

Running head: MORAL JUDGMENTS, MORAL EMOTIONS, AND EXCLUSION

Children's Moral Judgments and Moral Emotions following Exclusion of Children with
Disabilities: Relations with Inclusive Education, Age, and Contact Intensity

This is the peer-reviewed version of the following article: Gasser, L., Malti, T., & Buholzer, A. (2013). Children's moral judgments and moral emotions following exclusion of children with disabilities: Relations with inclusive education, age, and contact intensity. *Research in Developmental Disabilities*, 34, 948-958. doi: 10.1016/j.ridd.2012.11.017, which has been published by Elsevier. The publication is available in the publisher's final form at: <http://dx.doi.org/10.1016/j.ridd.2012.11.017>. Please refer to Elsevier Terms and Conditions of Archiving for more information: <https://www.elsevier.com/about/company-information/policies/sharing>. ©2013. This manuscript is licensed under the CC-BY-NC-ND License 4.0: <https://creativecommons.org/licenses/by-nc-nd/4.0/>

Abstract

We investigated relations between children's moral judgments and moral emotions following disability-based exclusion and inclusive education, age, and contact intensity. Nine- and 12-year-old Swiss children ($N = 351$) from inclusive and noninclusive classrooms provided moral judgments and moral emotion attributions following six vignettes about social exclusion of children with disabilities. Children also reported on their level of sympathy towards children with disabilities and their contact intensity with children with disabilities. Overall, children condemned disability-based exclusion, attributed few positive emotions to excluder targets, and expressed high sympathy for children with disabilities, independent of age and educational setting. However, younger children from inclusive classrooms exhibited more moral judgments and moral emotions than younger children from noninclusive classrooms. Moreover, children who expressed high sympathy towards children with disabilities were more likely to report frequent contact with children with disabilities. The findings extend existing research on social exclusion by examining disability-based exclusion and are discussed with respect to developmental research on social and moral judgments and emotions following children's inclusion and exclusion decisions.

Keywords: moral judgments, moral emotions, sympathy, social exclusion, disability

Children's Moral Judgments and Moral Emotions following Exclusion of Children with Disabilities: Relations with Inclusive Education, Age, and Contact Intensity

Based on increasing international efforts to promote the rights of persons with disabilities (Rights for Persons with Disabilities, 2006), the number of children with disabilities who join inclusive educational settings has increased in the United States and in Europe in recent years (European Agency for Development in Special Needs Education, 2011; U.S. Department of Education, Office of Special Education Programs, 2008). The present study focused on Switzerland. Although Switzerland still has one of the highest rates of noninclusive education in Europe, children with disabilities have been increasingly integrated into mainstream education since 2005 (Sermier Dessemontet, Bless, & Morin, 2011). One premise of inclusive education is that children without disabilities learn to reduce disability-related stereotypes and increase tolerance towards diversity through interactions and contact with children with disabilities (e.g., Cameron & Rutland, 2007). However, what do children without disabilities think and feel about children with disabilities, and which role do moral considerations play in their thinking and feeling about disability-related social conflicts?

In order to promote children's sensitivity towards inclusion, researchers have emphasized the need to better understand children's perceptions of social exclusion (Killen & Smetana, 2010). Nonetheless, despite the bulk of research on children's attitudes towards children with disabilities (Siperstein, Norins, & Mohler, 2007; for reviews, see Nowicki & Sandieson, 2002 and Scior, 2011), developmental research on children's understanding and feelings about social inclusion and exclusion of children with disabilities is very scarce.

The present study aimed to fill these research gaps and was guided by two main research objectives: First, we investigated how children's moral judgments and moral emotions about social exclusion of children with disabilities are related to educational setting (inclusive versus noninclusive) and age (9-year-olds versus 12-year-olds). Second, we

investigated the role of moral judgments and moral emotions in children's contact intensity towards children with disabilities.

Disability-Related Moral Judgments

Although the call for mainstreaming children with disabilities is frequently justified with references to moral concepts such as social justice and equal rights (e.g., Lindsay, 2007), only very little research to date has investigated how children judge disability-based exclusion and how moral judgment is related to their inclusive or exclusive behavior towards children with disabilities. One of the few exceptions is a study by Corwadin (1986), which revealed that higher levels of moral judgment predicted greater social acceptance of classmates with mental disabilities in a sample of adolescents from inclusive classes. However, this study assessed moral judgments by asking children about dilemmas concerning general moral issues (e.g., Heinz Dilemma) and, thus, does not allow for conclusions regarding children's judgments of situations, which specifically relate to moral conflicts about the inclusion or exclusion of children with disabilities. Yet, children's weighting of moral and non-moral considerations when reasoning about moral conflicts not only depends on individual characteristics (e.g., age, gender) but also on the specific features of the context to be judged (Smetana, 2006). In this respect, it might be problematic to characterize children's disability-related attitudes as homogenous orientations (i.e. as being uniformly positive or negative). For example, research on children's attitudes towards children with disabilities has revealed that the valence of attitudes varies as a function of disability type (Nowicki, 2006); that is, disabilities that are less apparent (e.g., mental disabilities) are judged more negatively than disabilities that are more apparent (e.g., physical disabilities) (Nowicki & Sandieson, 2002). In addition, children's attitudes may differ in regards to the specific features of the context presented to assess disability-based attitudes (Nowicki, 2006). For example, adolescents report less of a desire to interact with children who have disabilities for activities that are highly intimate (e.g., talking about personal issues) or require advanced cognitive or social

competences (e.g., homework) than for less intimate or demanding activities (e.g., lending a pencil) (Siperstein, Parker, Bardon, & Widaman, 2007). Thus, children's moral judgments of disability-related moral conflicts may be expected to vary across contexts.

In this study, we assessed moral judgments by children's evaluations and moral reasoning about disability-based exclusion. We took account of contextual influences by assessing moral judgments in situations entailing inclusion and exclusion of children with two different disabilities (mental vs. physical) with respect to different group activities (academic, social, athletic). Previous social domain research has investigated how children judge about the social exclusion of a non-stereotypical child and how their judgments and reasoning depend on varying contextual conditions such as intimacy of relationships (e.g., exclusion from friendships vs. exclusion from school) or qualification of the excluded non-stereotypical child (e.g., non-stereotypical child threatens or facilitates effective group functioning; Killen & Rutland, 2011). However, this research has focused primarily on how children judge and reason about exclusion based on gender, race, or nationality, and has not included disability (e.g., Killen, Margo, & Sinno, 2006; Malti, Killen, & Gasser, 2012).

The earliest evidence for children's ability to take account of context when reasoning about disability-based exclusion has been provided by two studies including kindergarten children from inclusive classrooms (Diamond & Hong, 2010; Diamond & Tu, 2009). In these studies, children had to decide if they would like to include a child with a physical disability in a group activity ("Who do you think should get to play?"). The majority of children opted for the inclusion of children with disabilities (67%). However, these studies also found that preschoolers were more likely to accept exclusion of children with physical disabilities in situations in which the disability interfered with the activity (e.g., kicking a ball) than in situations in which disability did not affect group functioning (e.g., drawing). In the present study, we extended this research by investigating children's moral judgments and reasoning

about exclusion of children with disabilities, and by examining the role of moral judgments in children's contact intensity with children with disabilities.

Disability-Related Moral Emotions

Research has shown that moral judgments alone do not account for socially inclusive behavior. Rather, researchers have argued that moral emotions are indicative of whether the child focuses on moral, other-oriented concerns or selfish interests in a given situation (Malti, Gasser, & Gutzwiller-Helfenfinger, 2010; Malti, Gummerum, Keller, & Buchmann, 2009; Malti & Krettenauer, in press). As such, moral emotions serve as motives for morally relevant behavior (Malti et al., 2009). Developmental researchers have defined moral emotions as self-conscious or self-evaluative emotions, as they are evoked by the individual's understanding and evaluation of the self (Eisenberg, 2000; Malti & Latzko, 2012). In contrast, moral judgments do not necessarily indicate how much children identify with moral principles and norms (Arsenio & Lemerise, 2004; Gini, Pozzeli, & Hauser, 2011; Nunner-Winkler, 2007).

Previous developmental research on moral emotions has predominantly focused on emotion attributions, as assessed in the *happy-victimizer* tradition, or has investigated the development of *empathy/sympathy* (Eisenberg, 2000). Research utilizing the happy-victimizer paradigm has revealed that preschool children often expect a moral transgressor to feel happy, even though they judge the moral transgression as morally wrong. During elementary school, judgments and emotion expectancies increasingly converge (for reviews, see Arsenio, Gold, & Adams, 2006; Krettenauer, Malti, & Sokol, 2008).

In the present study, we assessed moral emotions by: a) children's self-attributed emotions following exclusion of children with disabilities; and b) their self-reported sympathy. In one recent study, we showed that children's and adolescents' emotion attributions about nationality-based exclusion do not always converge with their moral judgments. For example, children sometimes say it is ok to exclude a person from a minority group while still attributing moral feelings to the excluder target (such as guilt and sadness;

Malti et al., 2012). Moral emotion attributions as assessed in this research tradition have a strong cognitive component, as they require the ability to anticipate the consequences of one's actions for the other and a sense of personal responsibility for this action (Malti et al., 2009).

In addition, in the present study, we assessed children's sympathy towards children who were being excluded because of their disability. Sympathy is defined as the feeling of concern for the other that stems from the apprehension of another's emotional state, although it is not the same feeling that the other person may experience (Eisenberg, 2000). Compared to moral emotion attributions, sympathy requires less complex cognitive processing and is more spontaneous (although basic perspective-taking skills are required as well). Although many studies have investigated the development of sympathy in general (for a review, see Eisenberg, Spinrad, & Sadovsky, 2006), we are aware of only one study that has investigated empathy towards children with disabilities (Crystal, Watanabe, & Chen, 1999). In this study, 10- and 16-year-old American and Japanese children had to respond to a situation in which a group of children wanted to go swimming and one child in a wheelchair wanted to join them. The children were asked how they would feel if the child with the disability would join them for swimming. The results revealed that the children often reported feeling empathy, acceptance of the peer with the disability, friendship, and a wish to help him/her. In contrast, feelings of anxiety or callousness were mentioned only infrequently. In the present study, we investigated children's general sympathy towards children who were being excluded because of their disability and if this sympathy accounts for differences in contact intensity.

The Present Study

Our first goal was to investigate the effects of classroom type and age group on children's disability-related moral judgments and moral emotions. We also investigated the effects of context on judgments and emotions following disability-based exclusion. Based on previous research on social exclusion (Killen & Rutland, 2011), we expected that children would judge the exclusion of children as wrong for moral reasons. We also hypothesized that

they would express high sympathy for children with disabilities and would attribute few positive emotions after excluding children with disabilities. In regards to context, we predicted that children would be more likely to accept exclusion in contexts in which the inclusion of the child who had a disability would interfere with effective group functioning. More specifically, we hypothesized that children would be more likely to view the exclusion of a child with a mental disability from an academic group activity as less wrong than the exclusion of a child with a physical disability. Conversely, it was expected that children would be more likely to condemn the exclusion of a child with a physical disability, compared to a child with a mental disability, from an athletic group activity. No different evaluations were expected for the exclusion from the social contexts.

Based on related research on intergroup contact (Pettigrew & Tropp, 2006), we expected that children in inclusive settings would show a stronger inclusive orientation in their moral judgments and moral emotions than children in noninclusive educational settings. According to Allport's contact hypothesis, contact between majority and minority groups is the most effective way to reduce prejudice and increase tolerance (Allport, 1954). The assumption is that children's stereotypes and negative attitudes towards other groups are a consequence of limited contact, implicating that children's experiences with a minority group disconfirm inappropriate beliefs about this group (Allport, 1954). Consistent with this hypothesis, research has shown that intergroup contact is not only effective for reducing negative stereotyping and prejudice with respect to racial or ethnic encounters (e.g., Crystal, Killen, & Ruck, 2005; Gaertner & Dovidio, 2000) but also with respect to disability (Maras & Brown, 2000; Pettigrew & Tropp, 2006; Wong, 2008). For example, meta-analytic findings indicate that inclusive classrooms, when compared to noninclusive classrooms, have a medium-sized positive effect on children's attitudes towards persons with disabilities (Nowicki & Sandieson, 2002).

Our second goal was to test the relation between children's disability-related moral judgments and moral emotions and intensity of real-life contact. We hypothesized that moral judgments and moral emotions would be positively related to contact intensity with children with disabilities. This expectation was drawn from related previous research on attitudes and behavior towards children with disabilities. For example, Roberts and Smith (1999) showed that elementary school children's attitudes towards children with a physical disability predicted their expectations about behavior in friendship situations, which then predicted the behavior towards a child with a physical disability. Based on related research that moral emotions are more consistently related to social behavior than moral judgments, we hypothesized a closer link between moral emotions and contact intensity than between moral judgments and contact intensity (e.g., Gasser & Malti, 2012).

Method

Participants

The study included 351 children (170 girls), of which 169 were from inclusive classes ($N_{classes} = 11$) and 182 were from noninclusive classes ($N_{classes} = 8$). One hundred and sixty of the children were 2nd or 3rd graders ($M_{age} = 8.75$, $SD = .78$) and 191 of the children were 5th or 6th graders ($M_{age} = 11.82$, $SD = .72$). Children from inclusive and noninclusive classes were equally distributed across the two age groups (younger: 52% vs. 48%, respectively; older: 51% vs. 49%, respectively). All the children with disabilities in inclusive classrooms were included full time and received specific therapeutic and educational support from a special education teacher. Children with disabilities were children with either mild mental retardation ($IQ < 70$ and > 50) or physical disabilities (e.g., cerebral palsy). Younger children with disabilities had been included for 2.9 years and older children with disabilities for 4.4 years. Most of the children without disabilities had Swiss nationality (84%) or European nationalities (15%). Only 1% of the children were of Asian or African nationality. In terms of nationality, the composition was homogenous across noninclusive (14% non-

Swiss) and inclusive classrooms (18% non-Swiss). Moreover, the socio-economic background of the families was estimated on the basis of statistics about the communities in which the parents lived. Of the parents with children educated in noninclusive classrooms, 20% had completed high school and 75% had reached a higher course of education. Similarly, 16% of the parents who had children educated in inclusive classrooms had completed high school and 79% had reached a higher education level. None of these differences were statistically significant. Parental permission forms were distributed at school and all children who received parental permission to participate were included in the study. Participant rate was 92%.

Procedure

The interview was conducted in two separate parts that were presented in a counterbalanced order. One part included the instruments on mental disability and the second part included instruments on physical disability. No order effects were found. Before each interview session, the meaning of mental or physical disability was explained to the children. These descriptions were adapted from studies investigating kindergarten and elementary school children's understanding of disabilities (e.g., Smith & Williams, 2004).

Instruments

First, we used hypothetical scenarios describing exclusion based on disability to assess moral judgments, emotion attributions, and moral reasoning. Second, sympathy was assessed using a self-report measure. All these moral measures were separately assessed for either mental or physical disability. Finally, we assessed contact intensity with a self-report measure.

Moral interview. The instrument was developed by Gasser and Malti (2012) and contained six stories in which a protagonist of a group of two children had to decide whether or not to include a child with or without a disability. Three of the stories were about children with mental disabilities and three stories were about children with physical disabilities. The

stories described academic, social, or athletic peer group activities. In the academic stories, groups of three children had to resolve a cognitive challenging task. One group consisted of only two children and was looking for an additional child. In the social stories, two children wanted to go to the circus and had one ticket left for another child. In the athletic stories, a team of two children wanted to include an additional child for a tug-of-war game, because the other team contained of three children. Thus, in all six stories, two children were looking for a third child to complete the group, and two children – one with a mental or physical disability and the other one without a disability – asked to be included. The situations were construed in such a way that the groups could only include one more child. The stories were illustrated by pictures and matched according to gender.

Interview questions. To assess children's evaluation of disability-based exclusion, they were asked to judge the decision of the protagonist after having included the child without a disability ("What do you think, is it good or bad that Ruth decided to include Laura [child without disability]?"). They were also asked to justify their evaluation ("Why?"). Moreover, children were asked to predict the emotion they *themselves* would have if they excluded the child with a disability ("Given that you decided to include Laura, how would you feel?"). Again, children were asked to justify their self-attributed emotions ("Why do you think you would you feel that way?"). The interview also included questions which were not at the focus of this manuscript and were not included into analyses (e.g. inclusion decisions).

Coding. The evaluation of the exclusion of the child with a disability as either right or wrong was coded as 0 and 1, respectively. Attributions of happiness were coded as 1. Moral emotions (e.g., guilt, empathy) and amoral emotions (e.g., fear, anger) were coded as 0. Few children attributed two emotions (< 5%). In these cases each attribution received as score of 0.5 for proportional weighting of the emotion categories.

Justifications following the evaluations of disability-based exclusion and self-attributed emotions were analyzed using a coding system adapted from previous research on

social exclusion (e.g., Killen & Stangor, 2001): Moral justifications included justifications referring to equal value, rights and opportunities (e.g., “children with disabilities are worth the same as other children”, “everyone has the right to learn”), and negative/positive consequences of exclusion/inclusion (e.g., “because the child feels lonely when being excluded”, “because he will be happy to be with the other children”). Social-conventional justifications included justifications referring to concerns about effective group functioning, stereotypes, or tradition (e.g., “with children with disabilities the group can not win”). Very few children mentioned more than one justification type (< 1%). To control for the varying number of responses, we computed mean proportions for the two justification types. Ten percent of the interviews were coded twice and Cohen’s kappa was .86 for inter-rater reliability. Moral reasoning scores were created by summing up children’s moral justifications following their moral evaluations and self-attributed emotions.

Sympathy. Children’s sympathy towards children with disabilities was assessed by an instrument adapted from Malti et al. (2009). The instrument contained four questions which described children with disabilities being excluded or treated unfairly. For example, the child was asked if he or she would sympathize with a child with a mental disability if the child were victimized because of his/her disability. Separate questions were used to assess sympathy towards children with mental or physical disabilities. Children answered the questions with either yes or no. If children answered yes, children were asked to what extent they would sympathize with the child (“Would you feel a little or very sorry for x?”). No sympathy was coded as 0, a little sympathy as 1, and strong sympathy as 2. Separate scores were created for mental and physical disability ($\alpha = .78, .73$, respectively).

Contact intensity. In order to assess contact intensity, children were asked if they knew a child with a disability. If they knew more than one child, they were told to think about the child they knew best. They were further asked to indicate how much contact they had with this child. Three categories were used to classify the children’s answers: no contact (0), little

contact (1), frequent contact (2). As well, children were asked to indicate the disability type (“Do you know which disability this child has?”) and the place where the contact took place (“From where do you know this child?”).

Results

The descriptive statistics (means and standard deviations) for all study variables are displayed in Table 1. The reporting follows our two main research goals: First, we report the results of effects of classroom type (inclusive vs. noninclusive) and age group (9- vs. 12-year-olds) on children’s moral judgments (i.e., moral evaluation and moral reasoning) and moral emotions (happy victimizer and sympathy). We used repeated measures ANOVA to analyze these effects. Disability type (mentally vs. physically disabled) and exclusion context (academic, social, athletic) were entered as a within subject factors and age group, classroom type, and gender were entered as between subject factors. Second, we investigated the predictive role of moral judgments and moral emotions in contact intensity. We controlled for gender in all analyses, as previous research has indicated gender differences in children’s judgments, emotions, and attitudes (e.g., Killen et al., 2002; Nowicki & Sandieson, 2002).

Effects of Educational Setting and Age Group on Children’s Moral Judgments and Moral Emotions

Moral evaluation. Irrespective of disability type, most children (84%) evaluated it as wrong to exclude children on the basis of disability. Analyses of variance revealed an interaction between disability type and context, $F(2, 664) = 10.07, p < .001, \eta^2 = .03$. Follow-up analyses indicated that children were more likely to accept exclusion of a child with a physical disability than a child with a mental disability in the school context ($M_s = 87$ vs. 82 , respectively), $t(347) = 2.43, p < .05$. In contrast, children judged the exclusion of a child with a mental disability as more acceptable than the exclusion of a child with a physical disability in the athletic context ($M_s = 85$ vs. 78 , respectively), $t(347) = 3.00, p < .01$. Children did not

judge the exclusion of children with mental or physical disabilities differently for the social context ($M_s = .83, .86$, respectively).

In addition, the analysis of variance revealed a significant main effect of age, $F(1, 332) = 3.98, p < .05, \eta^2 = .01$, which was qualified by an interaction effect between age group and school type, $F(1, 332) = 17.44, p < .001, \eta^2 = .05$ (see Figure 1). Post hoc t-tests comparing inclusive and noninclusive classrooms separately for each age group revealed that 9-year-olds from inclusive classrooms were more likely to condemn disability-based exclusion than 9-year-olds from noninclusive classrooms., $t(158) = 3.75, p < .001$. In contrast, 12-year-olds from inclusive and noninclusive classrooms did not differ, $t(189) = 1.60, p > .05$.

Moral reasoning. Children predominantly used moral reasons to justify their evaluations and self-attributed emotions of exclusion (64%). However, there was a significant main effect of age group, $F(1, 343) = 9.68, p < .01, \eta^2 = .03$, which was qualified by a two-way interaction between age group and classroom type, $F(1, 343) = 4.46, p < .05, \eta^2 = .01$ (see Figure 2). Separate analyses for age group indicated that within the younger sample, children from inclusive classes were more likely to refer to moral reasons in their justifications of moral evaluations and emotion attributions than children from noninclusive classes, $t(158) = 2.42, p < .05$. Twelve-year-olds from inclusive and noninclusive classes did not differ, $t(189) = .16, p > .05$.

Moral emotions.

Happy victimizer attributions. Overall, the children seldomly expected to feel happy after having excluded children with disabilities (19%). Analysis of variance revealed no effect of context or disability type for children's happy victimizer attributions. However, there were significant main effects of age group, $F(1, 343) = 21.29, p < .001, \eta^2 = .06$, and classroom type, $F(1, 343) = 13.51, p < .001, \eta^2 = .04$, both of which were qualified by a two-way interaction between age group and classroom type, $F(1, 343) = 11.04, p < .001, \eta^2 = .03$ (see Figure 3). Separate analyses for age group revealed that within the younger sample, children

from inclusive classrooms were less likely to attribute positive emotions to excluder targets than children from noninclusive classrooms, $t(158) = -3.96, p < .001$. In contrast, no effect of classroom type was found for older children, $t(189) = 0.27, p > .05$.

Sympathy. The overall mean of children's self-reported sympathy ($M = 1.70$, range 0-2) indicated that children generally expressed high disability-related sympathy. A main effect of disability type indicated that children reported less sympathy towards children with mental disability than towards children with physical disability ($M_s = 1.68$ vs. 1.72 , respectively), $F(1, 342) = 4.30, p < .04, \eta^2 = .01$. Moreover, a main effect of gender indicated that girls expressed higher sympathy than boys ($M_s = 1.75$ vs. 1.66 , respectively), $F(1, 342) = 5.96, p < .02, \eta^2 = .02$. Finally, a main effect of age group, $F(1, 342) = 9.60, p < .01, \eta^2 = .03$, was qualified by a two-way interaction between age group and classroom type, $F(1, 342) = 7.24, p < .01, \eta^2 = .02$ (see Figure 4). Separate analyses for age group revealed that within the younger sample, children from inclusive classes reported higher sympathy towards children with disabilities than children from noninclusive classes, $t(158) = 2.39, p < .05$. In contrast, within the older sample, no effect of classroom type was found, $t(189) = 0.78, p > .05$.

The Role of Moral Judgments and Moral Emotions on Contact Intensity

Next, we tested the hypothesis that moral judgments and moral emotions would be significantly related to contact intensity. Descriptive statistics indicated that 34% of the children reported that they had no contact with children with disabilities, 49% reported little contact, and 17% reported frequent contact. In most cases, children said that the child focused on had a mental or physical disability (24% and 34%, respectively) or said that they were unaware of disability type (34%). Children further reported that the contact either took place in school (22%), during leisure time (23%), in the family (18%) or in the neighbourhood (15%). For the following analyses, we created separate measures for mental and physical disability; however, we aggregated across exclusion contexts (academic, social, athletic), as the former analyses revealed only few effects of exclusion context.

We first ran correlations between the moral measures and contact intensity (see Table 2). Classroom type and age group were positively associated with contact intensity ($r = .27^{**}$ and $r = .17^{***}$, respectively). We also ran correlations after controlling for classroom type and age group. As expected, measures of moral emotions (i.e., attributions of happiness to excluder targets and sympathy) were significantly related to contact intensity, even after controlling for classroom type and age group (see Table 2).

Finally, in order to investigate unique relations between the moral measures and contact intensity, we computed two separate hierarchical linear regression analyses for mental and physical disability. In the first step, we entered age group and classroom type. In the second step, we entered the four moral measures. We also tested interaction effects between the moral measures in the third step, as previous research has revealed significant interaction effects between emotion attributions and sympathy when predicting morally relevant behavior (Malti et al., 2009). As none of the interaction effects were significant, they were excluded from the final models.

The analyses revealed that after controlling for all other moral measures, only self-reported sympathy significantly predicted contact intensity (Table 3). Again, results were consistent across disability types. As the negative effect of happy victimizer attributions on contact intensity disappeared after controlling for sympathy, we tested the possible role of mediation effects following the steps proposed by Baron and Kenny (1986). The analyses showed that sympathy significantly mediated the relationship between happy victimizer attributions and contact intensity (mental disability: *Sobel* $z = -2.68$, $p < .01$; physical disability: *Sobel* $z = -2.68$, $p < .01$). More specifically, fewer happy victimizer attributions predicted higher self-reported sympathy, which, in turn, predicted increased scores in contact intensity.

Discussion

We found that the majority of children evaluated disability-based exclusion as wrong for moral reasons and only rarely expected to feel happy after excluding children with disabilities. Similarly, most children reported that they would feel sorry if children with disabilities were excluded or treated unfairly. These findings are consistent with previous research on social exclusion based on gender and racial exclusion, indicating that most children condemn the exclusion of a non-stereotypical child for reasons of fairness and equal rights (Killen, Margie, & Sinno, 2006). Moreover, our findings parallel those from happy-victimizer research which indicate that attributions of happiness to moral transgressors strongly decrease from kindergarten to elementary school (for reviews, see Arsenio, Gold, & Adams, 2006; Krettenauer, Malti, & Sokol, 2008; see also Malti & Krettenauer, in press).

We only found limited support for the hypothesis that children's moral judgments and emotions depend upon disability type and exclusion context. However, for moral evaluations, we found that children viewed the exclusion of a child with a mental disability in the athletic context as less wrong than the exclusion of a child with a physical disability, whereas the contrary was found for the academic context. These findings are consistent with previous research indicating that children have more concerns to include a non-stereotypical child if their characteristics are in conflict with effective group functioning (e.g., Diamond & Hong, 2010; Killen & Stangor, 2001). Furthermore, results indicated that children's sympathy differed for disability type; that is, self-reported sympathy was lower towards children with mental disabilities than towards children with physical disabilities. This negative bias towards children with mental disabilities is in line with research showing that children with intellectual disabilities are more stigmatised and are at a higher risk of being rejected, neglected, or victimized than their typically-developing peers (Nowicki, 2006; Nowicki & Sandieson, 2002).

Results further indicated that inclusive education had a positive effect on moral judgments and moral emotions following disability-based exclusion for the younger children.

More specifically, younger children from inclusive classrooms were more likely to evaluate exclusion based on disability as wrong and provided more moral reasons than younger children from noninclusive classrooms. They were also less likely to expect themselves to feel happy in the role of an excluder and more likely to report sympathy towards children with disabilities. These findings are consistent with Allport's intergroup contact hypothesis (1954) which predicts that contact between groups is most effective for reducing intergroup bias and stereotypes. The findings also resonate with related research on the positive effect of inclusive education on children's concepts of disabilities (e.g., Diamond, Hestenes, Carpenter, & Innes, 1997; Magiati, Dockrell, & Logotheti, 2002) or attitudes towards children with disabilities (for meta-analytic reviews, see Nowicki & Sandieson, 2002; Pettigrew & Tropp, 2006). As the positive effect of inclusion should be even stronger if contact occurs under specific conditions such as equal status, common goals, or cooperation (Pettigrew & Tropp, 2006), it would be interesting for future research to distinguish classrooms along these conditions.

In contrast, older children from inclusive vs. noninclusive classrooms did not differ in their moral judgments and moral emotions. An explanation for this finding might be that as children get older, they increasingly cumulate direct and indirect experiences outside school (e.g., through media) which might compensate for the effects of classroom contact on their thinking and feelings about children who are different from themselves. At the same time, social-cognitive advances in middle childhood (Selman, 1980; Lalonde & Chandler, 2002) might enable children to generalize moral concepts such as fairness and equal rights from particular relationships to more abstract intergroup relationships (Slomkowski & Killen, 1992). Thus, older children, compared to younger children, might increasingly be able to understand the moral implications of disability-based exclusion, even without having extensive contact with children with disabilities.

We finally hypothesized that moral judgments and moral emotions would predict contact intensity. Results indicated that after controlling for classroom type, age group, and

the moral measures, only self-reported sympathy significantly predicted contact intensity. This finding extends previous research finding that sympathy is related to morally relevant behavior, such as prosocial or aggressive behavior (e.g., Zahn-Waxler, Cole, Welsh, & Fox, 1995). This finding highlights the significance of sympathy as a means to enhance other-oriented and socially inclusive behaviors. Moreover, we found that the negative effect of attributions of happiness on contact intensity was mediated by sympathy. Previous research by Eisenberg and colleagues (1989) revealed that sympathy played a mediational role with respect to the relationship between perspective taking and prosocial behavior; according to these researchers, this finding may indicate that perspective taking is not a sufficient condition for prosocial behavior, because perspective taking remains “cold cognition” if not accompanied by a person’s motivation to alleviate another person’s suffering. Additionally, it has been argued that a lack of emotional involvement combined with an interest in satisfying personal goals might implicate that persons use their perspective takings skills for manipulative purposes (Malti et al., 2010). Even though happy-victimizer attributions differ from perspective-taking skills because of their affective coloring, moral emotion attributions clearly have social-cognitive components (Krettenauer et al., 2008; Malti & Krettenauer, in press). For example, the ability to expect guilt feelings following moral transgressions presupposes a coordination of the perpetrator’s intentions with the victim’s perspective. Accordingly, it may be assumed that emotion attributions – as indicators of children’s ability to coordinate the perpetrator’s and victim’s perspectives and consider this internalized knowledge for feelings of guilt- need to be connected to feelings of sympathy to become relevant for children’s motivation to have contact with children with disabilities.

Overall, these findings are the first to provide support for the differential role of sympathy in children’s disability-related behavior, as well as its mediating role in the links between moral emotion attributions and disability-related behavior. Thus, understanding the wrongfulness and emotional consequences of disability-based exclusion may not guarantee

that children engage in disability-related interaction, as social and moral cognitions may remain merely on an informational level without having a motivational resonance. In contrast, moral emotions such as sympathy may more genuinely indicate that children care about children with disabilities and feel responsible to include these children in activities (see Eisenberg et al., 2006; Malti & Ongley, in press). However, it should be pointed out that the design is cross-sectional and, thus, precludes definitive answers to questions of causal direction between the moral measures and contact intensity.

This study contributes to our previous work on social exclusion of children with disabilities. In two related studies we focused on 6-, 9-, and 12-year old children's decision to include or exclude children with disabilities (Gasser, Chilver-Stainer, Buholzer, & Perrig-Chiello, 2012; Gasser, Malti, & Buholzer, 2012). We found that, compared to 6-year-old children, elementary school children were more likely to predict the inclusion of children with disabilities. Despite this, elementary school children were more sensitive to the social-conventional implications of the inclusion of children with disabilities, i.e. they exhibited a more advanced understanding of how inclusion of a child with a certain disability interferes with effective group functioning. Altogether, these findings parallel those within social domain research, indicating that as children age they become increasingly able to coordinate moral with social-conventional issues and thus to include different point of views in social conflicts (Killen & Rutland, 2011).

To enhance social inclusion among children with and without disabilities, it is important to learn more about the way children perceive, evaluate, and feel about children with disabilities. Our study makes an important contribution to this knowledge. Future research is warranted to investigate children's moral reasoning and moral emotions following disability-based exclusion across a wider range of disability types (e.g., sensory disabilities or conduct disorders), age groups (e.g., adolescents), and cultural contexts.

References

- Allport, G. W. (1954). *The nature of prejudice*. New York: Doubleday Anchor Books.
- Arsenio, W. F., Gold, J., & Adams, E. (2006). Children's conceptions and displays of moral emotions. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (pp. 581-610). Mahwah, NJ: Erlbaum.
- Arsenio, W. F., & Lemerise, E. A. (2004). Aggression and moral development: Integrating social information processing and moral domain models. *Child Development, 75*, 987-1002.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Cameron, L., & Rutland, A. (2007). Extended contact through story reading in school: Reducing children's prejudice toward the disabled. *Journal of Social Issues, 62*, 469-488.
- Corwadin, N. W. (1986). Adolescent characteristics associated with acceptance of handicapped peers. *Adolescence, 84*, 931-940.
- Crystal, D. S., Hirozumi, W., & Chen, R. (1999). Children's reactions to physical disability: A cross-national and developmental study. *International Journal of Behavioral Development, 23*, 91-111.
- Crystal, D. S., Killen, M., & Ruck, M. (2008). It is who you know that counts: Intergroup contact and judgments about race-based exclusion. *Journal of British Developmental Psychology, 26*, 51-70.
- Diamond, K. E., Hestenes, L., Carpenter, E., & Innes, F. (1997). Relationships between enrollment in an inclusive class and preschool children's ideas about people with disabilities. *Topics in Early Childhood Special Education, 17*, 520-536.

- Diamond, K. E., & Hong, J.-S. (2010). Young children's decisions to include peers with physical disabilities in play. *Journal of Early Intervention, 32*, 163-177.
- Diamond, K., & Tu, H. (2009). Relations between classroom context, physical disability and preschool children's inclusion decision. *Journal of Applied Developmental Psychology, 30*, 75-81.
- Eisenberg, N. (2000). Emotion, regulation, and moral development. *Annual Review of Psychology, 51*, 665-697.
- Eisenberg, N., Miller, P. A., Schaller, M., Fabes, R. A., Fultz, J., Shell, R., & Shea, C. (1989). The role of sympathy and altruistic personality traits in helping: A re-examination. *Journal of Personality, 57*, 41-67.
- Eisenberg, N., Spinrad, T. L., & Sadovsky, A. (2006). Empathy-related responding in children. In M. Killen & J. Smetana (Eds.), *Handbook of moral development* (pp. 517-549). Mahwah, NJ: Lawrence Erlbaum.
- European Agency for Development in Special Needs Education (2010). Special needs education country data 2010. Retrieved March 22, 2012, from <http://www.european-agency.org/publications/ereports/special-needs-education-country-data-2010/SNE-Country-Data-2010.pdf>
- Gaertner, S. L., & Dovidio, J. F. (2000). *Reducing intergroup bias: The common ingroup identity model*. Philadelphia: The Psychology Press.
- Gasser, L., Chilver-Stainer, J., Buholzer, A., & Perrig-Chiello, P. (2012). Soziales und moralisches Denken von Kindern über dein Ein- und Ausschluss behinderter Kinder [Children's social and moral reasoning about inclusion and exclusion of disabled children]. *Zeitschrift für Pädagogische Psychologie, 26*, 31-42.
- Gasser, L., Malti, T., & Buholzer, A. (2012). Swiss children's moral and psychological judgments about exclusion of children with disabilities. *Manuscript under revision*.
- Gasser, L., & Malti, T. (2012). *Social exclusion about disability task*. Unpublished

- instrument, Teacher's Training University of Central Switzerland.
- Gasser, L., & Malti, T. (2012). Children's and their friends' moral reasoning: Relations with aggressive behavior. *International Journal of Behavioral Development, 36*, 358-366.
- Gini, G., Pozzoli, T., & Hauser, M. (2011). Bullies have enhanced moral competence to judge relative to victims, but lack moral compassion. *Personality and Individual Differences, 50*, 603-608.
- Killen, M., Margie, N. G., & Sinno, S. (2006). Morality in the context of intergroup relationships. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (pp. 155-183). Mahwah, NJ: Erlbaum.
- Killen, M., & Rutland, A. (2011). *Children and social exclusion: Morality, prejudice and group identity*. New York: Wiley/Blackwell Publishers.
- Killen, M., & Smetana, J. G. (2010). Future directions: Social development in the context of social justice. *Social Development, 19*, 642-657.
- Killen, M., & Stangor, C. (2001). Children's social reasoning about inclusion and exclusion in gender and race peer group contexts. *Child Development, 72*, 174-186.
- 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.
- Lalonde, C. E., & Chandler, M. J. (2002). Children's understanding of interpretation. *New Ideas in Psychology, 20*, 163-198.
- Lindsay, G. (2007). Educational psychology and the effectiveness of inclusive education/mainstreaming. *British Journal of Educational Psychology, 77*, 1-24.
- Magiati, I., Dockrell, J. E., & Logotheti, A. (2002). Young children's understanding of disabilities: The influence of development, context, and cognition. *Applied Developmental Psychology, 23*, 409-430.

- Malti, T., Averdijk, M., Ribeaud, D., Rotenberg, K., & Eisner, M. P. (2012). "Do you trust him?" Children's trust beliefs and developmental trajectories of aggressive behavior in an ethnically diverse sample. *Manuscript under revision*.
- Malti, T., Gasser, L., & Gutzwiller-Helfenfinger, E. (2010). Children's interpretive understanding, moral judgments, and emotion attributions: Relations to social behavior. *British Journal of Developmental Psychology, 28*, 275-292.
- Malti, T., Gummerum, M., Keller, M., & Buchmann, M. (2009). Children's moral motivation, sympathy, and prosocial behavior. *Child Development, 80*, 442-460.
- Malti, T., Killen, M., & Gasser, L. (2012). Social judgments and emotion attributions about exclusion in Switzerland. *Child Development, 83*, 697-711.
- Malti, T., & Krettenauer, T. (in press). The role of moral emotion attributions in children's and adolescents' prosocial and antisocial behavior: A meta-analysis. *Child Development*.
- Malti, T., & Latzko, B. (2010). Children's moral emotions and moral cognition: Towards an integrative perspective. *New Directions for Child and Adolescent Development, 129*, 1-10.
- Malti, T., & Ongley, S. (in press). The development of moral emotions and moral reasoning. In M. Killen & J. Smetana (Eds.), *Handbook of moral development*. New York: Taylor & Francis.
- Maras, P., & Brown, R. (2000). Effects of different forms of school contact on children's attitudes toward disabled and non-disabled peers. *British Journal of Educational Psychology, 70*, 337-351.
- Nowicki, E. A. (2006). A cross-sectional multivariate analysis of children's attitudes towards disabilities. *Journal of Intellectual Disability Research, 50*, 335-348.

- Nowicki, E. A., & Sandieson, R. (2002). A meta-analysis of school-age children's attitudes towards persons with physical or intellectual disabilities. *International Journal of Disability, Development and Education, 49*, 243-265.
- Nunner-Winkler, G. (2007). Development of moral motivation from childhood to early adulthood. *Journal of Moral Education, 36*, 399-414.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology, 90*, 751-783.
- Roberts, C. M., & Smith P. R. (1999). Attitudes and behaviour of children toward peers with disabilities. *International Journal of Disability, Development and Education, 46*, 35-50.
- Scior, K. (2011). Public awareness, attitudes and beliefs regarding intellectual disability: A systematic review. *Research in Developmental Disabilities, 32*, 2164-2182.
- Selman, R. (1980). *The growth of interpersonal understanding*. New York, NY: Academic Press.
- Sermier Dessemontet, R., Bless, G., & Morin, D. (2012). Effects of inclusion on the academic achievement and adaptive behaviour of children with intellectual disabilities. *Journal of Intellectual Disability Research, 56*, 579-587.
- Siperstein, G. N., Parker, R. C., Bardon, J. N., & Widaman, K. F. (2007). A national study of youth attitudes toward the inclusion of students with intellectual disabilities. *Exceptional Children, 73*, 435-455.
- Siperstein, G. N., Norins, J., & Mohler, A. (2007). Social acceptance and attitude change: Fifty years of research. In J. W. Jacobson, J. A. Mulick & J. Rojahn (Eds.), *Handbook of intellectual and developmental disabilities* (pp. 133-154). New York: Springer.
- Slomkowski, C., & Killen, M. (1992). Young children's conceptions of transgressions with friends and nonfriends. *International Journal of Behavioral Development, 15*, 247-258.

- Smetana, J. G. (2006). Social-cognitive domain theory: Consistencies and variations in children's moral and social judgments. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (pp. 119-154). Mahwah, NJ: Erlbaum.
- Smith, L. A., & Williams, J. M. (2004). Children's understanding of the causal origins of disability. *Journal of Cognition and Development, 5*, 383-397.
- United Nations (2006, December 13). *Convention on the rights of persons with disabilities*. Retrieved March 22, 2012, from <http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf>
- U.S. Department of Education, Office of Special Education Programs (2008). *Individuals with Disabilities Education Act (IDEA) database*. Retrieved June 19, 2012, from https://www.ideadata.org/arc_toc10.asp#partbLRE
- Wong, D. K. P. (2008). Do contacts make a difference? The effects of mainstreaming on student attitudes toward people with disabilities. *Research in Developmental Disabilities, 29*, 70-82.
- Zahn-Waxler, C., Cole, P. M., Welsh, J. D., & Fox, N. A. (1995). Psychophysiological correlates of empathy and prosocial behaviors in preschool children with behavior problems. *Development and Psychopathology, 7*, 27-48.

Table 1

Means (SDs) for Moral Judgments and Moral Emotions as a Function of Disability Type, Classroom Type, and Age Group

	Inclusive			Non-Inclusive		
	Mental	Physical	Total	Mental	Physical	Total
Moral Judgments						
Moral Evaluation						
Younger	.92 (.22)	.87 (.28)	.90 (.21)	.72 (.38)	.73 (.35)	.72 (.34)
Older	.80 (.33)	.86 (.28)	.83 (.28)	.90 (.25)	.88 (.26)	.89 (.22)
Moral Reasoning						
Younger	.64 (.28)	.66 (.32)	.65 (.26)	.56 (.31)	.52 (.30)	.54 (.28)
Older	.65 (.24)	.69 (.26)	.67 (.20)	.68 (.27)	.68 (.23)	.68 (.22)
Moral Emotions						
Happy Victimizer						
Younger	.14 (.29)	.17 (.31)	.15 (.28)	.36 (.43)	.38 (.41)	.37 (.40)
Older	.12 (.25)	.10 (.22)	.11 (.21)	.12 (.27)	.12 (.25)	.12 (.23)
Sympathy						
Younger	1.69 (0.46)	1.74 (0.40)	1.72 (0.36)	1.53 (0.53)	1.59 (0.48)	1.56 (0.47)
Older	1.73 (0.35)	1.76 (0.30)	1.75 (0.27)	1.77 (0.39)	1.79 (0.35)	1.78 (0.35)

Table 2

Correlations between the Moral Measures and Contact Intensity (Controlling for Classroom Type and Age Group, Respectively)

	Contact Intensity	
	Mental Disability	Physical Disability
Moral Judgments		
Moral Evaluation	0.05 (0.03/0.04)	0.11* (0.09/0.09)
Moral Reasoning	0.09 (0.08/0.07)	0.10 (0.07/0.08)
Moral Emotions		
Happy Victimizer	-0.16** (-0.12*/-0.13*)	-0.17** (-0.13*/-0.13*)
Sympathy	0.20*** (0.19***/0.18***)	0.22*** (0.21***/0.20***)

*** $p < .001$, ** $p < .01$, * $p < .05$

Table 3

Results of the Hierarchical Regression Analyses Predicting Contact Intensity

Independent Variables	Mental Disability		Physical Disability	
	β	$\Delta R^2/\Delta F^2$	β	$\Delta R^2/\Delta F^2$
Step 1				
Age group	0.17**	0.10/19.53***	0.17**	0.10/19.53***
Classroom type	0.27***	.	0.27***	
Step 2				
Moral evaluation	-0.06	0.03/3.00*	0.01	0.04/3.47**
Moral reasoning	0.02		-0.03	
Happy victimizer	-0.06		-0.06	
Sympathy	0.16**		0.17**	

* $p < .05$. ** $p < .01$; *** $p < .001$

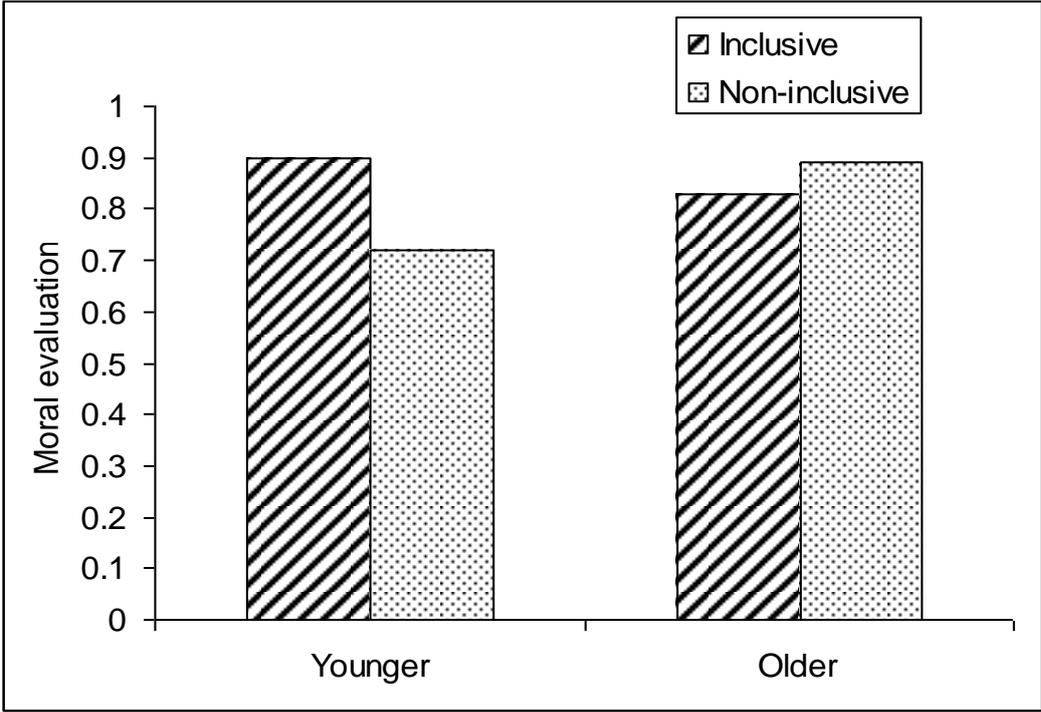


Figure 1. Moral evaluation of disability-based exclusion by age group and educational setting.

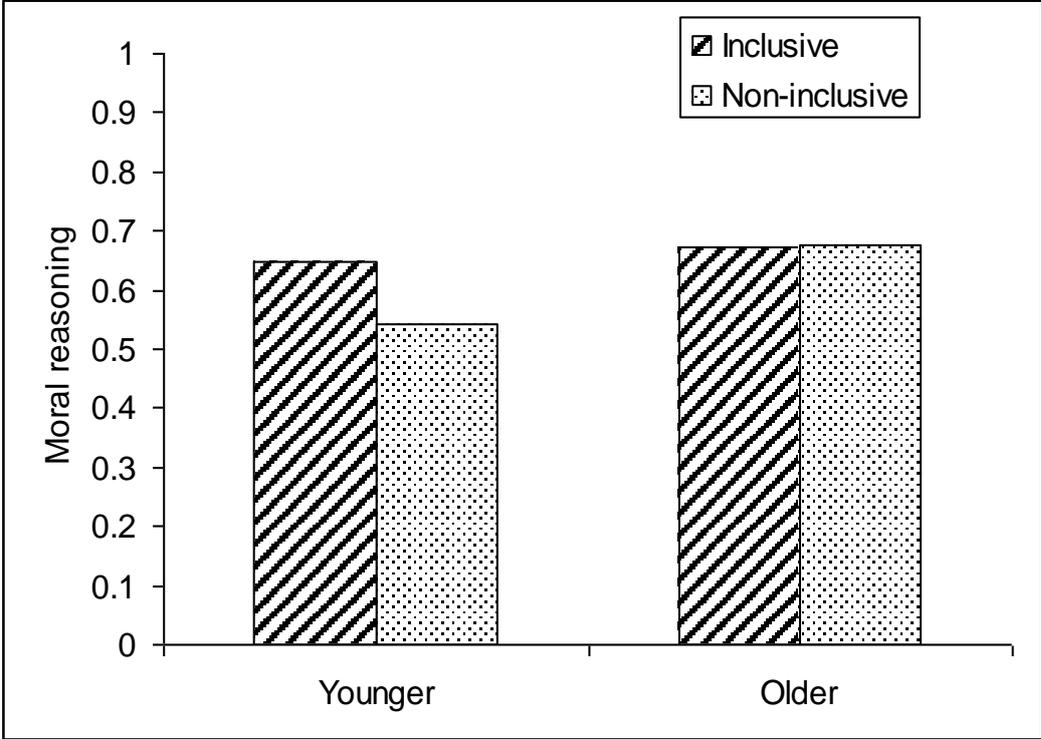


Figure 2. Moral reasoning of disability-based exclusion by age group and educational setting.

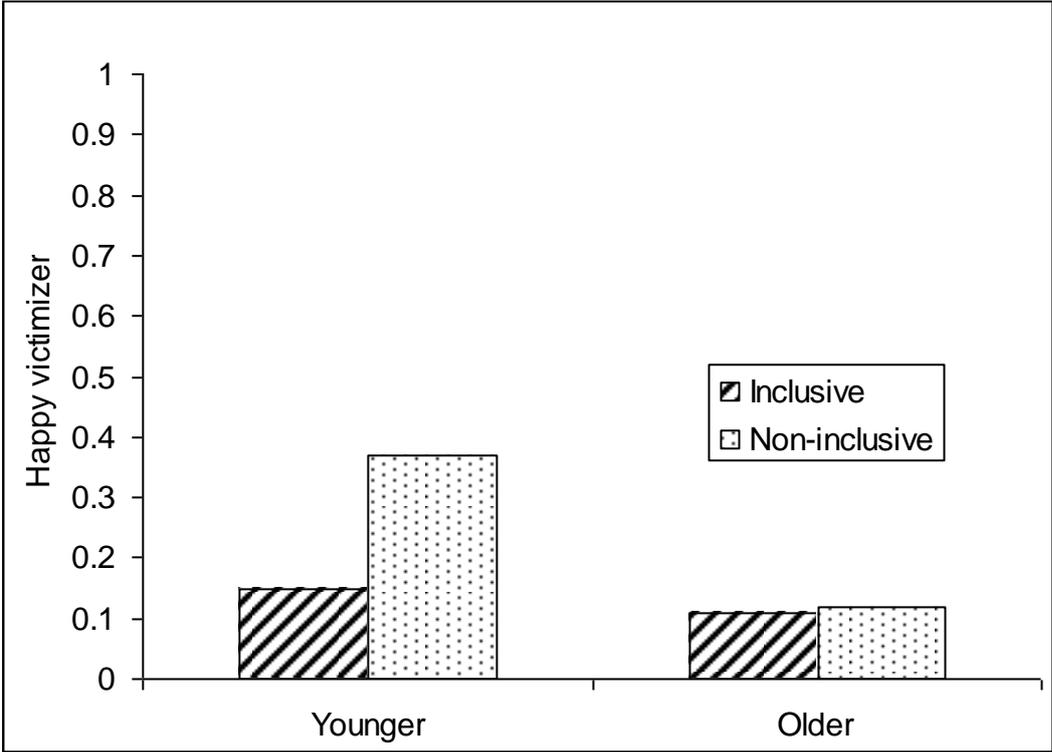


Figure 3. Positive emotion attributions to excluder targets by age group and educational setting.

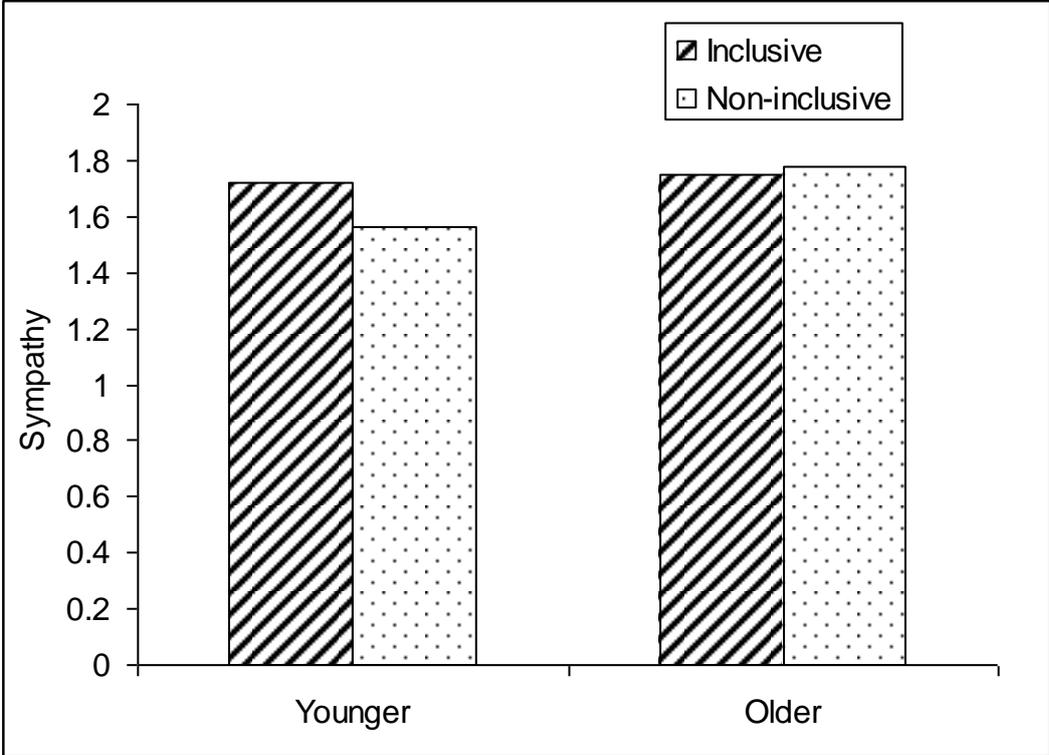


Figure 4. Sympathy with children with disabilities by age group and educational setting.