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IMPLICATIONS OF GUILT IN THE MANIFESTATION OF MORAL AND INDIVIDUALISTIC BEHAVIOURS

Ph.D. Thesis Summary

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Abstract Contents

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Introduction

Moral Development is one of those areas that have attracted interest since Antiquity. In Psychology, the first researchers that investigated the moral development were Jean Piaget (1965) and Lawrence Kohlberg (1969). During the past 15 years the number of research studies aimed at investigating morality grew constantly; the main themes explored being the antecedents of moral behaviour and the involvement of moral emotions in the process of moral decision making.

The present research focuses on studying the motivational function of guilt, particularly - the influence that guilt has over the manifestation of moral and individualistic behaviour, and the implications that empathy has over the same types of behaviours.

The first part of the investigation starts from opting for definitions (for morality, moral development and the development of morality), and from the differentiation between the components and the sub-components of the moral development domain.

The second stage of the theoretical investigation includes: (1). the decision to turn our attention toward the moral self-conscious emotions and empathy (viewed as a moral emotional process); (2). choosing the emotion of guilt as the moral emotion to be studied in detail; (3). a differentiation between guilt from other self-conscious emotions; (4). a description of guilt aversion; (5). a description of empathy, and its relations to guilt.

The third stage of our investigation includes a literature review which we ran in order to identify an appropriate method to experimentally induce guilt, other than moral scenarios (Christensen and Gomila, 2012; Rebega Apostle, Benga, Miclea, 2013). A pilot study follows this investigative endeavour. The purpose of the pilot study is to induce guilt and the fear of being negatively evaluated through an autobiographical memory task.

In the fourth stage of our research, a series of experiments were conducted in order to investigate in detail the motivational function of guilt. The premise of these experimental studies is given by the controversies related to guilt's motivational function which we found in the psychological literature (De Hooge, Nelissen, Breugelmans and Zeelenberg, 2011; De Hooge, 2012).

The aims of the conducted experiments were to investigate:
(1). the impact of guilt vs. vicarious emotions on moral and individualistic behaviours in a group of emerging adults (experimental study no. 1);
(2). guilt's motivational function and its behavioural consequences in a group of adolescents (experimental study no. 2a);
(3). guilt's motivational function followed by the victim's empathic reaction versus guilt's motivational function followed by the victim's passive reaction (experimental study no. 2b);
(4). the influence that the repair of the damage has on moral behaviour (experimental study no. 3).

Chapter 1 Theoretical Framework

1.1.   The concepts of Morality, Moral Development and the Development of Morality
The development of Morality refers to the process in which morality emerges and changes, depending on the socio-cultural and economical context, and also depending of the individual's or on the groups' moral development stage. The Development of Morality is closely linked to concepts of good, care, fairness and equity (Nucci & Ginkgo, 2008; Nucci & Turiel, 2009). Instead, Moral Development reflects the individuals' developmental stage, and

it integrates features related to cognitive, emotional or social development. Finally, morality refers to how an individual should behave in a particular group, or in a particular situation, and is regarded as the instance that helps individuals distinguish between good and evil (Moll, Zahn, the Oliveira - Souza, Krueger & Grafman, 2005, p 779).

1.2. Moral Development's Components

Despite the exponential growth of interest in moral development, there are few references that define and describe in detail its components: the moral judgments, moral behaviour or moral emotions, and the relationships between them (Greene, Somerville, Nystrom, Darley, & Cohen, 2001; Haidt, 2001).

The psychological literature highlights, for each of the components of moral development – for the cognitive, behavioural and emotional components - a series of sub-components (Harman, Mason and Sinnott-Armstrong, 2010, Greene et al., 2001, Murphy et al., 2011, 2012; Tangney et al., 2007). Among these, we choose a single sub-component relevant to this thesis, which we describe in more detail.

1.2.1. Moral Judgments

Moral judgments are included in the cognitive component of moral development, along with moral thinking. For Moll et al. (2005, p 807), moral judgments (English "Moral Judgments") are "a type of evaluative judgement that is based on assessments of the adequacy of one's own and others' behaviours according to socially shaped ideas of right and wrong." (Moll et al., 2005, p. 807). Instead, moral thinking (English "moral reasoning") is "a thinking mechanism through which moral judgements are attained." (Moll et al., 2005, p. 807).

1.2.2. Moral Behaviours

Moral behaviours are those behaviours that aim towards: cooperation, mutual assistance and equitable sharing of resources with other individuals (Tomasello & Vaish, 2013). In the following section, we present a comparison of three dimensions of the behavioural component of moral development: pro-social behaviours, behaviours related to benevolence and altruism (Batson, 1991).

Pro-social behaviours refer to a wider range of manifestations that are designed to benefit both parties involved in the social situation (both the agent exhibiting the pro-social behaviour, and the agent toward which the pro-social behaviour is directed). Benevolent behaviours are motivated more by internal rewards and aim at helping others, and contain a low dose of selfish motivation (Ferguson, Farrell, & Lawrence, 2008). Altruistic behaviour implies helping others without taking into consideration internal or external reward (Sober & Wilson, 1998).

It should be noted that we do not consider that moral behaviour is represented as either selfish behaviour or altruistic behaviours. Rather, we consider that these behaviours are situated on a continuum, at one pole being situated the "pure" selfish behaviours, and at the other extreme pole, the "pure" altruistic behaviours. Murphy and Ackermann (2011, 2012) capture this idea of a continuum of moral behaviour within their theory aimed to define social orientation values. Due to this classification, we use the term "individualistic behaviour" for behaviours that can be also named selfish.

In this paper we use the term "moral behaviour" for all the behaviours described above: for the pro-social behaviours, the benevolent and altruistic ones. We consider two features to be essential for moral behaviour: (1). these behaviours benefit people in social context and (2). the manifestation of these behaviours is associated with individuals' moral values.

1.2.3. The Moral Emotions

For a long time moral emotions' role in the moral decision making process has been ignored, as moral judgements were considered to be the most important components involved in the moral decision making process (Haidt, 2001). Currently, there are two perspectives that dominate the psychological literature and dispute the primacy of moral emotions or of moral judgments in moral decision making process: from Haidt's perspective (2001, 2003) moral emotions are the most important components, and along with intuitions, they determine the output of moral decision making process, and in Greene's view (2003), moral reasoning and moral emotions are processes that run in parallel.

Haidt (2003, p. 855) defines moral emotions as "those emotions that are related to the interests or the welfare of society, or of another person, other than the "evaluator" or the "agent" (the moral agent). It is necessary to emphasize that this feature of moral/immoral emotion is a contextual function that emotions perform. The consequences that each emotion has on behaviour, on individuals' moral judgments, on the subsequent emotions are those that determine whether an emotion is a moral emotion. We could notice a tendency in trying to differentiate social emotions from moral emotions, but we consider this difference an artificial one, as moral emotions are eminently social: moral emotions occur only in relation to social interactions.

In the present thesis, moral emotions are given this name because of the functions they perform: (1). they motivate and accompany moral judgments, moral values, moral behaviour and moral identity, and (2). they stop the manifestation of selfish, immoral, individualistic behaviours, which would have negative influences on other individuals, on other groups.

1.2.4. Moral Emotions Families

We have taken into account several references that aimed to describe and differentiate moral emotion families: (1). Haidt (2003); (2). Tangney, Stuewig and Mashek (2007); (3). Gray and Wegner (2011); and (4). Hutcherson and Gross (2011).

Although the distinctions proposed by Haidt (2003) are the most often referred to, the other references listed contribute with additional information about moral emotions. The inclusion of empathy in the category of moral emotions is important; some authors either present its emotional component as a moral emotion (in the form of compassion, Haidt, 2003) or they present it as an emotional process (Tangney et al., 2007).

1.2.5. The Self-Conscious Moral Emotions

The category of self-consciousness moral emotions includes: shame, guilt and embarrassment (Tangney et al., 2007). Considering Hutcherson and Gross's (2011) division, the self-conscious emotions (shame, guilt and pride) can also be named socio-moral emotions, emotions related to self-consciousness because they: (1). involve evaluations of the self or of the individual's behaviour in social contexts, and (2). they require the individual's ability to understand others' perspective of their own behaviours. Based on the strong desire that people have - to be a part of groups - these emotions should be highly adaptive (Baumeister & Leary, 1995), as they assessed and continually re-evaluate the relationship the individuals have with other social partners.

1.2.6. Guilt

Choosing guilt as the moral emotion to be studied in detail is not random, as guilt is one of the most important emotions that regulate individuals' behaviours in society. Haidt (2001) considers guilt one of the prototypes of moral emotions.

Guilt is defined as the ability to feel and anticipate others' suffering (Baumeister, Stillwell, and Heatherton, 1994; Tommasello et al., 2005). Haidt (2003) reported the research

conducted by Baumeister, Stillwell, and Heatherton (1994) and describes guilt as the emotion that arises in the context of an endangered relationship, when the moral agent believes that she/he caused the other partner of interaction a loss or discomfort, and these actions jeopardized the relationship the moral agent has with the victim. Although this emotional state can be felt in relation to foreigners, it is rare for this to occur in distant relationships (Baumeister et al., 1994). According to Baumeister (1998), guilt comes from the "emotional area" of empathic concern from the "emotional area" associated with the anxiety of being socially excluded. Guilt is an adaptive emotion that brings benefits to individuals and their relationships (Tangney, Stuewig, & Mashek, 2007, p. 26). It is the emotion that is often seen as the glue of communities and groups. Its purpose is to protect and help social relations by punishing the abuse of moral (conventional) rules and aims at restoring inequalities (Baumeister et al., 1994; Leith and Baumeister, 1998).

In the present thesis we define guilt as the unpleasant emotion that a moral agent feels following a moral transgression for which he feels responsible, an emotions which leads to moral, compensatory behaviour, aimed to restore the balance in the relationship.

1.2.7. Differentiating shame from guilt
One difference between guilt and shame is given by the different approach to the self. Guilt is less "painful" than shame, the individual who feels responsible for an inappropriate behaviour being motivated to repair the damage and the relationship (Baumeister et al., 1994). The individual who feels ashamed, assesses there is a difference between what he/she should be like and what he/she is, a difference between what they want to be and what it actually is, and these evaluations make the moral agent feel there are necessary changes needed to take part in their identity (Tangney, 1992, Tangney & Dearing, 2002). Guilt motivates the moral agent to take action, to act in social interactions, but shame, in opposition to guilt, is associated with the tendency to withdrawal from society.

1.2.8. Differentiating Guilt from Regret
Guilt and regret are very similar emotions. We consider regret as an emotion that has some features identified as describing guilt, and some from shame. From the perspective of motivating the moral agent's behaviours, regret is associated rather with the manifestation of moral behaviour, and not to loneliness or withdrawal (as shame is). Oftentimes, studies demonstrate significant associations between regret and guilt, and these associations make the differentiation between these two emotions more difficult in research (Mandel, 2003; Zeelenberg, Van Dijk, Manstead, & Van der Pligt, 1998).

1.2.9. Guilt aversion
The fear of feeling guilty and avoiding the situations in which guilt may appear is called "guilt aversion" (Charness & Dufwenberg, 2006; Dufwenberg & Gneezy, 2000; Battigalli, & Dufwenberg, 2007). If guilt is the emotion that individuals experience when they realize that their behaviour was wrong, then, guilt aversion is the secondary emotion in which individuals are afraid to experience guilt. If trust and cooperation depend on avoiding negative states, as considered in the theory proposed by Chang, Smith, Dufwenberg, & Sanfey (2011), then, guilt aversion is very important in regulating moral behaviour (along with guilt).

1.2.10. The relations between guilt and empathy
Empathy is more than an emotion, and most authors consider it a multifaceted construct (Eisenberg et al., 1991). Following the taxonomy proposed by Davis (1980, 1983), empathy has four dimensions: (1). perspective taking, (2). fantasy, (3). empathic concern, and (4). personal distress. Tangney et al. (2007) considered empathy an extremely important moral

process, not just a moral emotion, or its emotional component. Empathy includes sympathy and compassion, and guilt is closely related to both of these components.

There is an almost unanimously shared opinion which highlights the positive effects of guilt and empathy. There are two published studies in social psychology that investigate guilt's negative consequences (De Hooge et al., 2011; De Hooge, 2012). There are few studies that reveal the negative consequences of empathy, also. Barbara Oakley (2013) draws attention to the positive distortions toward the publication and the confirmation of positive stereotypes associated with empathy, which emphasis that empathy motivates pro-social behaviour. The author proposes an explanation for which the negative effects of empathy and altruism are not advertised as much as the positive consequences are: it is possible that the desire not to overshadow the positive effects empathy has on individuals and groups to be responsible for the biased positive presentation bias (Oakley, 2013). For example, one of the earlier studies showing possible negative effects of empathy is published by Batson, Klein, Highberger, and Shaw (1995); in this study empathy felt for the victim changes the participants' perception on fairness in relation to the victim. In the article published by Baumeister, Stillwell and Heatherton (1994) the negative effects of guilt are stated: some individuals might use guilt to gain more power, a higher power status, in the relations they are involved in. Although there are only a few studies that draw attention to the negative consequences of guilt or empathy, these consequences should be considered and investigated, as a distorted, share opinion toward the positive consequences, which argues that empathy should be exercised and must be cultivated, does not help the advancement of knowledge.

1.3. Final conclusions and present directions in the current research

Based on the theoretical and empirical arguments presented above - regarding the positive distortions encountered in presenting guilt and empathy - the objective of this thesis is to investigate the motivational functions of guilt, empathy, and their implications in the manifestation of moral and individualistic behaviour. In this thesis, moral behaviour defines the actions which aim to help other individuals, regardless of the intention the individual has or his motivation, and the individualistic behaviour is that behaviour which favours more the moral agent.

To achieve our general aim, we intend to meet the following objectives:

1. to analyse the empirical studies that used to experimentally induce guilt (Chapter 2);
2. to test the methodology involving autobiographical memory as a method by which the guilt and the fear of negative evaluation can be experimentally induced (Chapter 2, the pilot study)
3. to identify and construct a questionnaire to assess guilt as an emotional state, with an increased emphasis on moral emotions;
4. to examine the impact guilt vs. vicarious emotions have in motivating moral behaviours and individualistic behaviours (Chapter 3, Study 1);
5. to analyse guilt's motivational function over the decision to manifest moral behaviours or individualistic behaviours in a group of adolescents (Chapter 4, study 2a);
6. to examine the motivational function an empathic victim (of a guilty moral agent) has over moral and individualistic behaviour (Chapter 4, study 2b);
7. to analyse the implications that repair (and the identity of the repaired) that follows a moral transgression has over moral behaviour and over individualistic behaviour (Chapter 4, study 3);

These studies will lead to a better understanding of guilt and will be the first to investigate this emotion, using this type of methodology in a Romanian context. In addition, these are the first studies to investigate in detail the motivational function of guilt in an adolescent sample.

Chapter 2 Inducing Guilt: A Literature Review

2.1. Introduction

Most research makes use of moral scenarios to induce moral emotions, and guilt; the limits of this methodology are discussed by Christensen and Gomila (2012). The authors draw attention to the lack of uniformity in the use of such a methodology in Moral Psychology; a methodology which makes a meta-analysis difficult to conduct. As the knowledge gained on guilt is largely derived from studies which use moral scenarios, we aim to analyse the available literature in order to identify experimental induction methods to study guilt.

2.2.   Method

We have conducted a computer search using the key-words "guilt and morality", "guilt and induction" and "pro-social behaviour and guilt aversion" in Psych Info, Sage, Wiley and Science Direct databases. And we have included in our search the journal articles published in peer-reviewed journals between February 1980 and March 2012. The criteria used in selecting the articles were these: (1). the study uses a procedure to experimentally induce guilt and (2). the study refers to the moral domain (measuring pro-social behaviour).

2.3. Results and Discussions

We have identified only a few studies that use a proper method to experimentally induce guilt. There are three categories of strategies used to induce guilt: 1) the autobiographical recall, where participants are asked to describe with as many details as possible an event in which they felt guilt; 2) playing a computer game that has certain specifications aimed at inducing guilt and 3) causing a wrong-doing during the experiment to induce guilt.

Cunningham, Steinberg and Grev (1980) induced guilt in an ecological manner. Their study falls into the category of studies that push participants to violate a moral norm during the experiment. In short - the participants were required to take a photo of the experimenter, and during this time the camera became defective. After this, the participant was told that the camera is broken and will need some repair. Another experimenter passed by the prime experimenter and some papers accidentally fell on the floor. Results confirmed the hypothesis that guilt motivates pro-social behaviour.

Ketelaar and Au (2003) asked the participants to describe a recent experience in which they felt guilty, ashamed or blameworthy. For this task, the participants were given 10 minutes. The results obtained showed that participants with a high level of guilt demonstrate an increased tendency toward cooperative behaviours.

Nelissen, Dijker and De Vries (2007) induced guilt without using moral scenarios. The purpose of their study was to investigate the differences between fear and guilt regarding their motivational function of moral behaviour. The method used to induce guilt was that of an autobiographical memory task. Participants were divided into groups of 4 or 6 individuals, and within these small groups, they were asked to describe in as much detail as possible, a recent incident in which they felt they were guilty or afraid. They were told that this research aims to study "memory and information processing". Two evaluators examined and decided if the descriptions offered by the participants are sufficient or not to induce guilt. Guilt description should have included items such as taking personal responsibility. The results of this study replicated what is already claimed in the psychological literature - guilt motivates pro-social behaviour, and it seems that it is associated with selfish tendencies.

De Hooge et al. (2007) consider their study a "perfect replica" of the study by Ketelaar and Au (2003). The research carried out by De Hooge et al. (2007) represents an important

response to previous studies (Ketelaar & Au, 2003; Nelissen et al., 2007), thus producing additional empirical evidence on the direction of research that demonstrates that guilt has a motivational function towards the manifestation of compensatory and moral behaviours.

De Hooge et al. (2011) used the same methodology as Ketelaar and Au (2003) used in the first study. The researchers have asked participants to play a two-round game (De Hooge et al., 2011) and groups of 9-12 participants were introduced in the laboratory, where they played a computer game designed to make them feel guilty toward a teammate.

Smith, Webster, Parrott, and Eyre (2002) used a task of autobiographical memory recall to investigate shame and guilt. The purpose of their study was to investigate the differences between guilt and shame regarding the private/public distinction that often differentiates these two emotions. Unlike other studies, researchers have asked participants not to write the details of their memories so that their memories are better preserved. Participants were asked to think about a situation involving a violation of moral norms in a private context, or about a violation of a moral norm in a public context, a violation of a rule in a public context or a violation of a rule (which does not imply morality) in a private context. The dependent variable was the response given by participants to the question "what is the emotion that best defines what have you felt?. Following this procedure participants were asked whether the emotion that best describes their feeling was guilt or shame, and this assessment assumed that the response is appreciated and quantitatively measured using a Likert scale. Making use of this procedure - not to ask participants to write the details about their emotional experiences - may be an effective and non-invasive experimental method to induce guilt.   The argument is that guilt is an emotion that most people consider to be an unpleasant emotion.

De Hooge and her colleagues (2011) used the same method as that used previously by De Hooge et al. (2007). Researchers have made a few changes for this task - they exchanged messages with the other participants of the study. This change in approach probably maximizes the effects of emotion induction, if we consider the distinction of intra-group and inter-group, and the distance between the victim and the aggressor.

2.4. Conclusions
We found a few studies investigating guilt's motivational function by experimentally inducing the emotions. We consider that the experimental procedure of inducing guilt as a method that should be used as well as moral scenarios. It is necessary to draw attention to the difficulties encountered during this search for experimental methods to induce guilt because they reflect the state of the research, the inconsistencies encountered in defining and differentiating guilt and shame.

2.5 Pilot study

2.5.1. Introduction
Much of the research in the field of Moral Psychology makes use of moral scenarios to induce guilt (Christensen & Gomila, 2012). Using moral scenarios has its benefits: emotion can be induced in a large number of participants at the same time, participants are asked to imagine the same situation, so there cannot be a high variability of the types of induced "guilts". On the other hand, it would be preferable that information held about guilt is not all a result of a single type of methodology. These arguments, along with the results extracted from the previous analysis, in which we investigated the experimental method used to induce guilt, led

us to investigate whether the guilt induction method that makes use of a task which calls for autobiographical memory is effective.

We decided to examine also the possibility of inducing fear of negative evaluation (Watson & Friend, 1969; Leary, 1983; Carleton et al., 2007) with the same task, that to appeals to autobiographical memory. We chose this type of fear because: (1). it is closely linked to the behaviour that individuals have in social groups, without which morality would be meaningless; (2). it is considered in some cases a type of fear that helps individuals adapt, and in others cases it is considered to be the core of pathology, (3). it is associated with social rejection.

2.5.2. Objective and Hypothesis

Based on the theoretical analysis previously conducted, we aim to observe whether guilt or fear of negative evaluation can be induced using the methodology that uses autobiographical memory.

Based on this, we expect that the method of inducing guilt and fear of negative evaluation by using an autobiographical memory task is effective.

2.5.3. Method

2.5.3.1. Experimental Design

Participants were randomly distributed into one of three groups: (1). a group in which the guilt was induced (2). a group in which fear of negative evaluation was induced, and (3). the control group. The dependent variable was assessed using the subjective emotional state evaluated after the induction of the emotion (guilt, and respectively, fear of negative evaluation).

2.5.3.2. Participants

In this study 71 Romanian students were included (58 female, 13 male). They were enrolled in different programs of study (at the undergraduate level), at the University Babes Bolyai. All participants voluntarily participated in this study.

2.5.3.3. Instruments

The tasks used to induce guilt and the fear of negative evaluation. In the three groups (guilt, fear, and the control group) the task that was used to induce emotions appealed to autobiographical memory (and was previously used by De Hooge et al., 2007; Nelissen et al., 2007). Participants is the guilt group were asked to describe in as much detail an event in which they felt guilty, then, they were asked to what extent they feel guilty at that time. The participants from the fear group were asked to describe in as much details as possible situation where they were afraid to be evaluated negatively by other people. The participants in the control group were given the task to describe a typical day.

The initial emotional state assessment. Participants included in the guilt group were evaluated so as to establish their initial guilt emotional state using the question "To what extent do you feel now guilty for the events in your life?". The answer to this question was used using a Likert scale, and the answers could vary from 1 (not at all) to 5 (very much). The participants from the fear of negative evaluation group were asked to answer the following question: "To what extent are you afraid of being negatively evaluated by others now?", using a Likert scale from 1 (not at all) to 5 (very much);

2.5.3.4. Procedure

Participants read the original state assessment task, followed by the requirement employed by the inducing emotion task, and then, the emotion induction was evaluated. The completion of these tasks took on average 15 minutes. After completing this stage, participants were asked to answer a series of questionnaires, after which they were thanked for their participation.

2.5.4. Results and Discussion

There were 71 participants (13 male and 58 female, $Mage = 21.94$, $SD = 2.42$) included in the analysis. In the guilt-group there were 26 participants; in the fear of negative evaluation 24 participants were included and 21 participants were included in the control group. The results show that emotions were not induced, the difference between the two evaluations were not significant. The fear of negative evaluation was not induced ($M_{t1} = 1.79$, $SD = .83$, $M_{t2} = 1.95$, $SD = 1.08$), $t(23) = 1.00$, $p = .32$, $ns.$. Also, guilt was not induced ($M_{t1} = 2.19$, $SD = 1.16$; $M_{t2} = 2.03$, $SD = 1.11$) $t(25) = .75$, $p = . 46$. In addition, most participants did not complete the section made available for the event description that made them feel guilty.

2.5.5. Conclusions

These results fail to induce guilt and show that guilt is not an emotion that can easily be induced and studied using a methodology involving autobiographical memory. Probably the best strategy to induce guilt is that the emotion is induced on an individual basis. Through this research guilt characteristics were reinforced: it is a negative emotion, that causes discomfort, and individuals are not willing to recall such experiences.

Chapter 3 The investigation of guilt among emerging adults

3. Investigating of Guilt's vs. Vicarious Emotions' Impact on Moral Behaviour in Romanian Context (Study 1)

3.1. Introduction

Guilt and vicarious emotions are social, moral emotions (Baumeister et al., 1994; Haidt, 2003; Tangney et al, 2007). For the family of social emotions, taking into consideration the perspective the other individuals have is central (Batson et al., 1997; Decety & Jackson, 2004; Ruby & Decety, 2004). The status of social and of moral emotion attributed to guilt is due to the moral agents' tendencies to manifest pro-social, compensatory, moral behaviours towards their victims (Eisenberg, 2000; Haidt, 2003, Tangney et al, 2007).

The growing interest in studying the function of guilt and vicarious emotions is relatively recent (Nellisen & Zeelenberg, 2009; De Hooge, Nelissen, Breugelmans, and Zeelenberg, 2011; Paulus, Müller-Pinzler, Westerman, & Krach, 2013). The Interest in studying vicarious emotions is probably associated with the growing interest in moral emotions' and the vicarious emotions' tendencies to motivate moral behaviours (Batson et al., 1997; Decety & Jackson, 2004; Miller, Eisenberg, Fabes, Shell, 1996; Tangney et al., 2007). In this present study, vicarious emotions are not differentiated from sympathy, empathy or personal distress; and they are very similar to the personal distress caused by the presence of a victim (as it was named by Haidt, 2003).

De Hooge, Nelissen, Breugelmans and Zeelenberg (2011) aimed to test the influence guilt has, compared with the influence the vicarious emotions have on moral and individualistic behaviours. The results of their research (carried out using *student t test*) argue that there are differences between the three groups in terms of the amount offered for the victim - guilt, unlike vicarious emotions, motivates the manifestation of moral behaviour. Then, participants in the guilt induced group offered less for the neutral person compared with the participants in the other two groups. Also, there were no differences in regard to the amount retained for themselves by the participants from the three groups. What is interesting in these results is that participants in the induced vicarious emotions did not differ from those from the control group, although it is considered that vicarious emotions motivate pro-social behaviour (Batson et al., 1997).

3.2. Objectives and Hypotheses
In this study: (1). we analyse the motivational function of guilt has over moral behaviours, (2). we investigate the motivational function of vicarious emotions on moral behaviours, (3). we determine the differences between guilt and vicarious emotions in respect to behavioural consequences, and (4). we design a scale to assess guilt induction.

The formulated hypothesis are these ones:

Hypothesis 1. Guilt, unlike vicarious emotions, motivates more the manifestation of moral behaviours towards the victim.

Hypothesis 2. Guilt motivates at a greater extent the emergence of moral behaviour towards neutral people compared with vicarious emotions.

Hypothesis 3. Guilt motivates: compensatory behaviours of a higher magnitude toward the victim compared with those directed at neutral persons (H.3.a.), higher compensatory behaviour manifestations than individualistic behaviours motivate, towards the victim (H.3.b), a higher magnitude of moral behaviour directed the neutral persons, compared to the individualistic behaviours (H.3.c.).

Hypothesis 4. Vicarious emotions motivate: compensatory behaviours of a higher magnitude toward the victim compared with those directed at neutral persons (H.4.a.), higher compensatory behaviour manifestations towards the victim, compared to individualistic behaviours (H.4.b), a higher magnitude of moral behaviour directed the neutral individuals, compared with the individualistic behaviours (H.4.c.).

Hypothesis 5. Guilt and vicarious emotions cause differences between the ratios obtained for the value of moral behaviour.

3.3. Method

3.3.1. Experimental Design
Participants were randomly distributed into one of three groups: (1). a group in which the guilt was induced, (2). a group in which vicarious emotions were induced, and (3). the control group. The dependent variables were: (1). the behaviour manifested toward the victim/person who helped, (2). the moral behaviour manifested toward a neutral person from the social environment, and (3). the individualistic behaviour (the money participants kept for themselves).

3.3.2. Participants

157 Romanian students were included in this research (M_{age} = 20.88, SD = 3.33, 145 females, 12 males). They are enrolled in different programs of study (undergraduate level) within Babes Bolyai University. All participants participated voluntarily in this study.

3.3.3. Instruments

Moral Guilt Scale (SVM) was used to analyse the initial participants' emotional states levels. To meet this purpose we have built a scale to assess and differentiate moral emotions close to guilt. Our approach started by analysing the lists of emotions/emotional states included in previous studies published by De Hooge et al. (2011), Nellisen et al. (2009), Ketelar and Au (2003), and the questionnaire often used for assessing participants' emotional states before the induction of the emotions - PANAS - X (Watson & Clark, 1999). After this analysis, we decided to include in this scale 17 emotions and moods: guilt, pride, joy, shame, sorrow, regret, relief, fear, disappointment, anger, remorse, I feel responsible, anger towards self, disgust to themselves, to their own behaviour disgust, dissatisfaction with oneself, dissatisfaction with their behaviour. The instructions used were these: "Below you will find a list of words for emotions. "How intense do you feel these emotions now? Read each item and then mark the answers in the space next to the word." Each item was rated on a Likert scale with six levels (0 = none, 1 = very little, 2 = little, 3 = moderate, 4 = much, 5 = very much. Internal consistency coefficient indicates a higher fidelity: Cronbach's α = 0.81 (for the initial assessment of the level of basic mood, t1) and Cronbach's α = 0.92 (for evaluation after induction of emotions, t2).

Moral scenarios (De Hooge et al., 2011; De Hooge, 2012). To induce the guilt state, or the vicarious emotions, we used moral scenarios. These moral scenarios were developed by Ilona De Hooge and her colleagues'' studies (De Hooge et al., 2011, De Hooge, 2012). The beginning of the moral scenarios read was the same for all the participants, and consisted of the following description: "Imagine you are in a hurry because you want to get a special offer at a shop just before closing time. You do not have a means of transportation but you know that your friend Ioan has a bicycle. This bicycle is very special to him because it is the last present given to him by his grandmother before she died. Nevertheless, he lets you use the bicycle. You cycle to the shop and get the special offer. When you leave the shop you find out that the bicycle has been stolen; you forgot to lock it. You inform Ioan about this and he is very sad." In the guilt condition participants read the following final for the scenario: "When you leave the shop you find out that the bicycle is stolen; you forgot to lock it. You inform Ioan about this and he is very sad." The group vicarious emotion participants were read: "The next day Ioan lends his bicycle to Adi and the bicycle gets stolen: The friend forgot to lock it. Jim is very sad." Participants in the control group read the script ending with this sentence: "After you leave the shop you take the bicycle and bring it back to Ioan."

Moral Behaviour and Individualistic Behaviours' Evaluation (De Hooge et al., 2011). The individualist moral behaviours were assessed through a scenario that requires moral decisions. After using this description: "A week after the event there are the birthdays of your friend Ioan and of another friend, Michael. You have 100 lei that you can spend. How much money would you spend on the birthday of Jim and on the birthday of Michael, and how much money would you keep for yourself?"

Participating filled with what amount they give the victim/person that helped, what amount they give the neutral friend and how much they take for themselves. The amounts which participants decided upon to be given for the two friends' gifts are considered moral behaviour (the first two) and individualistic behaviour (the amount kept to themselves).

The value of moral behaviour is calculated by adding the amount offered for moral behaviours, from which the value assessing the individualistic behaviour is subtracted. This is the formula used: the value of moral behaviour = (the amount attributed for the victim + the amount offered to the neutral friend) - the amount the participants kept for themselves.

3.4. Participants

157 participants were initially included in the study. Of these, 23 were excluded from the analysis due to the lack of answers, as they either failed to complete items of the scales, or because the initial assessment scores reported extreme guilt, regret and shame. Therefore, 134 participants were included in the analysis (122 women and 12 men; $Mage = 20.88$, $SD = 3.33$).

The Initial Evaluation. After eliminating participants with extreme initial scores, the data provided by 134 participants was included in the analysis. In the group to which guilt was induced - 55 participants were included, 46 participants were include in the group in which the vicarious emotions were induced and 33 participants were enrolled in the control group. No significant differences between the three groups were found after the initial assessment ($F(2, 134) = 0.12$, $p > .05$, *ns.*).

Guilt Induction. The first step was to analyse the differences between the initial emotional evaluation and the evaluation of the emotional states after the emotional induction. The guilt induction was successful only in the group in which guilt was induced ($t(54) = -27.09$, $p < .001$, *Cohen's d* = - 5.09). The levels of guilt reported by the vicarious group show that participants in this group do not feel guilty for the inappropriate behaviour exhibited by another person, compared to those participants included in the guilt condition ($t(45) = -0.89$, $p > .05$, *ns.*).

At t2 there were significant differences between the mean scores obtained for the item "guilty" between the guilt condition participants and the vicarious condition participants, ($t(99) = -17.43$, $p < .001$), and also between the guilt induced condition group and the control group ($t(86) = -23.05$, $p < .001$). Thus, the induction of guilt was effective only in the experimental group.

Moral behaviour manifested toward the victim/person helped. The amount of money attributed by the guilt group to the first friend is considered the moral behaviour manifested toward their victim. For the other two groups, the moral behaviour manifested toward the first friend that helped is considered to be the moral behaviour. The participants from the guilt group gave the victim a greater amount compared to those in the group that had vicarious emotions induced ($t(99) = 4.72$, p < .001). Similarly, guilty participants offered the victim a greater amount than the control group participants did ($t(86) = 4.94$, $p < .01$). Among the vicarious emotion induction group and the control group there were no differences ($t(77) = 2.78$, p>.05, *ns.*).

The Moral Behaviour Manifested Toward the Neutral Friend. Regarding the amount offered to the neutral person, participants in the guilt cognition did not differ from those of the other two groups ($t(99) = -1.87$, $p > .05$, *ns.* - results obtained from the comparison of the guilt group to the vicarious emotion condition, respectively $t(86) = -1.56$, $p > .05$, *ns.* – results obtained by the guilt group compared to the control group). Between the control group and the vicarious emotions group there were no recorded differences ($t(77) = 0.16$, $p > .05$, *ns.*).

Individualistic behaviour was assessed through the amount of money that participants kept to themselves. Participants who were induced guilt responded differently from those in the vicarious emotion group ($t(99) = -3.49$, p < .01), keeping the least amount from

themselves. Also, participants in the guilt group differed from those included in the control group ($t(86) = -3.79$, $p < .01$). Again, there were no differences between the vicarious emotions group and the control group ($t(77) = .58$, $p > .05$, *ns.*).

Table 1.
The mean and the standard deviation reported for the variable of guilt, as an emotional state at the initial evaluation (t1) and after guilt's induction (t2) for the three groups

Group	N	t1	t2	*t*	*p*	*Cohen d*
Guilt	55	1.78 (.85)	5.4 (.53)	-27.09	.00	-5.09
Vicarious Emotions	46	1.74 (.97)	1.93 (1.35)	-.89	.37	-.16
Control	33	1.85 (1.17)	1.67 (099)	.81	.42	0.16

Thus, the results empirically supportb the first hypothesis: individuals from the guilt - group manifested an increased moral behaviour toward the victim's own behaviour, compared with the participants from the other two groups. The results did not empirically support the second hypothesis: the guilty participants did not differ from those included in the vicarious emotions group, or from those included in the control group, in terms of the moral behaviour manifested toward the neutral friend.

Table 2.
Means, standard deviations and the correlations between moral behaviours and individualist behaviours (N=134)

	1	2	3
1. Moral behaviour 1	-	-.34**	-.81**
2. Moral behaviour 2		-	-.25**
3.Individualist behaviour			-
M	51.3	30.49	17.84
SD	17.56	10.58	16.92

**$p < .01$

The data was analysed using *t Student test, as* did De Hooge et al. (2011), and also using MANOVA, given the three ways of the independent variable and the three ways of the dependent variable (Field, 2009).

Using Roy's Largest Root, one of the indicators that can be reported for MANOVA (Field, 2009), we observed a significant result of the group's impact on moral behaviour $\Theta = .35$, $F(4, 262) = .20$, $p < .001$. The results obtained allowed us to continue to analyse the influence of emotions on moral behaviour using discriminative analysis. The first function obtained by the discriminative analysis explained 99.8 % of the variance between the two groups, and the second explained only.02 %.

Combined, the discriminative functions described differ significantly between the groups included in the analysis, $\lambda = .80$, $\chi 2 (4) = 28.86$, $p < .001$, compared with the second function, $\lambda = .99$, $\chi2(1) = 0.07$, $p = .789$. The correlations between the results and the functions obtained charge in a very different manner depending on the two types of moral behaviours. The moral behaviour manifested toward the victim or the person who helps loaded $r = .99$ for the first function, and for the second function $r = .06$. For the second function, the moral behaviour manifested toward the second individual charged $r = -.36$, and for the second function r =.93. Thus, the first function discriminates better between moral behaviour

manifested by the victim/person that helps, and the second function discriminates better the moral behaviour manifested toward the neutral friends in the social context. The results support that the groups differed significantly in terms of the patterns of manifested moral behaviours.

Analysing the individualist behaviour. In order to analyse the differences between the three groups in terms of behaviour we used a non – parametric test - Kruskal - Wallis test. The three groups differed significantly based on the distributions of the individualistic behaviours ($H(2) = 12.96$, $p < .05$). Thus, we know that the three groups differ, but we need more analysis to understand the specific differences. To assess these differences, we used a non-parametric test for post hoc analysis. Since we are dealing with multiple comparisons, we use the Bonferroni correction. We compare: (1). the individualistic behaviour exhibited by the guilt-group and (2). the individualistic behaviour exhibited by the vicarious-emotions group. The threshold we took into consideration is $p = .0167$ (the Bonferroni correction), to prevent possible type I errors (Field, 2009; Howitt & Cramer, 2009). Mann- Whitney U test concluded that there are significant differences between individualistic behaviour exhibited by participants in the guilt group, compared to those in the group were vicarious emotions were induced, $U = 831.5$, $r = 82.73$. Similarly, there are significant differences between individualistic behaviours exhibited by the guilt group compared with the control group $U = 567$, $r = -.32$. Also, there were no significant differences between the individualistic behaviours shown by the vicarious emotion group and the control group ($U = 703$, r = .06). Therefore, the participants from the vicarious emotions group do not lead to a different pattern of individualistic behaviours compared with the participants included in the control group.

Intra-group differences based on moral behaviours. Within the guilt group, differences between moral behaviour directed toward the victim, compared to behaviours directed toward a neutral friend are observed ($F_{1, 54} = 108.49$, $p < .001$). In the group in which vicarious emotions were induced, significant differences between the amount offered for both friends (the neutral and the one that helped) are observed $F_{1, 45} = 14.93$, $p < .001$. The same results can be observed between the amounts provided in the control group for the same two friends $F_{1,32} = 19.86$, $p < .001$. Therefore, we can state that within the guilt group, participants have offered higher amounts for victim/the person that helped, rather than for the neutral person. Empirical evidence supports H.3.a. and H.4.a..

Individualistic behaviour vs. moral behaviour. Due to significant Levene test for individualistic behaviour, we analysed the data regarding moral and individualistic behaviour using the Wilcoxon test.

In the guilt group, the moral behaviour manifested toward the victim ($M_{cm1} = 60.61$) had a larger magnitude than the individualistic behaviour ($M_{CI} = 11.13$), $T = 27.97$, $r = -0.62$. This result empirically supports H.3.b.. Moral behaviour toward the neutral friend ($M_{cm2} = 28.27$) is larger than the individualistic behaviour ($M_{CI} = 11.13$), $T = 27.75$, $r = -4.25$, indicating that the hypothesis H.3.c. was also empirically supported.

In the vicarious emotions group, the moral behaviour manifested toward the victim (Mcm1 = 45.24) was of a larger magnitude than the individualistic behaviour ($M_{CI} = 21.48$), $T = 26.90$, $r = -0.42$. Moral behaviour toward a neutral person ($M_{cm2} = 32.20$) is larger than individualistic behaviour ($M_{CI} = 21.48$), $T = 23.89$, $r = -0.30$. These results bring empirical support for the hypothesis H.4.b. and H.4.c.

The value attributed to moral behaviour. Using the non-parametric equivalent of unifactorial ANOVA: the Kruskal- Wallis, we obtained a significant difference between the

three groups in terms of the amount attributed moral behaviour ($H(2) = 13.58$, $p =.024$). However, since the threshold for considering a significant difference is $p = .0167$ (considering the Bonferroni correction, Field, 2009; Howitt & Cramer, 2009), the result cannot be taken into account after. Therefore, H.5. is not empirically supported.

3.5. Discussion
This study aimed to replicate the first experimental study conducted by De Hooge et al. (2011). In comparison with the initial study, in the present study we have included an initial assessment of the emotional state of the participants, since the participants were selected from a convenience sample. Our results differ from those obtained in the initial study (De Hooge et al., 2011). The present study supports the positive effects of guilt on moral behaviour, both in terms of behaviour manifested toward the victim, and also in terms of the behaviour manifested toward other individuals in the social context. These results motivate us to maintain guilt in the category of moral emotions, as proposed by Haidt (2003) or by Tangney et al. (2007).

3.6. Final discussions and conclusions
The present study draws attention to the limited research available on vicarious emotions, the need to study these emotions more, and also fits in the new line of research that studies the vicarious emotions (Paulus et al., 2013). This is the first study developed in the Romanian social context. We consider that our results highlight cultural differences.

Chapter 4   Guilt's, Empathy's and Repairs' Impact over Moral and Individualistic Behaviour during Adolescence

4.1 Guilt's Influence over Moral Behaviour (Study 2)

4.1.1. Introduction
Adolescence is a period of vulnerability, in which adolescents' decisions can be easily influenced by their emotions (Blakemore, 2008; Choudhury, Blakemore, Charman, 2007). In the presence of peers, adolescents tend to take more risky decisions (Blakemore, & Robbins, 2012; Crone, 2013, Wolf, Wright, Kilford, Dolan, & Blakemore, 2013, Casey, & Caudle, 2013), in order to maintain their status in the group and their self-image. Taking these considerations into account, we find the study of guilt's motivational function an important subject of research during this period of development. To understand the context in which the moral development takes place, we can refer to recent results that highlight the cognitive and social development of adolescents (Blakemore & Robbins, 2012; Crone 2013; Gummerum, Keller, Takezawa, & Mata, 2008; Gummerum, Hanoch, Keller, Parsons, & Hummel, 2010). Also, there is a large amount of research that aims at studying social ability of decision-making related to fairness (Radke, Güroğlu, & de Bruijn, 2012; Güroğlu, Van den Bos, Rombouts, & Crone, 2010). All these studies reveal interesting differences between the highly cognitive, socio-emotional and moral features adolescence has, compared with the adult period.

Guilt is part of the emotions that are particularly relevant during adolescence because of the role it bears the dynamics of the group. This emotion related to self-awareness, is one of the emotions that are based on self- assessment of their own identity (Eisenberg, 2000).

What interests us is to analyse the influence guilt has on moral and individualistic behaviours as previous other studies have (De Hooge et al., 2011; De Hooge, 2012), but in a group of adolescents, in order to identify possible differences the step of developing data.

4.1.2. Objectives and Hypotheses
Starting from the idea that during adolescence the social information is processed differently, compared to emerging adults, and also adults, in this study we aim to analyse guilt's motivational function over the manifestation of the moral and individualistic behaviours.

Therefore, we expect that guilt motivates moral behaviour and does not motivate individualistic behaviour manifestations.

4.1.3. Method

4.1.3.1. Experimental Design
Participants were randomly distributed into two experimental groups: (1). a group in which guilt was induced, and (2). the control group. The dependent variables are: (1). the moral behaviour manifested toward the victim/the person who helped the participants, (2). the moral behaviour manifested toward the neutral person from the social environment and, (3). the individualistic behaviour (the amount of money the participants kept for themselves). This experimental design includes an independent variable with three modes and three dependent variables.

4.1.3.2. Participants
In this research 53 adolescents aged between 15 and 17 years ($M = 15.99$, $SD = .52$) enrolled in three schools of Craiova and Cluj-Napoca were included. The participation in the study was voluntary.

4.1.3.3. Instruments
The moral scenarios (De Hooge et al., 2011; De Hooge, 2012) used are the ones used in the previous study. Participants all read the same beginning of the scenario: "Imagine you are in a hurry because you want to get a special offer at a shop just before closing time. You do not have a means of transportation but you know that your friend Ioan has a bicycle. This bicycle is very special to him because it is the last present given to him by his grandmother before she died. Nevertheless, he lets you use the bicycle. You cycle to the shop and get the special offer. When you leave the shop you find out that the bicycle has been stolen; you forgot to lock it. You inform Ioan about this and he is very sad." The control group participants read: "After you leave the shop you take the bicycle and bring it back to Ioan."

The Moral Guilt Scale (MGS) is a scale designed to assess guilt compared other (moral) emotions experienced by the participants. This scale contains the following emotions/emotional states: guilt, pride, joy, shame, sorrow, regret, relief, fear, disappointment, anger, remorse. Participants received these completion instructions: "Below you will find a list of emotions and emotional states. How intense do you feel these emotions now? Read each item and then mark the answers in the column next to the word." All of the emotions included in this scale are rated on a scale from 0-5 (0 = none, 1 = very little, 2 = little, 3 = moderate, 4 = much, 5 = very much). Internal consistency coefficient indicates a high internal consistency for the scale: Cronbach's $\alpha = 0.86$ (for the initial assessment of the emotional state, t1) and Cronbach's $\alpha = 0.68$ (for evaluation after the induction of emotions took place, t2). This scale is a shortened version of the scale used in the study presented in Chapter 3.

The evaluation of moral and individualistic behaviours (De Hooge et al., 2011; De Hooge, 2012). The individualist moral behaviours were assessed using this scenario: "A week after the event there are the birthdays of your friend Ioan and of another friend, Michael. You have 100 lei that you can spend. How much money would you spend on the birthday of Jim and on the birthday of Michael, and how much money would you keep for yourself?" Each participant wrote the amounts they attribute to each of the victim, the neutral friend and to themselves.

The value of moral behaviour was calculated by adding the values attributed for the moral behaviours and subtracting the amount of money considered to assess the individualistic behaviour. The value of moral behaviour = (the amount offered to the victim + the amount offered neutral friend) - the amount kept by the participants for themselves.

4.1.3.4. Procedure

The participants completed the questionnaires in this following order: (1). MGS, (2). participants read the moral scenarios, (3). completed the MGS, (4) participants responded for the scale assessing moral behaviour and individualistic behaviour. Each questionnaire was accompanied by specific instructions. This process, of answering the scales took, on average, about 20 minutes. Participants were thanked after completing the questionnaires.

4.1.3.5. Methods of data analysis

Data was analysed using multivariate analysis of variance (MANOVA), given the three conditions of the dependent variable that we take into account. The value computed for the moral behaviour was analysed using univariate analysis of variance (ANOVA).

4.1.4. Results

Preliminary data analysis. The 53 participants were randomly divided into two groups. In the control group 19 participants were included ($M = 15.96$, $SD = 63$) and in the guilt induced group, 34 participants were included ($M = 16.01$, $SD = .46$). There were not differences between the two groups ($t(51) = .32$, $p = .746$, *ns.*).

Guilt Induction. For the 53 participants included in the two groups, we computed the mean and the standard deviation for the initial guilt report (here we use the term "t1" for this evaluation), and for the emotional state attributed to guilt after the guilt induction (here we use the phrase "t2", for the second evaluation). Then, we compared the two groups. There were no significant differences at t1 ($F(1,51) = .97$, $p = .329$), but there are significant differences t2 ($F(1,51) = 91.05$, $p < .001$). This result demonstrates that guilt induction took place in the experimental group.

Moral behaviours directed toward a neutral person (moral behaviour 2) and individualistic behaviours. Using Pillai 's trace, we observe a significant effect of group membership over the amount offered for the neutral person and for the individualistic behaviour, $V = 0.45$, $F (2, 46) = 19.08$, $p < .001$. These results show a significant effect of group membership over the moral behaviour 2 and over individualistic, selfish behaviour.

Discriminative analysis described a single function, given the inclusion of two groups in the analysis. The function obtained explain the entire variance, *canonical $R^2 = .67$*. For this function, *$\lambda = .55$, $\chi2 (2) = 27.78$, $p < .001$*. The correlations between the results (the dependent variables) and discriminant function shows that the amounts offered for the neutral person (moral behaviour 2) loaded onto this function ($r = .77$), while the individualistic behaviour loaded less on this function and conversely ($r = -.70$). Therefore, we can infer that people in

the two groups differed in the manner they chose to manifest moral behaviours toward the neutral friend, and also, by the manner they manifested the individualistic behaviour. Therefore, the participants involved in the experimental group, in which guilt was induced, manifested a low individualistic behaviour, whereas participants in the control group have retained a significantly higher amount for themselves, demonstrating increased individualistic behaviour. This latter difference would also be visible if the amount of money the control group participants kept for themselves would be divided by the sum the guilt participants kept for themselves and the number obtained would be 2.58, indicating a large difference. Following this analysis, the second part of the hypothesis has received empirical support. The differences between the two groups indicated differences in moral behaviour directed toward a neutral person, and in terms of individualistic behaviour.

Table 3.

Means ,standard deviations, and the correlations for moral behaviours and individualistic behaviour

Behaviour shown toward	1	2	3
1. Victim	-	-.70**	-.72**
2. Neutral Friend	-.76**	-	-.50*
3. Themselves	-.42*	-.22	-
Mgroup 1(SD)	59.55 (11.95)	34.08 (11.65)	5.29 (8.52)
Mgroup2 (SD)	65.26 (17.11)	21.57 (12.02)	13.68 (9.10)

Notă.The means and the standard deviations obtained for the two groups are shown in the lower part of the table. The group in which guilt was induced is group 1 and the control group is group 2.
*p <.05, **p <.01

Moral behaviour directed towards the victim/the person that helped (moral behaviour 1). To analyse the amounts provided to victims (by the participants in the group where guilt was induced) and the person who helped (the control group), we used the non-parametric test - the Kruskal-Wallis Test. Dealing with multiple comparisons, the threshold that we have set to consider a significant difference is *p =.0167*, to prevent possible type I errors (the Bonferroni corrections). The results show that the amount offered to the victim/the person who helps does not differ significantly between the two groups ($H(1) = 2.2, p = .14, ns.$). The lack of differences regarding moral behaviour 1 is an unexpected result. We can conclude that the first part of the hypothesis was not empirically supported; the participants included in the guilt group did not offer a higher amount for the victim, compared with the control group participants.

The value of "moral behaviour" shows that guilt led the participants in the guilt group to manifest a higher extent of moral behaviour ($F(1,49) = 13.84, p = .001$). Although there are no differences in the behaviour manifested toward the victim/the person that helps between the two groups, if we take into account both moral and individualistic behaviour, guilt motivates manifestation of moral behaviour.

4.1.5. Discussion
Participants from the two groups did not differ in regards with the amount of money offered to the person towards which they felt guilt. This result deserves further investigation because it differs from that shown by emerging adults, and the participants from the Netherlands, included in the research conducted by De Hooge et al. (2011) and De Hooge (2012).

The results support that the two groups differ significantly in terms of moral behaviour manifested towards the neutral friend. It remains to be discussed whether the "neutral" friend is really so, since the scenario states that the amount given is for the present of this friends' birthday, and the social norm is to offer gifts. Also, when it comes to teenagers, and their relationship with friends, it is known that their relationships with peers are extremely important (Blakemore, & Robins, 2012; Crone, 2013).

Our results show that guilt made participants not necessarily more altruistic, but less selfish. The approach trends towards the moral behaviour may be motivated by different emotions, by different personal values, by different possible assessments from participants' perspectives. We believe that these two trends are often associated – when a moral behaviour is manifested, there it is less likely for the individualistic behaviour to occur (even if different individuals are taken into account). However, if the motivations for these two types of behaviours are different, then they can be manifested simultaneously towards different individuals, and this type of decisions can be seen the case of decisions used by De Hooge et al. (2011) and by us.

It is necessary to emphasize the difference between the results of this study - different from those obtained in the Dutch culture (De Hooge et al., 2011; De Hooge, 2012) - and those in the Romanian culture (Rebega, Benga, & Miclea, in press). In addition, adolescents appear to be more sensitive to emotional anchors present in the scenarios. If we look at the age difference, without being familiar with the peculiarities of development of adolescents, we would not expect these differences. But there are plenty of studies that highlight the role of the group in adolescence, the role of friends and on social-emotional development (Blakemore, 2008; Crone, 2013; Choudhury, Blakemore, Charman, 2007; Somerville, 2013).

The small number of participants included in the study represents a limit of this research. In a new research, the low response rate could be taken into consideration, and therefore a larger number of questionnaires could be distributed.

4.1.6. Conclusions

From the current study we have shown empirical proof that shows that the cost of a moral transgression is supported by the moral agent, and not by the neutral friend. Due to the lack of differences between guilt-induced group and the control group in respect to the amount attributed to the victim (or the person who helps) the hypothesis was empirically supported. This lack of differences between the two groups requires further investigation; participants in the control group giving person who helped more than they gave participants blamed the victim.

The present study draws attention to the emotions that may be induced through the scenarios, the dependence of moral judgments to certain moral emotions and certain emotional states of the participants. As emotions influence moral decision making and behaviours, special attention should be attributed to the scenarios used in studies from the Moral Psychology domain.

4.2 The Influence of the Empathic Victim's Reaction over Moral and Individualistic Behaviour (Study 2b)

4.2.1. Introduction

Guilt is one of the moral emotions that motivate behaviour; guilt motivates compensatory behaviours toward the victims of the transgression (Haidt, 2003, Tangney et al., 2007). One of the most frequently cited features of this emotion is to repair a relationship that has been compromised by the moral agent's misconduct (Baumeister et al., 1994). As guilt is

an emotion often regarded as the golden standard for moral emotions, as empathy is, only that empathy is regarded as a moral process (Tangney et al., 2007). Empathy, unlike guilt, has been extensively studied (Eisenberg, 2000; Hoffman, 2000). Empathy is considered a moral emotional process (Tangney et al., 2007). However, as guilt can demonstrate negative consequences toward the other individuals (De Hooge et al., 2011; De Hooge, 2012), so can empathy (Oakley, 2013).

4.2.1. Objective and Hypothesis
We do not question the intentions that stand behind the manifestations of empathy (this investigative approach could be considered in a future research); we are interested in the behaviours that empathy motivates.

This study is an exploratory approach. We could not find a similar study that investigates the implications that an empathic reactions from the victim has over the moral agent's behaviour. We consider that the changes made in the scenario respect the literature's descriptions of empathy's features. It can be argued that the scenario used by De Hooge et al. (2011) describes a passive victim, but, in a real social context, victims may have a different reaction (whatever that reaction may be). This exploratory study is determined by attempting to change the task so that it is closer to reality.

The aim of this study is to analyse the motivational functions of guilt and of the victim's empathic reactions over moral and individualistic behaviours.

When a victim has an empathic reaction, the moral behaviour reaction is reduced, but the individualistic behaviour is heightened, compared with the situation in which the victim is not empathic.

4.2.1. Method

4.2.3.1. Experimental Design
Participants were distributed into three groups: (1). the group in which guilt was induced but the victim has a passive reactions, (2). the group in which guilt was induced but the victim had an empathic reactions, and (3). the control group. The dependent variables are: (1). The moral behaviour manifested toward the victim/the person who helped the participants, (2). The moral behaviour manifested toward the neutral person from the social environment and, (3). the individualistic behaviour (the amount of money the participants kept for themselves). Such experimental design includes an independent variable with three modes and three dependent variables.

4.2.3.2. Participants
77 adolescents, aged between 15 to 18 years ($M = 16.17$, $SD = .64$, 45.5% female participants and 54.5% male participants), were involved in this experiment. These adolescents were enrolled in three schools of Craiova and Cluj-Napoca. The participation in the study was voluntary.

4.2.3.3. Instruments
Moral Guilt Scale (MGS) evaluates a range of emotions in order to reveal guilt, compared to other related emotions (shame, regret), or opposite emotions (joy, relief). We decided to include more emotions and emotional states to determine the differences between guilt and close moral emotions (shame, regret), but also between the effects of mixed emotions (shame, fear, disappointment and guilt). This scale is similar to those used in studies aiming to evaluate the guilt's induction (Nelissen et al., 2008). Internal consistency coefficient indicates a high internal consistency: *Cronbach's* $\alpha = 0.85$ (for the initial assessment, t1) and *Cronbach's* $\alpha = 0.65$ (for evaluation after guilt's induction, t2).

Moral scenarios (De Hooge et al., 2011; De Hooge, 2012). The beginning of the scenarios was the same for all participants: "Imagine you are in a hurry because you want to get a special offer at a shop just before closing time. You do not have a means of transportation but you know that your friend Ioan has a bicycle. This bicycle is very special to him because it is the last present given to him by his grandmother before she died. Nevertheless, he lets you use the bicycle. You cycle to the shop and get the special offer. When you leave the shop you find out that the bicycle has been stolen; you forgot to lock it. You inform Ioan about this and he is very sad." (De Hooge et al., 2011, p 446). Participants in the control group read: "After you leave the shop you take the bicycle and bring it back to Ioan." (De Hooge et al., 2011, p. 446). The group which interacted with an empathic victim read: " When you go in the store to discover that the bike was stolen: you forgot to tie. You tell Ioan he is very sad. Still, he says that he understands and that it could have happened to him if he were in your place."

The Evaluation of Moral and Individualist Behaviour (De Hooge et al., 2011). These behaviours were evaluated in the same manner as in the other experiments. Participants read a scenario, used in the De Hooge et al. (2011) research: **"**A week after the event there are the birthdays of your friend Ioan and of another friend, Michael. You have 100 lei that you can spend. How much money would you spend on the birthday of Jim and on the birthday of Michael, and how much money would you keep for yourself?". We name moral behaviour 1 the moral behaviour exhibited towards the victim/the person that helps them; moral behaviour 2 is considered the moral behaviour aimed at the person. The individualistic behaviour was coded as the amount of money the participants kept for themselves.

The value of moral behaviour is calculated by adding the amounts offered for moral behaviours, from which we subtracted the individualistic behaviour. The formula is this: moral behaviour indicator = (amount + amount offered friend offered victim neutral) - the amount kept himself.

4.2.3.4. Procedure
The participants completed the questionnaires in this following order: (1). MGS, (2). participants read the moral scenarios, (3). completed the MGS, (4) participants responded for the scale assessing moral behaviour and individualistic behaviour. Each questionnaire was accompanied by specific instructions. This process, of answering the scales took, on average, about 20 minutes. Participants were thanked after completing the questionnaires.

4.2.4. Results
From the 77 adolescents included in the study, 34 were involved in the guilt condition (M = 16.01, SD = .46, 44.1% female and 55.9% male participants), and in the control group 19 adolescents were involved (M = 15.96, SD = .63, 73.7% male , 26.3 female participants), and in the empathic victim –reaction –group includes 24 adolescents (M = 16.57, SD = .72, 62.5% female and 37.5% male participants). From this last group, one of the participants did answer the questions related to the initial evaluation, and another participant did not answer to the moral and individualistic behaviours scale.

Guilt induction. At t1there were no differences between the three groups involved in the research, *(F(2,74) = .97, ns.),* but at t2 there were significant differences *(F(2,74) = 35.98, p <.001).* On average, participants from the guilt group (M = 5.26, SD = 1.05) reported more guilt compared to the control group (*M* = 2.57, *SD* = .83), *t*(51) = 9.54, *p* < .001, *r* =.81, *Cohen's d* = 2.82 after reading the scenario mint to induce guilt. These results indicate a significant difference, which leads us to believe that guilt induction took place.

Table 4.

Means and standard deviations dor the guiltvariable for the initial evaluation (t1) and the evaluation at t2, for the three groups.

Variable		M (SD) Guilt				
Group	N	t1	t2	*T*	*p*	*Cohen d*
Guilt	34	2,17 (1.66)	5.26 (1.05)	-9.574	.000	-2.22
Control	19	2.57 (.83)	2.57 (.83)	.039	1.000	0
Empathic Victim	23	1.95 (1.26)	4.61 (1.37)	-6.463	.000	-2.02

On average, participants reported higher levels of guilt at t2, after reading the scenario that induces guilt ($M = 5.26$, $SD = 1.05$) compared with the group with the empathic victim ($M = 4.61$, $SD = 1.37$), but the differences are not significant ($t(55) = 1.93$, *ns.*, *Cohen's d = 0.53*). All these results empirically support that guilt induction took place in the experimental groups and not in the control group.

Moral behaviours. In order to analyse the data using MANOVA, the results provided from 20 participants were excluded, due to the extreme scores reported. It was necessary to eliminate from the MANOVA the variable attributed to individualistic behaviour also, as it does not meet the assumption of homogeneity of variance. For this variable, the Kruskal-Wallis test was used.

We chose to report the results obtained from the MANOVA using Pillai's trace. We can observe that there are significant differences in respect with the three groups in respect to the sum attributed to the victim and for the neutral person, $V = 0.47$, $F(2, 46) = 8.35$, $p < .001$. These results indicate the significant effect of the group over the moral behaviour.

Table 5.

Means and standard deviations used for moral and individualistic behaviours in the three experimental groups.

Group	N	Moral behaviour 1 Manifested toward the victim/the person that helped	Moral behaviour 2 Behaviour manifested toward the neutral friend	Individualistic Behaviour
1. Induced guilt	34	59.55 (11.95)	34.08 (11.65)	5.29 (8.52)
2. Induced guilt+Empathic Reaction	22	46.13 (20.75)	31.59 (14.17)	20.90 (23.88)
3. Control	19	65.26 (17.11)	21.57 (12.02)	13.68 (9.10)

Discriminative analysis was the next step after MANOVA. The function described by the discriminative analysis explains 81.6 % of the total variance, *Cannonical R^2 = .36*. Together, the discrimination function differs between the two groups, $\lambda = .57$, $\chi2(2) = 30.26$, $p < .001$. Correlations between outcomes/dependent variables and the discrimination function shows that the amounts offered uploaded both behaviours on this function: for the moral behaviour shown for the victim ($r = -.64$), and for moral behaviour exhibited for the neutral person ($r = .65$). The opposite directions shown by the coefficient shows that there were different patterns of behaviour manifested for these two behaviours. Results indicate that individuals included in the three groups differ significantly in terms of their decision to adopt moral behaviour towards the victim, and toward neutral friends, although the patterns were different. This trend can be observed from the Table 5, also. With regard to the moral behaviour manifested toward the victim, the participants from the three groups differed

significantly (*F(2,74) = 7.78, p = .001*). The participants included in the group where the empathic victim was presented gave a smaller amount for the victim compared with the control group (*t*(39) = 3.18, *p* = .003), but they also gave less for the victim compared with the guilt group (*t*(54) = 2.75, *p* = .01).

Individualistic behaviour. Regarding the amount retained for themselves, participants from the group where the victim was empathic showed a more pronounced individualistic behaviour compared to the individuals from the group where guilt was induced (*H*(2) = 12.58, *p* = .002).

The results empirically support that the three groups differ in the manner in which the amount of money made available was distributed for the victim and for themselves. The guilt group manifested increased moral behaviours and lower individualistic behaviours compared with the group in which the victim had an empathic reaction. Taking into account only the behaviours manifested by the two groups – the guilt induced-groups – there were significant differences between the patterns shown, therefore the hypothesis has empirical support.

4.2.5. Discussion

In this study the motivational function of guilt was investigated. In addition, we compared the consequences guilt has in a situation in which the victim is passive, compared to the situation in which the victim is empathic.

We were able to establish significant differences between behavioural consequences of guilt followed by the victim's lack of response to the behavioural consequences of guilt followed by the empathic reaction of the victim. In the situation where the victim responds with empathy, the moral agent feels guilt, but the emotional component does not determine the moral behaviour.

A possible explanation for the manifestations of moral agents who are dealing with a victim that shows empathic reactions toward the moral transgressor might be that the empathic response does not motivate the behavioural component that follows a transgression. Therefore, we can assume that the moral agent feels no longer responsible. If the victim considers that the moral agent should not feel responsible, then the moral agent does not have the drive to manifest moral behaviour as a compensation for his behaviour. Another perspective is given by the moral agent's interpretation of the transgression. An empathic response can convey the message that the relationship was not jeopardized, and this relationship is still in balance. It is possible that the used procedure to be criticized because we did not use a measure of empathy along with the other emotions assessed using the Moral Guilt Scale. We believe that the change in the scenario meets the definition of empathy, therefore the methodology meets the conceptual validity criteria. It should be noted that the main interest was focused on the moral agent, not the moral patient.

In concerns with the practical implications this research has, this study shows another side of empathy – manifesting empathy in an inappropriate context enables the transgressor moral agent to "forget" to compensate the transgression.

4.2.6. Conclusions

The present study shows that guilt loses its fuction as a moral emotion when it is associated with an empathic response from the victim. The results demonstrate the importance of assuming responsibility for the emotional state of the victim, and also the responsibility assumed for the prejudice caused to the victim (both emotional and financial). Moreover, this is the first study from the research literature that shows that manifesting empathy triggers individualistic behaviours from the moral agent.

4.3 The Influence Repair has over Moral Behaviours and Individualistic Behaviours (Study 3)

4.3.1. Introduction

The study conducted by De Hooge (2012) is one of the most interesting recent published studies dedicated to guilt; it offers a new perspective on this emotion: the repair that is manifested by another person, other than the transgressor moral agent, can change the subsequent behaviour of the "aggressor". This describes those situations where there is a "conflict" between two friends: one feels guilty; the other is the victim of the first's wrong behaviour. After this situation, a third friend comes and fixes the initial mistake that the moral has agent made. What the empirical results showed is that in the initial dyad, the moral agent, and the "aggressor" did not showed compensatory behaviour if someone else repaired the damage in her/his expense, although the transgressor reported a high level of guilt.

This perspective is interesting because it is possible that over time, the emotion of guilt felt by the transgressors that have their fault repaired, forget to manifest the behaviour (therefore there is no personal cost related with guilt), and even the guilt feeling might no longer be motivated to appear. The possible situation would therefore be, in the case in which someone else fixes the transgression, that guilt will no longer be experienced, as this is one of the unpleasant emotions that an individual could experience (Baumeister et al., 1994; Tangney et al, 2007). In addition, these results contradict the accepted view in the psychological literature, that social and moral emotion of guilt is related to self-consciousness, which envisages repairing deteriorated relations (Haidt, 2003, Tangney et al, 2007).

4.3.2. Objectives and hypotheses

The general objective is to investigate the effects that guilt has over the intent to manifest moral behaviour after a repair (that is received either from a friend or from the self).

We expect that the repair (coming from the moral agent or someone else) reduces expression and increases expression of moral behaviour individualistic behaviours.

4.3.3. Method

4.3.3.1. Participants

This experiment involved 123 adolescents (58 females and 65 males), aged 14 to 17 years (M_{age} = 16.21, SD = .57). They are students enrolled in two schools and a National College from Craiova and Cluj-Napoca.

4.3.3.2. Instruments

Moral Guilt Scale (MGS) evaluates a range of emotions in order to reveal guilt, compared to other related emotions (shame, regret), or opposite emotions (joy, relief). We decided to include more emotions and emotional states to determine the differences between guilt and close moral emotions (shame, regret), but also between the effects of mixed emotions (shame, fear, disappointment and guilt). This scale is similar to those used in studies aiming to evaluate the guilt's induction (Nelissen et al., 2008). Internal consistency coefficient indicates a high fidelity: Cronbach's α = 0.84 (for the initial assessment, t1) and Cronbach's α = 0.76 (for evaluation after guilt's induction, t2).

Moral scenarios (De Hooge et al., 2011; De Hooge; 2012). The beginning of the scenarios was the same for all participants: "Imagine you are in a hurry because you want to get a

special offer at a shop just before closing time. You do not have a means of transportation but you know that your friend Ioan has a bicycle. This bicycle is very special to him because it is the last present given to him by his grandmother before she died. Nevertheless, he lets you use the bicycle. You cycle to the shop and get the special offer. When you leave the shop you find out that the bicycle has been stolen; you forgot to lock it. You inform Ioan about this and he is very sad." (De Hooge et al., 2011, p. 446). Participants in the control group read: After you leave the shop you take the bicycle and bring it back to Ioan (De Hooge et al., 2011, p 446). The friend repair group read: "Afterwards a friend of you both, Toma, hears about the event. He works in a bicycle shed and there he recognises Ioan's bicycle, which he offers to Ioan. Ioan is glad that he's got his bicycle back." The group with the self-repair read: "Afterwards you go to your part-time job. You work in a bicycle shed and there recognise Ioan's bicycle, which you offer to Ioan. Ioan is glad that he's got his bicycle back."

The Evaluation of Moral and Individualist Behaviour *(De Hooge et al., 2011).* These behaviours were evaluated in the same manner as in the other experiments. Participants read a scenario, used in the De Hooge et al. (2011) research: **"A week after the event there are the birthdays of your friend Ioan and of another friend, Michael. You have 100 lei that you can spend. How much money would you spend on the birthday of Jim and on the birthday of Michael, and how much money would you keep for yourself?"**. We use the name moral behaviour 1 the moral behaviour exhibited towards the victim/the person that helps them; moral behaviour 2 is considered the moral behaviour aimed at the person. The individualistic behaviour was coded as the amount of money the participants kept for themselves.

The value of moral behaviour is calculated by adding the amounts offered for moral behaviours, from which we subtracted the individualistic behaviour. The formula is this: moral behaviour indicator = (amount + amount offered friend offered victim neutral) - the amount kept himself.

4.3.3.3. Experimental Design
The experimental design used is one with an independent variable that has four modes (induced guilt and lack of repair, the group in which the moral agent repairs the damage, the group in which a friend repairs the damage and the control group), and three dependent variables: moral behaviour directed towards the victim, moral behaviour directed towards a neutral person and individualistic behaviour.

4.3.3.4. Procedure

Participants completed questionnaires in the following order: (1). MGS, (2). moral scenarios, (3). MGS, (4) the   scale assessing moral behaviour and individualistic behaviour. Each questionnaire was accompanied by specific instructions. Filling scales took on average 20 minutes. After the questionnaires were thanked participants were explained the purpose of the study and were presented the results in Western culture. Questionnaires were completed in class.

4.3.4. Results

We have analysed the data provided by the 123 adolescent participants, aged between 14 and 17 years ($M = 16.20$, $SD = .57$). Among these, there were 65 male participants and 58 female participants. The group in which guilt was induced included 34 adolescents (15 female and 19 male; $M_{age} = 16.01$, $SD = .46$). In someone else's repair group there were 43 participants included (17 female and 26 male) aged between 14 and 17 years old ($M = 16.51$, $SD = .60$). In the group which included participants' own repair were included 27 participants (21 females

and 6 males), aged between 15 and 17 ($M = 15.96$, $SD = .63$). The control group included 19 patients (5 female and 14 male), aged 15 to 17 years old (M = 15.96, SD =.63). After analysing the cases with missing data, we eliminated from the analysis results of 8 participants, so that the sample included in the analysis now includes 115 participants, aged between 15 and 17 years old (M = 16.23, SD =.55), 55 females and 60 males (52.2 %).

The evaluation of the initial emotional state. Initial emotional state was analysed to establish the emotional baseline. No significant differences between the four groups were found based on the assessment of the emotion of guilt ($F(3,111) = 2.66, p>.05, ns.$) at t1.

Evaluating the emotional state after guilt was induced. After the participants read the scenarios, those included in the guilt group reported more guilt than the other participants, in the other groups; the differences between the reported guilt being significant ($F(3, 111) = 18.29, p <.001$).

Also, the comparisons between the groups show that there are differences between the participants from the group in which guilt was induced and the participants from the group in which guilt was induced and then repaired by a friend. On average participants in the guilt group reported higher levels of guilt ($M = 5.26$, $SD = 1.05$) compared with participants in someone else's repair group ($M = 4.38, SD = 1.71$) and the difference between the two groups was statistically significant, $t(68) = 2.59, p < .05, r =.29, Cohen 's d = 0.61$. The participants from the guilt group reported more guilt than all the other groups and, compared to the baseline, all experimental groups reported a higher level of guilt ($F(3,111) = 2.66, p >.05$).

Table 6.
Means and standard deviations for the guilt variable at the initial evaluation (t1) and after the emotional induction (t2)

Group	N	t1	t2	t	p	Cohen d
Guilt	34	2.17 (1.66)	5.26 (1.05)	-9.57	.000	2,22
Control	19	2.57 (0.83)	2.57 (0.83)	.39	1.000	0
Own repair	26	1.53 (0.05)	4.70 (1.12)	-12.81	.000	3.99
Other's repair	36	2.05 (1.66)	4.39 (1.71)	-6.20	.000	1.38

Moral and individualistic behaviours. First, we analysed and calculated the averages and standard deviations for the behaviours the participants decided upon (Table 7). In order to analyse the differences between the four groups, we need to study the distribution of data and check their variances, the univariate and the multivariate extreme cases, their correlations, and then, we study whether the assumptions are met in order to use MANOVA.

Guilt's Influence over moral behaviour. In the MANOVA, the independent variables included are moral behaviour 1 and moral behaviour 2. Using Roy's Largest Root, we found a significant effect of group membership on the amounts offered, $\Theta = .43$, $F(3, 111) = 16.06$, p <.001.

The discriminative analysis that followed the MANOVA described two functions of discrimination. The first explains function 80% of the variance, *Canonical $R^2 = .30$*, and the second function explains 20%, *Canonical $R^2 = .09$*. In combination, these features discriminating between the four groups, $\lambda=.902, \chi2(2) = 51.28, p = .003$. The correlations between outcomes and the discriminative features shows that for the amount distributed to the

victim/person helps (moral behaviour 1), $r = .89$ (for the second function $r = .51$), and the amount allocated to the neutral Friend $r = -.311$ (for the second function $r = .98$).

Table 7.

Means and standard deviations for moral and individualistic behaviours for the four experimental groups

Group	N	Moral behaviour 1	Moral behaviour 2	Individualistic Behaviour
Guilt	34	59.55 (11.95)	34.08 (11.65)	5.29 (8.52)
Guilt + Other's repair	36	43.44 (12.18)	36.38 (8.33)	20.55 (15.71)
Guilt + Own repair	26	42.57 (20.34)	32.23 (15.26)	17.73 (06)
Control	19	65.26 (17.11)	21.57 (12.02)	13.68 (9.10)

The participants from the group in which guilt was induced and there was no repair present afterwards differed in respect to the moral behaviour from those that were included in the group where guilt was induced and their own repair followed ($t(58) = 4.05$, $p < .001$, *Cohen's d* $= 0.011$, $r = .005$), and also, no-repair guilt group was different from the group in which guilt was induced but someone else repaired the damage ($t(68) = 5.62$, $p < .001$, *Cohen's d* $= 1.33$, $r = .55$). Therefore, the first part of the hypothesis was empirically supported, but the effect sizes are low.

The evaluation of individualistic behaviour. Since we are interested in whether there are any differences between the groups in terms of the amount retained for them, we analysed the data using non-parametric methods, namely the Kruskal-Wallis test. The results support that the null hypothesis is rejected ($H(3) = 22.59$, $p < .001$). (A Bonferroni correction was applied to four groups compared $p = .0125$, and the result complies with this correction.) Compared with participants in the control group, participants in the guilt group did not differ significantly on the manifested individualistic behaviour ($U = 257$, $r = -.17$). The difference between the control group and the group with induced guilt and someone else's repair differed significantly ($U = 109$, $r = -.56$). Individualistic behaviour exhibited by the control group showed significantly different from the group with induced guilt and the moral agent's own repair followed ($U = 93.50$, $r = -.53$). Compared with the group in which guilt was induced and someone else repaired the damage, the guilt-with no repair group differed significantly (U = 197, r = -.59). The difference between the group with induced guilt and no repair and guilt with guilt induced followed by own repair differs significantly ($U = 164$, $r = .54$). Between the two groups with repair – the personal repair versus someone else's repair for the moral agent's damage - there were no significant differences ($U = 445.5$, $r = -.005$). Therefore, the second part of the hypothesis is also confirmed.

The value computed for moral behaviour. We analysed the data using ANOVA, and there were significant differences between the indicators of the value of moral behaviour ($F(3,111) = 8.71$, $p < .001$). The hypothesis was empirically supported, the four groups differ significantly on the manifestation of moral behaviour.

4.3.5. Discussion
If we analyse only guilt, we can admit that the scenarios were able to induce this emotion (in the experimental groups). The results also showed that the induced guilt, not being followed by other repairs motivates moral behaviour, and the costs of these behaviours are not

supported by the neutral friend in the context, but by the moral agent. Multivariate analysis results show differences in the moral behaviours patterns shown by the groups included in the experiment.

One of the limitations is the use of moral scenarios. These moral scenarios may explain only a limited context of social life, to which participants can relate. From the beginning we assumed this limit, narrowing the social context in order to highlight the differences in the motivational function of guilt and its consequences. Then, another limitation of the research is the low number of participants, hence, this is a possible cause of the difficulties encountered analysing the data distributions and the size effects.

4.3.7. Conclusions

The present study shows that guilt is a moral emotion as long as there is no repair for the moral transgression (repairs made by the moral agent or repairs performed by other individuals in the social context). Therefore, the "ideal" conditions in which guilt manifests in the same manner as most studies describe it, are those in which no repair takes place. On one hand, it is only natural that the moral agent wants to dissipate his guilt after the repair, as the mobile of the unpleasant emotions, and experienced guilt is no longer present. However, it remains to be determined whether, in another context, when the stakes are different (not a bike but a person, a pet or a costly object) participants would behave in the same manner. We believe that this line of research is an important one to follow because the change in the scenario changes the framing presented to the participants, and by this, the results.

Chapter 5 General discussion and conclusions

5.1. Overview of the results

In the first chapter, Chapter 1 of this thesis, we present a brief analysis of Moral Psychology's subdomains. We start with a differentiation between the terms "morality ", and the phrases "the development of morality" and "moral development". This was the first step which helped us place our research in the Moral Psychology domain. Then, we describe the main components of moral development: moral judgments, moral behaviour and moral emotions.

The second step was to focus our analysis on self-conscious emotions, then, we focused our analysis on guilt and empathy (with empathy viewed as a moral emotional process, partially integrated in the category of vicarious emotions). Guilt aversion was briefly described, as a complex emotion (composed of fear and guilt), through which individuals avoid the situations that might result in bringing unpleasant guilt. We differentiated guilt from other emotions from its self-conscious family of emotions (from shame and regret). The choice to study guilt was established by analysing its consequences and the importance attributed to this emotion, in Psychology and Sociology, Law, Ethics.

Chapter 2 includes a literature review on the experimental methods used to induce guilt and a pilot study. Results showed that there is a small number of studies in which guilt is induced experimentally, and most of the experimental studies that do not use moral scenarios are based on autobiographical memory. This method, which calls for autobiographical memory, is difficult to use because individuals feel uncomfortable when they experience this emotion, therefore, there is a high probability that they refuse to experience this unpleasant emotion

once again, after it has disappeared. The result of our literature analysis motivated us to build the design for the pilot study.

The objective of the pilot study was to investigate whether guilt and the fear of negative evaluation can be experimentally induced by using a task based on autobiographical memory However, this pilot study has shown, once again, that guilt is not an easy emotion to be induced, as participants were resistant to experience those memories. This pilot study led us to resort to the use of moral scenarios for the following experiments.

Chapter 3 is devoted to the first experimental study conducted in Romania, on an emerging adult population. Our objectives in this first study were: (1). to analyse the motivational function of guilt (2). to investigate the motivational function of vicarious emotions, and (3). to determine the differences between the consequences of guilt and those of vicarious emotion over moral and individualistic behaviour. In addition to these objectives, there was a forth objective (4). to build a moral emotion scale, with a special emphasis on guilt, in order to determine whether the emotion induction occurs.

Chapter 4 includes three experimental studies conducted in order to investigate the guilt's characteristics during adolescence. The second experimental study (study 2a) included two groups: the group in which guilt was induced and the control group. Its inclusion helps us to better emphasize the influence guilt has on the moral and individualistic behaviour. Study 2b includes three experimental groups: a group in which guilt was induced and the victim has an empathic reaction, the group in which guilt was induced and the victim is passive, and the control group. The added value of the 2b study is given by the opportunity to analyse in more detail which behaviours are motivated by guilt. Study 3 brings empirical evidence in favour of the hypothesis that repair (either the repair of the moral agent or someone else's) reduces the consequent moral behaviour and increases the expression of individualistic behaviour. This study (study 3) includes four groups of participants: a group in which guilt was induced but no repair was available, one in which the induced guilt was induced and the moral agent repaired its fault, one in which guilt was induced and another friend repaired the damage and the control group.

5.2. Contributions of this thesis

Chapter 1 focused on describing the theoretical support on which this thesis is based. This chapter includes:

• The definition of "morality", "moral development" and "the development of morality". Although these three terms are used very often in the literature, we have not found a study to achieve differentiation and analysis of the relations between all of them.

• A review of the basic components of moral development (moral judgments, moral behaviour and moral emotions). We pointed out the importance intuitions have for the moral development.

• A description and an analysis of the defining characteristics of the most cited classifications of moral emotions, and of moral emotions related to self-awareness.

• A description of guilt, as a social, moral emotion, related to self-awareness. We base our research on guilt's motivational functions.

• A comparative analysis of guilt with shame, regret, guilt aversion and empathy. A better understanding of guilt will facilitate the study of fear of guilt, also called guilt aversion.

Thus, Chapter 1 includes an overview of the field of morality, of its components, and then it focuses on the moral self-conscious emotions, from which we select to study guilt and empathy, considered as a moral emotional process. In this first chapter we summarize some of the latest studies in the Psychology of Morality, including those that alter the stereotypes associated with guilt. (One of them is related to the erroneous perception that guilt has only positive consequences.) In this chapter we often point out new research directions, such as the need to integrate the moral emotions classifications into a single one, which integrates all those existing to date.

Chapter 2 addresses a need identified in the literature: the need to use a consistent methodology to induce guilt. Therefore, Chapter 2 brings a major methodological contribution. In addition, this chapter has the following contributions:

• Defining and outlining the need for experimental methods to induce guilt;

• Identifying the three categories of methods used to induce guilt (1). using a task that makes use of autobiographical memory, (2). using computer games and (3). causing a violation of moral norms during the experiment;

• Describing the neural mechanisms that support the association between fear and moral judgments, emotions, moral behaviour, arguments which make fear a very important component in morality;

• The development of a pilot study that focused on evaluating the efficiency of testing a method to induce guilt and fear of negative evaluation by using a test related to autobiographical memory.

• Conducting a study which proves that autobiographical memory tasks are not suited to induce guilt or the fear of being negatively evaluated in large groups.

Thus, Chapter 2 brings notable contributions in terms of the methodology used in studies investigating guilt and the fear of negative evaluation.

Chapter 3 includes a detailed study (study 1) in which the motivational function of guilt on moral behaviour compared to vicarious emotions is studied. This chapter includes several contributions, as it provides:

• a synthetic presentation of guilt and of the studies that contradict the shared view on guilt's positive consequences and a synthetic analysis over vicarious emotions and their sub-components;

• a description and the identification of the effect Dooby (Nellisen et al., 2007);

• the confirmation that guilt is a moral emotion based on the results of the study;

• a perspective that cultural factors might have a powerful impact over the results;

• This study (study 1) is the first study conducted in Romania in order to analyse the consequences of moral and individualistic behaviours by using this methodology. Using the same scenarios as those developed by De Hooge et al. (2011) represents a step forward in the study of guilt.

Chapter 4 is devoted to studies carried out in a large sample of adolescents. These studies were designed to investigate in more depth the motivational function of guilt on moral and

individualistic behaviour, the implications empathy has over moral behaviour. This chapter makes the following contributions:

• it includes the first study that has the objective to better understand guilt during this stage of development, during adolescence, in Romania;

• developing the second study that highlights the positive consequences guilt has over moral behaviour;

Therefore, taking into account these results, guilt can be considered an emotion that motivates moral behaviour, so the results support guilt's inclusion in the category of moral emotions, as study 2a also shows;

• Study 2b is the first study, to our knowledge, that uses this methodology in order to highlight the impact empathy has over the moral agent's behaviour, namely the study focuses on the implications the victim's empathic reaction has, as opposed to a passive reaction;

• The results indicate that the empathic reaction manifested by the victim leads participants to change their behaviour to a considerable extent;

• based on the terminology from Game Theory, Study 2b indicates the following results: a victim who acts as a "dove" (provided the empathy manifested by the victim) transforms the guilty moral agent in a "hawk", motivating individualistic, selfish behaviour;

• Study 2b approach towards research points out that empathy does not only have positive consequences (Oakley, 2013), as most research states (Eisenberg, 2000; Hoffman, 2000; Tangney et al., 2007);

• Study 3 adds contributions to the fields of Social Psychology, Developmental Psychology and Moral Psychology because it shows that, if the moral agent feels guilty, he tends to manifest compensatory, moral behaviour towards the victim, towards the neutral individuals in the social context, opposed to the situations in which the damage is repaired;

• Study 3 adds improvement in the methodology compared to the first study conducted in the literature which had the same purpose (De Hooge, 2012). We consider by this, the additional control group added in the study, as in the initial study, the researcher did not include this group (De Hooge, 2012). Also, we have also included the evaluation of the initial emotional state of the participants, before inducing guilt;

• Study's 3 results draw attention to the need to study this pattern of behaviour in relationships where the damage has greater proportions;

• the interpretation of the results of the study draws attention to the direction of research in which social relations are aimed in the first place at the self-regulation processes of the partners and not only at the exchange of resources;

• the results of these studies make important contributions in the field of Developmental and Life-Span Social Psychology and also, in the field of Moral Psychology, and urges the development of new research;

• After obtaining these results, which are the first obtained using this methodology in Romania, as far as we know, we find different effects that guilt has over moral and individualistic behaviour, and it shows that the same emotions motivate slightly different behaviours in different stages of development.

• The studies included in this chapter bring to light the strengths and weaknesses of the methodology employed in the moral psychology domain, and also the need for the careful analysis of new methodological strategies.

The results of our research support the inclusion of guilt in the moral emotions family, as it motivates moral, pro-social, compensatory behaviour, but only under certain conditions. Guilt is not itself a moral emotion; however it can motivate moral behaviour of individuals in certain contexts.

In regards with the practical implications of this thesis, the results of the experiments indicate a number of areas in which the results can be applied: for example, to interpersonal interactions and targeted campaigns in which the manifestation of pro-social behaviour is needed. Given the magnitude of social inequalities and the implications of the manifestation of the pro-social behaviours to groups' welfare, it is important to identity the antecedents of these behavioural tendencies, so that we can encourage the expression of these behaviours in those areas where it is believed they are welcomed. Our results are different from the ones discovered in the western culture. First, our results show the positive effects of guilt on moral behaviour in Romanian socio-cultural context, in a sample consisting of emerging adults. Second, these different results draw attention to the need to study emotions from a Cross-Cultural Psychology perspective.

The present thesis adds significant contributions to psychology, to Social Psychology, to Developmental Psychology, and to Moral Psychology. In fact, this research endeavour is part of the domain which combines several areas, the name of "Developmental and Life-Span Social Psychology", found within sub-areas identified in the European Association of Social Psychology. This is the first research, to our knowledge, developed in Romania, which aims to study guilt as a moral emotion during adolescence, and in relation to moral behaviour.

The results allow us to argue that moral emotions and emotional processes fulfil a motivational function that depends on the context. These emotions do not have positively skewed consequences, regardless of the context in which they manifest. Guilt is a complex emotion that can be considered a moral emotional process, as empathy is considered a moral process, too. Therefore, we can conclude that guilt's motivational function depends as much on individual characteristics, as to the characteristics of the social contexts.

References

Aquino, K., & Reed, A. II. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology*, 83, 1423–1440.

Aristotle (2010) Nicomachean Ethics, In Nadelhoffer, T., Nahmias, E. & Nichols, S. (Readings, Eds.), *Moral psychology: Historical and Contemporary* (173-178), Wiley-Blackwell.

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55, 469-80.

Arsenio, W. F. & Kramer, R. (1992). Victimizers and their victims: Children's conceptions of the mixed emotional consequences of moral transgressions. *Child Development*, 63, 915–927.

Bandura, A. (2002). Selective moral disengagement in the exercise of moral agency. *Journal Of Moral Education*, 31,(2): 101–119. doi:10.1080/0305724022014322.

Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology*, 71, 364-374.

Bartlett, M. Y. & DeSteno, D. (2006). Gratitude and prosocial behavior: Helping when it costs you. *Psychological Science*, 17, 319-325.

Batson, C D , O'Qum, K , Fultz, J , Vanderplas, M , & Isen, A (1983) Self-reported distress and empathy and egoisc versus altruistic motivation for helping. *Joumal of Personality and Social Psychology*, 45, 706-718.

Batson, C. D. & Shaw, L.L. (1991). "Evidence for Altruism: Toward a Pluralism of Prosocial Motives." Psychological Inquiry, 2, (2): 107-122.

Batson, C. D., Klein, T. R., Highberger, L., & Shaw, L. L. (1995). Immorality from empathy-induced altruism: When compassion and justice conflict. *Journal of Personality and Social Psychology*, 68 , 1042-1054.

Batson, C. D., Sager, K., Garst, E., Kang, M., Rubchinsky, K., & Dawson, K. (1997). Is empathy-induced helping due to self-other merging? *Journal of Personality and Social Psychology*, 73, 495-509.

Batson, C.D. (1991). The Altruism Question. Hillsdale, NJ: Erlbaum.

Batty, M., & Taylor, M.J. (2003). Early processing of the six basic facial emotional expressions. *Cognitive Brain Research*, 17, 613–620.

Battigalli, P., & Dufwenberg, M. (2007). Guilt in Games, American Economic Review, *Papers and Proceedings,* 97, 170-176.

Baumeister, R. F., & Tice, D. M. (1990). Anxiety and social exclusion. *Journal of Social and Clinical Psychology*, 9, 165-195.

Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt: An interpersonal approach. *Psychological Bulletin*, 115, 243-267.

Baumeister, R. F., Vohs, K. D., DeWall, C. N., & Zhang, L. (2007). How emotion shapes behavior: Feedback, anticipation, and reflection rather than direct causation. *Personality and Social Psychology Bulletin*, 11, 167–203.

Baumeister, R.F. (1998). Empathy, shame, guilt, and narratives of interpersonal conflicts: Guilt-prone people are better at perspective taking. *Journal of Personality*, 66, 1-37.

Baumeister, R.F., & Leary, M.R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.

Baumeister, R.F., & Vohs, K.D. (Eds.) (2004). Handbook of Self-Regulation: Research, Theory, and Applications. New York: Guilford.

Benenson, J. F., Pascoe, J., & Radmore, N. (2007). Children's altruistic behavior in the dictator game. Evolution and Human Behavior, 28, 168–175.

Ben-Ze'ev, A. (2000). The subtlety of emotions. Cambridge: The MIT Press.

Berndsen, B., Pligt, J. van der, Doosje, B., & Manstead, A. S. R. (2004). Guilt and regret: The determining role of interpersonal and intrapersonal harm. *Cognition & Emotion*, 18, 55-70.

Blair, R. J. R. (2003). Neurobiological basis of psychopathy. *British Journal of Psychiatry*, 182, 5–7.

Blake, P.R., & McAuliffe, K. (2011). "I had so much it didn't seem fair": Eight- year-olds reject two forms of inequity. *Cognition*, 120, 215-224.

Blakemore, S-J. & Robbins, T.W. (2012). Decision-making in the adolescent brain. *Nature Neuroscience,* 15, 1184-1191.

Blakemore, S-J. (2008). Development of the social brain during adolescence. *Quarterly Journal of Experimental Psychology*, 61, 40-49.

Blasi, A. (1983). Moral cognition and moral action: A theoretical perspective. *Developmental Review*, 3, 178–210.

Blasi, A. (1999). Emotions and moral motivation. *Journal for the Theory of Social Behavior*, 29, 1–19.

Buckley, K., Winkel, R., & Leary, M. (2004). Reactions to acceptance and rejection: Effects of level and sequence of relational evaluation. *Journal of Experimental Social Psychology*, 40, 14 –28.

Caravita, S. C. S., Gini, G., & Pozzoli, T. (2012). Main and moderated effects of moral cognition and status on bullying and defending. *Aggressive Behavior*, 38, 456-468.

Carleton, R. N., Collimore, K. C., & Asmundson, G. J. G. (2005). Social anxiety and fear of negative evaluation: Construct validity of the BFNE-II. *Journal of Anxiety Disorders*, 21, 131–141.

Carleton, R. N., Collimore, K. C., & Asmundson, G. J. G. (2007). Social anxiety and fear of negative evaluation: construct validity of the BFNE-II. *Journal of Anxiety Disorders*, 21, 131–141.

Carlo, G., Mestre, M. V., Samper, P., Tur, A., & *Armenta, B. E. (2010). Feelings or cognitions? Moral cognitions and emotions as longitudinal predictors of prosocial and aggressive behaviors. *Personality and Individual Differences*, 48, 872-877.

Casebeer WD, Churchland PS (2003). The neural mechanisms of moral cognition: a multiple-aspect approach to moral judgment and decision-making. *Biology and Philosophy*, 18, 169–94.

Casey, B.J., & Caudle, K. (2013). The teenage brain: Self control. *Current Directions in Psychological Science*, 22, 82-87.

Chang, L.J., Smith, A., Dufwenberg, M., & Sanfey, A.G. (2011). Triangulating the neural, psychological, and economic bases of guilt aversion. *Neuron*, 70(3), 560–72.

Charness, G. and Dufwenberg, M., 2006. *Promises and partnership. Econometrica*, 74, 1579-1601.

Choudhury, S. Blakemore, S-J. & Charman, T. (2007). Social cognitive development during adolescence. *Social Cognitive and Affective Neuroscience*, 1, 165–174.

Christensen, J.F., Gomila, A. (2012). Moral dilemmas in cognitive neuroscience of moral decision-making: A principled review. *Neuroscience & Biobehavioral Reviews*, 36(4), 1249-1264. doi: 10.1016/j.neubiorev.2012.02.008

Clark DM, Wells A (1995). A cognitive model of social phobia. In: Heimberg RG, Leibowitz M, Hope DA, Schneider FR, editors. *Social phobia: Diagnosis, assessment and treatment*. New York: Guilford press.

Cova, F. (2011) Two kinds of moral competence. Lucrare prezentată în cadrul conferinței *What makes us Moral*, Amsterdam, 23-24 iunie.

Crone, E. A. (2013). Considerations of fairness in the adolescent brain. *Child Development Perspectives*, 7(2), 97-103.

Crone, E.A., Bullens, L., Van der Plas, E.A.A., Kijkuit, E., & Zelazo, P.D. (2008). Developmental changes and individual differences in risk and perspective taking. *Development and Psychopathology*, 20, 1213-1229.

Cunningham, M. R., Steinberg, J., & Grev, R. (1980). Wanting to and having to help: Motivations for positive mood and guilt-induced helping. *Journal of Personality and Social Psychology*, 38, 181-192.

Cushman, F., Young, L., & Hauser, M. (2006). The role of conscious reasoning and intuition in moral judgment: Testing three principles of harm. *Psychological Science*, 17, 1082–9.

Damasio, A. R. (1994a). Descartes' error. New York, NY: Avon.

Damasio, H., Grabowski, T., Frank, R., Galaburda, A. M., & Damasio, A. R. (1994). The return of Phineas Gage: Clues about the brain from the skull of a famous patient. *Science*, 264, 1102–1105.

Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology*, 10, 85.

Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44, 113–126.

De Hooge, I. E. (2012). The exemplary social emotion guilt: Not so relationship-oriented when another person repairs for you. *Cognition & Emotion*, 26, 1189-1207.

De Hooge, I. E., Breugelmans, S. M. & Zeelenberg, M. (2008). Not so ugly after all: When shame acts as a commitment device. *Journal of Personality and Social Psychology*, 95(4), 933-943.

De Hooge, I. E., Nelissen, R. M. A., Breugelmans, S. M., & Zeelenberg, M. (2011). What is moral about guilt? Acting "prosocially" at the disadvantage of others. *Journal of Personality and Social Psychology*, 100(3), 462-473.

De Hooge, I. E., Zeelenberg, M., & Breugelmans, S. M. (2007). Moral sentiments and cooperation: Differential influences of shame and guilt. *Cognition & Emotion*, 21, 1025-1042.

de Vignemont, F. and Singer, T. (2006). The empathic brain – When and WHY. *Trends in Cognitive Science*, 10(10):435-41.

Decety J, Jackson PL. (2004). The functional architecture of human empathy. *Behav. Cognit. Neurosci. Rev.,* 3, 71–100.

Decety, J., & Howard, L. H. (2013). The role of affect in the neuro-development of morality. *Child Development Perspectives*, 7, 49-54.

Decety, J., Michalska, K.J., & Kinzler, K. D. (2011). The developmental neuroscience of moral sensitivity. *Emotion Review*, 3, 305-307.

Diehl, M., Chui, H., Hay, E. L., Lumley, M. A., Grühn, D., & Labouvie-Vief, G. (2013). Change in coping and defense mechanisms across adulthood: Longitudinal findings in a European American Sample. *Developmental Psychology. Advance online publication.* doi: 10.1037/a0033619.

Dufwenberg, M. and Gneezy, U., (2000). Measuring beliefs in an experimental lost wallet game. *Games Econ. Behav.*, 30, 163-182.

Eisenberg, N. (2000). Emotion, regulation, and moral development. *Annual Review of Psychology*, 51, 665–697.

Eisenberg, N., Fabes, R. A., Murphy, B., Karbon, M., Maszk, P., Smith, M., et al. (1994). The relations of emotionality and regulation to dispositional and situational empathy-related responding. *Journal of Personality and Social Psychology*, 66, 776–797.

Eisenberg, N., Shea, C. L., Carlo, G., & Knight, G. (1991). Empathy-related responding and cognition: A "chicken and the egg" dilemma. In W. Kurtines & J. Gewirtz (Eds.), *Handbook of moral behavior and development:* Vol. 2. Research (pp. 63–68). Hillsdale, NJ: Erlbaum.

Eisenberg, N., Spinrad, T. L., & Sadovsky, A. (2006). Empathy-related responding in children. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (pp. 517–49). Hillsdale, NJ: Erlbaum.

Eisenberg, N., Valiente, C., & Champion, C. (2004). Empathy-related responding: Moral, social, and socialization correlates. In A. G. Miller (Ed.), *The social psychology of Good and Evil* (pp. 386–415). New York: Guilford.

Eisenberger, N. I., Lieberman, M. D., & Williams, K. D.(2003, October 10). Does rejection hurt? An fMRI study of social exclusion. *Science*, 302, 290-292.

Ellemers, N., Kingma, L., Van de Burgt, J., & Barreto, M. (2010). Corporate Social Responsibility as a source of organizational morality, employee commitment and satisfaction. *Journal of Organizational Moral Psychology*, 1, 1-28.

Engen, H. G., & Singer, T. (2012). Empathy Circuits. Current Opinion in *Neurobiology*. doi: 10.1016/j.conb.2012.11.003.

FeldmanHall, O., Dalgleish, T. Thompson, R., Evans, D., Schweizer, S., Mobbs, D.(2012). Differential Neural Circuitry and Self-Interest in Real versus Hypothetical Moral Decisions. *Social, Cognitive and Affect Neuroscience*, 7, 743-751.doi: 10.1093/scan/nss069.

Fergus, T.A., Valentiner D.P., McGrath, P.B., Jencius, S. (2010). Shame- and guilt-proneness: relationships with anxiety disorder symptoms in a clinical sample. *J. Anxiety Disord.*, 24: 811–815. doi: 10.1016/j.janxdis.2010.06.002.

Ferguson, E., Farrell, K., & Lawrence, C. (2008) Blood donation is an act of benevolence rather than altruism. *Health Psychology*, 27: 327-36.

Ferguson, T. J., & Stegge, H. (1998). Measuring guilt in children: A rose by any other name still has thorns. In J. Bybee (Ed.), *Guilt and children* (pp. 19-74). San Diego: Academic Press

Field, A. P. (2009). Discovering statistics using SPSS: and sex and drugs and rock 'n' roll (3rd edition). London: Sage.

Fontaine, J. R. J., Luyten, P., De Boeck, P., Corveleyn, J., Fernandez, M., Herrera, D., Ittzés, A., & Tomcsányi, T. (2006). Untying the Gordian knot of guilt and shame: The structure of guilt and shame reactions based on situation and person variation in Belgium, Hungary, and Peru. *Journal of Cross-Cultural Psychology*, 37, 273-292. doi:10.1177/0022022105284493

Fredrickson, B. L. (2013). Positive emotions broaden and build. In E. Ashby Plant & P.G. Devine (Eds.), *Advances on Experimental Social Psychology*, 47, 1-53. Burlington: Academic Press.

Gilligan, C. (1977). In a different voice: Women's conceptions of self and of morality. *Harvard Educational Review*, 47, 481-517.

Gilligan, C. (1982). In a different voice: Psychological theory and women's development. Cambridge, MA: Harvard University Press.

Gilovich, T, Medvec, V. H., & Chen, S. (1995). Commission, omission, and dissonance reduction: Coping with regret in the "three doors" problem. *Personality and Social Psychology Bulletin*, 21, 182-190.

Gilovich, T., Wang, R. F., Regan, D., & Nishina, S. (2003). Regrets of action and inaction across cultures. *Journal of Cross-Cultural Psychology*, 34, 61–71.

Gini, G., Pozzoli, T., & Hauser, M. (2011). Bullies have enhanced moral competence to judge relative to victims, but lack moral compassion. *Personality and Individual Differences*, 50(5), 603–608.

Giorgetta, C., Zeelenberg, M., Ferlazzo, F., & D'Olimpio, F. (2012). Cultural variation in the role of responsibility in regret and disappointment: The Italian case. *Journal of Economic Psychology*, 33, 726–737.

Glenn, A.L., Raine, A., Schug, R.A. (2009).The neural correlates of moral decision-making in psychopathy.*Molecular Psychiatry*, 14,5-6.

Grant, A. M., & Gino, F. (2010). A little thanks goes a long way: Explaining why gratitude expressions motivate prosocial behavior. *Forthcoming in the Journal of Personality and Social Psychology*, 98(6).

Gray, K. & Wegner, D. M. (2011). Dimensions of moral emotions. *Emotion Review*, 3(3), 227-229.

Greene, J. D., Sommerville, R. B., Nystrom, L. E., Darley, J. M., & Cohen, J. D. (2001). An fMRI investigation of emotional engagement in moral judgment. *Science*, 293(5537), 2105–2108.

Greene, J.D. (2003). From neural "is" to moral "ought": what are the moral implications of neuroscientific moral psychology? *Nature Reviews Neuroscience*, 4, 847-850.

Gummerum, M., Hanoch, Y., Keller, M., Parsons, K., & Hummel, A. (2010). Preschoolers' allocations in the dictator game: The role of moral emotions. *Journal of Economic Psychology*, 31, 25–43.

Gummerum, M., Keller, M., Takezawa, M., & Mata, J. (2008). To give or not to give: Children's and adolescents' sharing and moral negotiations in economic decision situations. *Child Development*, 79, 561-576.

Güroğlu, B., van den Bos, W., Rombouts, S.A.R.B., & Crone, E.A. (2010). Unfair? It depends: Neural correlates of fairness in social context. *Social Cognitive and Affective Neuroscience*, 5, 414-423.

Güroğlu, B., van den Bos, W., van Dijk, E., Rombouts, S.A.R.B., & Crone, E.A. (2011). Dissociable brain networks involved in development of fairness considerations: Understanding intentionality behind unfairness. *Neuroimage*, 57, 634-641.

Haidt J. (2000) The positive emotion of elevation. *Prevention and Treatment*, 3. Retrieved January 20, 2001, from the World Wide Web: http://www.journals.apa.org/prevention/volume 3/preOO3OO03c.html.

Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, 108, 814-834.

Haidt, J. (2003). The moral emotions. In R. J. Davidson, K. Scherer, & H. H. Goldsmith (Eds.). *Handbook of affective sciences* (pp. 852-870). Oxford, England: Oxford University Press.

Haidt, J., & Graham, J. (2007). When morality opposes justice: Conservatives have moral intuitions that liberals may not recognize. *Social Justice Research*, 20, 98–116. doi: 10.1007 /s11211-007-0034-z.

Haidt, J., & Joseph, C. (2004). Intuitive ethics: How innately prepared intuitions generate culturally variable virtues. *Daedalus: On Human Nature*, 133, 55–66.

Haidt, J., Koller, S., & Dias, M. (1993). Affect, culture, and morality, or is it wrong to eat your dog? *Journal of Personality and Social Psychology*, 65, 613–628.

Haidt, J., Rozin, P., McCauley, C., & Imada, S. (1997). Body, psyche, and culture: The relationship of disgust to morality. *Psychology and Developing Societies*, 9, 107–131.

Hamann, K., Warneken, F., Greenberg, J., & Tomasello, M. (2011). Collaboration encourages equal sharing in children but not chimpanzees. *Nature*, 476, 328-331.

Harder, D. W., Cutler, L., & Rockart, L. (1992). Assessment of shame and guilt and their relationships to psychopathology. *Journal of Personality Assessment*, 59, 584-604.

Harman G, Mason K, Sinnott-Armstrong W (2010) Moral reasoning. In: Doris J, The Moral Psychology Research Group (eds) *The handbook of moral psychology*. Oxford University Press, Oxford.

Hart, D., Atkins, R., & Ford, D. (1998). Urban America as a context for the development of moral identity in adolescence. *Journal of Social Issues*, 54, 513-530.

Ho, D.Y., Fu, W., Ng, S.M. (2004). Guilt, shame and embarrassment:Revelations of face and self. *Culture & Psychology*, 10(1), 64-84.

Hoffman, M. L. (1998). Varieties of empathy-based guilt. In J. Bybee (Ed.), *Guilt and children* (pp. 91-112). San Diego, CA: Academic Press.

Hoffman, M.L. (1982). Development of prosocial motivation: Empathy and guilt. In N. Eisenberg-Berg, (Ed.), *Development of Prosocial Behavior*. New York: Academic Press, 281-313.

Hoffman, M.L. (2000). Empathy and moral development: Implications for caring and justice. Cambridge: Cambridge University Press.

Hofstede, G. (1980). Culture's Consequences: International differences in work related values. Beverly Hill, CA, Sage.

Horner V, Carter JD, Suchak M, de Waal FBM (2011) Spontaneous prosocial choice by chimpanzees. Proc Natl Acad Sci USA, 108, 13847–13851.

Howitt D, Cramer D (2009). Introduction to Statistics in Psychology. Prentice Hall, ISBN 978-0-13-205161-3

Huebner, B., S. Dwyer, & M.D. Hauser (2009). The role of emotion in moral psychology. *Trends in Cognitive Science*, 13 (1): 1-6.

Hume (2010) Selections from Enquiries Concerning the Principles of Morals , In Nadelhoffer, T., Nahmias, E. & Nichols, S. (Readings, Eds.), *Moral psychology: Historical and Contemporary Readings* (32-36), Wiley-Blackwell. (Original work published 1751)

Hutcherson, C.A., & Gross, J.J. (2011). The moral emotions: a social functionalist account of anger, disgust, and contempt. *Journal of Personality and Social Psychology*, 100, 719-737.

Inbar, Y., Pizarro, D., Gilovich, T., & Ariely, D. (2013). Moral masochism: On the connection between guilt and self-punishment. *Emotion*, 13(1):14-8. doi: 10.1037/a0029749.

Iyer, A., Leach, C.W., & Crosby, F.J. (2003). White guilt and racial compensation: The benefits and limits of self-focus. *Personality and Social Psychology Bulletin*, 29, 117 – 129.

Izard, C. E. (1977). Human emotions. New York, NY: Plenum Press.

Jaffe, S., & Hyde, J.S. (2000). Gender differences in moral orientation: A meta- analysis. *Psychological Bulletin*, 126, 703–726.

Janoff-Bulman, R., Sheikh, S., & Hepp, S. (2009). Proscriptive versus prescriptive morality: Two faces of moral regulation. *Journal of Personality and Social Psychology*, 96, 521–537.

Johnston, M., & Krettenauer, T. (2011). Moral self and moral emotion expectancies as predictors of anti- and prosocial behavior in adolescence: A case for mediation? *European Journal of Developmental Psychology*, 8(1), 228-243. doi:10.1080/17405621003619945.

Joireman J. (2004). Empathy and the self-absorption paradox II: Self-rumination and self-reflection as mediators between shame, guilt, and empathy. *Self and Identity*, 3, 225–238.

Jolliffe D., Farrington D.P. (2004), Empathy and offending. A systematic review and meta-analysis. *Aggression and Violent Behavior*, Vol. 9, pp. 441 — 476.

Kant (2010) Introduction to Groundwork for Metaphysics of Morals, In Nadelhoffer, T., Nahmias, E. & Nichols, S. (Readings, Eds.), *Moral psychology: Historical and Contemporary* (37-39), Wiley-Blackwell (original work published in 2002).

Kelebeyev, V. (2011). A compassionate society . An immodest proposal. Lucrare prezentată în cadrul conferinței *What makes us Moral*, Amsterdam, 23-24 iunie.

Keller, M., & Edelstein, W. (1991). The development of socio-moral meaning making: Domains, categories and perspective-taking. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Handbook of moral behavior and development: Vol. 2. Research* (pp. 89-114). Hillsdale, NJ: Erlbaum.

Keller, M., Lourenço, O., Malti, T., & Saalbach, H. (2003). The multifaceted phenomenon of ''happy victimizers'': A cross-cultural comparison of moral emotions. *British Journal of Developmental Psychology*, 21, 1–18.

Keller, M., Takezawa, M., & Mata, J. (2008). To give or not to give: Children's and adolescents' sharing and moral negotiations in economic decision situations. *Child Development*, 79, 561-576.

Keltner, D., & Buswell, B. N. (1996). Evidence for the distinctness of embarrassment, shame and guilt: A study of recalled antecedents and facial expressions of emotion. *Cognition and Emotion*, 10, 155-171.

Ketelaar, T., & Au, W. T. (2003). The effects of guilt on the behaviour of uncooperative individuals in repeated social bargaining games: An affect-as information interpretation of the role of emotion in social interaction. *Cognition and Emotion*, 17, 429-453.

Kochanska, G. (1991). Socialization and temperament in the development of guilt and conscience. *Child Development*, 62, 1379-1392.

Kochanska, G. (2002). Committed compliance, moral self, and internalization: A mediational model. *Developmental Psychology*, 38, 339–351.

Kochanska, G., Aksan, N., & Joy, M. E. (2007). Children's fearfulness as a moderator of parenting in early socialization: Two longitudinal studies. *Developmental Psychology*, 43, 222–237.

Kochanska, G., Barry, R. A., Jimenez, N. B., Hollatz, A. L., & Woodard, J. (2009). Guilt and effortful control: Two mechanisms that prevent disruptive developmental trajectories. *Journal of Personality and Social Psychology*, 97, 322-333.

Kochanska, G., Gross, J.N., Lin, M-H., & Nichols, K.E. (2002). Guilt in young children: Development, determinants, and relations with a broader system of standards. *Child Development*, 73, 461-482.

Kochanska, G., Koenig, J. L., Barry, R. A., Sanghang, K., & Yoon, J. E. (2010). Children's conscience during toddler and preschool years, moral self, and a competent, adaptive developmental trajectory. *Developmental Psychology*, 46, 1320–1332.

Kochanska, G., Padavich, D. L., & Koenig, A. L. (1996). Children's narratives about hypothetical moral dilemmas and objective measures of their conscience: Mutual relations and socialization antecedents. *Child Development*, 67, 1420–1436.

Koenigs, M., Young, L., Adolphs, R., Tranel, D., Cushman, F., Hauser, M., & Damasio, A. (2007). Damage to the prefrontal cortex increases utilitarian moral judgements. *Nature*, 446(7138), 908-911.

Kohlberg, L. (1969). Stage and sequence: The cognitive-developmental approach to socialization. In D. A. Goslin (Ed.), *Handbook of socialization theory and research*. (pp. 347-480). Chicago: Rand McNally.

Krebs, D., & Denton, K. (2005). Toward a more pragmatic approach to morality: A critical evaluation of Kohlberg's model. *Psychological Review*, 112, 629–649.

Krettenauer, T., & Johnston, M. (2011). Positively versus negatively charged moral emotion expectancies in adolescence: The role of situational context and the developing moral

self. *British Journal of Developmental Psychology*, 29, 475–488. doi: 10.1348/ 026151010 X508 083.

Krettenauer, T., Jia, F., & Mosleh, M. (2011). The role of emotion expectancies in adolescents' moral decision making. *Journal of Experimental Child Psychology*, 108, 358–370.

Krettenauer, T., Malti, T., & Sokol, B. W. (2008). Development of moral emotions and the happy-victimizer phenomenon: A critical review of theory and application. *European Journal of Developmental Science*, 2, 221–235.

Kroll J, Egan E. 2004. Psychiatry, moral worry, and moral emotions. *J. Psychiatr. Pract.,* 10:352–60.

Landman, J. (1993). Regret: The persistence of the possible. New York: Oxford University Press.

Lapsley, D.K., & Narvaez, D. (2004). A social-cognitive approach to the moral personality. In D.K. Lapsley & D. Narvaez (Eds.), *Moral development, self and identity* (pp. 189-212). Mahwah, NJ: Lawrence Erlbaum.

Leary, M. R. (1983). A brief version of the Fear of Negative Evaluation Scale. *Personality and Social Psychology Bulletin*, 9, 371-375. doi:10.1177/0146167283093007

Leary, M.R., Kowalski, R.M., Smith, L., & Phillips, S. (2003). Teasing, rejection and violence: Case studies of the school shootings. *Aggressive Behavior*, 29, 202-214.

Leith, K. P., & Baumeister, R. F. (1998). Empathy, shame, guilt, and narratives of interpersonal conflicts: Guilt-prone people are better at perspective taking. *Journal of Personality*, 66, 1-38.

Lewin, K. (1945) 'The Research Center for Group Dynamics at Massachusetts Institute of Technology', *Sociometry*, 8, pp. 126–35.

Lindsey, L. L. M. (2005). Anticipated guilt as behavioral motivation: An examination of appeals to help unknown others through bone marrow donation. *Human Communication Research*, 31, 453-481.

Loewenstein, G. & Lerner, J. S. (2003). The role of affect in decision making, in: R. Davidson, K. Scherer & H. Goldsmith (Eds) *Handbook of Affective Science*, pp. 619–642 (Oxford: Oxford University Press).

Lowe , C. M. (1964). The equivalence of guilt and anxiety as pathological constructs. *Journal of Consulting Psychology*, 1964, 28, 553-554.

MacDonald, G., & Leary, M. R. (2005). Why does social exclu- sion hurt? The relationship between social and physical pain. *Psychological Bulletin*, 131, 202–223.

MacDonald, G., Kingsbury, R., & Shaw, S. (2005). Adding Insult to Injury. In K. D. Williams, J. P. Forgas & W. von Hippel (Eds.) *The social outcast: Ostracism, social exclusion, rejection, and bullying*, (pp. 77-90). New York, NY: Psychology Press.

Mandel, D.R. (2003). Counterfactuals, emotions, and context. *Cognition and Emotion*, 17(1), 139-159.

Marcia,J.E.(1980). Identity in adolescence. In J.Adelson (Ed.), *Handbook of adolescent psychology* (pp. 159-187). New York: Wiley.

Martinez, L.M.F., Zeelenberg, M., & Rijsman, J.B. (2011). Behavioural consequences of regret and disappointment in social bargaining games. *Cognition and Emotion*, 25(2), 351-359.

Mascaro JS, R. J. K., Tenzin Negi L, Raison CL. (2013). Compassion meditation enhances empathic accuracy and related neural activity. *Soc Cogn Affect Neurosci*, 8(1), 48-55. DOI: 10.1093/scan/nss095.

McCullough, M.E., Kilpatrick ,S.D., Emmons, R.A., Larson, D.B. (2001). Is gratitude a moral affect? *Psychological Bulletin,* 127, 249–266.

Mesquita, B., & Frijda, N.H. (2011). An emotion perspective on emotion regulation. *Cognition and Emotion*, 25, 782-784.

Mikulincer, M., & Florian, V. (1998). The relationship between adult attachment styles and emotional and cognitive reactions to stressful events. In Simpson, J., & Rholes, S. (eds.,) *Attachment theory and close relationships* (pp. 143-165). New York: Guilford

Miller, P., Eisenberg, N., Fabes, R. A., & Shell, R. (1996). Relations of moral reasoning and vicarious emotion to young children's prosocial behavior towards peers and adults. *Developmental Psychology*, 32, 210-219.

Moll, J., & de Oliveira-Souza, R. (2007). Moral judgments, emotions and the utilitarian brain. *Trends in Cognitive Sciences*, 11, 319–321.

Moll, J., & Schulkin, J. (2009). Social attachment and aversion in human moral cognition. *Neuroscience and Biobehavioral Reviews*, 33, 456–465.

Moll, J., de Oliveira-Souza, R., & Esslinger, P. J. (2003). Morals and the human brain: a working model. *Neuroreport*, 14(3), 299–305.

Moll, J., de Oliveira-Souza, R., Eslinger, P. J., Bramati, I. E., Mourao-Miranda, J., Andreiuolo, P. A., & Pessoa, L. (2002). The neural correlates of moral sensitivity: A functional magnetic resonance imaging investigation of basic and moral emotions. *Journal of Neuroscience*, 22, 2730–2736.

Moll, J., Zahn, R., de Oliveira-Souza, R., Bramati, I. E., Krueger, F., Tura, B., Cavanagh, A. L., Grafman, J. (2011). Impairment of prosocial sentiments is associated with frontopolar and septal damage in fronto-temporal dementia. *Neuroimage*, 54, 1735–1742.

Moll, J., Zahn, R., de Oliveira-Souza, R., Krueger, F., & Grafman, J. (2005). The neural basis of human moral cognition. *Nature Reviews Neuroscience*, 6, 799–809.

Morling, B. , Kitayama, S., & Miyamoto, Y. (2002). Cultural practices emphasize influence n the U.S. and adjustment in Japan. *Personality and Social Psychology Bulletin*, 28, 311-323

Mosher, D. L. (1966). The development and multitrait-multimethod matrix analysis of three measures of three aspects of guilt. *Journal of Consulting Psychology*, 30, 25–29.

Murphy, R. O., & Ackermann, K. A. (2012; under review). A review of social preferences measurement methods. *Retrieved from http://vlab.ethz.ch/svo/SVO_Slider/SVO_Slider.html*.

Murphy, R. O., Ackermann, K. A., & Handgraaf, M. J. J. (2011). Measuring social value orientation. *Judgment and Decision Making*, 6(8), 771-781.

Nelissen, R. M. A., & Zeelenberg, M. (2009). When guilt evokes self-punishment: Evidence for the existence of a Dobby-effect. *Emotion*, 9, 118-122.

Nelissen, R. M. A., Dijker, A. J., & De Vries, N. K. (2007). How to turn a hawk into a dove and vice versa: Interactions between emotions and goals in a give-some dilemma game. *Journal of Experimental Social Psychology*, 43, 280-286.

Nelissen, R.M.A., Leliveld, M., Van Dijk, E., & Zeelenberg, M. (2011). Fear and guilt in proposers: Using emotions to explain offers in ultimatum bargaining. *European Journal of Social Psychology*, 41(1), 78-85.

Nucci, L. & Gingo, M. (2008). Moral reasoning. In U. Goswami (Ed.). *Handbook of childhood cognitive development* (2nd edition). Oxford, UK: Blackwell.

Nucci, L., & Turiel, E. (2009). Capturing the complexity of moral development and education. *Mind, Brain, and Education*, 3, 151-159.

Nunner-Winkler, G., & Sodian, B. (1988). Children's understanding of moral emotions. *Child Development*, 59, 1323–1338.

Nunney, L. (1985). Group selection, altruism, and structured-deme models. American Naturalist, 126, 212–230.

Oakley, B. (2013). Concepts and implications of altruism bias and pathological altruism, *PNAS Early Edition*, http://www.pnas.org/content/early/2013/06/04/1302547110.full.pdf

Oakley, B., Knafo, A., Madhavan, G., & Wilson, D. (Eds.). (2012). Pathological altruism. New York, NY: Oxford University Press.

Oaten, M., Williams, K. D., Jones, A., & Zadro, L. (2008). The effects of ostracism on self-regulation in the socially anxious. *Journal of Social and Clinical Psychology*, 27, 471-504.

Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analysis. *Psychological Bulletin*, 128, 3–72.

Paulus, F. M., Müller-Pinzler, L., Westermann, S., and Krach, S. (2013). On the distinction of empathic and vicarious emotions. *Frontiers in human neuroscience*, 7, 196.

Paxton, J. M., Ungar, L., & Greene, J. D. (2012) Reflection and reasoning in moral judgment. *Cognitive Science*, 36(1) 163-177.

Paxton, J.M., Greene, J.D., (2010). Moral reasoning: Hints and allegations. *Topics in Cognitive Science*, 2(3), 511-527.

Pelligra, V., (2011). "Empathy, Guilt-Aversion, and Patterns of Reciprocity", *Journal of Neuroscience, Psychology and Economics*,4(3), pp. 161-173

Piaget. J. (1965). The moral judgment of the child. New York: Free Press. (Original work published 1932).

Pizzaro, D. A., & Bloom, P. (2003). The intelligence of moral intuitions: Comments on Haidt (2001). *Psychological Review*, 110, 193–196.

Plato. (2000). The Republic (Rev. ed.) (G.R.F. Ferari & T. Griffith, Trans.) Cambridge University Press.

Premack, D. and Woodruff, G. (1978) Does the chimpanzee have a theory of mind? *Behav. Brain Sci.*, 1, 515–526

Radke, S., Güroğlu, B., & de Bruijn E.R.A. (2012). There's something about a fair split: Intentionality moderates context-based fairness considerations in social decision-making. *PLoS ONE*, 7.

Rapee, R.M., & Heimberg, R.G. (1997). A cognitive-behavioral model of anxiety in social phobia. *Behaviour Research and Therapy*, 35, 741-756.

Rebega., O.L., Apostol,L., Benga, O., & Miclea, M. (2013). Inducing Guilt: A Literature Review. *Procedia - Social and Behavioral Sciences*, 78, 536–540 01/2013; DOI:10.1016/j.sbspro.2013.04.346

Rebega., O.L., Benga, O., & Miclea, M. (in press). Another Perspective on Guilt's Moral Status: The Romanian Case. *Procedia - Social and Behavioral Sciences*.

Reeder, G. D., & Coovert, M. D. (1986). Revising an impression of morality. *Social Cognition*, 4, 1–7.

Rest, J., Narvaez, D., Bebeau, M.J. & Thoma, S.J. (1999) *Postconventional Moral Thinking: a neo-Kohlbergian approach* (Mahwah, NJ, Lawrence Erlbaum).

Rochat, P. (2010). Emerging self-concept. In J.G. Bremner & T.D. Wachs (Eds.)*, Blackwell Handbook of Infant Development.* (2nd Edition). London: Blackwell Publishers.

Roseman, I. J. (1984). Cognitive determinants of emotions: A structural theory. In P. Shaver (Ed.), *Review of Personality and Social Psychology,* 5, 11-36.

Rothbart, M. K., Hanley, D., & Alberg, M. (1986). Gender differences in moral reasoning. *Sex Roles*, 15, 645-653.

Ruby, P., & Decety, J. (2004). How would you feel versus how do you think she would feel? A neuroimaging study of perspective taking with social emotions. *Journal of Cognitive Neuroscience*, 19, 988–999.

Russell, J. A. (1980). A circumplex model of affect. *Journal of Personality and Social Psychology*, 39, 1161-1178.

Sabini, J., & Silver, M. (1997). In defense of shame: Shame in the context of guilt and embarrassment. *Journal for the Theory of Social Behaviour*, 27(1), 1–15.

Saelen, C., & Markovits, H. (2008). Adolescents' emotion attributions and expectations of behavior in situations involving moral conflict. *Journal of Experimental Child Psychology*, 100, 53–76.

Schacht, A., & Sommer, W. (2009). Emotions in word and face processing: early and late cortical responses. *Brain Cognition*, 69, 538–550.

Sava, F.A. (2011). Analiza datelor în cercetarea psihologică. Ediția a II-a. Cluj-Napoca: ASCR

Schlochtermeier, L.H., Kuchinke, L., Pehrs, C., Urton, K., Kappelhoff, H., Jacob, A.M. (2013). Emotional Picture and Word Processing: An fMRI Study on Effects of Stimulus Complexity. *PLoS ONE*, 8(2): e55619.

Sebastian CL, Fontaine NM, Bird G, Blakemore SJ, Brito SA, McCrory EJ, Viding E. (2012). Neural processing associated with cognitive and affective Theory of Mind in adolescents and adults. *Soc Cogn Affect Neurosci.*,7(1), 53-63. doi: 10.1093/scan/nsr023.

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5-14.

Shamay-Tsoory,S.G., Harari, H., Aharon-Peretz, J., Levkovitz, Y. (2010). The role of the orbitofrontal cortex in affective theory of mind deficits in criminal offenders with psychopathic tendencies. *Cortex*, 46(5): 668-677.

Shimanoff SB. (1984). Commonly named emotions in everyday conversations. *Perceptual and Motor Skills*, 58:514.

Silvers, J.A., McRae, K., Gabrieli, J.D.E., Gross, J.J., Remi, K.A., & Ochsner, K.N. (2012). Age-related differences in emotional reactivity, emotional reactivity, regulation and rejection sensivity in adolescence, *Emotion*, 12, 1235-1247. 10.1037/10028297aaa

Singer, T. et al.(2006) Empathic neural responses are modulated by the perceived fairness of others. *Nature,* 439, 466–469.

Smetana, J.G., & Killen, M. (2008). Moral cognition, emotions, and neuroscience: An integrative developmental view. *European Journal of Developmental Science*, 2, 324-339.

Smith, A. (1976). The theory of moral sentiments. Oxford, England: Oxford University Press. (Original work published 1759).

Smith, C.A., & Lazarus, R.S. (1993). Appraisal com- ponents, core relational themes, and the emotions. *Cognition and Emotion*, 7, 233–269.

Smith, R. H., Webster, J. M., Parrott, W. G., & Eyre, H. L. (2002). The role of public exposure in moral and nonmoral shame and guilt. *Journal of Personality and Social Psychology*, 83, 138-159.

Sober, E., & Wilson, D. S. (1998). Unto others: The evolution and psychology of unselfish behavior. Cambridge, MA: Harvard University Press.

Somerville, L. H. (2013). The teenage brain: Sensitivity to social evaluation. *Current Directions in Psychological Science*, 22(2), 129-135.

Stevens, J.R. and Hauser, M.D. (2004). Why be nice? Psychological constraints on the evolution of cooperation. *Trends in Cognitive Sciences*, 8, 60-65.

Stich, Stephen et al. (2010), "Altruism", in John Doris et al. (eds.), *The Moral Psychology Handbook*, Oxford: Oxford University Press, 147-205.

Sutton, J., Smith, P. K., & Swettenham, J. (2001).'It's easy, it works, and it makes me feel good' – A response to Arsenio and Lemerise. *Social Development*, 10, 74–78.

Sutton,J., & Smith. P. K. (1999). Bullying as a group process: An adaptation of the Participant Role approach. *Aggressive Behavior*, 25, 97-111.

Tangney J.P. (1992). Situational determinants of shame and guilt in young adulthood. *Personal. Soc. Psychol. Bull.*, 18:199–206.

Tangney, J. P. (1991). Moral affect: The good, the bad, and the ugly. *Journal of Personality and Social Psychology*, 61, 598-607.

Tangney, J. P., & Fischer, K. W. (Eds.) (1995). Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride. New York: Guilford Press.

Tangney, J. P., Miller, R. S., Flicker, L., & Barlow, D. H. (1996). Are shame, guilt, and embarrassment distinct emotions? *Journal of Personality and Social Psychology*, 70, 1256-1269.

Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007). Moral emotions and moral behavior. *Annual Review of Psychology*, 58, 345-372.

Tangney, J. P., Wagner, P., & Gramzow, R. (1992). Proneness to shame, proneness to guilt, and psychopathology. *Journal of Abnormal Psychology*, 101, 469–478 doi:10.1037/0021-843X.101.3.469

Teroni, F., Deonna, J. A. (2008). Differentiating Shame from Guilt. *Consciousness and Cognition*, 17(3), 725 - 740.

Tomasello, M., & Vaish, A. (2013). Origins of human cooperation and morality. *Annual Reviews of Psychology*, 64, 231-255.

Tomasello, M., Carpenter, M., Call, J., Behne, T., & Moll, H. (2005). Understanding and sharing intentions: The origins of cultural cognition. *Behavioral and Brain Sciences*, 28, 675 - 691.

Turiel, E. (1983). The development of social knowledge: Morality and convention. Cambridge, England: Cambridge University Press.

Turiel, E. (1998) The development of morality, in: N. Eisenberg (Ed.) Handbook of child Psychology. Vol. 3. *Social, emotional and personality development* (New York, Wiley), 863-932.

Turiel, E., & Wainryb, C. (1998). Concepts of freedoms and rights in a traditional, hierarchically-organized society. *British Journal of Developmental Psychology*, 16, 375–395.

Ugazio G, Lamm C, Singer T. The role of emotions for moral judgments depends on the type of emotion and moral scenario. *Emotion*, 2011, 12:579–590.

Van Dijk, E., & Vermunt, R. (2000). Strategy and fairness in social decision making: Sometimes it pays to be powerless. *Journal of Experimental Social Psychology*, 36, 1–25.

Van Lange, P. A. M. (1999). The pursuit of joint outcomes and equality in outcomes: An integrative model of social value orientation. *Journal of Personality and Social Psychology*, 77, 337-349.

Van Lange, P. A. M., & Kuhlman, D. M. (1994). Social value orientations and impressions of a partner's honesty and intelligence: A test of the might versus morality effect. *Journal of Personality and Social Psychology*, 67, 126–141.

Van Lange, P. A. M., Bekkers, R, Schuyt, T. N. M., & Van Vugt, M. (2007). From games to giving: Social value orientation predicts donations to noble causes. *Basic and Applied Social Psychology*, 29, 375–384.

Van Lange, P. A.M., Otten,W., De Bruin, E., & Joireman, J. (1997). Development of prosocial, individualistic, and competitive orientations: Theory and preliminary evidence. *Journal of Personality and Social Psychology*, 73, 733–746.

Wagner, U., Handke, L., Dörfel, D., Walter, H. (2012) An Experimental Decision-Making Paradigm to Distinguish Guilt and Regret and Their Self-Regulating Function via Loss Averse Choice Behavior. *Front Psychol.*, 22;3:431. doi: 10.3389/fpsyg.2012.00431.

Watkins, P. C., Scheer, J., Ovnicek, M., & Kolts, R. (2006). The debt of gratitude: Dissociating gratitude and indebtedness. *Cognition and Emotion*, 20, 217-241.

Watson, D., & Clark, L. A. (1999). PANAS-X. Manual for the Positive and Negative Affect Schedule - Expanded form. Iowa: The University of Iowa.

Watson, D., & Friend, R. (1969), Measurement of social-evaluative anxiety. *Journal of Consulting & Clinical Psychology*, 33. 448-457.

Williams, K. D., & Sommer, K. L. (1997). Social ostracism by one's coworkers: Does rejection lead to loafing or compensation? *Personality and Social Psychology Bulletin*, 23, 693-706.

Wong, Y. &, Tsai, J.L. (2007). Cultural models of shame and guilt. Chapter in J. Tracy, R. Robins, & J. Tangney (Eds.). *Handbook of Self-Conscious Emotions*, (pp.210-223). New York, NY: Guilford Press.

Wood, A. M., Maltby, J., Stewart, N., & Joseph, S. (2008). Conceptualizing gratitude and appreciation as a unitary personality trait. *Personality and Individual Differences*, 44, 619-630.

Wood,A.M.,Joseph,S.,&Linley,P.A.(2007).Gratitude: The parent of all virtues. *The Psychologist*, 20, 18–21.

Yang Y, Raine A, Narr K, Lencz T, Toga A (2006) Amygdala volume reduction in psychopaths. In: *Socieity for Research in Psychopathology*.

Young, L., & Dungan, J. (2012). Where in the brain is morality? Everywhere and maybe nowhere. *Social Neuroscience*, 7(1), 1-10.

Young, L., Camprodon, J., Hauser, M., Pascual-Leone, A., Saxe, R. (2010). Disruption of the right temporoparietal junction with transcranial magnetic stimulation reduces the role of beliefs in moral judgments. *PNAS*,107, 6753-6758. doi:10.1073/pnas.0914826107.

Young, L., Cushman, F., Hauser, M., & Saxe, R. (2007). The neural basis of the interaction between theory of mind and moral judgment. *Proceedings of the National Academy of Sciences*, 104(20), 8235–8240.

Young, L., Tsoi, L. (2013). When mental states matter, when they don't, and what that means for morality. *Social and Personality Psychology Compass*, 7(8), 585–604. doi: 10.1111/spc3.12044

Zajonc, R. B. (1980) Feeling and thinking: Preferences need no inferences, *American Psychologist*, 35, pp.151–175.

Zeelenberg, M., & Breugelmans, S. M. (2008). The role of interpersonal harm in regret and guilt. Emotion, 8, 589–596.

Zeelenberg, M., & Pieters, R. (1999). Comparing service delivery to what might have been: Behavioral responses to regret and disappointment. *Journal of Service Research*, 2, 86–97.

Zeelenberg, M., & Pieters, R. (2004). Beyond valence in customer dissatisfaction: A review and new findings on behavioral responses to regret and disappointment in failed services. *Journal of Business Research*, 57, 445–455.

Zeelenberg, M., & Van Dijk, E. (1997). A reverse sunk cost effect in risky decision making: Sometimes we have too much invested to gamble. *Journal of Economic Psychology*, 18, 677–691.

Zeelenberg, M., Nelissen, R. M. A., Breugelmans, S. M., & Pieters, R. (2008). On emotion specificity in decision making: Why feeling is for doing. *Judgment and Decision Making*, 3, 18–27.

Zeelenberg, M., Van Dijk, W. W., & Manstead, A. S. R. (1998). Reconsidering the relation between regret and responsibility. *Organizational Behavior and Human Decision Processes*, 74, 254–272.

Zeelenberg, M., Van Dijk, W. W., & Manstead, A. S. R. (2000). "Regret and Responsibility Resolved? Evaluating Ordóñez and Connolly's (2000) Conclusions". *Organizational Behavior and Human Decision Processes, 81*, 143-154.

Zeelenberg, M., Van Dijk, W. W., Manstead, A. S. R., & Van der Pligt, J. (1998). The experience of regret and disappointment. *Cognition and Emotion*, 12, 221–230.