

# Anger and Moral Reasoning in Decision Making

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## abstract

The aim of the research was to examine the impact of anger on moral reasoning and decision making. We were interested in whether anger leads to more punitive attributions and to greater willingness to help when one perceives immoral behavior. Participants ( $N=61$ ) of the experimental design were randomly divided into two groups. The results show that anger may lead to more automatic information processing and also to an intuition based judgment. Angry participants chose harsher punishments and considered it more morally correct. It was also shown that anger does not lead to greater willingness to help in an immoral situation. The research notes that actual emotional states can influence the process of moral reasoning and determine moral judgment.

**Keywords:** moral reasoning, anger, decision making

Rationalistic cognitive theories have a long tradition in the field of moral development. Kohlberg (1976) says that moral reasoning is a cognitive process which an individual goes through in order to achieve morally right decisions. Moral reasoning is dependent on the knowledge of social moral standards and it includes thinking about moral issues and creating arguments in order to solve these issues properly (Lajčiaková, 2005). One's moral principles are dependent on one's age, and many authors confirm that moral reasoning is linked to cognitive and social development of an individual. Currently, there are numerous theories that emphasize the internal cognitive and perception mechanisms to explain moral reasoning and decision making (Piaget, 1968; Kohlberg, 1976;

Gilliganová, 2001; Selman & Byrne, 1974). However, the strong emphasis on the cognitive aspect can make our view of the determinants of moral behavior incomplete. Decision-making and reasoning, not only on moral issues, is often accompanied by emotions which can largely determine our actions. Many authors agree that in reasoning and decision making we use two different models (Chaiken & Trope, 1999; Epstein, 1994; Sloman, 1996). The first model is faster. It involves emotions, associations and does not require conscious attention. Authors often refer to this intuitionistic model as the "early-warning" system. The rationalistic model, which works on the basis of algorithms, is the opposite of this system. It is slower and requires concentration and conscious control. The theories of Piaget, Kohlberg, as well as other classical theories, focus on cognitive aspects of moral behavior. These theories are based on this second principle and suggest that moral judgment and the

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subsequent decision is the result of cognitive moral reasoning.

Haidt (2001) developed his theory in contrast to classical rationalistic theories. He claims that our moral judgment and subsequent action is determined by our intuition about the whole issue. Moral intuition is understood as "sudden feeling" which includes affective valence (good/bad, positive/negative emotion) and it does not require any conscious attention focused on searching for facts, evidences or inferring conclusions. The decision about what is morally right, therefore, does not need to pass a lengthy process of reasoning. The process of reasoning starts when we need to justify our intuition and explain our moral decision to another person. Blair (1995) says that the aversive feeling of wrongdoing leads to the evaluation of our particular action as morally wrong. Some people with antisocial personality disorder are absent this aversive sensation and therefore do not evaluate their behavior as morally wrong.

The intuitionistic model extends rationalist reductionist views of the formation of moral judgment and outlines a new factor entering into this process - affective states and emotions. Zajonc (1980) also emphasizes that affective reactions to stimuli are often the very first response that occurs automatically. Bechara, Tranel and Damasio (2000) also argue that the process of reasoning and decision making would be very difficult without emotions. In their research, patients with damaged ventromedial prefrontal cortex – a part of the brain associated with emotions, could not decide properly, consider alternatives and choose one of them. Green and colleague's research (2001) could support the claim that emotions can also play an important role in the process of moral reasoning. In their experiment they observed brain activity in the process of resolving moral dilemmas. They found that dilemmas which are personal (seemingly more emotional) activate the limbic system, which mediates emotions. Impersonal dilemmas activate the frontal part of the brain associated with memory and cognitive control. Another experiment whose basis was to monitor the brain activity in developing moral judgment was conducted by

Moll, de Oliveira-Souza, and Eslinger (2003). In their study, participants answered simple moral claims like: "You should break the law if necessary", as well as factual assertions: "Stones are made of water." The authors found that in creating moral judgment the part of a brain associated with emotions is activated. Neuropsychology studies confirm the impact of emotions on the process of moral reasoning, especially when moral dilemma contains rudeness against the weak one, injustice, law violations and saving lives (Prinz, 2006).

### **Anger and moral reasoning**

Haidt (2003) considers anger one of the most unappreciated moral emotions. Anger is sometimes incorrectly described as an immoral emotion, which should be suppressed by education and culture. Hall (1899) collected data from over 2000 questionnaires. He created a list of the main triggers of anger which included frustration, obstruction in satisfying needs or achieving goals, but also situations where someone has done something for which they had no justification or right. Many other works mention some other triggers such as betrayal, insult, injustice and even the perception of immorality. According to Aristotle (1962) anger evokes desire for revenge. Many recent studies show that, in addition to the desire for revenge, anger also includes the motivation to attack and humiliate the immoral person (Izard, 1977; Shaver, Schwartz, Kirson & O'Connor, 1987). In their research, Haidt, Sabini, Gromet and Darley (2010) presented a video showing a man's injustice to another person. They created two different conclusions about the video. The results show that the participants were unhappy when the video was ended by the victim's acceptance and reconciliation of what had happened, without any consequences for the transgressor. Conversely, when the video was ended by the suffering of the transgressor in return for his actions, participants reported the highest satisfaction. The study by de Quervain and colleagues (2004) revealed that the corpus striatum, a subcortical brain structure that is associated with pleasure and joy, is activated in anticipation of punishing the transgressor. Moreover, the corpus striatum

is activated even when we punish the transgressor at the expense of certain loss arising from such a punishing act. Angry people are more optimistic about their chances of success (Fischhoff, Gonzalez, Lerner & Small, 2005), less careful in their thinking (Bodenhausen, Sheppard & Kramer, 1994) and more eager to intervene in a particular situation (Harmon-Jones, Sigelman, Bohlig & Harmon-Jones, 2003). Anger leads to increased physiological arousal and causes the reaction known as "fight or flight". This emotion can lead to more automatic information processing and reactions that are focused on action rather than on verbal assertive responses (Scarpa & Raine, 1997; Rabiner, Lenhart & Lochman, 1990). Compared with participants in a neutral emotional state, anger induced participants have chosen harsher punishments to the transgressor, and also suggested more penalties in the proposed series of law violations. Anger simplifies the cognitive reasoning process – angry participants require fewer arguments to create a judgment (Lerner, Goldberg & Tetlock, 1998).

We mentioned numerous studies and theories suggesting that emotions can enter the process of moral reasoning. The studies exploring the impact of anger on moral judgment suggest that anger can inhibit and block the rational process of moral reasoning and can also become the major determinant of moral judgment. In our research, we will try to induce the integral moral emotion, anger, to a group of our participants and we will monitor its impact on decision making about the amount of punishment for the transgressor. We will also monitor the impact of anger on moral evaluation of punishment. Based on Lerner and colleagues' research (1998), we expect that, compared to participants in a neutral emotional state, the angry participants will choose harsher punishments for the transgressor. We also expect that angry participants will consider granting such severe punishment as morally more correct compared to the neutral group. Angry people are more eager to intervene in the same situation (Harmon-Jones et al., 2003). Anger can lead to more automatic processing of information, causing the reaction to be focused on action rather than verbal assertive responses

(Scarpa & Raine, 1997, Rabiner et al., 1990). Therefore, we expect that angry participants will be more eager to intervene and willing to help a victim in the immoral situation.

## Method

### Participants

Sixty-one participants (25 males and 36 females) from age 20 to 27 participated in the experiment. The study population consisted of students from all the Slovak regions and several universities with various study fields (humanities, physics, pedagogy, veterinary, computer science). Participant selection was conducted on the Internet through the social network "Facebook". The initial idea was to randomly search for people who were members of social groups based on a protest against animal cruelty. Due to limited willingness of the members, we finally had to choose an alternative method - snowball sampling. We asked participants to recommend us some of their friends who would be willing to participate in our study and who share the same attitude toward animals. In this way we tried to reach out to people who had a positive attitude towards animals and were not indifferent to animal abuse issue.

The age characteristics of participants are presented in Table 1.

Table 1  
*Research participants – age characteristics*

Sex	AM	SD	Min.	Max.
Men	22.36	1.52	20	26
Women	22.42	1.73	20	27

### Research design and procedure

The research consisted of four variables. Moral emotion, anger, was an independent variable. By manipulating this variable, we monitored the change of three dependent variables - decision on the amount of punishment, moral evaluation of punishments and willingness to help. To test

our research hypotheses we designed an experimental plan in which every participant was exposed to only one level of the independent variable. Participants were randomly divided into two groups – an experimental group to whom anger was induced and a control group which was not exposed to induction of emotions. The experiment was conducted online through the mentioned social network "Facebook".

**Induction of anger.** Currently, there are many techniques that are used for inducing emotions – presenting emotional materials – pictures, music (Pilárik & Matušiková, 2010), video (Forgas & Moylan, 1987) and Velten's technique (Velten, 1968). In our research, to induce anger, we presented emotionally saturated images of abused animals in combination with a story about life for those animals. We were inspired by a problem regarding the abuse of bears. This practice is known in India and Pakistan as "dancing bears" (Seshamani & Satyanarayan, 1997). This emotionally saturated story presented the abuse and suffering of young bears that are used by local people as an attraction for tourists. All participants were informed about the purpose of the study and had the opportunity to quit the participation at any moment. The experimental group was informed that they were going to read the story about the bear abuse with authentic pictures presented. Each member of the experimental group participated voluntarily and after the experimental process we provided a short discussion about the research and participants' insights. To verify the effectiveness of our induction technique, we created a set of moral emotions inspired by Haidt's model of moral emotions (Haidt, 2003). Participants were supposed to answer which moral emotion they perceived the most intensely during the presentation of our induction technique. Some participants reported that they perceived contempt or sadness the most. These participants were excluded from the experiment and we included only participants who perceived anger.

**Decision about the amount of punishment and moral evaluation of punishments.** Currently, many authors use various moral dilemmas and stories to observe

and investigate moral reasoning and moral judgment. This trend has its origin in philosophy and this methodology was implemented into psychology. It was used by Piaget (1968), Kohlberg (1976) and is also widely used today (Greene et al., 2001; Bartels, 2008). Our study, however, focuses on a specific issue - animal abuse. It was necessary to create specific problem situations to measure the variables. We expected that the angry participants would choose harsher punishments for the transgressor. We also hypothesized that angry participants would consider granting such a severe punishment more morally correct, compared to the neutral group. Therefore, we had to create a situation in which participants have perceived violations of the law and immorality in the form of unjustified raw animal abuse and it was necessary to create a scale of punishment. In creating this scale we were inspired by current and former Slovak criminal law. The first option which was included in the scale was "no crime" - no punishment for the transgressor. The second punishment reflected the former, now invalid animal abuse law – a fine. The third option reflected the current animal abuse law § 378 of the Slovak criminal code (Zákon č. 300/2005 Z. z., 2011) which says: "The one, who abuses an animal, especially in a cruel and brutal manner, shall be punished by up to two years' imprisonment." The fourth option reflected the current domestic abuse and violence law - § 208 of the Slovak criminal code (Zákon č. 300/2005 Z. z., 2011). This act grants three to eight years' imprisonment to the transgressor. The fifth punishment reflected the highest alternative of imprisonment resulting from the existing criminal code (Zákon č. 300/2005 Z. z., 2011) - life imprisonment. The last option for the transgressor was based on "an eye for an eye" principle - the act of revenge - the transgressor deserves the same as he did to his victim. We have created the punishment scale consisting of six different punishments. Experimental group with induced anger had to decide which of the proposed punishments was appropriate for the bear abusers presented in our induction method. The control group had no contact with our induction method and therefore the participants only answered a simple question: "Which of the proposed punishments is appropriate for the

brutal raw animal abuse?" Both groups had to decide and choose only one of the six proposed punishments. After choosing the punishment for the transgressor, both groups of participants were asked to evaluate the moral correctness of each option on a scale from 0 to 100. 100 meant that granting such a punishment would be the most morally correct. Creating our own punishment scale based on current and former Slovak laws, unlike the fictional and often extreme moral dilemmas, allows us to determine whether the current law reflects the moral judgment of our population. The alternative, reflecting the current animal abuse law, granting 2 years' imprisonment, is the transition point. We hypothesized that the angry participants would choose harsher punishments for the transgressor. Harsher punishments (hereinafter referred to as high punishments) were considered only those which were more rigorous than the current animal abuse law - namely 3-8 years' imprisonment, life imprisonment and "an eye for an eye" punishment. Compared to the control group, we expected that angry participants will choose these three alternatives more frequently.

**Willingness to help.** The third hypothesis was based on arguments that anger can lead to more automatic information processing, it can raise action focused reactions and also raises eagerness to intervene in the situation. Therefore, we expected that participants with induced anger will be more eager to intervene and help a victim in a situation that violates the law. Considering the specificity of our topic - animal abuse, we constructed a model situation in which the participant perceived a dog being abused and had an opportunity to help. The violation of the law and immoral behavior was thus represented by the situation of abusing a dog. Both groups of participants were presented with the following situation: "You are at the dog training ground and you noticed a middle-aged man training his dog. Each time the dog disobeys, the master rebukes him and it seems that the master is getting angry. When they get to the high wall, the fearful dog refuses to jump and to obey the master's command. Suddenly he starts to beat the frightened dog. The defenseless dog is howling and you realize that the

master can kill the dog if he does not stop the abuse immediately." Participants had three response options on how to act in this situation and each one reflected a degree of willingness to help. The first option was a verbal reaction - an attempt to vigorously, verbally stop the man from abusing a dog. However, this alternative did not guarantee saving the

animal and it also created a conflict with the transgressor. The second option was to hit the transgressor. Although it would cause an injury to the transgressor, it would mean a certain rescue for the dog. The third option was to ignore the whole situation, which meant death for the dog, but the participant would not get into any trouble. Haidt and colleagues (2010) outlined certain natural setting - need for justice and "settling scores" in humans. This principle is also characteristic for revenge and it seems that anger is the antecedent of desire for revenge. It also includes the motivation to attack and the need to humiliate the immoral person (Izard, 1977, Shaver et al., 1987). The second option, guaranteeing rescue of the dog at the cost of an injury of the transgressor, was deliberately constructed to involve an element of revenge. We expected that angry participants would choose this option more frequently compared to the control group because of the fact that this emotion evokes desire for revenge.

## Results

### Decision about the amount of punishment

We expected that angry participants would choose harsher punishments for the transgressor compared to the control group. Therefore, we examined the differences in granting the punishment for the transgressor between the groups. Due to small expected counts we used the Fisher's exact test for the analysis (Table 2).

Table 2

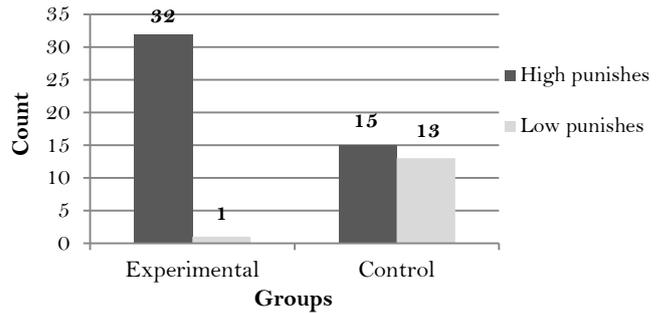
Comparing groups in granting the punishments for the transgressor

Group	A	B	C	D	E	F
Experimental - frequency	0	0	1	12	5	15
Experimental - % within group	0%	0%	3%	36.3%	15.2%	45.5%
Control - frequency	0	2	11	11	0	4
Control - % within group	0%	7.1%	39.3%	39.3%	0%	14.3%

Based on the result of Fisher's exact test, with a small risk ( $F=21.33$ ;  $p<.001$ ) we conclude that the difference in granting punishments between the groups is significant. In addition, the conclusion that anger influenced the decision making about the amount of punishment could be supported by the observed high degree of association between the variables ( $V=.593$ ).

Response A in our punishment scale was that the participant does not consider animal abuse a crime. The frequency of responses in this option was 0 in both groups. All participants, therefore, considered animal abuse a crime and the groups differed only in the amount of punishment for the transgressor. Therefore, we do not provide "Punishment A" in other parts of this paper.

We expected that angry participants would choose harsher punishments. Therefore, we proceeded to compare the groups with regard to choosing high or low punishments, which was defined in the methods. For high punishments we considered the punishment D, E and F. We used the Pearson chi-square test for the analysis. The result of testing shown that the difference between compared groups was significant ( $\chi^2=16.134$ ;  $p<.001$ ) and the degree of association between variables was moderate ( $\Phi=.514$ ). Based on this result we can conclude that the experimental group punished the transgressor with high punishments significantly more frequently in comparison with the control group. The comparison of the groups in granting high and low punishments is given in Figure 1.



It was shown that experimental group punished the transgressor with high punishments significantly more frequently in comparison with the control group. We further examined the differences between groups and analyzed the data at the level of individual categories. We compared the frequency of each punishment in the experimental and control group (Table 3). Due to small expected counts, we used Fisher's exact test instead of Pearson's chi-square in some categories (Punishment B and E).

The results of the testing have shown that the difference in granting Punishment C ("2 years' imprisonment") between groups was significant ( $p<.001$ ). The control group would grant "2 years' imprisonment" significantly more frequently than the experimental group.

We can also conclude that the difference in granting Punishment F ("an eye for an eye") between groups is significant ( $p=.009$ ). The experimental group would grant this punishment significantly more frequently than the control group.

Frequency differences in categories Punishment B ("fine"), Punishment D ("3-8 years' imprisonment") and Punishment E ("life imprisonment") were not significant ( $p>.05$ ).

Table 3  
Comparing the frequencies of each punishment between experimental and control group

Punishment	Experimental group	Control group	Sig.	Φ
B - frequency	0	2		
B - % within group	0%	7.1%	.207**	.200
C - frequency	1	11		
C - % within group	3%	39.3%	.000*	.454
D - frequency	12	11		
D - % within group	36.4%	39.3%	.814*	.030
E - frequency	5	0		
E - % within group	15.2%	0%	.056**	.275
F - frequency	15	4		
F - % within group	45.5%	14.3%	.009*	.335

Note: Sig.\* – significance of Pearson chi-square test,

Sig.\*\* – significance of Fisher exact test

### Moral evaluation of high punishments

We expected that angry participants would consider granting high punishments morally more correct in comparison with the neutral group. "An eye for an eye, life imprisonment and 3-8 years' imprisonment" were considered high punishments. For each participant, we added up the evaluations of these three options. It allowed us to create a new variable – the moral evaluation of the high punishments, which was the sum of evaluations of the three mentioned punishments. Thus, this variable takes on values up to 300. Subsequently, we compared the means of this variable between the experimental and control group.

The results of the Student's t-test shown that the difference in moral evaluation of high punishments between groups was significant ( $t=2.763$ ;  $p=.012$ ). Experimental group considered granting high punishments as morally more correct compared to control group. The difference between groups is presented in Figure 2.

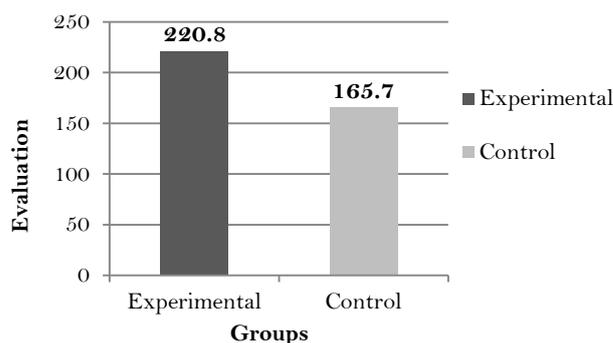


Figure 2. Comparing groups in moral evaluation of high

### Willingness to help

We expected that participants with induced anger would be more eager to intervene and help the victim in the case of a violation of the law and, therefore, help the abused dog even at the cost of attacking the transgressor. We compared frequencies of decisions in the experimental and control groups.

Based on the Fisher's exact test, we conclude that the difference in willingness to help between groups was not significant ( $F=4.421$ ;  $p=.089$ ). The experimental group was not more willing to help the abused dog compared to the control group. In addition, the proportion of variance indicated only small difference between groups ( $rm=.282$ ). The difference between groups is shown in Figure 3.

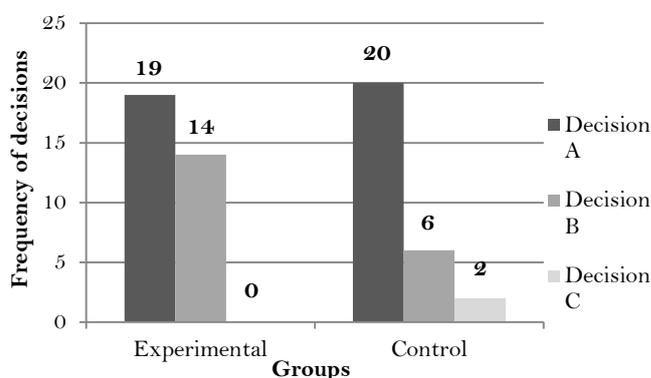


Figure 3. Comparing groups in willingness to help - frequencies c

## Discussion

The aim of the research was to examine the impact of anger on moral reasoning and decision making. We were interested in whether anger leads to more punitive attributions and to greater willingness to help when one perceives immoral behavior. We focused on a specific issue - animal abuse, and we were interested in how anger affects one's moral judgment and decision making in this context.

We expected that angry participants would choose harsher punishments for the transgressor compared with the control group. Therefore, we created a scale of punishments that included high and low punishments and then we observed the differences in granting punishments between the experimental group and the control group. The results indicate significant differences in severity of punishment between the angry participants and those who were in a neutral emotional state. Angry participants chose high punishments for the transgressor significantly more often than the neutral group. Our hypothesis was thus confirmed.

Almost half of the angry participants (45.5%) would punish the animal abuser with "an eye for an eye" punishment. Haidt and colleagues (2010) showed that when we perceive injustice and violation of the law, we are the most satisfied when the offender's behavior is revenged. There is a general tendency of "settling scores". According to Izard (1977), anger may be the antecedent of desire for revenge and it also motivates to attack. Therefore, our results could support these claims. This moral emotion associated with increased physiological arousal and need for revenge could make our angry participants choose punishment based on vengeance and settling scores between the transgressor and the victim. Although there were only five angry participants who would choose life imprisonment for the transgressor, none of the group of participants, in a neutral emotional state, would grant such a punishment. Although this difference is not significant, the tendency to grant more severe

punishments by angry participants cannot be overlooked also in this case. More than one third of the angry participants (36.4%) chose 3-8 years' imprisonment. In the group of participants in a neutral emotional state it was 39.3%. This difference was also nonsignificant. These three aforementioned punishments were included in the category of "high punishments" and the angry participants chose these three options significantly more frequently than the participants in a neutral emotional state. These results thus seem to be similar to Lerner and colleagues' research (1998). In their experiment, angry participants also granted harsher punishments to the transgressor and they also suggested more punishment in a proposed series of law violations. We considered 2 years' imprisonment (the current animal abuse law in Slovakia) as a boundary between low and high punishments. This punishment was considered a low punishment. When comparing our samples with regard to this punishment, we found that the group in a neutral emotional state granted this punishment significantly more often (39.3%) than the angry participants (3%). If we set a new boundary between high and low punishments, it would be the punishment of 3-8 years' imprisonment. This punishment was equally preferred by both groups, but they differed in other sentences. Angry participants tended to go upwards from this point and the participants in the neutral emotional state tended to reduce the amount of punishment from this border. The former Slovak animal abuse law (fine) was chosen by only two participants both from the neutral emotional state group. Due to this result, we can conclude that the current animal abuse law accurately reflects moral judgment of our subjects in comparison with the former law. Thus, anger led our participants to more punitive attributions. This conclusion can support the Haidt intuitionistic model (2001) which claims that, especially in emotional situations, the major determinant of our judgment is intuition which has an emotional component. Anger could influence moral judgment about the transgressor's violation and, therefore, angry participants chose harsher punishments for his actions.

In the second part of our work we expected that angry participants would consider granting a high punishment

morally more correct compared with the neutral group. This assumption was closely related to our first hypothesis. Schnall, Haidt, Clore and Jordan (2008) found out that a person in a negative affective state tends to evaluate moral transgression as more serious compared to those in a neutral state. The results confirm our hypothesis - angry participants evaluated granting harsher punishments as morally more correct than the neutral group and the difference between the groups compared was significant. According to Lerner and colleagues (1998) anger simplifies the cognitive process of reasoning and one requires fewer arguments to create a judgment. Haidt claims (2001) that in an emotional situation, moral judgment is mainly determined by intuition which blocks cognitive reasoning. This intuition involves a certain affective valence (good/bad, positive/negative feeling). Creating arguments that would support one's intuition based decision, starts post hoc - when a person is exposed to a situation in which he has to defend his decision. Angry participants were exposed to an emotional situation and we concluded that induced anger might influence their moral judgment. We already know that angry participants chose harsher punishments for the transgressor. This fact probably influenced the result of our second hypothesis. As in Schnall et al. (2008), in our research, anger could lead participants to evaluate transgressor's legal violations as more serious and, therefore, they considered a harsher punishment morally correct. In addition, for angry participants, moral evaluation of high punishments could serve as one of the post hoc reasons supporting their choice of a high punishment. Simply put: "I consider granting a high punishment morally correct because I have decided to give a high punishment to the transgressor." Therefore, the moral evaluation of the punishment they granted could serve as a support - a post hoc reason for their decision in the punishment choice task. The decision about the amount of punishment in the group of participants in a neutral emotional state could be the result of the long-term rational reasoning about the transgressor's violation and thinking about whether it is morally correct to grant him a high punishment for such a violation. The process of rational inference requires a

broader set of arguments to create a judgment compared to the intuition based decision making. Decisions of neutral participants might be characterized as "I grant a low punishment to the transgressor because granting a high punishment would be morally wrong." Compared to the group of angry participants, it is a reverse process.

In the third part of the research we were interested in how anger affects willingness to help the victim. We created a model situation where participants perceived abuse of a dog and they had three options. Each option reflected a certain level of willingness to help in spite of negative consequences that would result from the choice. The decision that guaranteed the certain rescue of a dog was characterized by a physical attack on the transgressor. This alternative was deliberately designed to include an element of revenge and retribution for the transgressor's actions. We expected that angry participants would choose this alternative more frequently in comparison with participants in a neutral emotional state. The results indicate that there is no significant difference in willingness to help between groups and thus our hypothesis has not been confirmed. Both groups chose verbal action against the transgressor most often, which did not guarantee saving the dog. Fourteen angry participants (42.4%) would attack the transgressor in order to save the dog and in the emotionally neutral group it was 6 (21.4%). We can observe some differences between the samples, but this difference was also insignificant. In Rabiner and colleagues' research (1990), anger evoked action focused responses more than verbal assertive responses. Our results are not consistent with the abovementioned authors' results. Izard (1977) argues that anger is the antecedent of desire for revenge and it motivates to attack. From the results of the first hypothesis we could infer that anger could be the antecedent of desire for revenge and retribution. In our model situation, however, it did not significantly motivate the participants to attack the transgressor in order to save the dog. One reason could be that in spite of a positive relationship to animals, this model situation was not close or personal enough to the participants, to motivate to

attack. In addition, we exposed our participants to the role of an executor. There were negative consequences in each option and participants would have to take responsibility for their decision. In deciding the amount of punishment for the transgressor, there were no such consequences. It could evoke associations like: "What punishment would you grant to the transgressor if you could?" or: "What punishment do you think the transgressor deserves?"

In our experiment we investigated the influence of anger on decision making and moral reasoning. We can conclude that anger could lead to more automatic information processing and could lead to an intuition based judgment. Angry participants in our research granted harsher punishments to the transgressor compared to the participants in a neutral emotional state and they also evaluated the high punishments as more morally correct. Based on these results, we can conclude that anger could be the antecedent of desire for revenge and retribution and angry people can evaluate a certain violation as more serious than people in a neutral mood. Considering that we have not studied the latter claim directly, it might be one possible suggestion for future research.

The main idea of the study was to compare participants in a neutral mood state with participants in an induced anger state. The success of induction was assessed via verbal subjective reports of the participants. By this method, we tried to reach only those participants who perceived anger. Nowadays there are various technological methods, especially in neuropsychology (neuroimage testing), which can objectively observe one's emotional state. Unfortunately we did not have the opportunity to use these methods and therefore the conclusions of our study are fairly limited. Using these methods could be one of the proposals on how to improve the observation of one's emotional state.

We already mentioned that participant selection was conducted on the Internet through the social network "Facebook". We tried to randomly search for people who were members of social groups based on a protest against

animal cruelty. Due to limited willingness of the members, we finally had to choose the snowball sampling method. In this way we tried to reach out to people who had a positive attitude towards animals and were not indifferent toward animal abuse issues. Due to this specificity, our research sample was fairly limited. It also limited the impact of the study and therefore we suggest more extensive investigation of this topic.

Animal abuse is a worldwide issue and there are many organizations fighting for animal rights. On the other hand, there are cultures that do not care much about animals. We can mention the Faroe Islands which have received a great deal of international criticism for brutal and rough whale hunting. However, this annual bloody tradition called "grindadráp" is deemed an essential symbol of Faroese culture and 95% people of the Faroe Islands support "grindadráp" (Ginkel, 2005). Comparing two different cultures that diametrically differ in handling animals could clarify this issue from a different perspective.

Human behavior in small or large social groups is a result of one's moral beliefs and standards. We are all part of society. We fulfill a certain role and a position and satisfy our needs as well as the needs of society. Guarantee of co-existence of all members of society is, therefore a creation of a system of norms and standards which each member of the community should adhere to – creation of law. Morality is considered a basic pillar of law. The relationship between morality and law is reciprocal. Studying and examining moral judgment and moral standards of a society is important in the context of law genesis, which reflects the morals of a society, and determines them as well.

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