

# Understanding mixed emotions and moral emotion attributions in children aged 5–6 years

Mari Hasegawa<sup>1</sup>

<sup>1</sup>Yokohama City University  
22-2, Seto, Kanazawa-Ku Yokohama-City, Japan 236-0027

Key words : Moral emotion attribution, Mixed emotion, *Happy Victimizer*, Guilt, Preschoolers

## Abstract

Infants are likely to attribute positive emotions to a victimizer, which is called the Happy Victimizer phenomenon. The present study explored how the relationship between the Happy Victimizer phenomenon and understanding of mixed emotions changes across different contexts among preschoolers in children aged 5–6 years ( $N = 37$ ,  $M = 72.62$  months,  $SD=3.72$ ). Understanding of mixed emotions was assessed through children's explanations of non-moral situations. Participants were also asked to attribute situations to the moral-victimizer wherein the victimizer's motivations or moral rules were emphasized. The children were asked to judge how the victimizer felt, report any additional emotions the victimizer may have felt, and judge the levels of these two emotions. Results indicated that understanding mixed emotions was positively related to moral emotion attributions. Moreover, understanding mixed emotions was related to attributing negative emotions to the victimizer during recall of moral rules. The importance of context in Happy Victimizer scenarios and suggestions for future research are discussed.

## 1. Introduction

A central developmental approach to the study of moral emotions has been to focus on moral emotion attributions (Arsenio, Gold, & Adams, 2006). A moral emotion attribution refers to one's assumption that an individual feels a certain way because of the consequences of a morally relevant action. Emotion attribution is important for understanding children's moral development (Malti & Krettenauer, 2013). For instance, the ability to make such attributions helps children anticipate outcomes of socio-moral events and adjust their own moral behavior accordingly.

### 1.1 *Happy Victimizer* phenomenon in preschoolers

Previous research indicates that preschool-age children know that moral transgressions are wrong (Smetana, 2006). However, these children tend to attribute positive feelings to transgressing protagonists (Arsenio & Kramer, 1992). This phenomenon is called the "Happy Victimizer," and has been observed in

several studies (e.g., Arsenio et al., 2006). The Happy Victimizer is defined as children's belief that the victimizer feels happy rather than having a sense of guilt (Arsenio & Lover, 1995). Meta-analysis also shows that the Happy Victimizer reaction is related to children's moral behavior (Malti & Krettenauer, 2013). Children with a Happy Victimizer reaction tend to commit immoral behavior. Therefore, Happy Victimizer research is important for moral development.

As first documented by Nunner-Winkler and Sodian (1988), young children (4–5 years old) have the apparent belief that victimizers feel happy following successful acts of victimization. Conversely, children near the age of 8 years will focus on the emotional consequences of breaking a moral rule, predicting that the victimizer will feel sad.

Studies have shown that even infants understand others' guilty feelings. Three-year-old children are able to express guilt (Zahn-Waxler, Radke-Yarrow, & King, 1979), and 5-year-olds understand the word "guilt"

(Ridgeway, Waters, & Kuczaj, 1985). Kochanska, Gross, Lin, and Nichols (2002) revealed that infants' tendencies to display discomfort following a mishap positively correlated with feelings of guilt. However, according to Harris (2008), children start attributing guilt to others several years after they are able to experience it themselves. The ability to attribute guilt is far from an automatic accompaniment (Harris, 2008). Moreover, guilt is not exclusively a Western cultural concept. For example, Nakagawa and Yamazaki (2005) found that Japanese infants expressed guilt for victims. Ishikawa and Uchiyama (2001) measured Japanese children's guilt in terms of "feeling sorry" and found a relationship between empathy and guilt.

At first glance, it seems contradictory that infants show Happy Victimizer phenomenon even though they can understand guilt. Some studies have indicated that children's limited cognitive abilities, such as inhibitory control (Colasante, Zuffianò, Bae, & Malti, 2014), counterfactual thinking (Mandel & Dham, 2005; Niedenthal, Tangney, & Gavanski, 1994), theory of mind (Yuill, Perner, Pearson, Peerbhoy, & van den Ende, 1996), and perspective-taking skills (Krettenauer, Malti, & Sokol, 2008), are connected to the Happy Victimizer phenomenon. Accordingly, declines in the Happy Victimizer response pattern with age are not surprising (Malti & Krettenauer, 2013).

### 1.2. *Happy Victimizer* phenomenon and understanding of mixed emotions

Although several cognitive factors affect children's Happy Victimizer displays, there is a consensus that understanding mixed emotions is one of the most important factors regarding emotion attribution (Arsenio et al., 2006). In a typical Happy Victimizer experimental paradigm, the main character (i.e., the victimizer) engages in an immoral behavior, such as stealing or violating others, to satisfy selfish desires. Thus, previous research (for review; Arsenio et al., 2006) shows that there is an assumption that the victimizer has both positive feelings (motivation to fulfill the victimizer's desire) and negative feelings (such as guilt). Therefore, it seems likely that there is some relationship between understanding of mixed emotions and the Happy Victimizer phenomenon.

Mixed emotions refer to the presence of two emotions of the opposite valence being linked to a single target. There is near consensus that children aged around 5–6 years can experience and understand mixed emotions under conditions of minimal cognitive load. Kestenbaum and Gelman (1995) demonstrated that 4-year-olds could use mixed emotion labels to describe mixed emotion faces. Furthermore, Larsen, To, and Fireman (2007) demonstrated that 5–7-year-olds possess the ability to both understand and experience mixed emotions. Smith, Glass, and Fireman (2015) also indicated preschoolers understand the experience of mixed emotions using an animated video clip in which a character experiences a mixed emotional episode. Moreover, Zajdel, Bloom, Fireman, and Larsen (2013) reported that children's abilities to understand and report mixed emotions are distinct skills; understanding mixed emotions is often preceded by the experience of mixed emotions.

Despite the connections between understanding mixed emotions and the Happy Victimizer phenomenon, little research regarding this relationship has been conducted. Arsenio and Lover (1995) suggested that a relationship could be found between children's tendency to acknowledge mixed emotions in a non-moral situation when asked, "Could the victimizer be feeling anything else?" Arsenio and Lover claimed that the cognitive ability needed to understand mixed emotions outside of moral contexts appears to underlie children's ability to attribute mixed emotions to moral victimizers. The authors suggested that this finding does not explain why young children overwhelmingly attribute simple positive emotions to victimizers rather than unmixed negative emotions. Thus, the reason for the relationship between mixed emotions and Happy Victimizer responses remains unresolved.

This study focuses on the interaction between the Happy Victimizer phenomenon and understanding mixed emotions for the reasons explained below. Previous studies have shown that even junior high school students, who are old enough to understand mixed emotions, display Happy Victimizer reactions when asked to attribute information to an excluder within a peer exclusion scenario (Malti, Killen, & Gasser, 2012). It is considered that the adolescent

Happy Victimizer response is based on emphasis on fellow relations important to adolescence. Thus, even those who understand mixed emotion may also display the Happy Victimizer reaction depending on the context. In line with this view, understanding mixed emotions may function as a mediation factor for emotion attribution. Understanding mixed emotion is expected to weaken the child's Happy Victimizer reaction. On the other hand, understanding of mixed emotions is not expected to weaken the Happy Victimizer response uniformly in every scene. In other words, unlike children who do not understand, children who understand mixed emotions can change their judgment according to the context.

In this way, understanding mixed emotions is expected to have different influences depending on the story context. In other words, understanding mixed emotions can allow children to flexibly assign positive and negative emotions based on the characteristics of the victimizer's conditions and the setting. For now, there is little research examining interactions between understanding mixed emotions and the situational context. Thus, the purpose of the present study was to examine how the relationship between the Happy Victimizer phenomenon and understanding of mixed emotions changes across different contexts among preschoolers.

### 1.3. Present study

We examined the types of situations that influence the relationship between understanding mixed emotions and emotion attributions. Specifically, we compared situations where the victimizer's motives were emphasized with situations (e.g., the victimizer's desires are satisfied) and where the moral rule was recalled (e.g., when a victimizer was reminded of moral rules after committing an immoral behavior). Understanding mixed emotions likely plays a greater role in the latter case. Thus, understanding mixed emotions has a stronger relationship to children's Happy Victimizer performance when the victimizer's awareness of breaking moral rules is emphasized compared to when the desire/motive is emphasized.

Lagattuta (2005) demonstrated that young children display mature performance in the task of explaining

their unexpected emotions. This method has been effectively used in previous studies to reveal sophisticated reasoning (Lagattuta & Wellman, 2001; Lagattuta, Wellman, & Flavell, 1997). Similarly, Kubo (1999) argued that recognizing mixed emotions is easier than recalling them. Kubo specifically explored children's explanations for mixed emotions within non-moral situations. Given this consideration, a "recognizing mixed emotions task" is suitable for exploring younger children's knowledge regarding mixed emotions.

Moreover, we examined different questions regarding emotion attributions. Specifically, we asked participants to judge how the victimizer felt, report additional emotions that the victimizer may have felt, and judge the levels of these two emotions. The first two questions have been used in previous studies (for a review, see Arsenio et al., 2006).

We targeted the age range of around 5–6 years because the Happy Victimizer phenomenon emerges during preschool (Arsenio et al., 2006), and because acknowledgment of mixed emotions emerges during preschool (Larsen et al., 2007; Smith et al., 2015). From the above, hypotheses of this study are as follows.

1. Children who understand mixed emotions will attribute negative emotions in Happy Victimizer situations.
2. Children who understand mixed emotions will be more likely to respond any additional emotions than those who do not understand mixed emotions.

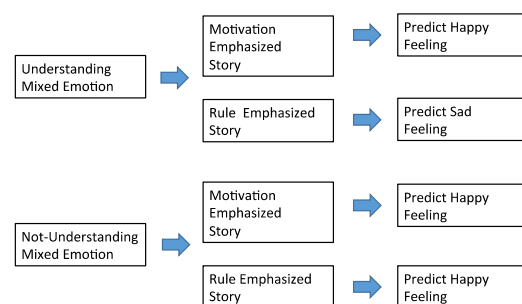


Figure 1: Model of the Hypothesis

3. Children who do and do not understand mixed emotions will also expect that the victimizer had a positive emotion in the motivation-emphasized Happy Victimizer stories. However, in the rule-emphasized Happy Victimizer stories, children who do not understand mixed emotions will expect the victimizer to have positive emotions, while children who do understand mixed emotions will expect the victimizer to have negative emotions. Hypothesis 3 is shown in Figure 1.

## 2. Method

### 2.1 Participants

Japanese nursery school children, aged 5–6 years (18 girls and 19 boys;  $M = 72.62$  months,  $SD = 3.72$ ) served as participants for the present study. They were drawn from two nursery school serving middle-socioeconomic-status families located in the Kanto area. All infants in all public nursery schools in one district were covered. All participants were native Japanese speakers. A local university ethics committee approved the study design. All the children and their parents provided verbal and written informed consent. Incidentally, children certified with developmental disabilities who have difficulty communicating verbally were excluded.

### 2.2. Materials

Each child completed two types of tasks: a moral emotion attribution task and an explanation of mixed emotions task. The moral emotion attribution task was similar to those used in previous Happy Victimizer studies (e.g., Sokol, 2004; Gummerum et al., 2016). Each story had two immoral behaviors. The mixed emotions task was a non-moral story, which included both a sadness-inducing situation and a happiness-inducing situation (i.e., a “present” story; Kubo, 1999). In total, the children were presented five stories. There were two strong motivation, two rule recall, and one mixed emotion story across a series of simple, colorful illustrations on  $30 \times 21$  mm cards.

**Moral emotion attribution stories.** Happy Victimizer stories were used for the moral attribution task. Each story featured a character that achieved personal gain by harming someone in the following

ways: (a) pushing a child to get to a playground swing or (b) stealing another child’s doughnuts. The “swing” story is as follows: “One day, A is playing alone on the swing. B arrives and thinks to him/herself, ‘I want to play on the swing.’ B pushes A to the ground. Now, B is playing on the swing. A is hurt on the ground and is crying.” The “stealing doughnuts” story is as follows: “One day, C thinks to him/herself, ‘I want to eat.’ C eats D’s doughnuts from D’s bag without D’s permission. D comes and finds no doughnuts left. D is crying beside C.” In the “strong motivation” story, the sentences “he/she really wants to swing/eat the doughnuts” and “he/she did swing/ate the doughnuts, which he/she really wanted to do” were added to the stories. The former was placed at the start of the story and the latter at the end. For the rule recall story, the sentences “he/she thinks that pushing a child/stealing doughnuts is bad” and “he/she remembers that pushing a child/stealing doughnuts is bad” were added to the stories. Based on the consistent flow of the story, the former was placed at the start of the story, and the latter was placed at the end.

**Understanding mixed emotions story.** Kubo’s (1999) understanding mixed emotions story was used for this task. The story featured a character whose dog had died, after which he/she was given a new dog by his/her friend. Specifically, the story read as follows: “Taro/Hanako had a dog called Pochi, and he/she loved Pochi very much. But Pochi died. After a short time, Taro/Hanako’s birthday came. Taro/Hanako’s friend gave him/her a new dog as his/her birthday present.”

**Control questions.** At the end of each story, the children were asked the following control question to monitor their understanding of the plot: “What did this child do?” If children did not describe the scenario correctly, the experimenter corrected them, and their comprehension was re-checked. All children answered the second control question correctly.

**Moral emotion attribution questions.** To explore children’s emotion attributions, the experimenter asked, “How does the character feel?” After responding to this question, participants were shown a 4-point pictorial intensity scale ranging from “sad” to “happy” and were asked, “Does the character feel sad or just a little bit sad?” or “Does the character feel happy or a just a little

bit happy?" The scale consisted of four faces.

Children were then asked the following question regarding other emotions that the character may have felt: "Does the character feel another emotion?" If they answered "yes," they were asked, "Does the character feel sad, just a little bit sad, just a little bit happy, or happy?" Participants responded on a 4-point pictorial intensity scale ranging from "sad" to "happy."

When children provided a second emotion that was different from the first emotion, the child was asked to compare the degree of the two emotions: "For the two emotions, which one do you think is bigger, or are both emotions at the same level?" Participants responded with one of three options: the first emotion is bigger than the second emotion, the second emotion is bigger than the first emotion, or both are the same.

**Mixed emotions task questions.** The children were asked questions regarding their understanding of mixed emotions. The experimenter stated that the character felt both negative and positive emotions. After this statement, children were asked why this might be the case, as follows: "Taro/Hanako said that he/she felt both happy and sad feelings. Why did the character feel both feelings?"

Each child was interviewed, individually, in a quiet room. The interviews were tape-recorded and transcribed verbatim. The procedure lasted approximately 15–20 minutes. A within-participants design was used across all five scenarios. The five tasks were counterbalanced. The main character for all of the stories was presented as a different character, with different clothes and hairstyles. Moreover, before presenting the new story, the experimenter said, "This is a story about another child." The story character's gender was always matched to the participant's own gender as in previous studies (Lagattuta, 2005; Lagattuta et. al., 2001).

### 2.3 Coding the moral emotion attributions

**Attributing the first moral emotion.** Children's first emotion attributions—"sad," "a little bit sad," "a little bit happy," and "happy"—were given 4, 3, 2, and 1 points, respectively. No child failed the first question. **Attributing the second moral emotions.** Children's second emotion attributions were categorized as either

"understand the second moral emotion" or "do not understand the second moral emotion." Understanding the second moral emotions was determined by responding to the opposite emotion from the first attribution. Not understanding second moral emotions was determined by responding with the same type of emotion as the first attribution or giving no response (e.g., "I have no idea.").

**Comparing the two emotions.** Comparing the two emotions was categorized via four response options: "happy is bigger than sad," "both are equal," "sad is bigger than happy," and "impossible to compare." "Impossible to compare" was used for children who did not provide a second emotion attribution or no response such as "I have no idea." This question was therefore not independent of the previous question.

### 2.4 Coding for the understanding mixed emotions Task

Children's justifications for mixed emotions were categorized as either "understand mixed emotions" or "do not understand mixed emotions." Understanding mixed emotions was determined by explanations that related to two opposite emotions, such as "There were happy feelings because of the new dog and sad feelings because of the dog's death" or "The child felt happy because she got another dog, but this dog was not Pochi." "Do not understand mixed emotions" was considered as recognizing one emotion or as ignorance of mixed emotions, such as "The child feels happy because he has the dog," "This present reminded her of Pochi," or "I have no idea why the child has two feelings." Two raters independently classified all of the children's justifications into the two categories. Inter-rater reliability was 94.6% for all participants' responses. Accordingly, the two evaluators reached a consensus on all protocols through discussion.

### 3. Results

For the "understand mixed emotions" and "do not understand mixed emotions" groups, the average points for question 1, and the frequencies for questions 2 and 3, were calculated (Tables 1, 2, and 3). There were 17 children who understood mixed emotions, and 20 children who did not understand mixed emotions.

For question 1, we conducted a 2 (mixed emotions: “understand mixed emotions” or “do not understand mixed emotions”) × 2 (action: “swing” or “stealing doughnuts”) × 2 (story: strong motivation or rule

Table 1: Mean Scores and Standard Deviations in for the First Emotion Attribution Question According to Mixed Emotions Understanding.

	Swing		Stealing	
	Strong motivation	Rule recall	Strong motivation	Rule recall
Do not understand mixed emotions	1.40 (0.50)	2.05 (1.05)	1.75 (0.79)	1.95 (1.00)
Understand mixed emotions (n=17)	2.06 (0.75)	3.00 (0.87)	1.82 (0.88)	3.06 (0.75)

Note. Higher scores indicate a response of "sad," while lower scores indicate a response of "happy."

recall) analysis of variance (ANOVA). There was no significant main effect of action. There were, however, significant main effects of mixed emotions ( $F(1, 35) = 11.85, p = .002, \eta^2 = .25$ ) and story ( $F(1, 35) = 25.61, p = .001, \eta^2 = .42$ ), a significant mixed emotions × story interaction ( $F(1, 35) = 4.92, p = .03, \eta^2 = .12$ ), and a significant mixed emotions × action × story interaction ( $F(1,35) = 6.25, p = .017, \eta^2 = 1.15$ ). As shown in Table 1, children in the “understand mixed emotions” group made more negative emotion attributions than did those in the “do not understand mixed emotions” group. Furthermore, children felt more negative emotion attributions in response to the rule recall stories than to the strong motivation stories. Multiple simple main effects indicated that the mixed emotions effect was significant in the rule recall story, but not in the strong motivation story. Moreover, there were significant story differences for all action and story interactions except for the interaction between the stealing doughnuts scenario and the rule recall story for those who did “not understand mixed emotions.”

For the second emotion attributions (Table 2), we conducted a 2 (mixed emotions: “understand mixed emotions” or “do not understand mixed emotions”) × 2 (second emotion: “understand second emotion” or “do not understand second emotion”) chi-square test to test for a potential category bias across the four scenarios. We observed a bias for three scenarios (strong

motivation swing story:  $\chi^2(1) = 6.58, p = .01$ ; rule recall swing story:  $\chi^2(1) = 6.19, p = .013$ ; stealing doughnuts rule recall story:  $\chi^2(1) = 7.63, p = .006$ ). Residual analyses revealed that “understand a second moral emotion” was high for those who “understood

Table 2: Number of Responses for the Second Emotion Attribution Question According to Mixed Emotion Attributions.

	Swing				Stealing			
	Strong motivation		Rule recall		Strong motivation		Rule recall	
	Do not understand second emotion	Understand second emotion	Do not understand second emotion	Understand second emotion	Do not understand second emotion	Understand second emotion	Do not understand second emotion	Understand second emotion
Do not understand mixed emotions	13	7	14	6	12	8	16	4
Understand mixed emotions (n=17)	3	14	4	13	8	9	5	12

mixed emotions”; “do not understand a second moral emotion” was high for those who did “not understand mixed emotions” across all three scenarios.

Table 3: Number of Responses to the Third Question (Comparing Two Emotions) According to Understanding of Mixed Emotions.

	Strong motivation							
	Happy is bigger than sad		Both are equal		Sad is bigger than happy		Impossible	
	Swing	Stealing	Swing	Stealing	Swing	Stealing	Swing	Stealing
Do not understand mixed emotions	3	5	2	1	2	2	13	12
Understand mixed emotions	6	3	6	6	1	1	4	7

	Rule recall							
	Happy is bigger than sad		Both are equal		Sad is bigger than happy		Impossible	
	Swing	Stealing	Swing	Stealing	Swing	Stealing	Swing	Stealing
Do not understand mixed emotions	2	1	2	1	2	2	14	16
Understand mixed emotions	1	1	5	5	7	6	4	5

For the third question (Table 3), wherein the two emotions were compared, we combined groups due to statistical power issues; in particular, there were too few cells for the differences in actions (i.e., both the swing and stealing doughnuts). We conducted a 2 (mixed emotions: “understand mixed emotions” or “do not understand mixed emotions”) × 4 (comparison of two emotions: “happy is bigger than sad,” “both are equal,” “sad is bigger than happy,” and “impossible to compare the two emotions”) chi-square test. We observed a bias for both scenarios (strong motivation

story:  $\chi^2(3) = 11.16, p = .011$ ; rule recall story:  $\chi^2(3) = 19.69, p = .001$ ). Residual analyses revealed that “both are equal” was high for “understand mixed emotions” and “impossible to compare the two emotions” was high for “do not understand mixed emotions” during the strong motivation story; “both are equal” and “sad is bigger than happy” were high for “understand mixed emotions,” while “impossible to compare the two emotions” was high for “do not understand mixed emotions” during the rule recall story.

#### 4. Discussion

The aim of the present study was to explore the relationship between the Happy Victimizer phenomenon and understanding of mixed emotions, including how this relationship changes across different contexts. As expected, children who understood mixed emotions made more negative emotion attributions than those who did not understand mixed emotions. When comparing the two emotions, children who understood mixed emotions were more likely to assume that both happy and sad emotions were of an equal degree than children who did not understand mixed emotions during the strong motivation stories. Thus, Hypothesis 1, which was that children who understand mixed emotions are likely to attribute negative emotions in Happy Victimizer situations, was supported.

Then, children who understood mixed emotions understood a second moral emotion. Moreover, children who did not understand mixed emotions did not understand a second moral emotion in three scenarios. Thus, Hypothesis 2 was almost supported. Moreover, the mixed emotions effect was significant in the rule recall story, but not in the strong motivation story. These results suggest that children who understand mixed emotions might be sensitive to specific contexts when moral rules are recalled. Thus, Hypothesis 3 was supported.

Overall, the present findings support the assumption that the Happy Victimizer phenomenon is constrained by both children’s limited knowledge (i.e., lack of understanding regarding mixed emotions) and contextual factors. Although prior research suggests that even young children can understand guilty feelings

when presented independently, it is unclear why young children are likely to attribute un-mixed, positive emotions. The present study provided a partial answer to the question as to why it is difficult for children to understand people’s negative feelings after breaking moral rules. Despite the Happy Victimizer phenomenon being related to understanding mixed emotions, attributions were context-dependent. As described above, moral emotion attributions interacted with mixed emotion understanding and the situational context.

Even a very young child is sensitive to the pain and loss of the victim, but it is difficult to explain why a child would predict that a perpetrator has a positive emotion. As a factor explaining this contradiction, understanding of mixed emotions has been suggested, but there has been no direct study so far. This study showed that comprehension of mixed emotions is related to the reduction of Happy Victimizer phenomenon, but more importantly, it is suggested that understanding of mixed emotion acts as an adjustment factor. In other words, understanding of mixed emotions does not necessarily cause a Happy Victimizer reaction.

At the same time, the Happy Victimizer phenomenon cannot simply be explained as resulting from cognitive limitations. Moral emotion attributions can also predict children’s pro-social and antisocial behaviors (Malti & Krettenauer, 2013). Thus, moral emotion attributions, as assessed in a Happy Victimizer task, might reflect individual differences in morality. In this way, there is a need to consider the Happy Victimizer phenomenon in terms of problems with moral motivation development.

It is possible that emotion attribution meanings differ throughout specific developmental periods. For younger children, the Happy Victimizer phenomenon occurs because of cognitive limitations. Conversely, during puberty, the Happy Victimizer phenomenon might connect to one’s identity. Moreover, peer relationships might affect moral emotion attributions (Malti, Ongley, Dys, & Colasante, 2012; Malti, Killen, & Gasser, 2012). Thus, in the future, long-term mechanisms underlying the development of moral emotion attributions should be clarified.

A few study limitations should be noted. First, the sample size was small, and it consisted only of Japanese participants. In the future, reconfirmation of the current findings including studies in other cultures is necessary. Second, a variety of negative emotions exist; in the present study, we focused on sadness attributions. Children's understanding of self-conscious moral emotions (including guilt, shame, pride, etc.) may develop rapidly throughout childhood (Nelson & Russell, 2012; Pons, Harris, & de Rosnay, 2004). Future research should address the nature of emotion attributions across a wider range of feeling states. Finally, the Happy Victimizer phenomenon requires explanations beyond the notion of cognitive limitations. A complete understanding of moral emotion attributions should include an assessment as to the role of moral identity or moral motivations to better understand the complex mechanisms underlying Happy Victimizer phenomena.

As mentioned above, several studies (e.g., Malti & Krettenauer, 2013) suggest that attributing negative emotions to a victimizer plays a significant role in children's moral behavior. Thus, research on moral emotion attribution has several implications for children's social cognition and emotional understanding. Results from the present study suggest that children's recall of moral rules might be associated with their understanding of emotions (including mixed emotions), and considering the context is important for understanding children's emotion attributions.

In sum, the present results support the view that Happy Victimizer responses relate to children's abilities to understand mixed emotions. Moreover, the present study extends our understanding as to the influence of contextual factors on children's moral emotion attributions. Further studies should continue to explore how cognitive and motivational factors relate to the development of children's emotional awareness.

## 5. Notes.

1. We did not explore gender effects because no prior hypotheses were defined, and no main effects of gender occurred in our pre-analysis.
2. The degrees of freedom for the within-subject comparisons were corrected for deviance using the

Greenhouse–Geisser correction.

3. The chi-square test was based on Yate's continuity correction.

## 6. Conflict of Interest

The authors declare that they have no conflict of interest concerning this study.

## 7. References

- [1] Arsenio, W. F., Gold, J., & Adams, E. (2006). Children's conceptions and displays of moral emotions. In M. Killen & J. Smetana (Eds.), *Handbook of moral development* (pp. 581–608). Mahwah, NJ: Lawrence Erlbaum Associates.
- [2] Arsenio, W. F., & Kramer, R. (1992). Victimizers and their victims: Children's conceptions of the mixed emotional consequences of victimization. *Child Development*, **63**, 915–927. doi: 10.1111/j.1467-8624.1992.tb01671.x
- [3] Arsenio, W., & Lover, A. (1995). Children's conceptions of sociomoral affect: Happy Victimizers, mixed emotions and other expectancies. In M. Killen & D. Hart (Eds.), *Morality in everyday life: Developmental perspectives* (pp. 87–128). Cambridge, UK: Cambridge University Press.
- [4] Colasante, T., Zuffianò, A., Bae, N.Y., & Malti, T. (2014). Inhibitory control and moral emotions: Relations to reparation in early and middle childhood. *Journal of Genetic Psychology*, **175**, 511–527. doi: 10.1080/00221325.2014.976535
- [5] Gummerum, M., López-Pérez, B., Ambrona, T., Rodríguez-Cano, S., Dellaria, G., Smith, G., & Wilson, E. (2016). Children's moral emotion attribution in the Happy Victimizer task: The role of response format. *Journal of Genetic Psychology*, **177**, 1–16. doi: 10.1080/00221325.2015.1103694
- [6] Harris, P. (2008). Children's understanding of emotion. In M. Lewis, J. M. Haviland-Jones, & L. F. Barrett (Eds.), *Handbook of emotion* (3rd ed., pp. 320–331). New York: Guilford Press.
- [7] Ishikawa, T., & Uchiyama, I. (2001). Empathy and role-taking ability: Guilt feelings in 5-year-old preschoolers. *Japanese Journal of Educational Psychology*, **49**, 60–68. doi: 10.5926/jjep1953.49.1\_60
- [8] Kestenbaum, R., & Gelman, S. A. (1995).



- Preschool children's identification and understanding mixed emotions. *Cognitive Development*, **10**, 443–58. doi: 10.1016/0885-2014(95)90006-3
- [9] Kochanska, G., Gross, J. N., Lin, M. H., & Nichols, K. E. (2002). Guilt in young children: Development, determinants, and relations with a broader system of standards. *Child Development*, **73**, 461–482. doi: 10.1111/1467-8624.00418
- [10] Krettenauer, T., Malti, T., & Sokol, B. (2008). The development of moral emotions and the Happy Victimizer phenomenon: A critical review of theory and applications. *European Journal of Developmental Science*, **2**, 221–235. doi: 10.3233/DEV-2008-2303
- [11] Kubo, Y. (1999). Understanding and its development of mixed feelings in childhood. *Toyo Journal of Child and Juvenile Problems*, **18**, 33–43.
- [12] Lagattuta, K. H. (2005). When you shouldn't do what you want to do: Young children's understanding of desires, rules, and emotions. *Child Development*, **76**, 713–733. doi: 10.1111/j.1467-8624.2005.00873.x
- [13] Lagattuta, K. H., & Wellman, H. M. (2001). Thinking about the past: Early knowledge about links between past events, thinking, and emotion. *Child Development*, **72**, 82–102. doi: 10.1111/1467-8624.00267
- [14] Lagattuta, K. H., Wellman, H. M., & Flavell, J. H. (1997). Preschoolers' understanding of the link between thinking and feeling: Cognitive cuing and emotional change. *Child Development*, **68**, 1081–1104. doi: 10.1111/j.1467-8624.1997.tb01986.x
- [15] Larsen, J. T., To, Y. M., & Fireman G. (2007). Children's understanding and experience of mixed emotions. *Psychological Science*, **18**, 186–191. doi: 10.1111/j.1467-9280.2007.01870.x
- [16] Malti, T., Killen, M., & Gasser, L. (2012). Social judgments and emotion attributions about exclusion in Switzerland. *Child Development*, **83**, 697–711. doi: 10.1111/j.1467-8624.2011.01705.x
- [17] Malti, T., & Krettenauer, T. (2013). The relation of moral emotion attributions to prosocial and antisocial behavior: A meta-analysis. *Child Development*, **84**, 397–412. doi: 10.1111/j.1467-8624.2012.01851.x
- [18] Malti, T., Ongley, S. F., Dys, S. P., & Colasante, T. (2012). Adolescents' emotions and reasoning in contexts of moral conflict and social exclusion. *New Directions for Youth Development*, **136**, 27–40. doi: 10.1002/yd.20036
- [19] Mandel, D. R., & Dhimi, M. K. (2005). “What I did” versus “what I might have done”: Effect of factual and counterfactual thinking on blame, guilt, and shame in prisoners. *Journal of Experimental Social Psychology*, **41**, 627–635. doi: 10.1016/j.jesp.2004.08.009
- [20] Nakagawa, M., & Yamazaki, A. (2005). Sincerity of preschoolers' apologies: The influence of inferences about a victim's emotions. *Japanese Journal of Developmental Psychology*, **16**, 165–174.
- [21] Nelson, N. J., & Russell, J. L. (2012). Children's understanding of nonverbal expressions of pride. *Journal of Experimental Child Psychology*, **111**, 379–385. doi: 10.1016/j.jecp.2011.09.004
- [22] Niedenthal, P. M., Tangney, J. P., & Gavanski, I. (1994). “If only I weren't” versus “If only I hadn't”: Distinguishing shame and guilt in counterfactual thinking. *Journal of Personality and Social Psychology*, **16**, 584–595. doi: 10.1037/0022-3514.67.4.585
- [23] Nunner-Winkler, G., & Sodian, B. (1988). Children's understanding of moral emotions. *Child Development*, **59**, 1323–1338. doi: 10.2307/1130495
- [24] Pons, F., Harris, P. L., & de Rosnay, M. (2004). Emotion comprehension between 3 and 11 years: Developmental periods and hierarchical organization. *European Journal of Developmental Psychology*, **1**, 127–152. doi: 10.1080/17405620344000022
- [25] Ridgeway, D., Waters, E., & Kuczaj, S. A. (1985). Acquisition of emotion-descriptive language: Receptive and productive vocabulary norms for ages 18 months to 6 years. *Developmental Psychology*, **21**, 901–908. doi: 10.1037/0012-1649.21.5.901
- [26] Smetana, J. (2006). Social-cognitive domain theory: Consistencies and variations in children's moral and social judgments. In M. Killen & J. Smetana (Eds.), *Handbook of moral development* (pp. 119–153). Mahwah, NJ: Lawrence Erlbaum Associates.
- [27] Smith, J. P., Glass, D. J., & Fireman, G. (2015). The understanding and experience of mixed emotions in 3–5-year-old children. *Journal of Genetic Psychology*, **176**, 65–81. doi: 10.1080/00221325.2014.1002750
- [28] Sokol, B. (2004). Children's conceptions of

agency and morality: Making sense of the Happy Victimizer phenomenon. (Unpublished doctoral dissertation.) University of British Columbia, Canada.

[29] Yuill, N., Perner, J., Pearson, A., Peerbhoy, D., & van den Ende, J. (1996). Children's changing understanding of wicked desires: From objective to subjective and moral. *British Journal of Developmental Psychology*, **14**, 457–475. doi: 10.1111/j.2044-835X.1996.tb00718.x

[30] Zahn-Waxler, C., Radke-Yarrow, M., & King, R. A. (1979). Child rearing and children's prosocial initiations toward victims of distress. *Child Development*, **50**, 319–330. doi: 10.2307/1129406

[31] Zajdel, R. T., Bloom, J. M., Fireman, G., & Larsen, J. T. (2013). Children's understanding and experience of mixed emotions: The roles of age, gender, and empathy. *Journal of Genetic Psychology*, **174**, 582–603. doi: 10.1080/00221325.2012.732125

(Received March 12, 2019; accepted April 11, 2019)

## 5. 6歳児における入り混じった感情の理解と道徳感情帰属の関係

キーワード：道徳感情帰属，入り混じった感情，*Happy Victimizer*，罪悪感，幼児

### Abstract (Japanese)

*Happy Victimizer* とは、幼児にしばしば見られる、加害者にポジティブな感情を帰属させる現象である。なぜ幼児にこの現象が生じるのかは十分にわかっていない。本研究は、5～6歳の子ども（ $N = 37$ ,  $M = 72.62$  ヶ月,  $SD = 3.72$ ）を対象に、*Happy Victimizer* 現象と入り混じった感情の理解の関係を調べた。実験参加者は、非道徳場面での入り混じった感情の理解、および、*Happy Victimizer* 課題に回答した。*Happy Victimizer* 課題は、加害者の利己的な動機が強調される、または道徳的ルールが強調されるという、2種類のシナリオが用意された。その結果、入り混じった感情を理解することと道徳感情帰属に関係が見られた。さらに、入り混じった感情を理解している幼児は、道徳的ルールが強調されるシナリオにおいて加害者にネガティブな感情を帰属させる傾向が見られた。つまり、文脈と入り混じった感情理解の組み合わせ効果により、*Happy Victimizer* 現象が弱まることが示唆された。

### Mari Hasegawa

Professor of Psychology, Yokohama City University, Japan

2013- present Professor of psychology, Yokohama-City University, Japan

2016- 2017 Visiting Professor, Faculty of Arts and Science, University of Toronto, Canada

2008- 2013 Associate Professor of psychology, Yokohama-City University, Japan

2007- 2008 Associate Professor of psychology, Takachiho University, Japan

2003 Ph.D., Psychology, Human Developmental Sciences, Ochanomizu University,