The Development of Children's Sympathy, Moral Emotion Attributions, and Moral Reasoning in Two Cultures

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Abstract

The current study investigated the development of children's sympathy, moral emotion attributions, and moral reasoning in two cultures: Chile and Switzerland. One hundred and seventy-six children in two age groups (i.e., 6 and 9 years old) were asked to report their sympathy. Moral emotion attributions and moral reasoning were measured using two hypothetical moral transgressions (i.e., omitting a prosocial duty, stealing from another child). Younger Chilean children reported higher levels of sympathy than younger Swiss children. Across cultures, older children attributed more moral emotions than did younger children. Younger Swiss children used more moral reasoning following judgments about rule violations than did younger Chilean children. The findings are discussed from both a developmental and cross-cultural perspective.

Keywords: Sympathy; Moral Emotion Attribution; Moral Reasoning; Children; Cross-cultural Comparison

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Developmental researchers have emphasized the need to investigate both moral emotions and moral reasoning in children's emerging morality (Malti & Latzko, 2012). This integrative approach to children's morality emerged as a result of increasing evidence that moral emotions are a salient feature of children's everyday experiences with moral conflict. Accordingly, moral emotions can serve as a vehicle to differentiate moral judgments from other social judgments (Arsenio, Gold, & Adams, 2006). Research also indicates that the development of children's moral emotions and moral reasoning is embedded in the cultural context (e.g., Gummerum & Keller, 2008; Keller, Edelstein, Schmid, Fang, & Gang, 1998). Despite this notion, developmental research on moral emotions and moral reasoning across cultures is still scarce.

The aim of the present study was to fill parts of this research gap by investigating the development of children's sympathy, moral emotion attributions, and moral reasoning in a cross-cultural comparison between Switzerland and Chile. These cultures were chosen because of our interest in comparing a prototypical Western country (i.e., Switzerland) with a Latin American cultural context (i.e., Chile). This comparison is particularly interesting because cross-cultural comparisons between mid-European and Latin American children's moral development are very scarce. Thus, the present study is well suited to fill some of the research gaps.

The Development of Sympathy, Moral Emotion Attributions, and Moral Reasoning

The present study focused on sympathy and moral emotion attributions. Sympathy has been defined as feelings of concern for the other that stems from the apprehension of another's emotional state, but it is not the same feeling as the other person may experience (Eisenberg,

2000). Moral emotion attributions have been defined as those emotions that children attribute to a wrongdoer or the self as a wrongdoer as a result of an action that is morally relevant. Moral emotions can be positive and negative depending on the type of behavior (e.g. pride over prosocial behavior, guilt over a rule transgression; Malti & Krettenauer, in press). The attribution of negative emotions has been labeled as "moral emotion attribution" (Krettenauer, Malti, & Sokol, 2008).

We studied the development of sympathy and moral emotion attributions in two age groups (i.e., 6 and 9 years old). These age groups were chosen because there is empirical evidence that there is a normative developmental increase in self-reported sympathy in these age groups (for a review, see Eisenberg, Spinrad, & Sadovsky, 2006).

Research on the development of moral emotion attributions has most commonly been conducted in the happy victimizer paradigm (Krettenauer et al., 2008). The research in this paradigm suggests that younger children (under the age of 7) expect the transgressor to be happy despite understanding the validity of a transgression (Smetana, Campione-Barr, & Yell, 2003). In contrast, older children manage to coordinate the perspective of both self and other to in order to understand that there are also negative consequences for the wrongdoer (i.e., unhappy victimizer). Research supports that there is a shift between the attributions of positive emotions to negative emotions from early childhood to middle childhood (for reviews, see Arsenio et al., 2006; Krettenauer et al., 2008).

We also investigated the development of moral reasoning. Social domain research indicates that from very early on children judge moral transgressions (e.g., hitting, stealing) as deserving of moral condemnation due to moral reasons (e.g., Smetana et al., 2003). Studies also suggest that children as young as 3 years are able to discriminate these moral rules from other

social rules, such as conventions (Turiel, 1983). Research has shown that younger children tend to attribute more hedonistic reasons (e.g., satisfaction of personal needs) or sanction-oriented reasons (negative sanctions from authorities or peers after the transgression) in these contexts; in contrast, older children tend to use more moral reasons, such as pointing to the unfairness of the action or expressing altruistic concerns (Keller et al., 1998). There is also evidence that moral reasoning depends on the type of transgression involved. For example, children are more likely to provide more moral justifications in the context of negative duties than in that of the omission of positive duties (Malti, Gasser, & Buchmann, 2009). We therefore investigated moral emotion attributions and moral reasoning across two contexts (i.e., stealing and omission of prosocial duty).

Finally, we were interested in examining interrelations between moral emotions and moral reasoning. Conceptually, it is likely that the experience of certain moral emotions (e.g. guilt) is associated with moral justifications. Nevertheless, there is only limited evidence for the notion that moral emotions and reasoning are related in mid-childhood. Eisenberg, Carlo, Murphy and Vancourt (1995) found an association between prosocial moral reasoning and sympathy in late adolescence. Here, we investigated relations between sympathy, moral emotion attributions, and moral reasoning in 6- and 9-year-olds.

The Development of Sympathy, Moral Emotion Attributions, and Moral Reasoning in Switzerland and Chile

While a number of authors have stressed the role of culture in moral development (e.g., Chen, 2011; Neff & Helwig, 2002), the amount of empirical research that integrates both moral emotions and moral reasoning across cultures is scarce. The current study focused on two distinct countries from Europe and Latin America, namely, Switzerland and Chile, to address

some of these research gaps. Growing up in a Middle European or Latin American culture is likely to affect children's moral development since these cultures vary in terms of social norms and political backgrounds. Switzerland is a European country whose political system is based on a direct democracy (Kriesi & Wisler, 1996). Thus, Swiss culture can be considered as a rather prototypical Western culture in terms of its focus on individual rights, personal choices, and an egalitarian orientation. In comparison, Chile has been identified as being one of the most collectivistic countries in Hofstede's (1980) study among other 50 countries. Therefore, it is reasonable to assume that family duties might be prioritized over individual needs in this particular Latin American culture. A study by Fuligni, Tseng, and Lam (1999) found that American adolescents with a Latin American background reported feeling more obligated to support their family than did adolescents with a European background. Overall, thus, there is some evidence, albeit very limited, that Chilean children might be more guided by the perceived social obligation of caring for the welfare of others (i.e. family and peers) than Swiss children.

The existing research on the development of sympathy across cultures has revealed inconsistent findings. For example, a cross-cultural study on children's sympathy in a Western country (i.e., Germany) and Southeast Asian countries (i.e., Indonesia and Malaysia) did not reveal any differences (Trommsdorff, Friedlmeier, & Mayer, 2007). However, other research has shown that young people in India perceive the expression of concern for family and friends as satisfying, whereas young people in the US do not (Miller, Chakravarthy, & Rekha, 2008).

With respect to cross-cultural differences in moral emotion attributions, Malti and Keller (2010) documented that children from China, compared to children from Iceland, attributed more frequently unhappy than happy feelings after making moral choices. The authors interpreted this cultural difference in relation to collectivism and the intensive moral education focused on the

welfare of others that Chinese children receive. Whether the findings from other collectivistic countries (i.e., Asian countries) and North American countries extend to a Latin American and mid-European cultural context remains an empirical question.

Research indicates both cross-cultural differences and normative developmental trends in the multifaceted moral reasoning of children (Neff & Helwig, 2002). For example, a study with US and Brazilian children found that US children showed advanced moral reasoning when compared to Brazilian children (Carlo, Koller, Eisenberg, DaSilva, & Frohlich, 1996). As Swiss early education is known for an emphasis on the development of cognitive skills, utilizing an intense curriculum that promotes critical thinking and problem solving in preschoolers (Marti-Bucknall, 2002), Swiss children might develop reasoning skills at a young age.

In summary, we aimed to investigate the development of sympathy, moral emotion attributions, and moral reasoning in two cultures: Switzerland and Chile. Regarding sympathy and moral emotion attributions, the limited related cross-cultural research suggests that Chilean children might display more sympathy and moral emotion attributions, compared to Swiss children. We also investigated whether children's moral reasoning differed across cultures. Because the Swiss kindergarten system puts great emphasis on acquiring cognitive skills, we expected Swiss children to be more likely to emphasize moral reasons from early on, compared to Chilean children. In line with previous research, we hypothesized that older children would display more moral emotions and moral reasoning compared to younger children. Finally, we examined moral development in two contexts of rule violation which differed in severity: stealing and not sharing. We hypothesized that children might attribute more moral emotions and use more moral reasoning in the stealing context compared to the not-sharing context.

Method

Participants

A total of 176 children participated in the study. The Swiss sample was drawn from a kindergarten and elementary school in the canton of Zurich in Switzerland. Written informed parental consent for participation was obtained. Interviews were conducted with 47 6-year-old children (*M* age = 6.16, *SD* = 0.19, 40.4% girls) and 51 9-year-old children (*M* age = 9.20, *SD* = 0.18, 58.8% girls). The children were randomly sampled and resembled a middle-class sample.

The Chilean sample was drawn from a public kindergarten and school in the region of Valparaíso, which is located in the northwest of the capital, Santiago de Chile. The sample also represented a middle-class sample. Written informed parental consent for participation was obtained. Interviews were conducted with 43 6-year-old children (*M* age = 6.4, SD = .19, 41.9% girls) and 35 9-year-old children (*M* age = 9.3, SD= .21, 54.3% girls). The ethnic composition in the northwest part of Chile is rather homogeneous, and data from the census in Chile revealed that more than 95% of the families living the region of Valparaíso are of Chilean descent (Chilean Census of Population and Housing, 2002).

Procedure

Both the Chilean and the Swiss children were tested in quiet rooms at the kindergarten/school using paper-and-pencil tests. The sessions lasted about 25 minutes. The interviewers were undergraduate psychology students who had been intensively trained in the interview techniques by the last author. The interview measure was translated and back-translated from Swiss-German to Spanish by the third author, who is a bilingual native speaker.

Measures

Sympathy. Children rated their sympathy on a scale containing five items (e.g., "When I see another child who is hurt or upset, I feel sorry for him or her"; from Eisenberg, Fabes, & Murphy, 1996). They were asked whether the sentence was like him/her or not and, if the former, how much (0 = *not like him/her*, 1 = *sort of like him/her*, 2 = *like him/her*). Cronbach's α for the sympathy scale was .71 in the Swiss sample and .72 in the Chilean sample.

Moral emotion attributions and moral reasoning. Children's moral emotion attributions and moral reasoning were measured using two hypothetical rule violations: not sharing a pencil and stealing another child's chocolate. Previous research in the happy victimizer tradition has shown these vignettes to be valid and reliable (Krettenauer et al., 2008). The stories were systematically counterbalanced, and there were no order effects. Each story was illustrated by a sequence of sex-matched cartoons. In the stealing story, a child (victim) leaves his or her jacket with a nice chocolate bar in it in the kindergarten/school hall (cartoon 1). Another child (victimizer) takes the chocolate bar (cartoon 2). In the not sharing a pencil story, a child (victim) asks another child (victimizer) for a pencil with which to draw a picture. The child (victimizer) says no (cartoon 1). After listening to each of the two stories, the children were asked regarding (1) their understanding of rule validity ("Is it right or not right what the protagonist did? Why/why not?") and (2) their attribution of emotion to self as victimizer ("How would you feel afterwards if you had done this? Why?").

Coding. The understanding of rule validity was coded as 0 (right) and 1 (wrong). As almost all the children (92%) judged the actions as wrong, this variable was not included in further analyses. The emotions attributed to the self as victimizer were coded as 0 (positive) and

1 (negative). Mixed emotions occurred very rarely (< 1%) and were combined with negative emotions.

A validated coding system used in previous studies (Malti, Gasser, et al., 2009) was used to code justifications of moral judgment and emotion attribution: (a) moral/altruistic reasons (e.g., "It is not fair to steal"; "The other child will be sad"), (b) sanction-oriented reasons (e.g., "The kindergarten teacher may find out and get angry"), (c) hedonistic, self-interested reasons (e.g., "He just likes pencils so much"), and (d) unelaborated reasons (e.g., "because he just did it"; "It is not nice").

All responses were probed, and the argument after probing was coded. Very few participants used more than one reason. In the rare cases when two justifications were used, each justification received a score of 0.5 for proportional weighting of the use of the category (thus, the proportions reflected the total sample). The justifications were the proportions of moral/altruistic, sanction-oriented, hedonistic, and unelaborated categories.

Twelve percent of the Swiss and 10% of the Chilean transcripts were coded by two independent raters, with an average $\kappa = .96$. The raters discussed the disagreements with each other until a consensus was reached, and the consensus was then coded.

Data analytic strategy. ANOVA-based statistical tests to analyze proportions were used due to our repeated measures design (which are not easily analyzed using other approaches such as log-linear), following data analytic procedures in social-cognitive developmental studies (for similar approaches, see Smetana, 2006). This approach has been adopted over the past 3 decades, and a recent review of analytic procedures for these types of data (covering 10 years in APA psychology journals) confirmed the validity and appropriateness of this data analytic approach. Linear models with repeated procedures, particularly ANOVA, are appropriate for this type of

within-subjects design (see Posada & Wainryb, 2008, for a fuller explanation and justification of this data analytic approach). For the moral emotion attribution variable, binary logistic regression models were utilized.

Results

The Development of Sympathy across Cultures

Preliminary analyses examined sex differences in the main study variables. A 2-way ANOVA 2(Sex) X 2(Culture) revealed a sex main effect on sympathy: $F(1,163)$ 5.31, $p < .05$, $\eta^2 = .03$, indicating that girls scored higher on sympathy than boys. In contrast, there were no gender differences in moral emotion attributions and moral reasoning. As we had no gender-specific hypothesis, sex was not considered in further analyses.

As expected, a two-way ANOVA 2(Age Group) X 2(Culture) revealed a significant main effect of age: $F(1,163) = 31.62$, $p < .001$, $\eta^2 = .17$, revealing that older children scored higher on sympathy ($M = 1.49$, $SD = 0.45$) than did younger children ($M = 1.02$, $SD = 0.67$). There was also a significant main effect of culture: $F(1,163) = 27.86$, $p < .001$, $\eta^2 = .15$, indicating that Chilean children displayed higher sympathy ($M = 1.47$, $SD = 0.52$) than did Swiss children ($M = 1.01$, $SD = 0.63$). Finally, there was a significant interaction between culture and age in the prediction of sympathy, $F(1,163) = 15.6$, $p < .001$, $\eta^2 = .09$, indicating that younger Chilean children showed significantly higher levels of sympathy than did younger Swiss children (Figure 1).

The Development of Moral Emotion Attributions across Cultures

The frequencies (%) of moral emotion attributions for both story contexts across age group and culture are shown in Table 1. Since the dependent variable (i.e., moral emotion

attribution) was binary (i.e., negative/mixed versus positive feelings), a stepwise binary logistic regression model was used to examine the effects of culture, age group, and story context on moral emotion attribution. Culture, age group, and story context were entered in Step 1. In Step 2, the 2-way interaction terms of culture by age group, culture by story context, and age group by story context were entered. Finally, the 3-way interaction of culture by age group by story context was entered in Step 3. The model predicted moral emotion attributions significantly (Nargelkerke's $R^2 = .06$, $p < .05$). In line with our hypothesis, there was a significant main effect of age: Older children attributed more moral emotions in both story contexts than did younger children ($ß = 0.73$, $p < .05$). There were no other significant main or interactions effects.

The Development of Moral Reasoning across Cultures

The mean proportions and standard deviations of the four different types of reasoning (i.e., moral, sanction-oriented, hedonistic, and unelaborated justifications) by culture, age group, and story context are shown in Tables 2 and 3 (i.e., reasoning for moral judgments and moral emotion attributions, respectively). In order to examine the role of age group and culture in the different types of reasoning, we conducted a series of three-way repeated measures ANOVAs 2(Age group) X 2(Culture) X 2(Story context) on each of the four reasoning scores. Story context was included as a within-subjects factor, and the four different types of reasoning in the context of moral judgments and moral emotion attributions as dependent variables. Regarding moral justifications following moral judgments, we found a significant 3-way interaction between story context, culture, and age group, $F(1,131) = 4.31$, $p = .04$, $\eta^2 = .03$. Post hoc analyses revealed that younger Swiss children used more moral reasoning when justifying that it is wrong to steal than did younger Chilean children ($p < .05$; Figure 2).

Furthermore, there was a significant two-way interaction between story context and age group for the unelaborated reasoning category in the context of moral judgment: $F(1,155) = 4.66$, $p = .032$, $\eta^2 = .03$; older children used fewer unelaborated justifications in the sharing story compared to the stealing story ($p < .001$).

Regarding reasoning in the context of emotion attributions, there was a significant two-way interaction between culture and story context, revealing that moral reasoning differed between the story contexts for the Chilean children only, $F(1,155) = 6.92$, $p < .01$, $\eta^2 = .05$. Post hoc analyses revealed that Chilean children used more moral justifications of emotion attributions in the stealing story compared to the sharing story ($p < .05$), while there was no difference in moral justifications of emotion attribution for the Swiss children.

Relations among Sympathy, Moral Emotion Attributions and Moral Reasoning

Table 4 presents the results of the correlational analysis. Unelaborated and sanction-oriented justifications were not considered in this analysis because of our interest in the relations among sympathy, moral emotion attributions, and moral reasoning. Hedonistic justifications however, were not included because they were strongly negatively correlated with both moral emotion attributions and moral reasoning for moral emotion attributions providing redundant information. Overall, the study variables were similarly associated with each other in both the Swiss and Chilean sample. More specifically, moral emotion attributions were positively correlated with moral justifications of emotion attributions for the Chilean sample; the correlation for the Swiss sample was marginally significant only; $r = .33$, $p < .01$, and $r = .20$, $p = .068$, respectively). Sympathy was not associated with moral emotion attributions or moral reasoning.

Discussion

This study aimed to investigate the development of sympathy, moral emotions, and moral reasoning in a sample of Chilean and Swiss children. The results contribute to the cross-cultural and integrative moral developmental research on this topic.

One significant finding was that younger Chilean children reported higher levels of sympathy than did younger Swiss children, whereas older Chilean and Swiss children did not differ in their self-reported sympathy. Chilean children might be raised with values that emphasize the welfare of others above individual needs, and parents perhaps are motivated to encourage them from very early on to be aware that caring about other people's feelings is a social obligation (Fuligni et al., 1999). This cross-cultural difference might, in part, be due to differences in parenting, such as support. Malti, Eisenberg, Kim and Buchmann (2012) investigated trajectories of sympathy in middle childhood and found that parental support enhanced the development of sympathy. Perhaps Chilean parents also emphasize such supportive parenting behaviors from early on because of the importance they put on support within the family, which in turn may facilitate a child's emerging sensitivity to the needs of others. Our sympathy measure focused on children's general empathic concern for others, which might indicate that Chilean children's internalization of caring for other people's feeling has in fact, an effect on their motivation to show concern for others. Future studies on the role of supportive parenting on sympathy across cultures are warranted.

In line with our hypothesis, there was a normative developmental increase in moral emotion attributions in both Chilean and Swiss children (Pons, Harris, & Rosnay, 2004). This finding supports what has been consistently found in the happy victimizer research tradition: As children get older, they tend to attribute fewer positive emotions to the self as wrongdoer. This is

likely due to increasing ability to coordinate the perspective of both the self and other (Arsenio et al., 2006). Contrary to our hypothesis, we did not find a cross-cultural difference in moral emotion attributions. Taken together, these findings suggest that the development of moral emotion attributions may follow a universal trend from positive to negative and that cultural norms might be less important for their development, at least in middle childhood.

Interestingly, we did not find a significant relation between sympathy and moral emotion attribution, although both are being conceptualized as moral emotions. Our findings rather seem to indicate that they might be distinct and independent constructs. While the former was affected by cultural differences, the latter was affected by age only. In addition, sympathy was also not associated with moral reasoning. However, moral emotion attributions were associated with moral reasoning in the context of emotion attributions, which is consistent with previous research (Malti, Gasser, et al., 2009).

Regarding moral reasoning, the findings revealed that younger Swiss children used more moral reasoning when making judgments about harm-related rule violations than did younger Chilean children. This cross-cultural difference in moral reasoning might relate to early socialization experiences in the kindergarten context. As indicated earlier, the early education system in Switzerland emphasizes nontraditional learning strategies such as cooperative play and critical problem solving in games. By school regulation, children in kindergarten are not taught reading, writing, and written numeracy because the main priorities are to encourage children's cognitive skills in structured play environments. Children are often required to work cooperatively in solving puzzles, card games, and crafts that require practicing complex cognitive processes (Marti-Bucknall, 2002). These experiences might help children to develop their cognitive abilities in general, which may facilitate moral reasoning.

Our findings also showed that Chilean children used more moral reasoning for emotion attributions in the stealing context compared to the non-sharing context. This finding resonates with previous research that children judge negative duties, such as stealing, as more severe compared to omitting positive duties, such as not helping (Malti, Gasser, et al., 2009). It is somewhat difficult to explain why this context difference did not occur in the Swiss sample, as previous research has revealed this context difference as well (Malti, Gasser, et al., 2009). It is possible that children in our Swiss sample were more fearful of sanctions in the stealing context than in the sharing context and therefore their justifications for attributing moral emotions were underlying their fear of punishment. In fact, Swiss children were found to have more sanction-oriented justifications for moral emotion attributions in the stealing context than Chilean children. Woolgar, Steele, Steele, Yabsley and Fonagy (2003) found that young children's attribution of moral emotions in a cheating task was mostly followed by punishment justifications. However, as this interpretation is speculative, future research on children's moral reasoning across contexts and cultures is warranted.

Our findings also confirmed that girls reported higher levels of sympathy than did boys regardless of age and culture. This finding is consistent with previous studies (see Eisenberg, 2000).

Although the findings of the present study provide new insights into children's moral development across cultures, several limitations should be noted. First, the sample size for each age group and culture was relatively small. Thus, the generalizability of the findings might be limited, and future research with larger sample sizes is needed to confirm our findings. Second, we only used two contexts of rule transgressions; although the two stories have been extensively validated in previous studies (see Krettenauer et al., 2008). Third, we did not specify the context

of the rule violation further. As differing contexts, such as social exclusion or care, seem to influence judgments and emotion attributions (Malti, Killen, & Gasser, 2012), examining moral emotions and moral cognition in different contexts is warranted.

Despite these limitations, the present study points to the importance of studying the development of moral emotions and moral cognition across cultures. By investigating both moral emotions and moral cognition in an understudied cultural context (i.e., Chile), this study contributed useful knowledge on cross-cultural differences and similarities in children's affective and cognitive moral development.

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Table 1

Frequencies (%) of Moral Emotion Attributions by Age Group, Culture, and Story Context

	Switzerland		Chile	
Story Context	Younger	Older	Younger	Older
Stealing	35 (74)	37 (95)	36 (84)	33 (94)
Not Sharing	34 (72)	28 (80)	36 (84)	29 (83)

Table 2

Mean Proportions (and Standard Deviations) of Moral, Sanction-Oriented, Hedonistic, and Unelaborated Justifications of Moral Judgments by Age Group, Culture, and Story Context

		Switzerland		Chile	
		Younger	Older	Younger	Older
Stealing	Moral	0.83 (0.37)	0.59 (0.45)	0.65 (0.45)	0.70 (0.39)
	Sanction-oriented	0.02 (0.10)	0.03 (0.16)	[a]	[a]
	Hedonistic	[a]	0.01 (0.08)	[a]	[a]
	Unelaborated	0.15 (0.36)	0.38 (0.45)	0.35 (0.45)	0.30 (0.39)
Not Sharing	Moral	0.77 (0.43)	0.78 (0.39)	0.78 (0.41)	0.73 (0.42)
	Sanction-oriented	0.04 (0.21)	[a]	[a]	0.06 (0.20)
	Hedonistic	[a]	0.08 (0.22)	[a]	0.04 (0.19)
	Unelaborated	0.18 (0.39)	0.09 (0.28)	0.18 (0.38)	0.11 (0.32)

Note: [a] Justification did not occur.

Table 3

Mean Proportions (and Standard Deviations) of Moral, Sanction-Oriented, Hedonistic, and Unelaborated Justifications of Emotion Attributions by Age Group, Culture, and Story Context

		Switzerland		Chile	
		Younger	Older	Younger	Older
Stealing	Moral	0.31 (0.47)	0.40 (0.48)	0.35 (0.48)	0.71 (0.43)
	Sanction-oriented	0.44 (0.50)	0.27 (0.44)	0.13 (0.34)	0.11 (0.27)
	Hedonistic	0.02 (0.15)	0.06 (0.24)	0.15 (0.36)	0.03 (0.17)
	Unelaborated	0.22 (0.42)	0.27 (0.44)	0.27 (0.43)	0.06 (0.20)
Not Sharing	Moral	0.42 (0.49)	0.52 (0.48)	0.28 (0.45)	0.51 (0.49)
	Sanction-oriented	0.35 (0.48)	0.13 (0.35)	0.15 (0.34)	0.10 (0.29)
	Hedonistic	0.03 (0.16)	0.08 (0.27)	0.22 (0.40)	0.17 (0.37)
	Unelaborated	0.21 (0.41)	0.27 (0.43)	0.21 (0.40)	0.19 (0.39)

Table 4

Correlations of Sympathy, Emotion Attributions and Moral Reasoning Variables for Switzerland and Chile

	1	2	3	4
1 Sympathy	-	.20[a]	-.15	.10
2 Moral Emotion Attribution	-.07	-	.11	.20[a]
3 Moral Justification J	.13	.14	-	.30**
4 Moral Justification EA	.10	.33**	.07	-

Note. Correlations above the diagonal represent results for the Swiss sample, and correlations below the diagonal represent results for the Chilean sample.
[a]$p < .10$. *$p < .05$. **$p < .01$.
J = Judgment. EA = Emotion attribution.

Figure Captions.

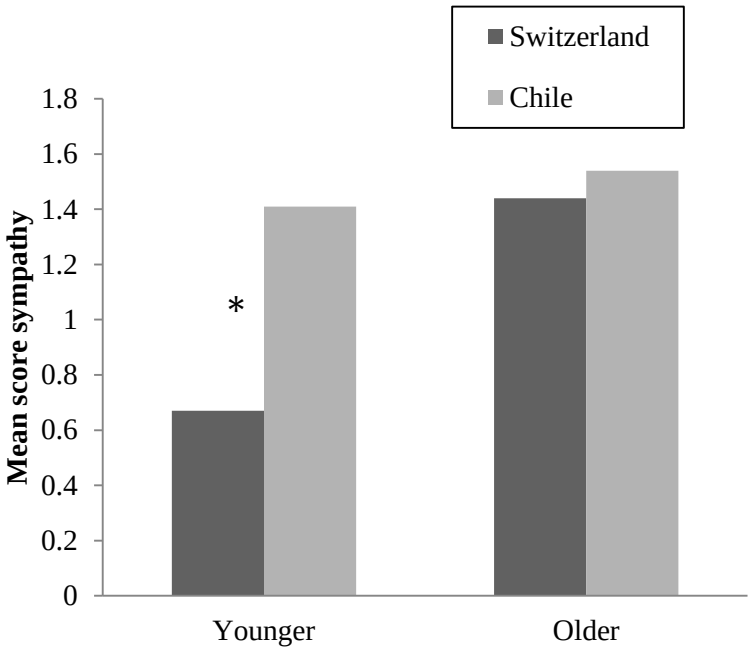

Figure 1. Interaction between Age Group and Culture in the Prediction of Sympathy.

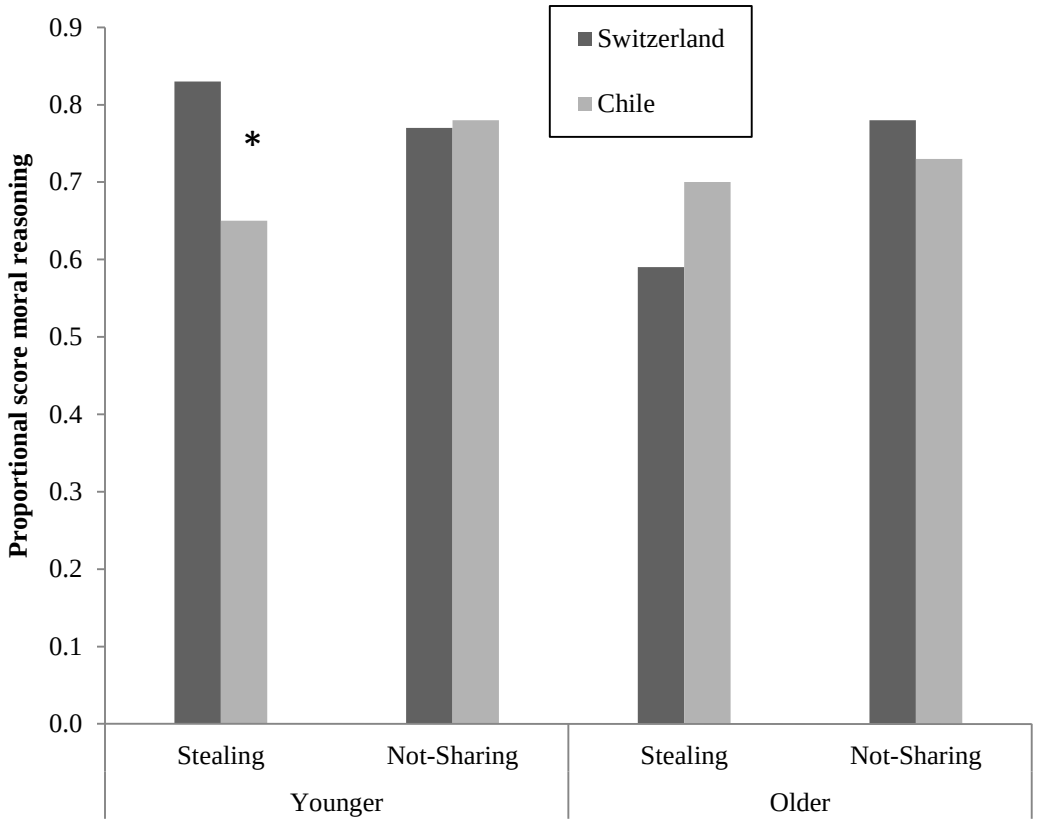

Figure 2. Moral Reasoning of Moral Judgment by Culture, Age Group, and Story Context.