

**Children's Attribution of Emotions in
Victimization Situations:
Examination of the Happy Victimizer Task and its
Relation to Children's Moral Behavior**

by

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Abstract

Children's understanding of emotions in victimization situations has been investigated as a way to study children's moral motivation. To assess this understanding, researchers have used a procedure known as the *happy victimizer* task in which children are asked to attribute emotions to victimizers who have performed an immoral action. In the present study I argue that this task is flawed in a number of ways that compromise the validity of the conclusions drawn from this research for the study of children's morality. Following this critique, I propose an improved version of the task, the anticipated emotions version, in which the story character has not yet performed the immoral action and children are asked about emotions the character might feel. I analyze children's attribution of emotions in the anticipated emotions version of the task and compare these with their performance on the standard task. In order to investigate possible processes that underlie children's emotion attributions in victimization scenarios, I also investigate relations among children's attribution of emotions, their social understanding (i.e., understanding of interpretation and mixed emotions), and their social history (i.e., parental style and number of siblings). Finally, I investigate how children's emotion attributions are related to their moral behavior. One hundred and forty-four 5- to 8-year-old Portuguese children participated in this study. Results show a developmental shift from the attribution of positive to the attribution of negative emotions in the anticipated emotions version of the task when children attribute emotions to a hypothetical victimizer, and a decline of the attribution of positive emotions when children attributed emotions to themselves as if they were the victimizers. Children also attributed less positive emotions to a hypothetical victimizer in the anticipated emotions compared to the standard version of the task. Attributions of emotions were not related to children's social understanding or to the assessed aspects of children's social history. Also, no relation was found between children's attribution of emotions and behavior. Implications of these results for the study of children's moral development and moral behavior are discussed and future research is proposed.

Keywords: Happy Victimizer; Emotion attributions; Moral development; Moral behavior.

Dedication

To my whole family, my parents, my sister and brothers, my sisters and brother in law, my nieces and nephews.

To Tio Manuel Luís and Tia Zita.

To Lena and Rui.

For their truly friendship and patience.

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Chapter 1.

Introduction

The social, emotional, and moral world in which children exist is an essential aspect of their development. Furthermore, children's understanding of the emotional consequences of actions may influence their tendency to engage in those actions. In particular, children's understanding of the emotions experienced in victimization situations has been of considerable research interest because this understanding may influence children's prosocial and antisocial behavior in such situations (Malti & Krettenauer, 2012; Nunner-Winkler, 2013).

To study the emotions that children expect someone to experience after transgressing a moral rule, researchers have investigated children's understanding of emotions in victimization scenarios, through a procedure that is now known as the *happy victimizer* task (Arsenio & Fleiss, 1996; Arsenio & Kramer, 1992; Gasser & Keller, 2009; Krettenauer, 2013; Lourenço 1997; Malti & Keller, 2009; Murgatroyd & Robinson, 1993, 1997; Nunner-Winkler & Sodian, 1988). In this task, children are told a story about a protagonist who transgressed a moral rule in order to obtain a personal gain (e.g., pushing another child off a swing in order to use the swing or stealing a chocolate from another child) and they are asked to attribute emotions to that protagonist—the victimizer—after he or she has committed the immoral action. Based on children's emotion attributions to the victimizer, implications for children's moral motivation have

been inferred such that the attribution of positive emotions is interpreted as indicating children's lack of motivation for moral action, whereas the attribution of negative emotions is viewed as suggesting children's motivation to behave morally.

However, a careful look at the happy victimizer task indicates that this task is flawed in a number of ways that compromise the validity of the conclusions drawn from this research. In the present study I analyze these flaws and propose an improved version of the happy victimizer task (i.e., the anticipated emotions version) to evaluate children's understanding of emotions in victimization scenarios. As it is unclear which aspects of children's social understanding and children's social lives underlie children's emotion attributions in victimization scenarios, I then expand the study of children's understanding of emotions in victimization scenarios in the following ways. I investigate (1) whether results from previous research on children's attribution of emotions in victimization scenarios are replicated in a Portuguese sample when certain controlled procedures are followed; (2) how children attribute emotions in victimization scenarios in an improved version of the happy victimizer task (i.e., the anticipated emotions attributions version), and compare these attributions with children's attribution of emotions in the standard version of the task; (3) whether aspects of children's social understanding (i.e., understanding of interpretation and mixed emotions) as well as aspects of children's social history (i.e., parents' ways of talking about disciplinary situations and children's number of siblings) are related to the way children attribute emotions in victimization scenarios; and (4) whether children's emotion attributions in the anticipated emotions attribution scenarios are related to their moral behavior (i.e., prosocial and antisocial behavior).

In the first section of the present study, I briefly describe how the issue of moral motivation has been addressed within the major theories of moral development. In the second section I describe how the study of children's emotion understanding in victimization scenarios emerged as a way of investigating moral motivation. I then describe how studies of children's understanding of emotions in victimization scenarios have been conducted and the major results that have been reported. In the third section, I analyze methodological problems of previous studies and propose to investigate whether previous results are replicated when these methodological problems are addressed. In the fourth section I analyze flaws with the standard happy victimizer task and propose to explore how children attribute emotions in an improved version of the task, the anticipated emotions version, as a way of expanding the study of children's attribution of emotions in victimization scenarios. In the fifth section I describe how previous studies have investigated children's moral reasoning associated with children's attribution of emotions. I then propose a way of expanding the study of children's justifications for their emotion attributions in order to obtain further and more precise information about children's moral reasoning. In the sixth section I explore whether children's understanding of emotions in victimization scenarios is related to some aspects of their social understanding as assessed by their understanding of interpretation and mixed emotions, and aspects of their social history as assessed with parents' talk about disciplinary situations and children's number of siblings. Finally, in the seventh section I examine whether children's attribution of emotions in the anticipated emotions version of the task is related to children's moral behavior.

1.1. An introduction to the Happy Victimizer Phenomenon

The question about what leads a person to act morally has been addressed within developmental psychology in different ways, but so far no one has offered a coherent and clear answer. Although Piaget (1932) pioneered the study of moral development, it was Kohlberg's (e.g., 1984) extension of this work that has been more influential. Whereas Piaget was interested in the emergence of practical social action and the later developing ability to reflect on and talk about such activity, Kohlberg focused on moral reasoning. Kohlberg considered the way individuals think about what should be done in a moral situation to be a central aspect of motivation for moral action. However, studies that have investigated the relation between moral reasoning and moral action (e.g., Blasi, 1980) have shown a gap between these two aspects of morality, pointing to the need to investigate other aspects beyond moral reasoning in order to understand moral motivation. In his work, Kohlberg (Kohlberg & Candee, 1984) proposed a model to explain the link from moral reasoning to moral action. He argued that the first step is the deontic judgment of what is right in that situation (i.e., an individual's considerations regarding what should be done in a moral dilemma and why). This is followed by the individual's judgment regarding whether he or she is responsible to perform the act. Individuals might know what should be done in moral situation, but if they do not feel responsible to act in accordance with such a prescriptive judgment, they might fail to act in accordance with it. The third step in the model consists of nonmoral factors (e.g., courage) required to actually be able to perform the act. Empirical research has shown that a sense of responsibility increases across moral stages, and the relation between moral reasoning and moral action tends to be stronger in higher than lower

stages (Kohlberg & Candee, 1984). However, it remains unclear what leads some, but not others, to act in accordance with what they consider to be right.

In a similar vein, Rest (1984) proposed a model with four components to explain the processes that need to be followed for a person to act morally. More specifically, Rest postulates that first the person has to be able to recognize the situation as moral (moral sensitivity). Then, the person produces a moral judgment about what should be done (moral judgment). The individual, then, has to have the determination to act in accordance to the moral judgment that was produced (moral motivation). And finally, the person has to have the character to be able to take that course of action (moral character).

Although Kohlberg and Rest have considered other variables beyond moral reasoning to explain what would lead a person to act in accordance with what he or she considers to be the right thing to do, the answer to the question of what motivates individuals to behave morally is still far from being understood (Nunner-Winkler, 2013).

1.1.1. The Happy Victimizer Phenomenon

Another approach to understanding what motivates individuals to act morally is to study individuals' understanding of the emotional consequences of actions. Drawing on functionalist theories of emotions (e.g., Bretherton, Fritz, Zahn-Waxler, & Ridgeway, 1986), according to which emotions are internal systems that motivate human action, some researchers have investigated the type of emotions children expect to be experienced when a moral rule is transgressed as a key aspect of motivation for moral action (Gasser, Gutzwiller-Helfenfinger, Latzko, & Malti, 2013; Nunner-Winkler & Sodian,

1988). To investigate children's understanding of the type of emotions experienced by victimizers, children have been presented with victimization stories (i.e., the happy victimizer task) that depict a story character who has performed an immoral action and has achieved a personal gain (e.g., a child who pushed another child off a swing in order to play with the swing) (Arsenio, 1988; Barden, Zelko, Duncan, & Masters, 1980; Chaparro, Kim, Fernández, & Malti, 2013; Gasser & Keller, 2009; Keller, Lourenço, Malti, & Saalbach, 2003; Murgatroyed & Robinson, 1993, 1997; Nunner-Winkler & Sodian, 1988).

These victimization stories confront children with two dimensions. A personal dimension, based on the victimizer's satisfied desire (e.g., getting the swing), and a moral dimension, based on the transgression of a moral rule (e.g., pushing another child off a swing). When children attribute emotions to the victimizer they are assumed to reveal which one of these two conflicting dimensions they consider to be more important in determining the emotional state of the victimizer. The attribution of positive emotions is thought to suggest that children value the personal aspect of the situation more than the moral aspect. That is, children may recognize the immorality of the action but they do not expect the moral transgression to produce a negative emotional outcome. Conversely, the attribution of negative emotions in victimization scenarios indicates that children value the moral aspect of the situation. That is, children recognize the immorality of the situation and expect the moral transgression to produce a negative emotional outcome (e.g., Arsenio, 2010; Arsenio, Gold, & Adams, 2006; Malti, Gummerum, & Buchmann, 2007). If an individual values the personal more than the moral dimension of the situation and expects to feel good after transgressing a moral rule in order to achieve a personal gain (e.g., steal a chocolate) he or she may be more

prone to perform the act. In contrast, if the individual values the moral dimension and expects to feel bad after having committed the immoral action he or she may be less likely to do it (Nunner-Winkler & Sodian, 1988). Moreover, researchers have argued that from the point of view of moral development, the attribution of positive emotions to the victimizer suggests that moral rules may not be understood as personally binding, whereas the attribution of negative emotions suggests that children not only know the moral rules but are also personally committed to them (Nunner-Winkler & Sodian, 1988).

Results from these studies describe the *happy victimizer phenomenon*, young children's tendency to attribute positive emotions to victimizers (e.g., the victimizer feels good because he or she is playing with the swing), and its developmental shift, around 6 to 7 years of age, from an attribution of positive to the attribution of negative emotions (e.g., the victimizer feels sad because he or she pushed another child off the swing; e.g., Arsenio & Kramer, 1992; Keller et al., 2003; Nunner-Winkler & Sodian, 1988). Despite the finding of this developmental shift and the increased number of studies conducted in the last two decades on the happy victimizer phenomenon and its relation to children's moral behavior, the reasons that the happy victimizer phenomenon occurs and its meaning for children's morality remain controversial and unexplored (Malti & Krettenauer, 2012). For instance, some researchers (Arsenio, Gold, & Adams, 2006) have suggested that the developmental shift from the attribution of positive to the attribution of negative emotions results from children's developing abilities in understanding and coordinating conflicting perspectives. According to this interpretation of the happy victimizer phenomenon, young children attribute positive emotions to the victimizer because they fail to coordinate the emotional state of the victimizer with the state of the victim. In contrast, older children attribute negative emotions because they

believe that the state of the victimizer is influenced by the state of the victim. For others (e.g., Harris, 2006), this developmental shift reflects older children's increasing awareness that it is socially less acceptable for someone to feel good after he or she performs an immoral action than to feel bad.

Although the processes that underlie the attribution of positive and negative emotions in victimization situations remains uncertain (Malti & Krettenauer, 2012; Nunner-Winkler, 2013), children's understanding of emotions in these sort of scenarios is thought to be a key aspect of their moral motivation. Results from several studies offer support for this perspective. More precisely, despite the consistent findings of a developmental shift from the attribution of positive to the attribution of negative emotions, there is also significant variability within the same age groups in the way children attribute emotions to victimizers. Moreover, it has been reported that this variability is related to children's moral behavior. Concerning the variability of emotion attributions across ages, for example, some studies show that most 4- to 6-year-old children also attributed negative emotions to victimizers (Chaparro et al., 2013; Keller et al., 2003; Lourenço, 1997; Whitesell & Harter, 1989). In other studies it was found that older children and even adults persisted in attributing positive emotions to the victimizer (Murgatroyed & Robinson, 1993, 1997). Therefore, although there is a tendency for a developmental shift from the attribution of positive to the attribution of negative emotions to a victimizer, variability of attribution of positive and negative emotions within the same age groups and across ages, also exists. Along with these results, in a recent meta-analysis researchers found that emotion attributions predict moral behavior in 4- to 20-year-olds (Malti & Krettenauer, 2012). More precisely, in this meta-analysis researchers found that across all age groups the attribution of positive emotions in victimization

scenarios is related to anti-social behavior, whereas the attribution of negative emotions is related to prosocial behavior.

In sum, research on the happy victimizer phenomenon has shown that although there is a tendency for a developmental change from the attribution of positive to negative emotions in victimization scenarios, there is also a significant variability within age groups in the way children attribute emotions to victimizers and a relation between children's attribution of emotions in victimization scenarios and their moral behavior. However, these results and their interpretation for children's moral development must be regarded with caution, because, from my perspective, the study of children's understanding of emotions in victimization scenarios is flawed in several ways. In the following sections I address problematic aspects of the happy victimizer studies (i.e., methodological procedures under which children's attribution of emotions in victimization scenarios have been investigated, conceptualization of the happy victimizer task, and analysis of children's justifications of their emotions attributions) and propose alternative procedures to improve and extend the study of children's attribution of emotions in victimization scenarios.

1.1.2. Robustness of the Happy Victimizer Phenomenon

In the happy victimizer studies, researchers are interested in understanding the emotions children expect themselves to feel in similar situations (Arsenio, 2010; Nunner-Winkler & Sodian, 1988). For that reason, in the happy victimizer stories, story characters are presented as being the same age and sex as the child being interviewed. This procedure is expected to facilitate children's identification with the story character and thus to induce children to attribute to the hypothetical transgressor the same

emotions they would expect to feel in similar situations. Nevertheless, presenting a victimizer as being the same age and sex of the child does not guarantee children's identification with the character. Thus, researchers developed studies in which children were asked to attribute emotions as if they were the protagonist of the story (Keller et al., 2003; Krettenauer & Eichler, 2006; Malti, Gasser, & Buchmann, 2008; Malti & Keller, 2009). Results from these studies showed a considerable reduction of the happy victimizer pattern when children attribute emotions to themselves as if they were the victimizer, and an increased differentiation between self and other attributions over time.

Previous studies have also shown that 6- and 8-year-olds, but not 4-year-old children, attribute more mixed emotions when their emotion attributions to a hypothetical victimizer are probed (Arsenio & Kramer, 1992; Lourenço, 1997). However, most studies in the happy victimizer tradition do not probe children's emotion attributions. Also, no studies have probed children's emotion attributions when they were asked to attribute emotions as if they were the victimizer. This lack of probing raises questions regarding the robustness of children's tendency to attribute positive emotions to themselves as if they were the victimizer, as well as the robustness of children's patterns of emotion attributions to hypothetical victimizers.

With the goal of investigating the strength of children's patterns of emotion attributions across ages and types of victimizers (i.e., hypothetical other vs. the self as the victimizer), in the present study children's attribution of emotions were probed by explicitly asking them if the victimizer would feel anything else. This procedure made it possible to identify differences in the ways children attribute emotions to a victimizer that are not captured by procedures where children's emotion attributions are not probed. Children who start by attributing positive emotions but also attribute negative emotions

after probing reveal a different way of understanding emotions that are experienced in victimization situations compared to children who persist in attributing positive emotions, and this may reveal differences in moral motivation. In the present study children's attribution of emotions were probed in order to differentiate between "hard core" happy victimizers (children who persist in attributing positive emotions across probing) and "reluctant" happy victimizers (i.e., children who start by attributing positive emotions but also attribute negative emotions with probing).

All the studies in which children attribute emotions to themselves as if they were the victimizer have methodological limitations making it unclear whether children differ in the way they attribute emotions to themselves as if they were the protagonist of the action (i.e., the victimizer) compared to the way they attribute emotions to a hypothetical victimizer. In a set of studies, children were asked to attribute emotions only to themselves as if they were the victimizers (Gasser & Keller, 2009; Malti et al., 2008; Malti, Gummerum, Keller, & Buchmann, 2009). In these studies 5- to 10-year-old children mostly attributed negative emotions to themselves in the role of victimizer. However, because in these studies children's attributions of emotions to a hypothetical victimizer were not investigated, they do not allow a sound conclusion that the happy victimizer pattern of emotion attributions decreases when children attribute emotions to themselves as if they were the victimizer, compared to when children attribute emotions to a hypothetical victimizer.

In another set of studies (Keller et al., 2003; Malti, Gummerum, & Buchman, 2007; Malti & Keller, 2009) children were asked to attribute emotions to a hypothetical victimizer as well as to themselves as if they were the victimizer. Nonetheless, in all these studies, children always attributed emotions to themselves after attributing

emotions to the hypothetical victimizer. Due to this design, it is possible that the decrease in attribution of positive emotions when they were asked to view themselves as the protagonist of the story may be a result of an order effect. Children may understand the second question (the request to attribute emotions to themselves as if they were the victimizer) as similar to the first one and therefore change their emotion attributions because they believe that their response to the first question was not satisfactory, otherwise, they would not be asked the same question twice (Siegel, 1999).

All together, these results seem to point to a decrease in the happy victimizer pattern of emotion attributions when children attribute emotions to themselves compared to when they attribute emotions to a hypothetical victimizer. Nevertheless, a controlled procedure in which children's attribution of emotions to a hypothetical victimizer and to themselves as if they were the victimizer that is counterbalanced has never been conducted. A counterbalanced procedure would allow testing the decline of the attribution of positive emotions when children attribute emotions to themselves as if they were the victimizer.

Thus, the first goal of the present study is to replicate the finding of a decrease in the happy victimizer pattern when children attribute emotions to themselves as if they were the victimizers in a methodologically controlled procedure and when children's attributions are probed. For this purpose, children are asked to attribute emotions to a hypothetical story character in the standard version of the happy victimizer task and also to attribute emotions as if they were the victimizer in the story (counterbalanced), with probing of emotion attributions. I expect to replicate the finding of a decrease in attribution of positive emotions to themselves when children are asked to consider

themselves to be the victimizer, compared to the attribution of positive emotions to a hypothetical victimizer.

1.2. Standard and Anticipated Emotions Versions of the Happy Victimizer Task

So far, all of the studies that have investigated children's attribution of emotions in victimization scenarios asked children to attribute emotions to a victimizer who had already performed an action and had reached the desired goal (e.g., how does the victimizer feel *after* having pushed another child off the swing?). This means that because the action was intentionally performed, responding to the test question is based on the link between intention and outcome, and so attributing positive emotions to the victimizer is an appropriate way to answer the question. The fact that the protagonist has already completed the action suggests that for he or she the personal desire was more salient than the moral rule, otherwise the hypothetical actor would not have performed the act of victimization. In this sense, there is no reason to think that someone who has done what he or she wanted to do and reached a desired goal should feel sad. Attributing negative emotions to the victimizer would require the child to think about the victimizer as remorseful, someone who acted intentionally and achieved a goal, but afterwards regretted having acted in that way. There is nothing in the task that might lead children to think about the victimizer in this way. For this reason, it is possible that some children may attribute positive emotions because the victimizer acted in order to reach the desired goal and therefore he or she must value personal gain more than the moral transgression, even though the children themselves may believe that the moral transgression would make themselves feel bad.

Yuill, Perner, Pearson, Peerbhoy, and van den Ende, (1996) reported that 5-year-old children are able to understand emotions in victimization scenarios from a personal and from a moral perspective. In this study, that was designed to investigate children's understanding of desire, the authors report that 5-year-old children are able to understand that someone may feel happy when a desired goal is attained, even if that goal is immoral and that a responsible person may feel sad after committing a moral transgression. These results support my previous critique according to which it is possible that in response to the standard version of the happy victimizer task some children as young as 5 years of age may attribute positive emotions to the victimizer based on their understanding that the victimizer feels happy once he or she has achieved the desired goal. This possibility compromises possible conclusions that can be drawn from children's attribution of emotions in victimization scenarios, namely from children's attributions of positive emotions, and may weaken the relation between children's understanding of emotions in victimization scenarios and their moral behavior.

A way of improving the happy victimizer task is to present a story in which intentions and outcomes are not related. From my perspective, an improved way to assess the kind of emotions children expect victimizers to experience could be achieved by presenting children with situations in which a hypothetical protagonist has not yet acted and ask children how the protagonists in the stories would expect to feel if he or she acts in an immoral way—the anticipated emotions version of the task. In this improved task the link between intention and outcome is not present, making it more likely that the attribution of emotions will be in accordance with children's own perspective rather than the victimizer's perspective.

So far, no one has explored how children attribute emotions to a protagonist before the victimization action had been performed. Namely, no one has investigated whether there is a developmental change in the way children attribute emotions in the anticipated emotions version of the task, as observed in the standard task, whether children differ in the way they attribute emotions to a hypothetical victimizer and to themselves in the anticipated emotions version of the task, and whether children differ in the way they attribute emotions in the anticipated emotions version of the task compared to the emotions they attribute in the standard version.

The second goal of the present study is to investigate how children attribute emotions in the anticipated emotions version of the task and compare this with their attribution of emotions in the standard version, both when children attribute emotions to a hypothetical victimizer and when they attribute emotions to themselves as if they were the victimizer. For this purpose, children will be presented with the standard and anticipated emotion versions of the task and asked to attribute emotions to a hypothetical story character and to attribute emotions as if they were the victimizer in the story, following the procedure of probing all the emotion attributions.

As the link between the character's intentions and outcome is weaker in the anticipated emotion version of the task, I expect to find no differences across age groups in the way children attribute emotions to a hypothetical victimizer in the anticipated emotion version of the task. That is, I do not expect to find a developmental change from the attribution of positive to the attribution of negative emotions when children attribute emotions to a hypothetical victimizer in the anticipated emotions version of the task, across age groups. Based on previous findings that report a decrease in the happy victimizer pattern of emotion attributions when children attribute emotions to themselves

as if they were the victimizer, I expect to replicate this decrease of the happy victimizer pattern of emotion attributions in the anticipated emotions version of the task. Finally, comparing emotion attributions between the standard and anticipated emotions version of the task, I expect that children will attribute less positive emotions or will persist less in attributing positive emotions when they attribute emotions to a hypothetical victimizer in the anticipated emotions version than in the standard version of the task. I expect to find no differences in the way children attribute emotions to themselves as if they were the victimizer comparing the standard and anticipated emotions versions of the task.

1.3. Children's Justifications of Negative Emotions Attributions and Moral Development

In the happy victimizer studies children have been asked to attribute emotions to a victimizer and to justify their emotion attributions. Children's justifications enable distinguishing different types of morality that underlie their emotion attributions, and these moral justifications have been also related to children's moral behavior (Arsenio & Fleiss, 1996; Hughes & Dunn, 2000). Children typically justify attributions of positive emotions by referring to the victimizer's gain (e.g., the victimizer feels good because he is playing with the swing). Children generally justify the attribution of negative emotions based on one of two concerns: punishment (e.g., the victimizer is sad because he is afraid of being punished), and morality (e.g., the victimizer is sad because pushing another child of a swing is not right). Justifications based on moral reasons (e.g., the protagonist is sad because he did something that is not right) have been interpreted as a sign of a more advanced morality compared to justifications based on concerns for

punishment because children seem to be more autonomously committed to a moral code compared to avoiding punishment.

However, moral justifications should be analyzed in more detail because they may be informed by two distinct reasons revealing different moral orientations. Moral justifications may be given based on the understanding that breaking a moral rule is not right *per se* or because breaking a moral rule is not right because it leads to an unfair loss or harm for the victims. The first reason suggests a rule oriented, heteronomous morality, and the second suggests a more autonomous morality in which the other's perspective is taken into account (Piaget, 1932). It is difficult, however, to disentangle these two kinds of morality based on only simple answers given by the children to a single question (e.g., why does the protagonist of the story feel happy/sad?). For example, answers such as the victimizer "feels sad because he pushed the other child off the swing" do not permit this distinction. It is possible that behind this justification, lies a rule oriented morality (i.e., he is sad because he broke a rule), or a more sophisticated morality based on coordination of perspectives and consideration of fairness and others' welfare (i.e., he is sad because the other child lost the swing or is hurt). Most studies that investigate the happy victimizer phenomenon do not probe children's justifications for their emotion attributions and thus do not disentangle these different moral orientations that may underlie justifications that have been viewed as morally oriented. To disentangle which of these two kinds of justifications underlie children's initial moral justifications, probing questions such as "why is it not right to push the other child off the swing" need to be asked.

In three studies involving 5- to 10-year-old children (Malti et al., 2008; Malti et al., 2009; Malti & Keller, 2009) researchers have probed justifications for children's emotion

attributions. However, in these studies, justifications considered to be moral were only coded as moral without disentangling the different moral orientations that may underlie them. In the present study I probe 5- to 8-year-old children's moral justifications to avoid confounding justifications based on a rule-oriented morality with concerns for others' rights and welfare.

The third goal of the present study is to investigate whether 5- to 8-year-old children's moral justifications observed in previous studies are linked to different moral orientations. To reach this goal, children's justifications are probed. Based on previous knowledge about children's moral development (Piaget, 1932) I expect to observe an increase in justifications based on concerns for others' rights and welfare across age groups when children justify their emotion attributions in all versions of the task except when children attribute emotions to a hypothetical victimizer in the standard version. In this version, as children may understand the task in different ways it is not possible to predict any results.

1.4. Attribution of Emotions and Social Understanding

Another question that arises regarding children's emotion attributions and justifications in victimization situations concerns the psychological processes that underlie these attributions (Gasser & Keller, 2009; Malti & Krettenauer, 2012; Malti et al., 2008; Menéres & Lourenço, 2004). In this study, I aim to investigate how children's understanding of interpretation as well as children's understanding of mixed emotions may be related to their attribution of emotions to a victimizer in victimization scenarios.

Some researchers (e.g., Arsenio et al., 2006) have suggested that the attribution of negative emotions involves consideration of the impact of the victim's perspective on the victimizer's emotional state. This means that the attribution of negative emotions involves a more sophisticated ability to understand conflicting perspectives. Conversely, the attribution of positive emotions seems to be only focused on the victimizer's perspective (i.e., the obtained gain) and so should be related to a lower ability in understanding and coordinating perspectives. Understanding interpretation—an advanced level of social understanding—refers to the understanding that different people may have different perspectives about the same event, which involves the understanding of conflicting perspectives. For this reason, children's attribution of emotions in victimization scenarios may be related to children's understanding of interpretation. More precisely, I expect that children with more advanced understanding of interpretation will attribute negative emotions or will persist less in attributing positive emotions across probing questions, whereas children who attribute positive emotions and persist in this attribution across probing will show a less advanced understanding of interpretation. I expect to find this association in all versions of the task, except in the standard version when children attribute emotions to a hypothetical victimizer. In this version of the task, as I argued before, it is possible that there are children who attribute positive emotions based on the perspective of the victimizer (i.e., the victimizer feels happy, otherwise he wouldn't have stolen the chocolate) and not based on their own perspective. Therefore, it is not possible to predict what kind of results would be expected due to the ambiguity in how children may interpret this version of the task.

Concerning the relation between children's justifications and their understanding of interpretation, when children attribute emotions to a victimizer, it is expected that

negative emotions justified by concerns with others' loss and harm will be associated with higher levels of understanding of interpretation. In contrast, I expect that positive emotions justified by self gain as well as negative emotions justified by normative reasons and self cost will be associated with lower levels of social understanding.

To my knowledge, only one study (Malti, Gasser, & Gutzwiller-Helfenfinger, 2010) has investigated the relation between children's moral reasoning in victimization scenarios and children's understanding of interpretation. In their study, Malti and colleagues interviewed 5-, 7-, and 9-year-old children and reported a negative correlation only between 9-year-olds' understanding of interpretation (Lalonde & Chandler, 2002) and moral reasoning. In Malti and colleagues' study, the moral reasoning measure combined scores obtained by children's moral evaluation regarding the moral transgression (i.e., is it right or not to commit that moral transgression and why), children's emotion attributions and justifications for children's emotion attributions (i.e., how does the protagonist feel and why?) to a hypothetical victimizer in the standard version of the task. In the present study, I investigate whether children's attribution of emotions in victimization scenarios and children's understanding of interpretation as well as the association between children's justifications and children's understanding of interpretation are related, when emotion attributions and justifications are probed, and when the associations between children's understanding of interpretation and both children's attribution of emotions and justifications are analyzed separately. Also, in the present study I explore whether children's understanding of interpretation is related to their attribution of emotions and justifications, not only in the standard version of the task, but also in the anticipated emotions version of the task. I also assess children's understanding of interpretation with a different task (Carpendale & Chandler, 1996) from

the task that was used previously by Malti and colleagues (Malti et al., 2010) to investigate the relation between these variables.

In line with research that aims to understand the processes that underlie children's attribution of emotions in victimization scenarios, in the present study I also investigate the relation between children's attribution of emotions and their understanding of mixed emotions (Harter & Buddin, 1987; Whitesell & Harter, 1989). More specifically, I investigate whether children who attribute positive emotions and persist more in that pattern of attribution across probing questions, lack an understanding of mixed emotions when compared with children who resist less in changing from attributing positive emotions to negative emotions with probing.

The fourth goal of the present study is therefore to investigate whether there is a relation between the different patterns of children's emotion attributions to victimizers and individual differences in children's social understanding assessed by children's understanding of interpretation and mixed emotions. I expect to observe positive associations between children's understanding of interpretation and their attribution of emotions, in all versions of the task except in the standard version when children attribute emotions to a hypothetical victimizer. I also expect to find a positive association between children's understanding of interpretation and children's justifications in all versions of the task. In addition, I expect that children who persist less in attributing positive emotions to the victimizer, will show a more sophisticated understanding of mixed emotions in all versions of the task except in the standard version, when children attribute emotions to a hypothetical victimizer. I do not expect to find positive associations between the referred variables, when children attribute emotions to a hypothetical victimizer in the standard version of the task because it is possible that in

this version children attribute or persist more in attributing positive emotions to the victimizer based on the victimizers' perspective. For this reason it is not possible to predict what kind of results would be expected concerning children's attribution of emotions and their understanding of interpretation as well as children's attribution of emotions and their understanding of mixed emotions due to the ambiguity in how children may interpret this version of the task.

1.5. Emotion Attributions and Children's Social History – Parenting Styles and Siblings

Although children's understanding of the emotional consequences of immoral actions has been considered a key aspect of children's moral motivation, so far, no studies have investigated aspects of children's social interactions that may underlie the development of different ways of understanding emotions in victimization scenarios. Parental styles, as well as number of siblings, have been documented as being important variables that are correlated with some dimensions of social development, such as false belief understanding and understanding of emotions (e.g., Carpendale & Lewis, 2006, for a review). The way parents describe their parental attitudes, as well as the way they talk with their children about social and moral events are associated with the development of their children's understanding of social and moral situations (e.g., Garner, 2012; Peterson & Slaughter, 2003; Ruffman, Perner, & Parkin, 1999; Turnbull, Carpendale, & Racine, 2008). The present study aims to investigate the relation between parents' ways of talking about disciplinary situations and children's understanding of emotions in victimization situations. Drawing on previous research on parental styles and children's social and moral understanding, my expectation is that

children with parents who encourage them to reflect upon how the victim might feel in disciplinary situations will attribute more negative emotions in victimization scenarios based on concerns for others compared to children of parents who do not explore different perspectives, and instead only discuss victimization behavior as being wrong from the perspective of moral rules.

The number of siblings children have has also been related to their performance on false belief tasks (Carpendale & Lewis, 2004; Jenkins & Astington, 1996; Perner, Ruffman, & Leekam, 1994). Some research has suggested that older siblings but not younger siblings facilitate the development of false belief understanding (Lewis, Freeman, Kyriakidou, Maridaki-Kassotaki, & Berridge, 1996; Ruffman, Perner, Naito, Parkin, & Clements, 1998). As children's understanding of victimization scenarios involves children's social understanding, in this study I also investigated possible sibling effects in children's emotion attributions and justifications in victimization scenarios. Drawing on previous research, a relation between children's number of siblings and their understanding of victimization scenarios is expected. More precisely, I expect that children with siblings (or older siblings) will attribute more negative emotions and give more morally sophisticated justifications in victimization scenarios than children without siblings or only with younger siblings.

In sum, the fifth goal of this study is to investigate the relation between children's emotion attributions and justifications and their social history assessed with parents' ways of talking about disciplinary situations and number of siblings. I expect to find a relation between children's attribution of emotions and justifications and the way their parents talk about disciplinary situations, as well as between children's attribution of emotions and justifications and children's number of siblings in all versions of the task

except in the standard version, when children attribute emotions to a hypothetical victimizer because this version of the task may be interpreted by children in different ways.

1.6. Emotion Attributions and Behavior

The way children think about the emotions experienced in victimization scenarios has been considered a motivational force for children's behavior (Nunner-Winkler, 2013; Gasser et al., 2013). More precisely, children's expectations regarding how a person feels after committing an immoral action have been related to their moral action. Although results from previous studies that have investigated this association between children's attribution of emotions in victimization scenarios and their moral behavior have been inconsistent (e.g., Asendorpf & Nunner-Winkler, 1992; Gasser & Keller, 2009; Hughes & Dunn, 2000; Malti & Keller, 2009) in a recent meta-analysis (Malti & Krettenauer, 2012) an overall significant association between moral emotion attributions and children's prosocial and antisocial behaviors was reported. In this meta-analysis, the attribution of positive emotions in victimization scenarios was related to anti-social behavior, whereas the attribution of negative emotions was related to prosocial behavior. The effect sizes of the studies included differed significantly and were small to moderate. For instance, the effect size found for predicted antisocial behavior was moderate and for predicted prosocial behavior was small. It was also found that the effect sizes for predicted antisocial behavior were larger for self-attributions than for attributions to a hypothetical victimizer.

So far no study has investigated the relation between children's anticipation of emotions in potential victimization situations before the action has been performed and

children's moral behavior. However, when deciding on a certain course of action, considerations about the emotional outcomes of that action occur before not after acting. Moreover, because the anticipated emotions version of the task addresses possible confounding of the standard version, children's attribution of emotions to a hypothetical victimizer in the anticipated emotions version might be a stronger predictor of children's moral behavior than children's attribution of emotions to themselves as if they were the victimizer.

Children's attribution of emotions to themselves as if they were the victimizer appears to be a better predictor of their antisocial behavior than their attribution of emotions to a hypothetical victimizer (Malti & Krettenauer, 2012). In the present study I expand the study of the relation between children's understanding of emotions in victimization scenarios and their moral behavior by investigating the relation between children's attribution of emotions in the anticipated emotions version of the task and their moral behavior.

The sixth goal of this study is therefore to investigate whether there is a relation between children's probed attribution of emotions and justifications and children's social behavior in the standard and also in the anticipated emotions version of the task. I expect to find that children's attribution of emotions in the anticipated emotions version of the task will be related to children's moral behavior. Moreover, I expect that children's attribution of emotions to a hypothetical victimizer in the anticipated emotions version of the task will be a stronger predictor of children's moral behavior than children's attribution of emotions to themselves as if they were the victimizer in any version of the task or than children's attribution of emotions to a hypothetical victimizer in the standard version.

1.7. The Current Study

In sum, the present study is designed to investigate: (1) whether the finding of a decrease in the happy victimizer phenomenon is replicated when children attribute emotions to themselves in the standard version of the task when attributions of emotions are probed and when controlling for order effects; (2) how children attribute emotions in the anticipated version of the task and whether these attributions differ from children's emotion attributions in the standard version; (3) whether children's moral justifications reflect different moral orientations (i.e., based on moral rules versus concern for others) when justifications are probed; (4) the relation between children's attribution of emotions justifications and their social understanding assessed with children's understanding of the interpretive nature of mind, and their understanding of mixed emotions; (5) whether there is a relation between both children's attribution of emotions in victimization scenarios and the parental style children experienced and the number of their siblings; and (6) whether children's attribution of emotions and justifications in the anticipated emotions version of the task are related to their moral behavior.

The present study expands the study of children's understanding of emotions in victimization situations by (1) proposing an improved version of the happy victimizer task; (2) studying a Portuguese sample of 5- to 8-year-old children; (3) investigating how children attribute emotions in the anticipated emotions version of the happy victimizer task; (4) probing children's emotions attributions in order to distinguish children who persist in attributing positive emotions across probing (the committed, or "hard core," happy victimizers), from children who start by attributing positive emotions to the victimizer but are able to attribute negative emotions after probing (the weak, or reluctant, happy victimizers), from children who are not happy victimizers because they

attribute negative emotions to the victimizer in a first place; (5) probing children's justifications in order to distinguish moral justifications based on rule orientation and moral justifications based on concern for the victim; (6) investigating the relation between children's attribution of emotions and justifications and aspects of children's social understanding and social history; and finally, (7) investigating the relation between children's attribution of emotions in the anticipated emotion version of the task and children's behavior.

Chapter 2.

Method

2.1. Participants

A total of 144 children from 5 to 8 years of age, as well as their teachers and parents participated in this study. Four age groups were formed (5-, 6-, 7-, and 8-year-olds), with 36 participants in each group, based on participants' age and grade in school ($M = 5.6$ years, $SD = 0.32$, for kindergarten; $M = 6.3$ years, $SD = 0.44$, for first grade; $M = 7.6$ years, $SD = 0.43$, for second grade; and, $M = 8.6$ years, $SD = 0.37$, for third grade). Each of the groups had the same number of boys and girls, and all of the participants come from native Portuguese families, who were fluent in Portuguese and attended private Portuguese schools in Lisbon. Sixty-three percent of the children's parents had a university degree and thirty-one percent had a college degree. Six percent of the parents had a baccalaureate degree or an advanced vocational diploma. Only three of the families contacted did not allow their children to participate in the study.

2.2. Tasks and Measures

2.2.1. Victimization Stories

Victimization stories about pushing and stealing frequently used in previous studies of the happy victimizer phenomenon (e.g., Keller et al., 2003; Nunner-Winkler &

Sodian, 1988; Malti et al., 2007) were adapted for this study. Children were presented with a standard version of the task in which the protagonist has already performed the action (either pushing another child off a swing or stealing chocolate), and an anticipated emotions version, in which the protagonist has not yet performed the action. All of the stories were illustrated with a sequence of three cartoons in which the characters were depicted so that there was no indication of their emotional states. There were two sets of the same stories, feminine and masculine, so that participants listened to stories with characters of the same age and sex as themselves.

Each child was asked to attribute emotions to a hypothetical victimizer and to themselves as the victimizer in situations involving pushing and stealing in the standard and anticipated emotions version of the task. Thus, each child was presented with eight stories, four for the standard version, and four for the anticipated emotions version of the task (i.e., stealing or pushing, for self and other conditions, in the standard version and in the anticipated emotions version of the task). To make the stories equivalent, the same stories in both versions was presented, changing only the names and physical features of the characters in the way they were depicted (e.g., hair color and clothes). Everything else was kept the same.

Standard Victimization Stories

Pushing a Child off a Swing

This is Marc. Marc is at the playground playing on the swing (cartoon 1). Another boy, John, went to the playground to play with the swing and sees Marc playing there (cartoon 2). John pushed Marc off the swing and plays with it. Marc lies on the ground (cartoon 3).

Stealing a Chocolate

This is Florian and this is Thomas. They are in the classroom in their kindergarten/school, hanging up their coats. Thomas brought a chocolate to eat at lunch time and kept it in the pocket of his coat (cartoon 1). Later on, Florian goes to Thomas' coat and takes the chocolate (cartoon 2). At lunch time Thomas goes to his coat to get the chocolate and sees that it is not there anymore (cartoon 3).

Test Questions – Standard Version

- 1- Primary emotion attribution – *How do you think the protagonist feels in the end of the story? If you were this child, how would you feel in the end of the story? Why?*
- 2- Probe of justification's explanation - *Why is it that _____ makes the protagonist feel good?* (The space refers to the justification given in the previous answer if that was not clear enough. For example, *Why is it that that pushing the other child off the swing makes him feel sad?* [if the justification in the previous answer was the protagonist feels sad because he pushed the other child off the swing]).
- 3- Secondary emotion attribution (only if the child did not attribute opposite emotions in question 1) – *Could the protagonist/you be feeling anything else too? Why?*
- 4- Counter-suggestion (only if the child did not attribute opposite emotions in the questions 2 and 3) - *A child of your age said that the protagonist was feeling/he would feel good/bad. Do you think that (s)he/you could also feel that? Why?*

Anticipated Emotions Stories

Pushing a Child off a Swing

This is Anthony. Anthony is at the playground playing on the swing (cartoon 1). Another boy, Max, went to the playground to play with the swing and sees Anthony playing there (cartoon 2). Max looks at Anthony playing with the swing (cartoon 3).

Stealing a Chocolate

This is Noah and this is Trevor. They are in the classroom in their kindergarten/school, hanging up their coats (cartoon 1). Trevor brought a chocolate to eat at lunch time, and kept it in the pocket of his coat (cartoon 2). Later on, Noah passes by Trevor's coat and looks at the chocolate (cartoon 3).

Test Questions

1 - Anticipation of emotions before victimization - *How is the protagonist going to feel if he pushes the other child of the swing/ gets the chocolate? If you were the protagonist of the story, how would you feel if you pushed the other child of the swing/ get the chocolate? Why?*

2 - Probe of justification's explanation - *Why is it that _____ makes the protagonist feel ____?/ Why is it that ____ would make you feel ____?* (The space refers to the justification given in the previous answer if that was not clear enough. For example, *Why is it that pushing the other child off the swing makes him/her feel sad?* [if the justification in the previous answer was the protagonist feels sad because he pushed the other child off the swing]).

3 - Secondary emotion attribution (only if the child did not attribute opposite emotions in question 1) – *Could the protagonist/you feel anything else too? Why?*

4 - Counter-suggestion (only if the child didn't attribute opposite emotions in the questions 2 and 3) - *A child of your age said that the protagonist was going to feel/he would feel good/bad. Do you think that (s)he/you could also feel that? Why?*

2.2.2. Social Understanding Tasks

Children's social understanding was assessed with tasks that assess understanding of both interpretation and mixed emotions.

Children's Understanding of Interpretation

Three tasks involving ambiguous stimuli, namely, lexical ambiguity, ambiguous referential communication, and ambiguous figures, were used to assess children's understanding of interpretation (Carpendale & Chandler, 1996).

Following Carpendale and Chandler's (1996) procedure, in the lexical ambiguity task the child listened to a story about two puppets, Maxi and Mary, who were told to wait for a ring. Then the experimenter asked each of the two puppets what they were waiting for. Each of the puppets said they were waiting for a different sort of ring. One puppet reported to be waiting for a bell to ring and the other puppet claimed to be waiting for a diamond ring. In the ambiguous referential task, there were three cards depicting a large red square, a large blue square, or a small red square. Again, two puppets were presented and were told that there was a sticker hidden under the card with the large square. Then the experimenter asked each of the puppets where the sticker was. One of the puppets said it was under the card with the large blue square and the other one

said it was under the card with the large red square. In the ambiguous figures task, Jastrow's (1900) "duck-rabbit" figure (Attneave, 1974) was shown to the two puppets and the experimenter asked them what they thought it was. One of the puppets said it was a duck and the other puppet disagreed, claiming it was a rabbit.

After each one of these situations of conflicting interpretations were presented, children were asked the three following questions: an explanation question, *"Is it okay for Mary to say it is a duck and Maxi to say it is a rabbit? Why is (isn't) it okay?"*, a prediction question, *"Now Mary says it is a duck and Maxi says it is a rabbit. If we showed this picture to children in another school would they think it is a duck or a rabbit, or wouldn't you know what they think?"* If the child took a decisive position by saying that the other person would think that the ambiguous figure is a rabbit, he or she was then asked, *"How can you tell what they will think?"* and *"How sure are you that they will think that?"* If the child said *"I don't know"*, he or she was asked *"why is it hard to tell what they will think?"*; and a deviant interpretation question, *"Ann, another girl, says it is an elephant. Does it make sense for Ann to say it is an elephant, or does it not make sense?"* These options were counterbalanced as well as the answers attributed to each one of the puppets.

Children's Understanding of Mixed Emotions

To assess children's understanding of mixed emotions, children were presented with two stories, depicting situations able to elicit two contrary emotions, riding a two-wheel bicycle for the first time, and going to the zoo with the child's mother but without the child's best friend.

Bicycle Story

“Today Jason’s (Jennifer’s) father is going to help Jason (Jennifer) ride a two-wheel bicycle for the first time.”

Zoo Story

“Jason’s (Jennifer’s) [counterbalance] mother is taking Jason (Jennifer) and his (her) best friend to the zoo today. But Jason’s (Jennifer’s) best friend calls on the telephone and says he (she) can’t go because he (she) is sick. So Jason (Jennifer) and his (her) mother will have to go to the zoo without his (her) friend.”

For each one of the stories, children were asked the following questions:

“How might Jason (Jennifer) feel about trying to ride a two wheel bicycle for the first time/going to the zoo without his (her) friend?” If the child’s answer was vague, a clarification question was asked: *“You said.... Can you tell me more about that?”*

If the child referred to two contrary emotions and justified them correctly, the interview ended there. If the child referred to only one emotion, or two similar emotions, the child was asked to think about whether there was something else that the protagonist of the story could feel as well as the first emotion the child mentioned, *“Is there anything else that Jason (Jennifer) might feel at the same time? Why?”* If the child stated an opposite emotion, justifying it correctly, the interviewed ended there. If the child answered that the protagonist of the story didn’t feel anything else, one more probe question was asked, stating that the character of the story felt excited and scared (for the bicycle story) or happy and sad (for the zoo story), and the experimenter asked why would the child feel that way: *“you know what, Jason (Jennifer) felt excited and scared.*

Why did Jason (Jennifer) feel excited and scared riding the two wheel bicycle for the first time?"

2.2.3. Parenting Styles and Siblings

Parental styles were assessed through an adaptation of the questionnaire designed by Ruffman and colleagues (1999) to assess how mothers deal with six disciplinary situations with their children. Mothers were asked to report what they did or would do and say if their own child behaved in a certain way. An example of the disciplinary situations presented is: "Can you remember a time recently when you thought your child was lying to you? What did you (would you) say or do?" An additional situation similar to those described in the victimization stories was added to the original questionnaire. This situation was related to pushing another child in the playground. All of the other 5 questions were the same as the original version (see Appendix A for the complete version of the questionnaire).

Mothers were asked to fill out a questionnaire with questions about the child's number of younger and older siblings, and their age and sex (see Appendix B).

2.2.4. Children's Behavior

Children's behavior was assessed with parents' and teachers' answers to questionnaires. Parents evaluated children's prosocial and antisocial behavior with two subscales, the Conduct Problems Scale and the Prosocial Scale of the Strength and Difficulties Questionnaire (SDQ; Goodman, 1997). The SDQ is a measure that has revealed good psychometric properties. Its five-factor structure (emotional, conduct, hyperactivity-inattention, peer, prosocial) was confirmed and reliability was generally

satisfactory, whether judged by internal consistency (mean Cronbach α .73), cross-informant correlation (mean: 0.34) or retest stability after 4 to 6 months (mean: 0.62; Goodman, 2001). Studies carried out in Portugal provide further evidence of the reliability and validity of this instrument (Marzocchi, Capron, Pietro, Tauleria, Duyme, et al., 2004).

Each one of the scales have five items, describing five behavioral situations, and each one of these items is rated on a three point scale, “not true”, “somewhat true”, and “certainly true” (see Appendix C for the complete version of the scale).

Teachers reported children’s behaviors with the Aggressive Scale Teacher Rating (Dodge & Coie, 1987), rating children from *never* to *almost always*, on 6 items related to general level of aggression, 3 items concerned with reactive aggression, and 3 items concerned with proactive aggression (see Appendix D for the complete version of the scale).

All materials were translated from English into Portuguese by a Portuguese native speaker and back translated into English by a professional English translator. Minor differences were resolved between the two.

2.3. Procedure

Parents and teachers were contacted and asked to fill in the questionnaires about children’s behavior and parental styles, and return them to the researcher or to the teacher in school (this procedure did not provide control over which parent filled out the

questionnaire. Although most of them were filled out by the children's mothers, some may be have been filled out by fathers).

Children were individually interviewed in a spare room at their school. The interviews were audio taped and transcribed. Each child received a total of eight happy victimizer stories, three tasks about interpretation, and two stories about mixed emotions. To control for order effects within each age group, a third of the children were first presented with the happy victimizer tasks, another third, the understanding of interpretation tasks, and another third, the mixed emotions understanding tasks. After having responded to the first set of tasks, half of the children were presented with one of the two remaining sets of tasks followed by the other one. The other half received the second and third set of tasks in the reversed order. For instance, in the group of children who received the happy victimizer tasks first, half of that group then received the understanding of interpretation tasks, followed by the understanding of mixed emotions tasks. The other half received these two social understanding tasks in the reverse order. This same procedure was used for the other two groups, who received first the understanding of interpretation or the understanding of mixed emotions tasks.

The order of presentation of the different stories, within the happy victimizer, the understanding of interpretation, and mixed emotions set of stories were counterbalanced. In the happy victimizer task, there were three factors to be considered, version of the task (standard and anticipated emotions), action of the story (pushing and stealing), and person of emotion attribution (self and other). Accordingly, half of the children in each age group received the standard version of the stories first and the anticipated emotions stories second. The other half received the anticipated emotions stories first, followed by the standard version. Within all conditions, pushing

versus stealing stories and whether children attributed emotions to themselves or to the hypothetical protagonist of the story were counterbalanced. Following these considerations, 18 unique permutations were created, based on a Latin Square randomized procedure. Two participants in each group were randomly assigned to each one of these eighteen permutations. The presentation of the three stories for assessing the understanding of interpretation and the two stories to assess mixed emotions tasks was also counterbalanced. Children were interviewed twice, and in each interview they listen to half of the stories referred to above. Each interview had the duration of approximately 15 minutes.

2.4. Coding

2.4.1. Attribution of Emotions

In order to test the *happy victimizer* pattern of attributions, children's emotion attributions were credited *0 points*, when they attributed positive emotions and kept doing so across probing questions (i.e., confirmed happy victimizers), *1 point*, when children first attributed a positive emotion, but in response to probing questions also stated that the victimizer would feel negative emotions (i.e., "weak happy victimizers"), and *2 points* when children attributed negative emotions but also attributed positive ones, across probing, mixed emotions right away, or when children attributed negative emotions, never changing to positive ones across probing questions (i.e., children who were never happy victimizers). Thus, scores ranged from 0 to 2 in each story condition with lower scores indicating that children persisted more in attributing positive emotions to the victimizer. Previous studies have used similar coding of emotion attributions (e.g., Malti & Keller, 2009; Malti et al., 2008). Twenty-five percent of all responses were coded

by a second rater who was blind to participants' age and sex, and also to the goals of the research. The inter-rater agreement between the two coders was 100%.

2.4.2. Justifications

Drawing on previous studies (e.g., Keller et al., 2003; Malti et al., 2007), children's justifications were coded in one of the following categories: *self gain*, *self-cost*, *normative*, and *other cost*. *Self-gain* justifications were based on the gain of the victimizer, "*I would feel happy because I was playing with the swing*". *Self-cost* justifications were based on fear of punishment, or on negative consequence for the victimizer. Justifications like "*the victimizer feels bad because he is afraid that the teacher saw him taking the chocolate*" or "*the victimizer feels bad because the other child won't play with him anymore*" were included in this category. *Normative* justifications were based on answers in which children referred to norms and rules that should be followed but could not explain why those norms and rules should be followed. Answers like, "*the victimizer feels sad because he did something bad,*" or "*I would feel sad because stealing is bad*" were included in this category. *Other cost justifications* were scored when the justification was based on concerns with the victim's loss or pain. Justifications based on concerns for physical harm, "*the victimizer feels sad because the other child is hurt*", emotional loss, "*the victimizer feels bad because the other child is sad*", or object loss, "*I would feel sad because the other child doesn't have the chocolate anymore*" were included in this category.

From a moral point of view, *self-gain* justifications are the least sophisticated justifications. They are only based on the victimizer perspective and his gains, indicating that the situation is not seen as a moral one. *Self-cost* justifications are slightly more

sophisticated emotions. Although they are also based on the victimizer's perspective, they reveal a moral orientation. Referring to being afraid of being punished shows that the child understands the situation as a moral one. That is, the child understands that a moral rule was broken (something that seems not to be understood by children who attribute positive emotions and justify them with the victimizer's gains). However, these kind of justifications are based on fear, an expression of a low level of morality indicating that the child knows the moral code but feels the motives to follow it are external constraints (i.e., being punished; these justifications may be seen as revealing an heteronomous morality, in Piagetian terms, or an orientation of stage 1 in terms of Kohlberg's stages).

Normative justifications are more sophisticated than *self-cost* justifications. They indicate that children know the moral code and understand the situation as a moral one as in the *self cost* justifications. However, in contrast to the *self-cost* justifications, normative justifications are rule oriented. That is, the reason for following the moral code is not being afraid of being punished, instead it is a personal commitment to the moral code. Although there is a personal commitment to the moral code, the child, in giving these justifications does not show an understanding of the reason for that moral code (i.e., considerations of justice and others' welfare). The child accepts and follows a set of moral norms that are defined by external authorities (like *self cost* justifications, *normative justifications* may be seen as a manifestation of a heteronomous moral orientation, in Piagetian terms). *Normative* justifications like *self cost* justifications do not show an understanding and coordination of conflicting perspectives. Justifications based on *other cost* are the most morally sophisticated ones considered in this study. They indicate that children understand the situation as a moral one, and are able to

consider conflicting perspectives and solve the moral conflict based on considerations of a person's rights and welfare. The child understands the reasons that the moral norms are based on and analyzes the situations in accordance with those reasons rather than in accordance with the norm itself. For these reasons, *self gain* justifications were credited with 0 points, *self cost* were credited with 1 point, *normative* were credited with 2 points, and *other cost* were credited with 3 points. Scores for justifications ranged from 0 to 3 with higher scores indicating more sophisticated moral justifications. Previous studies have coded justifications in a similar way (Gasser & Keller, 2009; Malti et al., 2007, 2009). Twenty-five percent of all responses were coded by a second rater. The inter-rater reliability was $\kappa = .87$. Disagreements were discussed and the consensus solution coded.

2.4.3. Interpretive Understanding of Mind

Following Carpendale and Chandler's (1996) procedure, children's answers to *explanation questions* were coded as failing, and attributed 0 points, if they wrongly stated that it is was not possible for the two puppets to give different interpretations of the situation, stating that one of them was wrong, or if they considered it possible that each puppet can have her own interpretation but could not justify this judgment or justified it purely in terms of internal individual differences without noting the ambiguous nature of the stimulus (e.g., "Because they are different and each one can think different things").

Children's answers were scored as passing, and credited with 1 point, if they judged both interpretations to be legitimate and justified this based on the ambiguous nature of the situation (e.g., "Because you said it's under the red block and there are two

red blocks, a bigger one and a smaller one” or “Because you didn’t say what kind of ring you mean” or “Because it looks like both of those things, a rabbit and a duck”).

In response to the *prediction questions*, children were credited with 0 points if they made a clear prediction about what another person would say in the situation, or if they did not make a prediction but could not justify why it would be impossible to do so. One point was credited when children refused to make a prediction and explained why it would be difficult to do so (e.g., “I don’t know, it can be a duck or a rabbit”, or “I don’t know what he is going to see first”). All children said the deviant interpretations did not make sense, so the answers to the questions about deviant interpretation were not considered in the final coding. A score, ranging from 0 to 2, in each of the ambiguous situations was obtained by summing the points obtained by each child in the explanation and prediction questions. The three tasks were significantly correlated ($r = .55, p = .000$ for correlation between lexical and referential ambiguity, $r = .33, p = .000$, for correlation between lexical ambiguity and ambiguous figures, and $r = .44, p = .000$ for correlation between referential ambiguity and ambiguous figures) and a final score for interpretation, ranging from 0 to 6, was calculated summing the three scores obtained across the three situations. Twenty-five percent of all responses were coded by a second rater and the inter-rater reliability was $\kappa = .91$.

2.4.4. Mixed Emotions Understanding

Drawing on previous research (Harter & Buddin, 1987), children’s answers to the mixed emotion stories were credited with *0 points*, when children were not able to provide any emotion in response to the story; *1 point*, when only one emotion was detected and explained across all probing; *2 points*, when the child spontaneously

detected and explained one emotion, and explained a second emotion, introduced by the experimenter (i.e., *Jason felt excited and scared. Why did Jason feel excited and scared riding the two wheel bicycle for the first time?*); 3 points, when an emotion was detected and explained and a second one was also detected and explained after the experimenter asked if there were other emotions that the child could also feel (i.e., *Is there anything else that Jason might feel at the same time? Why?*); and 4 points, when the child spontaneously detected and explained two opposite emotions. Scores of the two tasks were significantly correlated ($r = .53, p = .000$) and a final score, ranging from 0 to 4, was calculated averaging the scores across the two stories, ranging from 0 to 4. Twenty-five percent of all responses were coded by a second rater and the inter-rater reliability was $\kappa = .94$.

2.4.5. Parental Styles

Drawing from Ruffman and collaborators' coding system (Ruffman et al., 1999) parents' response to each of the six disciplinary situations was credited with 0 or 1 point. If parents explained and explored the situation in some way without referring to the victim's feelings it was credited 0 points. The following types of answers were credited with 0 points: stating that the described situation is wrong and shouldn't happen because it shows bad behavior, without any reference to the victim's feelings; answers indicating that the child was punished; and answers that were not clear enough regarding the way parents did or would deal with the situation. Answers in which parents reported encouraging their child to reflect on the emotional perspective of the victim of the child's transgression were credited with 1 point. Scores were summed across the six disciplinary situations, so the total scores ranged from 0 to 6.

2.4.6. Children's Behavior

Parents' ratings could vary between 0 to 15 points for each one of the two subscales, *Conduct Problems Scale* and *Prosocial Scale*, on the *Strength and Difficulties Questionnaire* (SDQ; Goodman, 1997), resulting in a total score ranging from 0 to 30. Item scores of the *Conduct Problems Scale* were reversed so that higher scores in this scale indicate lower levels of conduct problems. In the *Prosocial Scale* higher scores indicate higher level of prosocial behavior. In the total scale higher scores indicate higher levels of prosocial behavior and less aggressive behavior. From the 144 parents, 107 (74.3%) returned the questionnaires (17, 29, 29, 32 in kindergarten, grade 1, grade 2, and grade 3, respectively). Cronbach's α was .40 and .58 for the Conduct Problems Scale and the Prosocial scale, respectively, and .22 for the whole scale. Cronbach's α for the parents' questionnaires indicate that this measure lacks reliability. For this reason analyses with this variable were not performed.

Teachers' ratings could vary between 0 to 30 in the *General level of aggression subscale*, and between 0 to 15 in both *Reactive aggression* and *Proactive aggression* subscales of the *Aggressive Scale Teacher Rating* (Dodge & Coie, 1987). The total score can vary from 0 to 60, with a higher value indicating lower levels of aggressive behavior. Teachers' ratings were obtained for 122 out of the total of 144 children (84.7%). Cronbach's α were .87 for reactive aggression, .93 for general aggression, and .92 for proactive aggression, and .95 for the whole scale.

Chapter 3.

Results

In the first section of the results I report how children attribute emotions in the various versions of the happy victimizer task across age groups. In the second section, I report whether children's moral justifications reflect different moral orientations, as well whether justifications vary across the various versions of the happy victimizer task. In the third section, I analyze whether children's social understanding and their social history are related to their emotion attributions and justifications. Finally, in the fourth section, I examine the relations between children's moral behavior and their attribution of emotions and justifications across story conditions. Preliminary analysis revealed no gender differences for the hypotheses examined in study, thus this variable is not considered in further analyses.

3.1. Attribution of Emotions

The first goal of this study was to replicate the decrease of the attribution of positive emotions in the standard version of the task when children attribute emotions to themselves in a controlled procedure and when attributions are probed. The second goal was to investigate how children attribute emotions in the anticipated emotions version of the task, namely: whether there is a developmental change from the attribution of positive to the attribution of negative emotions when children attribute

emotions to a hypothetical victimizer; whether children attribute less or persist less in attributing positive emotions when they attribute emotions to themselves as if they were the victimizer compared to when they attribute emotions to a hypothetical victimizer in the anticipated emotions version; and whether children differ in the way they attribute emotions to a hypothetical victimizer in the standard compared to the anticipated emotions versions of the task.

In the total sample, 66.6% of the children gave answers that were credited with 2 points (the reluctant happy victimizers, as 2 points were credited when children attributed negative emotions, but also attributed positive ones, across probing, mixed emotions right away, or when children attributed negative emotions, never changing to positive ones across probing questions). Following this, 19.7% of the children's answers were credited with 1 point (1 point was credited when children first attributed a positive emotion but in response to probing questions also stated that the victimizer would feel negative emotions). Finally, 12.7% of the attributions were credited with 0 points (the "hard core" happy victimizers, as 0 points were credited when children attributed positive emotions and kept doing so across probing questions). In the kindergarten group, 59.3% of the answers were credited with 2 points, 18.8% were credited with 1 point, and 21.9% were credited with 0 points. In grade 1, 56.6% of the answers were credited with 2 points, 27.8% were credited with 1 point, and 15.6% were credited with 0 points. In grade 2, 74.1% of the answers were credited with 2 points, 19.1% were credited with 1 point, and 6.9% were credited with 0 points. In grade 3, 80.6% of the answers were credited with 2 points, 13.2% were credited with 1 point, and 6.2% were credited with 0 points.

Table 1 shows the means and standard deviations of children's emotion attributions for each one of the story conditions in the study, Task version (standard and anticipated emotions), Person (self/other), and Action (stealing and pushing) by Age group. In the present study, younger children had the lowest mean for emotion attributions in the standard version ($M = 1.35$). The older the children the higher the mean for emotion attributions in the standard version of the task ($M = 1.40$, for 6-year-olds; $M = 1.65$, for 7-year-olds; $M = 1.71$, for 8-year-olds), replicating the finding of the happy victimizer phenomenon. This is, younger children tend to attribute more positive emotions or persist more in attributing positive emotions to a hypothetical victimizer than older children.

A 4 (School grade) x 2 (Gender) x 2 (Person: self/other) x 2 (Action: stealing/pushing) x 2 (Task version: standard/anticipated emotions), ANOVA with Person, Action, and Task version as repeated measures, and School grade and Gender as between-subjects factors was performed. Results showed a main effect for School grade, $F(3,144) = 6.13$, $p < .001$, $\eta_p^2 = .13$, indicating that children from different grades persist differently in the happy victimizer pattern of attributions. Post-hoc analysis revealed that children from kindergarten and grade 1 did not differ from each other in the way they attributed emotions ($p = n.s.$, $M_s = 1.37, 1.41$, $SD_s = .51, .52$, for kindergarten and grade 1) and children from grade 2 and grade 3 also did not differ from each other ($p = n.s.$, $M_s = 1.67, 1.74$; $SD_s = .29, .32$, for grade 2 and grade 3). However, the kindergarten group differed from the grade 2 ($p < .05$) and grade 3 groups ($p < .01$) in the way they attributed emotions to the victimizer, with kindergarten children persisting in attributing positive emotions to the victimizer more than children from grade 2 and grade 3. Grade 1 children also differed from grade 2 ($p < .05$) and grade 3 ($p < .01$) with

younger children persisting more in attributing positive emotions to the victimizer. These results indicate that there is a developmental trend in the way children attribute emotions to victimizers. More specifically, kindergarten and grade 1 children attribute more or persist more in attributing positive emotions to victimizers than children from grades 2 and 3. These results indicate a replication of the happy victimizer phenomenon, but they are contrary to the expectation that there would be no developmental trend from the attribution of positive to the attribution of negative emotions when children attribute emotions to a hypothetical victimizer in the anticipated emotions version of the task.

Table 1. Means (SDs) of Children’s Emotion Attributions for Each One of the Conditions by Age Group

| | Age groups | | | | |
|---------------|------------------|------------------|------------------|------------------|------------------|
| | 5-year-olds | 6-year-olds | 7-year-olds | 8-year-olds | Total |
| | <i>Mean (SD)</i> | <i>Mean (SD)</i> | <i>Mean (SD)</i> | <i>Mean (SD)</i> | <i>Mean (SD)</i> |
| Standard | 1.35 (0.59) | 1.40 (0.60) | 1.65 (0.36) | 1.71 (0.43) | 1.53 (0.52) |
| Ant. emotions | 1.40 (0.57) | 1.42 (0.57) | 1.69 (0.33) | 1.78 (0.36) | 1.57 (0.49) |
| Self | 1.40 (0.57) | 1.51 (0.58) | 1.84 (0.28) | 1.85 (0.25) | 1.65 (0.48) |
| Other | 1.34 (0.57) | 1.31 (0.54) | 1.50 (0.44) | 1.64 (0.45) | 1.45 (0.51) |
| Stealing | 1.36 (0.59) | 1.32 (0.57) | 1.58 (0.37) | 1.68 (0.41) | 1.48 (0.51) |
| Pushing | 1.38 (0.57) | 1.50 (0.56) | 1.76 (0.33) | 1.81 (0.31) | 1.61 (0.49) |
| Total | 0.80 (0.45) | 0.92 (0.56) | 1.10(0.30) | 1.20 (0.32) | 1.55 (0.45) |

Note. Means could vary from 0 to 2. For each age group, n=36. For the total group, n=144.

There was also a main effect for Person, $F(1,35) = 33.49, p < .001, \eta_p^2 = .20$ (Ms = 1.65, 1.45, SDs = .48, .51, for attributions to the self as the victimizer and for a hypothetical victimizer, respectively), indicating that children attributed less positive

emotions or persisted less in attributing positive emotions to themselves compared to a hypothetical victimizer. That is, children were less likely to attribute negative emotions to the hypothetical victimizer than to themselves as if they were the victimizer. However, this main effect was qualified by a Person x School grade interaction, $F(3,135) = 2.75, p < .05, \eta_p^2 = .06$, and a Person x Task version interaction, $F(1,135) = 5.18, p < .05, \eta_p^2 = .04$. Simple effect analysis revealed (Bonferroni correction considered) that differences were significant in grade 1, $t(35) = 3.04, p < .01$, Cohen's $d = .36$ (Ms = 1.51, 1.31, SDs = .58, .54, for Self and Other conditions, respectively), grade 2, $t(35) = 4.64, p = .000$, Cohen's $d = .92$ (Ms = 1.84, 1.50, SDs = .28, .44), and grade 3, $t(35) = 3.51, p < .05$, Cohen's $d = .58$ (Ms = 1.85, 1.64, SDs = .25, .45), indicating that older children were significantly less likely to attribute emotions following the happy victimizer pattern when they attribute emotions to themselves compared to when they attributed emotions to a hypothetical victimizer. This tendency was not observed in children in kindergarten ($t(35) = .85, p = \text{n.s.}$, Ms = 1.40, 1.34, SDs = .56, .57), who made the same kind of attributions in both self and other conditions. These results are, partially, in accordance with the hypotheses of this study, according to which I expected to replicate the finding of a decrease in the happy victimizer pattern when children attribute emotions to themselves if they were the victimizers, in a controlled procedure and when emotion attributions were probed, compared to when children attribute emotions to a hypothetical victimizer, in the standard but not in the anticipated emotions versions of the task. The decrease of the happy victimizer pattern was observed in both versions of the task, in the three older groups but not in the 5-year-olds.

Simple effect analysis for the Person x Task Version interaction revealed a significant difference (Bonferroni correction considered) for attributions in the Other

condition, $t(143) = -2.19$, $p < .05$, Cohen's $d = -.20$ (Ms = 1.39, 1.51, SDs = .62, .59, for the standard and anticipated emotions versions of the task), but not in the Self condition, $t(143) = .54$, $p = \text{n.s.}$, Cohen's $d = .04$ (Ms = 1.66, 1.64, SDs = .55, .54), indicating that children attributed more emotions according to the happy victimizer pattern when they attribute emotions to a hypothetical victimizer in the standard than in the anticipated emotions version of the task. This difference was not observed between the two versions of the task when children attributed emotions to themselves as the victimizer. These results are in line with my hypotheses, according to which children were expected to differ in the way they attribute emotions to a hypothetical victimizer, but not to themselves as if they were the victimizer, in the standard compared to the anticipated emotions versions of the task. Children attributed less or persisted less in attributing positive emotions to a hypothetical victimizer in the anticipated emotions version than in the standard version of the task. They did not differ in the way they attributed emotions to themselves as if they were the victimizer when comparing emotions attributions in the standard and anticipated emotions versions.

There was also a main effect for Action, $F(1,135) = 12.47$, $p < .001$, $\eta_p^2 = .09$ (Ms = 1.48, 1.61, SDs = .51, .49, for stealing versus pushing), indicating that children attribute more emotions according to the happy victimizer pattern in the stealing than in the pushing story. No main effects were observed for Task version, $F(1,135) = 1.28$, $p = \text{n.s.}$, $\eta_p^2 = .09$ (Ms = 1.53, 1.57, SDs = .52, .49, for standard and anticipated emotions versions of the tasks), and Gender, $F(1,135) = .338$, $p = \text{n.s.}$, $\eta_p^2 = .02$ (Ms = 1.56, 1.57, SDs = .48, .42, for boys and girls, respectively).

In sum, the analyses of children's emotion attributions showed (a) a developmental change from the attribution of positive emotions to the attribution of

negative emotions when both versions of the task were considered; (b) an increase in the attribution of positive emotions to a hypothetical victimizer compared to the self in all age groups except in kindergarten, in both versions of the task; (c) children were less prone to attribute positive emotions or persisted less in attributing positive emotions to a hypothetical victimizer in the anticipated emotions than in the standard version of the happy victimizer task; (d) there were no differences between the way children attributed emotions to themselves as the victimizer in the standard and anticipated emotions versions of the task. These results indicate that children attribute emotions differently in the standard and modified emotions version of the task when they attribute emotions to a hypothetical victimizer, but not to themselves as if they were the victimizer. Finally, children differ significantly in the way they attributed emotions in the pushing and stealing story, attributing emotions more in accordance with the happy victimizer pattern in the stealing than in the pushing story.

3.2. Justifications

The third goal of this study was to investigate whether children give justifications based on concern for others, when justifications are probed, and to investigate whether children give different justifications in the standard and anticipated emotions version of the task.

Table 2 shows the percentage of the different types of justifications given by children for the whole sample and in each age group, indicating that although other cost justifications are not the most frequently given justifications, 30.3% of the total of justifications were based on concerns for victims' cost. Also, in all age groups at least 23% of the justifications were based on concerns for the victim. These results are in line

with what I expected, according to which moral justifications could be related to different moral orientations, more rule oriented or based on concerns for the welfare and rights of the victim.

Table 2. Percentages of Different Types of Justifications by Age Group

| School grade | Justifications | | | |
|--------------|----------------|-----------|-----------|------------|
| | Self gain | Self cost | Normative | Other cost |
| kindergarten | 22.0% | 42.9% | 33.8% | 23.3% |
| Grade 1 | 15.6% | 25.0% | 26.7% | 32.6% |
| Grade 2 | 6.9% | 12.2% | 52.1% | 28.8% |
| Grade 3 | 6.2% | 8.7% | 48.6% | 36.5% |
| Total | 12.7% | 16.7% | 40.3% | 30.3% |

To analyze whether children gave different justifications in the standard version compared to the anticipated emotions version of the task when they attributed emotions to a hypothetical victimizer and when they attributed emotions to themselves as the victimizer, Wilcoxon signed rank tests were run. Separate analyses comparing the way children attributed emotions in the stealing and pushing stories were run because justifications in the pushing and stealing stories were only weakly and moderately correlated within self and other attribution, in the standard and in the anticipated emotions versions of the task ($r_s = .23, p < .01$, for self attributions in the standard task; $r_s = .21, p < .05$, for other attributions in the standard task, $r_s = .25, p < .01$, for self attributions in the anticipated emotions task; and $r_s = .40, p < .001$, for attributions to a hypothetical victimizer in the anticipated emotions task).

Wilcoxon tests showed that in the pushing story across the whole sample, children gave less sophisticated moral justifications for a hypothetical victimizer in the standard than in the anticipated emotions version of the task (Wilcoxon $Z = 2.39$, $p = .017$). These differences were not observed when children attributed emotions to a hypothetical victimizer in the stealing story (Wilcoxon $Z = -.68$, $p = \text{n.s.}$), nor when separate analyses were run within each age group (Wilcoxon $Z = -.04$, $p = \text{n.s.}$, for kindergarten, Wilcoxon $Z = -.34$, $p = \text{n.s.}$, for grade 1, Wilcoxon $Z = -.29$, $p = \text{n.s.}$, for grade 2, and Wilcoxon $Z = -.29$, $p = \text{n.s.}$, for grade 3, for pushing story; Wilcoxon $Z = -1.66$, $p = \text{n.s.}$, for kindergarten, Wilcoxon $Z = -.67$, $p = \text{n.s.}$, for grade 1, Wilcoxon $Z = -.54$, $p = \text{n.s.}$, for grade 2, and Wilcoxon $Z = -1.10$, $p = \text{n.s.}$, for grade 3, for stealing story).

Analyses of children's justifications for the emotions they attributed to themselves as the victimizer showed that when the whole sample was considered children did not give different justifications between the standard and anticipated emotions versions of the task, in both stealing (Wilcoxon $Z = -.48$, $p = \text{n.s.}$) and pushing stories (Wilcoxon $Z = -1.8$, $p = \text{n.s.}$). Analyses performed by age group showed that children from kindergarten and grade 1 gave different justifications in the standard and anticipated emotions version of the stealing story (Wilcoxon $Z = -2.62$, $p < .01$, for kindergarten and Wilcoxon $Z = -2.16$, $p < .05$, for grade 1). However, these differences are not similar. Kindergarten children gave more sophisticated moral justifications in the standard than in the anticipated emotions version of the task. Grade 1 children gave more sophisticated justifications in the anticipated emotions version. Children from grade 3 also gave different justifications between the standard and anticipated emotions in the pushing story (Wilcoxon $Z = -2.13$, $p < .05$). In this case more sophisticated moral

justifications were given in the standard not in the anticipated emotions version of the task. No other significant differences were found when comparisons regarding the way children attribute emotions to themselves between the standard and anticipated versions of the task were made within each age group (Wilcoxon $Z = -1.16$, $p = n.s.$, for kindergarten, Wilcoxon $Z = .67$, $p = n.s.$, for grade 1, Wilcoxon $Z = -1.31$, $p = n.s.$, for grade 2, for the pushing story; Wilcoxon $Z = -.595$, $p = n.s.$, for grade 2, and Wilcoxon $Z = -.40$ $p = n.s.$, for grade 3, in the stealing story).

In sum, the analysis of justifications showed that when justifications are probed, children as young as 5 years of age gave justifications based on concerns for the victim's welfare and rights. These results show that moral justifications were related to two distinct moral orientations, one, rule oriented, and another based on concerns for the well being and rights of the victim. Regarding the way children justified their emotion attributions, comparing justifications in the standard and anticipated emotions versions of the task, children differed in the way they justified their emotion attributions in very few cases. When children attributed emotions to a hypothetical victimizer these differences were only observed in the pushing story, when the whole sample was considered. When children attributed emotions to themselves as if they were the victimizer there were differences in kindergarten and grade 1 group in the stealing story and in grade 3 in the pushing story. No other differences were observed when comparing justifications between the standard and anticipated emotion versions of the task.

3.3. Attribution of Emotions and Social Understanding

The fourth and fifth goals of the present study were to investigate whether there was a relationship between children's attribution of emotions and social understanding

(assessed by children's understanding of interpretation and mixed emotions) and between children's attribution of emotions and their social history (assessed with parents' ways of talking about disciplinary situations and number of siblings).

Table 3 shows the means and standard deviations for children's understanding of interpretation and mixed emotions, as well as the means and standard deviations of children's number of siblings and the way parents talk with their child about disciplinary situations. To test whether children's attribution of emotions were related to their understanding of interpretation, correlations were run between children's attribution of emotions and their understanding of interpretation, for each one of the eight story conditions (self/other x pushing/stealing x standard/anticipated). As children's understanding of interpretation was correlated with their age ($r = .47$ $p < .001$), partial correlations, controlling for age, were run. Contrary to what was expected, correlations between children's attributions of emotions and their understanding of interpretation were low and non-significant (correlations ranged from $-.07$ to $.12$) in each one of the eight story conditions.

Table 3. Means (SD) of Interpretive Understanding, Mixed Emotions, Number of Siblings and Parents' Style by Age Group

| | Age group | | | | |
|-------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| | 5-year-olds | 6-year-olds | 7-year-olds | 8-year-olds | Total |
| | <i>n</i> Mean (SD) Range | <i>n</i> Mean (SD) Range | <i>n</i> Mean (SD) Range | <i>n</i> Mean (SD) Range | <i>n</i> Mean (SD) Range |
| Interpretation | 36 .72 (0.74) 0-6 | 36 1.75 (1.50) 0-6 | 36 2.61 (2.02) 0-6 | 36 3.22 (1.88) 0-6 | 144 2.08 (1.86) 0-6 |
| Mixed emotions | 36 1.53 (0.55) 0-4 | 36 2.31 (0.61) 0-4 | 36 2.54 (0.51) 0-4 | 36 2.76 (0.65) 0-4 | 144 2.28 (0.74) 0-4 |
| Total siblings | 17 1.45 (1.03) - | 29 1.21 (0.73) - | 29 1.34 (1.08) - | 32 1.29 (0.59) - | 107 1.33 (0.9) - |
| Older siblings | 17 0.77 (1.09) - | 29 0.62 (0.73) - | 29 0.76 (1.15) - | 32 0.76 (0.75) - | 107 0.73 (0.96) - |
| Disciplinary situations | 17 0.76 (0.90) 0-6 | 29 0.55 (0.83) 0-6 | 29 0.55 (0.87) 0-6 | 32 0.69 (0.93) 0-6 | 107 0.62 (0.87) 0-6 |

To test whether children's justifications were related to their understanding of interpretation, a new dichotomous variable, based on children's justifications, was created. *Self gain*, *self cost*, and *normative* justifications were credited with 0 points, as they do not involve perspective taking. *Other cost* justifications were credited with 1 point, as they involve perspective taking, by explicitly referring to concern for the victim's harm or loss. Spearman's correlations were run separately within each age group (as children's understanding of interpretation was correlated with children's age) for each one of the eight story attribution conditions (self/other x pushing/stealing x standard/anticipated). Contrary to expectations, the analyzed correlations showed values between -.14 and .37 and all but one did not reach statistic significance. The

significant correlation was observed in grade 2, when children attributed emotions to themselves as the victimizer, in the standard version of the pushing story ($r_s = .37, p < .05$). Children's justifications of their emotion attributions to a hypothetical victimizer in the standard version of the task and their understanding of interpretation were not correlated ($r_s = .07, n.s.$).

To test whether children's attributions of emotions were correlated with their understanding of mixed emotions, correlations were run between these two variables for each one of the 8 story conditions. As understanding of mixed emotions were correlated with age ($r = .60, p < .001$), partial correlations were run controlling for age. All of the 8 calculated correlations were low and non-significant (correlations ranged from $-.09$ to $.22$). These results are contrary to what was expected.

Because in the previous analyzed variable for emotion attributions the higher scores involved children who attributed negative emotions without changing across probing, a new ordinal variable based on children's tendency to attribute mixed emotions was created to analyze the relationship between children's attribution of emotions and their understanding of mixed emotions. In this new variable, attributions of positive or negative emotions without changing across probing questions were credited with 0 points. Attributions of mixed emotions across probing were credited with 1 point. Attributions of mixed emotions right away (11.5% of the total of the attributions) were credit with 2 points. As understanding of mixed emotions was correlated with children's age, Spearman correlations were run within each age group. Contrary to expectations, all correlations, except two, ranged from $r_s = -.22$ to $r_s = .3$ and were non-significant. Two significant correlations were found in grade 2, when children attributed emotions to

themselves as the victimizer in the anticipated emotions version of the task of the pushing ($r_s = .42, p < .05$) and stealing ($r_s = .38, p < .05$) stories.

In sum, regarding the relation between children's attribution of emotions and their understanding of interpretation, contrary to what was expected, no correlations between these two variables were observed. Also, in contrast to what was anticipated, children's justifications were not correlated with children's understanding of interpretation when children attributed emotions to themselves in both versions of the task and when they attributed emotions to a hypothetical victimizer in the anticipated emotions version of the task. Regarding children's attribution of emotions and their understanding of mixed emotions, again, in contrast to what was expected, there were no significant correlations between these two variables within any of the 8 story conditions. Supplementary analyses, testing the correlation between children's attribution of emotions and their understanding of mixed emotions, using a variable measuring how prone children were to attribute mixed emotions, showed that these two variables were only correlated in grade 2 when children attributed emotions to themselves as if they were the victimizer in both stealing and pushing story. However, these two correlations were contrary to what was expected.

3.4. Attribution of Emotions and Children's Social History

The fifth goal of this study was to investigate whether there is a relationship between children's attribution of emotions and justifications in victimization situations and their social history assessed with parents' ways of talking about disciplinary situations and the number of siblings the children have. To determine if there was a positive relation between the way parents talk about disciplinary situations and children's

attribution of emotions, correlations between these two variables were calculated within each one of the 8 stories. As children's attribution of emotions was significantly correlated with age in all story conditions (except in the stealing story, when children attributed emotions to a hypothetical victimizer in the anticipated emotions version of the task), partial correlations for emotion attributions were run. Contrarily to what was expected results showed that there were no significant correlations between the way parents talk about disciplinary situations and children's attributions of emotions in any version of the task (correlations ranged from $-.06$ to $.18$ and did not reach statistical significance).

Regarding the relation between children's justifications and the way parents talk about disciplinary situations, analyses were run to test if children's justifications were correlated with age. Children's justifications were correlated with age when children attributed emotions to themselves as the victimizer in all of the conditions ($r_s = .23, p < .01$; $r_s = .29, p < .001$, for stealing stories, in the standard and anticipated emotions versions of the task; $r_s = .34, p < .001$; $r_s = .24, p < .01$, for pushing stories, in the standard and anticipated emotions versions of the task). When children attributed emotions to a hypothetical victimizer, justifications were only correlated with age in the standard version of the stealing story ($r_s = .17, p < .05$). Justifications were not correlated with age in any of the other story conditions when children attributed emotions to a hypothetical victimizer ($r_s = .05, p = \text{n.s.}$, for the standard version of the pushing story, and $r_s = .16, p = \text{n.s.}$ and $r_s = .11, p = \text{n.s.}$, for the anticipated emotions version of the stealing and pushing stories). Correlations were run separately within each age group in the stories where justifications were correlated with age. Contrary to expectations, the way parents talk about disciplinary situations was not correlated to

children's justifications when they attributed emotions to a hypothetical victimizer in the standard version of the task (correlations ranged from $-.0$ to $.12$ and did not reach statistical significance), nor when children attributed emotions to themselves as if they were the victimizer in both the standard and anticipated emotions version of the task, and when they attributed emotions to a hypothetical victimizer in the anticipated emotions version of the task (correlations ranged from $.03$ to $.32$ and did not reach statistical significance).

The number of siblings the children had ranged from 0 to 5. Eleven children had 0 siblings, 64 had 1 sibling, 22 had 2 siblings, 8 had 3 siblings, and 2 children had 5 siblings. Considering only older siblings, 53 had no older siblings, 38 had 1 older sibling, 12 had 2 older siblings, 2 had 3 older siblings, and 2 had 5 older siblings. Parents of 38 children did not return the questionnaires so it was not possible to know the number of siblings these children had.

To analyze whether there was a positive relation between the number of siblings children had (considering older siblings only, or any siblings) and children's attribution of emotions, partial correlations, controlling for age, were run for each one of the 8 stories. Contrary to expectations, correlations ranged from $-.03$ to $.22$ and were not statistically significant.

Finally, to investigate whether there was a relation between children's justifications and their number of siblings, Spearman's correlations were run. Correlations were run separately within each age group in the stories where justifications were correlated with age. Among all of the calculated correlations, only two were statistically significant, namely, for grade 2 and grade 3 children's attribution of emotions

to themselves in the standard version of the task, in the pushing story ($r_s = -.47, p < .05$, $r_s = -.38, p < .05$ for grade 2 and grade3). All of the other correlations ranged from $-.01$ to $.22$ and were non-significant. Although significant, these correlations are contrary to what was expected. I expected positive correlations between children's justifications and their number of siblings when they attributed emotions to themselves as if they were the victimizers and when they attributed emotions to a hypothetical victimizer in the anticipated emotions version of the task. There were only two situations where correlations were found. However, they were negative not positive correlations, contrary to my prediction. Contrarily to what was expected, no correlations were found between children's justifications and their number of siblings when they attributed emotions to a victimizer in the standard version of the task.

In sum, in contrast to what was anticipated, children's attributions of emotions and justifications were overall not related with children's social history, namely with the way parents talk with them about disciplinary situations and with children's number of siblings. There were two situations in which children's justifications and children's number of siblings were significantly correlated. However, although moderate, those were negative correlations, and so, contrary to what were expected.

3.5. Attribution of Emotions and Children's Behavior

The last goal of this study was to investigate if the attribution of emotions to a hypothetical victimizer in the anticipated version of the task, was related to children's social behavior and if children's attribution of emotions to a hypothetical victimizer, in the anticipated emotions version of the task could account for more explained variability of children's moral behavior than children's attribution of emotions in the other versions of

the task (i.e., self attributions in the standard and anticipated version of the task and attributions to a hypothetical victimizer in the standard version of the task).

Table 4 shows the means and standard deviations for behavior scores from teachers' ratings, by age group. Table 5 shows the correlations between teachers' measures of behavior and the children's attributions of emotions. Partial correlations controlling for age between children's attribution of emotions in each one of the stories and children's behavior were run. Correlations ranged from $-.19$ to $.18$ and were not statistically significant. Spearman correlations were run between children's justifications and children's behavior within each age group. All correlations ranged from $-.11$ to $.17$ and were non significant.

In sum, no significant correlations were found between children's behavior and children's emotion attributions and justifications. These results are contrary to what was predicted. It was expected that children's attribution of emotions to a hypothetical victimizer in the anticipated emotions version of the task would be a stronger predictor of their moral behavior than their attribution of emotions to themselves as if they were the victimizer in any version of the task or than their attribution of emotions to a hypothetical victimizer in the standard version. In this study, children's attributions of emotions and justifications in those stories conditions were not significantly correlated with children's behavior.

Table 4. Means (SDs) of Teachers' Ratings of Behavior by Age Group

| | Age group | | | | |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 5-year-olds | 6-year-olds | 7-year-olds | 8-year-olds | Total |
| | <i>n</i> Mean (SD) | <i>n</i> Mean (SD) | <i>n</i> Mean (SD) | <i>n</i> Mean (SD) | <i>n</i> Mean (SD) |
| Behavior (total score) | 36 3.20 (0.72) | 28 2.75 (1.25) | 23 3.33 (0.65) | 36 2.97 (0.94) | 123 3.08 (0.91) |
| Reactive aggression | 36 2.83 (0.85) | 28 2.26 (1.31) | 23 2.89 (0.75) | 36 2.59 (1.13) | 123 2.66 (1.03) |
| General aggression | 36 3.21 (0.73) | 28 2.79 (1.36) | 23 3.39 (0.73) | 36 2.98 (0.95) | 123 3.10 (0.96) |
| Proactive aggression | 36 3.53 (0.71) | 28 3.16 (1.29) | 23 3.67 (0.66) | 36 3.33 (1.05) | 123 3.44 (0.93) |

Note. Means could vary from 0 to 5.

Table 5. Partial Correlations Between Children’s Emotion Attributions and Children’s Behavior

| | Behavior | | | |
|-----------------|---------------------------|------------------------|-----------------------|-------------------------|
| | Behavior (total score) | Reactive aggression | General aggression | Proactive aggression |
| Std Other Steal | .05 | .00 | .06 | .07 |
| Std Other Push | .01 | -.04 | .03 | .03 |
| Ant Other Steal | .04 | .02 | .05 | .04 |
| Ant Other Push | -.08 | -.15 | .06 | -.01 |
| Std Self Steal | -.12 | -.19 | -.10 | -.06 |
| Std Self Push | .15 | .07 | .16 | .18 |
| Ant Self Steal | .25 | -.01 | -.01 | -.14 |
| Ant Self Push | -.28 | -.04 | -.02 | -.02 |

Chapter 4.

Discussion

The present study aimed to: (a) replicate the finding of a decrease in attribution of positive emotions when children attribute emotions to themselves as the victimizer compared to a hypothetical victimizer, in a methodologically controlled procedure, and with probing children's attributions; (b) investigate how children attribute emotions in the anticipated emotions version of the happy victimizer task and how these emotion attributions differ from attributions in the standard version of the task; (c) investigate whether different moral orientations underlie moral justifications, and whether children give different kinds of justifications in the standard compared to the anticipated emotions version of the task; (d) investigate whether children's attribution of emotions and justifications are related to their understanding of interpretation and mixed emotions; (e) investigate whether there is a relationship between the children's emotion attributions and justifications and the way their parents talk about disciplinary situations and children's number of siblings; and (f) investigate whether children's behavior is more strongly related to children's attribution of emotions in the anticipated emotions than in the standard version of the happy victimizer task.

In the present study, children attributed emotions to a hypothetical victimizer in the standard version of the task following the same pattern of emotion attributions observed in previous studies. Five- and 6-year-old children attributed more positive

emotions to the victimizer than 7- and 8-year-old children (e.g., Malti & Keller, 2009; Nunner-Winkler & Sodian, 1988). Therefore, this is a cross-linguistic and cross-cultural replication of the happy victimizer phenomenon in a Portuguese population that is also consistent with previous research on the happy victimizer phenomenon in Portugal (Keller et al., 2003; Lourenço, 1997).

Concerning children's attribution of emotions to themselves as the victimizer and to a hypothetical victimizer, in the present study, 6-, 7-, and 8-year-old, but not 5-year-old children, attributed less positive emotions when they attributed emotions to themselves as the victimizer compared to attributing emotions to a hypothetical victimizer. These results partially replicate previous research and extend earlier findings by showing a developmental change in the way children differentiate attribution of emotions to themselves as the victimizer compared to a hypothetical victimizer. Previous studies have described a decrease in the attribution of positive emotions, even in kindergarten children (Keller et al., 2003; Malti et al., 2007; Malti & Keller, 2009), when they were asked to imagine themselves as the victimizer. However, none of the previous studies have investigated how children attribute emotions to themselves as the victimizer compared to a hypothetical victimizer in a procedure controlled for order and with probed attributions. These results raise questions about the strength of younger children's decrease of attribution of positive emotions when children attribute emotions to themselves as if they were the victimizer in procedures where attributions are not probed (Arsenio, 2010; Nunner-Winkler, 2007; Weirsmann & Laupa, 2000). However, the present study is the only one that has tested children's emotion attributions in victimization scenarios in a controlled and probed procedure. More studies aiming to replicate this finding should be conducted.

The reasons why children attribute less positive emotions to themselves than to a hypothetical victimizer are unclear as well as the meaning of these differences for children's moral development. For example, the decrease of the attribution of positive emotions when children attribute emotions to themselves might be related to children's growing awareness of the social meaning of feeling good after having victimized another child. If this is the case, children's self attributions might reflect children's awareness of the social norms rather than their expectations regarding the emotional outcomes of victimization situations. Further research should carefully investigate possible reasons for these differences and their meaning for children's moral development.

Another goal of the present study was to investigate the kind of emotions children attribute in the anticipated emotions version of the task, and whether children attribute different emotions comparing the standard and the anticipated emotion versions of the task. In the present study, children's attribution of emotions in scenarios of victimization revealed a developmental shift from a tendency to attribute positive emotions to victimizers to a tendency to attribute negative emotions. Five- and 6-year-old children attributed more emotions in accordance with the happy victimizer pattern than 7- and 8-year-olds, even when children's attributions were probed in both versions of the task. These results are in accordance with previous research, which has reported a developmental shift around 6 to 7 years of age, from an attribution of positive to the attribution of negative emotions when children attribute emotions to a hypothetical victimizer in the standard version of the task (Barden et al., 1980; Keller et al., 2003; Nunner-Winkler & Sodian, 1988).

The results, however, also extend previous research by reporting this developmental shift when children attribute emotions in the anticipated emotions version

of the task. Despite this observed developmental shift, children attributed less or persisted less in attributing positive emotions to a hypothetical victimizer in the anticipated emotions version of the task than in the standard version. These results indicate that children differ in their emotions expectancies when they assess the emotional outcome of a hypothetical transgressor who had already transgressed a moral rule, victimizing another child in order to obtain a personal gain, as being different from the emotional outcome that is anticipated before the immoral action being performed. The reasons for these differences are also unclear. Following my critique of the standard version of the happy victimizer task, one possible reason for this difference is that children who respond to the standard version of the task by saying that the victimizer would feel happy do so because they respond to the task as requiring taking the perspective of the victimizer rather than assessing the morality of the action. That is, children may be attributing emotions to the hypothetical victimizer in the standard version of the task in accordance to what they consider to be the perspective of the victimizer (i.e., someone who feels good, otherwise the victimizer would have not performed the action), rather than in accordance to children's own perspective regarding that situation.

In the present study, children's attribution of emotions was not related to their understanding of interpretation. However, future research should investigate what may explain the differences that are observed between children's attribution of emotions to a hypothetical victimizer in the standard version compared to the anticipated emotions version of the happy victimizer task. Since the present study is the only one that has compared children's emotion attributions in the standard and anticipated emotions

versions of the happy victimizer task more studies aiming to replicate this finding should be conducted.

Although not directly related to the goals of the present study, results showed that children attributed more negative emotions in the story involving pushing another child off a swing than in the story about stealing a chocolate. These results are in accordance with previous research (Keller et al., 2003; Lourenço, 1997). Although previous studies have found these differences, none of them have elaborated on possible reasons for these differences. Pushing another child off a swing occurs in a playground where there are usually other children and adults supervising, whereas stealing a chocolate might usually occur in a quiet hallway of the school without being observed. It may be that this difference in how private or public the situation is may influence differences in children's emotion attributions. Also, the cost to the victim in the pushing story (i.e., physical aggression) is more salient than in the stealing situation. However, previous research has shown that the salience of the victim does not have an impact on children's attribution of positive emotions to the victimizer (Arsenio & Kramer, 1992). Children's higher proneness to attribute negative emotions in the pushing than in the stealing story may be more related to the context where the action happens than to the salience of the victim's cost. Studies in which these differences are investigated by manipulating the salience of the cost for the victim and the context where it happens (i.e., public or private) could provide information about the role of these aspects of the situations in children's emotion attributions in victimization scenarios.

Another goal of the present study was to investigate whether the reasons behind the moral justifications were mainly rule oriented or may also be due to concern for others' harm and loss. Results from the present study showed that 33% of the

justifications given by children were based on concern for the victim's harm and loss, and children as young as 5 years old were able to give this type of justification. This is a new result since previous studies, even when probing justifications procedures were followed, did not report finding this kind of justification (Malti et al., 2008; Malti et al., 2009; Malti et al., 2010). This difference between the present study and previous studies may be due to different probing procedures. It is possible that probing in the present study was more extensive than in previous studies. If children, as young as 5 years old are able to give justifications based on concern for others' harm and loss, considerations about children's moral understanding drawn from children's moral justifications, when justifications were not probed, should be done cautiously.

Another goal of this study was to investigate whether children give different justifications in the standard and anticipated emotions version of the task. Results show that when children attributed emotions to a hypothetical victimizer, they gave more sophisticated moral justifications in the anticipated version than in the standard version of the task in the pushing story. In the stealing story children did not differ in their justifications comparing the standard and anticipated emotions versions of the task. When children attributed emotions to themselves as if they were the victimizer there were no differences in children's justifications within age groups between the standard and anticipated emotions versions of the task, except in three cases. These results highlight the fact that the moral justifications considered in previous studies may be based on various forms of moral orientation. Therefore, they should be viewed cautiously when drawing inferences about children's moral development.

Another goal of the present study was to investigate how children's understanding of interpretation and mixed emotions is related to children's attributions of

emotions and their justification for these emotions in victimization scenarios. Results showed that children's attribution of emotions and justifications were not correlated with children's understanding of interpretation and mixed emotions in any versions of the task investigated in the present study. These results are in accordance with previous research (Malti et al., 2010), indicating that understanding of victimization scenarios seems to be related to other variables rather than the assessed aspects of social understanding. These results suggest that understanding victimization situations and social understanding may not be related, at least at young ages. However, results found in the present study should be carefully examined. Children in the present study performed poorly in the understanding of interpretation task, so results for understanding of interpretation lacked variability. The task used to assess understanding of interpretation (Carpendale & Chandler, 1996) might have been too demanding for the young participants of the present study as it requires verbal awareness of interpretation (children had to verbally explain why is it possible and reasonable that two people think differently about the same situation and say if it is possible to predict what a third individual will think about the ambiguous stimulus). Other studies using alternative tasks that may capture more rudimentary levels of younger children's understanding of interpretation could clarify this relationship. For example, Lalonde and Chandler's (2002) understanding of interpretation tasks used in previous studies (Malti et al., 2010) may be less demanding. In those tasks children have to interpret the ambiguous parts of drawings from the perspective of two different puppets but they are only asked about what each one of the two puppets might think about the ambiguous drawing. Children are not required to explain why it is possible for two individuals to think different things about the same event.

Results of the present study showed no relationship between children's attribution of mixed emotions and children's understanding of mixed emotions. Once more, children in the present study performed poorly in the understanding of mixed emotions task, so results for this variable lacked variability. To my knowledge the present study is the only one that has investigated this relationship. As previous studies have shown, 6- and 8-year-olds, but not 4-year-old children are able to attribute mixed emotions to victimizers (Arsenio & Kramer, 1992; Lourenço, 1997). Future studies using another task capable of capturing higher variability in children's answers may investigate further if there is a relation between children's attribution of mixed emotions and their understanding of mixed emotions.

Unexpectedly, no relations were found between children's attribution of emotions and justifications and their social history assessed with parents' ways of talking about disciplinary situations and children's number of siblings. These results contrast with previous research reporting relations between the way parents talk with children about the social and moral world (e.g., how parents deal with disciplinary situations) and children's moral understanding and moral behavior (e.g., Dunn, Brown, & Maguire, 1995; Kochanska, Gross, Lin, & Nichols, 2002; Laible & Thompson, 2000, 2002; Zahn-Waxler, Radke-Yarrow, & King, 1979). These results suggest that the way parents talk about disciplinary situations does not play a key role in children's development of an understanding of emotions in victimization scenarios. Previous studies in which the relation between the way parents talk with children about disciplinary situations and children's social understanding have been investigated usually include 3- and 4-year old children as these studies usually investigate children's understanding of first order false beliefs as a measure of children's social understanding. In the present study,

participants were older than 5 years of age, so it possible that the way parents talk about disciplinary situations in terms of others' emotions and mental states may be important for younger children's social understanding but not for older children. Other and more sophisticated aspects of parents talk with their children might be investigated as critical for older children's development of their social and moral understanding. However, in the present study, there was a low frequency of parents' answers reporting references to the victim's feelings and emotional states. This low variability of parents' answers may explain the lack of association between the way parents talk about disciplinary situations and children attribution of emotions and their justifications. Other ways of assessing the way parents talk about disciplinary situations, such as naturalistic observations or controlled procedures that elicit parents' ways of taking about disciplinary situations or about different aspects of the moral world (e.g., Racine, Carpendale, & Turnbull, 2006, 2007), should be considered in future research.

A sibling effect related to children's understanding of victimization scenarios was not observed in the present study. Previous research has shown that children with older siblings pass false belief tasks earlier than children with no siblings (e.g., Jenkins & Astington, 1996; Perner, Ruffman, & Leekam, 1994). In the present study, children's attribution of emotions in victimization scenarios was not related to the presence of siblings or older siblings in these children's lives. These results are in line with several studies that report no relation between children's number of siblings and their social understanding. For example, in one study (Jenkins & Astington, 1996) it was found that the effect of the family size in children's development of false belief understanding was moderated by children's language ability. Specifically, the family size showed to be strongly associated with children's understanding of false beliefs when children's

language ability was low but not when children's language was high. As in the present study language ability was not assessed it was not possible to investigate this possibility. Some studies have proposed that the quality of sibling relationships, such as children's strategies to resolve conflict with siblings, is a critical variable for the development of children's understanding of second-order false belief understanding (Recchia & Howe, 2009). Therefore, it might be that variables such as the quality of the siblings relationship, and not just the number of siblings, may be related to children's understanding of emotions in victimization situations. Future research aiming to understand the relation between children's understanding of victimization scenarios and children's social life should also explore these possibilities.

Finally, children's emotion attributions in victimization situations have been considered a motivational force for children's behavior (Arsenio, 2010; Blasi, 1980, 1983, 1995; Kohlberg & Candee, 1984). Children's attribution of emotions in any versions of the happy victimizer task investigated in this study was not correlated with teachers' reports of children's aggressive behavior. Contrary to my prediction, children's attribution of emotions and justifications in the modified version of task were not correlated with teachers' reports of children's aggressive behavior. These results are consistent with other studies reporting no relation between children's attribution of emotions and antisocial behavior (Arsenio & Fleiss, 1996; Hughes & Dunn, 2000). However, they are contrary to results reported in the recent meta-analysis conducted by Malti and Krettenauer (2012) according to which children's attribution of emotions are related to children's antisocial and prosocial behavior. Several hypotheses may explain these results. First, children's behavior measures were broad measures of behavior. In this kind of behavioral measure the items used to assess behavior, namely, aggressive

behavior, are based on overt aggressive behavior (e.g., *starts fights with peers, when teased, strikes back*). Measures of one specific domain, for example, stealing, might be more closely related to emotions attributions about stealing situations (Malti & Krettenauer, 2012). Second, other reports, such as teachers' reports, may also report a biased subjective perception of the child's behavior. The use of other measures of behavior such as peer nominations, self reports or behavior observation should be investigated as the use of different measures enables controlling for possible biases. In the present study, I planned to have two measures of behavior, one from parents' reports and another from teachers. Parents' reports did not prove to be a reliable measure, a result that compromised the possibility of having more than one measure of behavior.

Concerning parent's ratings of their children's behavior, the present results obtained from parents' answers on the Strength and Difficulties Questionnaire were not reliable. This is difficult to understand because several studies have been conducted with Portuguese samples that have supported the psychometric qualities of this questionnaire (Marzocchi, et al., 2004)

The present study aimed to expand the study of children's understanding of emotions in victimization scenarios by proposing an improved task to assess children's understanding of emotions addressing some flaws in the standard version of the happy victimizer task. I also investigated some cognitive processes that may underlie children's emotion attributions in victimization scenarios, the relation between some aspects of children's social history and children's emotion attributions, and the relation between children's emotion attributions in different versions of the happy victimizer task and their antisocial behavior. In addition to the study limitations discussed above, others

should also be mentioned. First, the present study was cross sectional. Longitudinal studies are crucial for investigating the development of individual pathways of children's emotion attributions in victimization scenarios, and the precursors of children's understanding of emotions in moral contexts. Second, all of the tasks used in the present study (i.e., attribution of emotions, understanding of interpretation and mixed emotions) are highly verbally dependent. However, verbal ability was not controlled. It is possible that children's performance on these tasks was confounded with children's verbal ability. Third, overall, I argue that the anticipated emotions version involving a hypothetical victimizer is an improved version of the happy victimizer task because it separates intention from the outcome. However, it is still possible that in the anticipated emotions version of the task questioning about the potential feelings that a hypothetical character may experience if he or she commits an immoral action may trigger an understanding of that character as a bad person with a bad intention. This can lead to the attribution of positive emotions that are more related to a character-goal relationship than to a moral perspective on the situation. Also, the anticipated emotions version of the task used in this study is not free of possible socially desirable answers. Further research using independent measures of propensity for social desirability answers should be developed in order to control for this possible effect.

Finally, studies with the happy victimizer paradigm attempt to evaluate an emotional dimension of children's morality and motivation for moral behavior. However, they still take a conscious verbal understanding approach to emotions and do not assess children's actual experience of emotions in moral situations. Rather the happy victimizer task, in its various versions, assesses children's verbal awareness of their own emotional experiences or children's verbal awareness of emotions that should be

experienced in victimization scenarios. This conscious verbal understanding approach to the emotional dimension of children's morality may be a limitation to the happy-victimizer studies, and so a limitation of the present study. In order to understand how children develop an understanding of emotions in victimization scenarios the relation between children's emotional experiences in real life situations and their emotion attributions in victimization scenarios, as well as the relations between children's social experiences, namely the way parents talk about emotions and moral situations, and their emotion attributions should be investigated. Also, other aspects of children's functioning such children's executive function abilities and self regulation should be investigated as variables that could be considered as mediators of the relation between children's understanding of emotions in victimization scenarios and children's moral behavior

Despite its limitations, this study provides useful insights for the study of children's understanding of emotions in victimization scenarios and its relation to children's morality. Primarily, this study has highlighted some problematic aspects of the standard version of the happy victimizer task that constrain inferences that can be drawn regarding children's morality from their attribution of emotions in that version of the task. The present study raised hypotheses about possible processes such as children's social understanding and children's social history that could be related to children's attribution of emotions in victimization scenarios. Although results in the present study showed no relationships between children's social understanding and their emotion attributions in victimization scenarios, further research should explore other aspects of individual variables (e.g., aspects of social understanding other than the ones used in this study) as well as other critical variables of children's social interactions that may allow learning about the processes that are related to children's understanding of emotions in

victimization scenarios, and how this understanding develops from early childhood to adolescence. Finally, the present study highlights the importance of understanding whether children's attributions of emotions in victimization scenarios may constitute a good measure of children's moral motivation and suggests that measures other than the attribution of emotions in the standard version of the happy victimizer task should be explored in order to understand children's antisocial behavior.

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Appendix A.

Parental Styles Questionnaire

Disciplinary situations presented:

1. Can you remember a time recently when you thought your child was lying to you?

Yes or No.

What did you (would you) say or do?

2. Can you remember a time recently when your child did something such as pushing another child in a playground to get something that he/she wanted?

Yes or No.

What did you (would you) say or do?

3. Can you remember a time recently when your child teased or hit another child?

Yes or No.

What did you (would you) say or do?

4. Can you remember a time recently when your child took something that wasn't his or hers from somebody else?

Yes or No.

What did you (would you) say or do?

5. Can you remember a time recently when your child shouted at you or your husband, made fun of either of you, or referred to you or your husband in some unflattering way?

Yes or No.

What did you (would you) say or do?

6. Can you remember a time recently when your child purposely damaged something that wasn't hers/his (e.g., a friend's toy, a neighbour's garden)?

Yes or No.

What did you (would you) say or do?

Appendix B.

Questionnaire for Demographic Variables

- Composition of the household

Number of older siblings: _____ Sex: _____

Ages: _____

Number of younger siblings: _____ Sex: _____

Ages: _____

- Parents

Mother:

Age: _____ Education: _____ Occupation: _____

Father:

Age: _____ Education: _____ Occupation: _____

Appendix C.

Parents' Ratings of Children's Behavior

SDQ – Strength and Difficulties Questionnaire

Conduct problems Scale

1. Often has temper tantrums or hot tempers.
2. Generally obedient, usually does what adults request.
3. Often fights with other children or bullies them.
4. Often lies or cheats.
5. Steals from home, school or elsewhere.

Prosocial Scale

1. Considerate of other people's feelings.
2. Shares readily with other children (treats, toys, pencils, etc).
3. Helpful if someone is hurt, upset or feeling ill.
4. Kind with younger children.
5. Often volunteers to help others (parents, teachers, other children).

Appendix D.

Teachers' Ratings of Children's Behavior

Reactive aggression

1. When teased, strikes back
2. Blames others in fights
3. Overreacts angrily to accidents

General aggression

1. Teases and name-calls
2. Starts fights with peers
3. Gets into verbal arguments
4. When frustrated, is quick to fight
5. Breaks rules in games
6. Responds negatively when fails

Proactive aggression

1. Uses physical force to dominate
2. Gets others to gang up on a peer
3. Threatens and bullies others

Each item is scored on a 5-point scale from *never* to *almost always*.