circle one)

not at all									extremely
1	2	3	4	5	6	7	8	9	

3. For what reasons did you make the above decision (helping vs. not helping)?

4. How would you rate the pleasantness of the above encounter? (Circle one)

Very Unpleasant				Neutral				Very Pleasant
-3	-2	-1	0	1	2	3		

5. Based on your choice to help or not, how do you think the other student would behave towards you afterwards?

6. In this situation, *how much* do you think you would *go out of your way* if you helped the other person? (Circle one)

Not at all		Somewhat		A little bit		A lot
0	1	2	3	4	5	

7. Based on your decision to help out/or not in the above situation, which emotions would better describe your feelings afterwards? (Circle all that apply)

1. **Grouchy** (not at all) 1-----2-----3-----4-----5-----6 (very much)
2. **Happy** (not at all) 1-----2-----3-----4-----5-----6 (very much)
3. **Caring** (not at all) 1-----2-----3-----4-----5-----6 (very much)
4. **Guilt** (not at all) 1-----2-----3-----4-----5-----6 (very much)
5. **Shame** (not at all) 1-----2-----3-----4-----5-----6 (very much)
6. **Pride** (not at all) 1-----2-----3-----4-----5-----6 (very much)
7. **Optimistic** (not at all) 1-----2-----3-----4-----5-----6 (very much)
8. **Cheerful** (not at all) 1-----2-----3-----4-----5-----6 (very much)
9. **Lively** (not at all) 1-----2-----3-----4-----5-----6 (very much)
10. **Content** (not at all) 1-----2-----3-----4-----5-----6 (very much)
11. **Active** (not at all) 1-----2-----3-----4-----5-----6 (very much)
12. **Nervous** (not at all) 1-----2-----3-----4-----5-----6 (very much)
13. **Tired** (not at all) 1-----2-----3-----4-----5-----6 (very much)
14. **Other** _____ (not at all) 1-----2-----3-----4-----5-----6 (very much)

8. Based on your decision to help out/or not in the above situation, what do you think the other student would think of you?

Scenario 3

It is the end of the school year and you are preparing for the upcoming final exams. Your first exam is tomorrow and you still have to review all the material from the start. You want to do well in this exam and have spent a lot of time preparing for it. You usually study in a remote corner of the library but today you couldn't find a quiet spot and decided to stay in the main floor of the library instead. Just as you are in the middle of reviewing your notes, another student approaches you and says that she is in the same class as you and wanted to ask you something she couldn't understand from the class notes. You haven't seen her before and probably will never meet this person again after the school year is over. She says that she is worried she won't be confident on the exam if she doesn't clearly understand all the material. She looks a bit stressed and is counting on you to help her out. She asks you if you can help her out with her questions. You still haven't finished your reviewing and thus you are faced with two choices:

- 1) You put your studying aside and help the other student with her questions.
- 2) You tell her that you have no time to help her out because you are in the middle of your studying for tomorrow.

Questions

1. Which choice would you make in the above situation? _____

2. How great is the need of the person described in the above story? (Circle one)

not at all								extremely
1	2	3	4	5	6	7	8	9

3. For what reasons did you make the above decision (helping vs. not helping)?

4. How would you rate the pleasantness of the above encounter? (Circle one)

Very Unpleasant				Neutral				Very Pleasant
-3	-2	-1		0	1	2	3	

5. Based on your choice to help or not, how do you think the other student would behave towards you afterwards?

6. In this situation, *how much* do you think you would *go out of your way* if you helped the other person? (Circle one)

Not at all		Somewhat		A little bit		A lot
0	1	2	3	4	5	

7. Based on your decision to help out/or not in the above situation, which emotions would better describe your feelings afterwards? (Circle all that apply)

1. **Grouchy** (not at all) 1-----2-----3-----4-----5-----6 (very much)
2. **Happy** (not at all) 1-----2-----3-----4-----5-----6 (very much)
3. **Caring** (not at all) 1-----2-----3-----4-----5-----6 (very much)
4. **Guilt** (not at all) 1-----2-----3-----4-----5-----6 (very much)
5. **Shame** (not at all) 1-----2-----3-----4-----5-----6 (very much)
6. **Pride** (not at all) 1-----2-----3-----4-----5-----6 (very much)
7. **Optimistic** (not at all) 1-----2-----3-----4-----5-----6 (very much)
8. **Cheerful** (not at all) 1-----2-----3-----4-----5-----6 (very much)
9. **Lively** (not at all) 1-----2-----3-----4-----5-----6 (very much)
10. **Content** (not at all) 1-----2-----3-----4-----5-----6 (very much)
11. **Active** (not at all) 1-----2-----3-----4-----5-----6 (very much)
12. **Nervous** (not at all) 1-----2-----3-----4-----5-----6 (very much)
13. **Tired** (not at all) 1-----2-----3-----4-----5-----6 (very much)
14. **Other**_____ (not at all) 1-----2-----3-----4-----5-----6 (very much)

8. Based on your decision to help out/or not in the above situation, what do you think the other student would think of you?

Appendix G. Descriptive statistics and reliability analyses of affect scales for the three vignettes.

Mood Scales			
Vignette 1	Mean	S.D.	Alpha
Negative affect	1.57	0.71	0.72
Positive activated affect	4.30	1.03	0.85
Positive non-activated affect	4.29	1.09	0.78
Total positive total	4.29	1.00	0.89
Vignette 2			
Negative affect	1.47	0.69	0.74
Positive activated affect	3.57	1.13	0.87
Positive non-activated affect	3.90	1.11	0.77
Total positive total	3.73	1.05	0.89
Vignette 3			
Negative affect	2.06	1.00	0.75
Positive activated affect	3.00	1.25	0.91
Positive non-activated affect	3.23	1.15	0.80
Total positive total	3.11	1.16	0.92
All Vignettes			
Negative affect	1.70	0.64	0.84
Positive activated affect	3.62	0.90	0.88
Positive non-activated affect	3.80	0.84	0.82
Total positive total	3.71	0.83	0.91

Appendix H: Pain Intensity Questionnaire

Please indicate how you would describe the pain you felt when you had your hand in the water.

	None	Mild	Moderate	Severe
Throbbing				
Shooting				
Stabbing				
Sharp				
Cramping				
Gnawing				
Hot-Burning				
Aching				
Heavy				
Tender				
Splitting				
Tiring-Exhausting				
Sickening				
Fearful				
Punishing-Cruel				

II. Tick along the scale below for the pain in your arm only:

No Pain I-----I Worst possible
pain

III. Overall intensity of **total** pain experience. Please limit yourself to a description of the pain in your arm area only. Place a check mark (✓) in the appropriate column:

0	No Pain	
1	Mild	
2	Discomforting	
3	Distressing	
4	Horrible	
5	Excruciating	

Appendix I: Brief Mood Introspection Scale (BMIS) (Long Version)

Please indicate which one of the following words best describes your emotional state AT THIS MOMENT. Please circle the most appropriate number that most describes your emotional state RIGHT NOW.

absolutely do not feel		do not feel		feel a little bit		absolutely feel
1 -----	2 -----	3 -----	4 -----	5 -----	6 -----	7 -----

			happy			
1 -----	2 -----	3 -----	4 -----	5 -----	6 -----	7 -----

			tired			
1 -----	2 -----	3 -----	4 -----	5 -----	6 -----	7 -----

			gloomy			
1 -----	2 -----	3 -----	4 -----	5 -----	6 -----	7 -----

			in high spirits			
1 -----	2 -----	3 -----	4 -----	5 -----	6 -----	7 -----

			loving			
1 -----	2 -----	3 -----	4 -----	5 -----	6 -----	7 -----

			in distress			
1 -----	2 -----	3 -----	4 -----	5 -----	6 -----	7 -----

			calm			
1 -----	2 -----	3 -----	4 -----	5 -----	6 -----	7 -----

			active			
1 -----	2 -----	3 -----	4 -----	5 -----	6 -----	7 -----

			cooperative			
1 -----	2 -----	3 -----	4 -----	5 -----	6 -----	7 -----

			fed up			
1 -----	2 -----	3 -----	4 -----	5 -----	6 -----	7 -----

			drowsy			
1 -----	2 -----	3 -----	4 -----	5 -----	6 -----	7 -----

			sociable			
1 -----	2 -----	3 -----	4 -----	5 -----	6 -----	7 -----

1 ----- 2 ----- 3 ----- **sad** ----- 4 ----- 5 ----- 6 ----- 7

1 ----- 2 ----- 3 ----- **uncomfortable** ----- 4 ----- 5 ----- 6 ----- 7

1 ----- 2 ----- 3 ----- **caring** ----- 4 ----- 5 ----- 6 ----- 7

1 ----- 2 ----- 3 ----- **lively** ----- 4 ----- 5 ----- 6 ----- 7

1 ----- 2 ----- 3 ----- **joyful** ----- 4 ----- 5 ----- 6 ----- 7

1 ----- 2 ----- 3 ----- **grouchy** ----- 4 ----- 5 ----- 6 ----- 7

1 ----- 2 ----- 3 ----- **considerate** ----- 4 ----- 5 ----- 6 ----- 7

1 ----- 2 ----- 3 ----- **distressed** ----- 4 ----- 5 ----- 6 ----- 7

1 ----- 2 ----- 3 ----- **outgoing** ----- 4 ----- 5 ----- 6 ----- 7

1 ----- 2 ----- 3 ----- **friendly** ----- 4 ----- 5 ----- 6 ----- 7

Appendix J: Reactions to “Pain intensity and Personality” Study

Please answer the following questions about the experiment you just completed:

1. How difficult/stressful was the experiment you just completed?

1 2 3 4 5 6 7
(very easy) (very difficult)

2. How much did you enjoy the experiment you just completed?

1 2 3 4 5 6 7
(not at all) (very much)

3. How much did you feel obliged to help Jessica by doing her part of the experiment?

1 2 3 4 5 6 7
(not at all) (very much)

4. Sometimes peoples' perceptions about the study influence their performance. In your own words, what do you think what the purpose of the study?

.....

5. Any other comments you would like to make about the study?

Appendix K

If you were asked by the experimenter to Help Jessica (the other participant), please answer the following questions:

1. How much did you feel obliged to help Jessica by doing her part of the experiment?

1	2	3	4	5	6	7
(not at all)						(very much)

2. Was your decision to help or not influenced at all by the experimenter?

1	2	3	4	5	6	7
(not at all)						(very much)

3. How do you feel about your decision to help or not Jessica?

Very Bad	Bad	Somewhat Bad	Neutral	Somewhat Good	Good	Very Good
1	2	3	4	5	6	7

4. How glad are you for making your decision?

Not Very Glad	Somewhat Glad	Neutral	Glad	Very Glad		
1	2	3	4	5	6	7