Swiss Children's Moral and Psychological Judgments about Inclusion and Exclusion of Children with Disabilities

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Abstract

Children's judgments about inclusion and exclusion of children with disabilities were investigated in a Swiss sample of 6-, 9- and 12-year-old children from inclusive and noninclusive classrooms ($N = 422$). Overall, the majority of children judged it as morally wrong to exclude children with disabilities. Yet, participants were less likely to expect the inclusion of children with mental or physical disabilities in academic and athletic contexts compared to social contexts. Moreover, older children more consistently coordinated disability type with context of exclusion. There were also significant differences depending on the type of classroom. The findings extend existing research on exclusion by investigating exclusion based on disability across different age groups and educational settings.

Keywords: Moral Judgments, Moral Emotions, Exclusion, Disability, Children

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Children with Disabilities

According to Article 24 of the UN Convention on the Rights of Persons with

Disabilities, inclusive education of children with disabilities is important to achieve equal

educational opportunities for all children, regardless of any difficulties they may have

(United Nations, 2006). Despite this, children with disabilities are disproportionately

excluded from mainstream education, especially those who have mental disabilities

(UNESCO, 2010). In addition, children with disabilities frequently face experiences of social

exclusion. For example, recent research suggests that children with disabilities have a higher

risk for peer rejection and victimization than their typically developing peers (Diamond,

Huang, & Steed, 2011; Siperstein, Norins, & Mohler, 2007).

Negative attitudes and stereotypes towards people with disabilities can explain social

exclusion on the basis of disability (Nowicki & Sandieson, 2002). In order to promote

children's sensitivity towards inclusion, researchers have emphasized the need to better

understand how children think and feel about social exclusion (Killen & Smetana, 2010).

Previous research has focused primarily on how children judge and reason about exclusion

based on gender, race, or nationality. In contrast, developmental research that has examined

how children understand exclusion of children with disabilities is very limited. Drawing on

previous research on social exclusion from the perspective of social domain theory (Killen &

Rutland, 2011), the present study investigated how kindergarten and elementary school

children in Switzerland reason and feel about the exclusion of children with disabilities. This

is the first study that investigated children's disability-related judgments across a broad range

of age groups (6-, 9-, 12-year-olds), including different disability types (mental disabilities

vs. physical disabilities) and educational settings (inclusive vs. noninclusive). Moreover,

most research on social exclusion focused on moral judgments of social exclusion, and only

few research included both moral and psychological judgments (e.g., emotion attributions). Finally, most of the existing research on exclusion has been conducted in the US (for exceptions, see Abrams, Rutland, Pelletier, & Ferrell, 2009; Moller & Tenenbaum, 2011).

Social Exclusion about Disability in Switzerland

The present study focuses on social exclusion of children with disabilities in Switzerland. To date, discrimination of persons with disabilities at all ages represents a serious challenge to Swiss society. Although the Swiss Federal Constitution prescribes equality of persons with and without disabilities before the law, Switzerland is still far away from an effective anti-discrimination law (Schönenberger & Fibbi, 2011). Symptomatic thereof is that Switzerland is one of the few countries in the world, which has not signed the UN Convention for the Rights of Persons with Disabilities.

Discrimination of persons with disabilities can be observed in different areas of social life in Switzerland. For example, adolescents and adults with disabilities are less likely to be included into clubs (53% vs. 65.2%) and report more feelings of loneliness (45% vs. 30%) than persons who do not have disabilities (Swiss Federal Statistical Office, 2011). Yet, Swiss law orders the right for inclusive education since 2006. Even though the Swiss Federal Confederation calls the states to promote inclusive education, Switzerland has one of the highest rates of noninclusive education in Europe (European Agency for Development in Special Needs Education, 2011). In addition, research indicates that many teachers and parents of children without disabilities hold ambivalent attitudes towards inclusion. Although it appears that they sympathize with the idea of inclusion, many fear that high heterogeneity in the classroom competes with meeting the curriculum demands (Sermier Dessemontet, Benoit, & Bless, 2011). Taken together, these data indicate that Switzerland represents a cultural context that may be characterized as holding ambiguous attitudes towards people with disabilities and inclusive education. Based on the assumption that children's social

knowledge is constructed from interactions with salient socialization agents such as peers, parents, and teachers (Smetana, 2006; Turiel, 1998), it is important to examine if children's reasoning about exclusion of children with disabilities reflects some of these concerns.

Moral and Psychological Judgments about Inclusion and Exclusion of Children with Disabilities

In the present study, three measures were used to assess children's conceptions of exclusion based on disability. The first measure focused on children's *general moral judgment* of disability-based exclusion from peer groups. Children were asked to evaluate exclusion from a group solely on the basis of their disability, as well as to justify their general evaluation. Previous research on social exclusion has shown that children, from an early age on, view exclusion in straightforward contexts as a moral transgression (Killen, Margie, & Sinno, 2006) and condemn exclusion by referring to fairness issues such as equal treatment and equal rights. Based on this research, we hypothesized that children evaluate disability-based exclusion that is carried out for no apparent reason as morally wrong and primarily refer to moral reasons when justifying their general evaluation of exclusion.

We further assessed children's *psychological judgments* about disability-based inclusion and exclusion. Recent research indicates that a complete reconstruction of children's experiences about social issues requires not only the assessment of moral judgments but also of psychological judgments about intentions, beliefs, and emotions (Posada & Wainryb, 2008). Psychological judgments allow insights into children's expectation about how persons *are likely* to decide or feel in moral conflicts, which sometimes may compete with children's moral judgments about how persons *should* decide or feel (Keller, Lourenço, Malti, & Saalbach, 2003). For example, related research about children's judgments and feelings about moral transgressions 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 (Krettenauer, Malti, & Sokol, 2008).

We created two measures to assess children's psychological judgments: (1*) Expected

choice* and (2*) Expected emotion*. To assess these psychological judgments, children were

told stories, in which two children, with and without disabilities, asked to be included into a

group and a protagonist had to decide whom to include. The children with disabilities either

had a mental or physical disability. First, children were asked whom the protagonist will pick

(expected choice) and why they would decide this way (justification for expected choice).

These questions were asked to explore our interest in how children's psychological

judgments about inclusion and exclusion depend on social-conventional considerations, such

as group functioning compared to moral considerations about fairness, equality and rights

(Killen, Lee-Kim, McGlothlin, & Stangor, 2002; for reviews see Killen et al., 2006; Killen &

Rutland, 2011). Most research on social and moral reasoning about exclusion investigated

prescriptive inclusion decisions (e.g., "Whom should the group pick? ") (Killen & Stangor,

2001) and did not include expectations about descriptive or factual inclusion decisions

("Whom will the group pick?"). Whereas prescriptive inclusion decisions focus on how

persons should decide, factual inclusion decisions reflect children's views of real motives

rather than desired motives (Posada & Wainryb, 2008). Thus, they might provide important

insights into children's social experiences and interactions in peer groups. Second, children

had to predict the emotion that the protagonist would feel, given that he or she excluded the

child who had a disability (expected emotion). Thus far, only little research has been

conducted on emotion expectancies in the context of social exclusion (for an exception, see

Malti, Killen, & Gasser, 2012). However, emotions such as guilt or pride in contexts of

exclusion provide important additional information about children's sensitivity to the

prescriptive nature of these conflicts (Turiel & Killen, 2010).

In order to investigate the effect of contextual variations on children's psychological judgments and social reasoning, we varied the situational context. Previous research has shown that judgments about straightforward exclusion differ from judgments of exclusion in more multifaceted situations, where moral considerations are in conflict with social-conventional considerations such as group functioning or group identity (Killen et al., 2006). Whereas in straightforward exclusion contexts moral considerations clearly predominate, judgments of exclusion in multifaceted situations require weighing moral considerations with competing social-conventional considerations. For example, research on race- or gender-based exclusion has shown that children's decisions to exclude a child who did not fit the stereotype (e.g., a girl from a baseball team) strongly depends on considerations about how the inclusion of this child would interfere with group functioning: A non-stereotypic child that is equally qualified for a group activity as a stereotypic child is more likely to be included than if the nonstereotypic child is less qualified and therefore threatens effective group functioning (e.g., Killen & Stangor, 2001).

First evidence for children's ability to take account of group functioning when reasoning about disability-based exclusion has been provided by studies including preschool children from inclusive classrooms (Diamond & Hong, 2010; Diamond & Tu, 2009). These studies found that 4-5-year-old preschool children were more likely to exclude children with physical disabilities in activities requiring high motor skills than in activities requiring few motor skills. The present study extends this research by including different disability types and a broader range of exclusion contexts. Specifically, the salience of group functioning was manipulated by presenting children with six stories that varied with regard to (a) *disability type* of exclusion target (mental disability and physical disability) and (b) *group activity* of exclusion context (academic, social, and athletic). We expected that children would strongly endorse the acceptability of exclusion in situations where disability type interferes with the

group activity, namely in the academic and in the athletic context. In the social context, considerations about group functioning should be less dominant. Moreover, we expected children to coordinate disability type and context of exclusion. More specifically, we hypothesized that children with mental disabilities would be less likely to be included in an academic group activity than in a social group activity for reasons of group functioning. Analogously, we hypothesized that children with physical disabilities would be less likely included in an athletic group activity than in a social group activity.

We also expected that these contextual effects would depend on *development*. The sample of the present study included 6-, 9-, and 12-year-old children. We included 6-year-olds because exclusion of children with disabilities has been observed even in young children (Odom et al., 2006). Moreover, research on children's conceptions about disability indicated that preschoolers already have some basic understanding of the characteristics associated with different disability types (Smith & Williams, 2001). We hypothesized that older children would be more sensitive to contextual issues of inclusion and exclusion than younger children, and would reveal a more differentiated understanding of the effect of inclusion and exclusion on effective group functioning. In contrast, younger children were expected to be less able to coordinate situational context and disability type. This hypothesis was based on previous research, which indicated that as children age they are increasingly able to coordinate multiple considerations, and consequently are increasingly able to differentiate between different contexts with varying moral and social-conventional demands (Killen et al., 2006). While previous research investigated disability-related inclusion decisions in preschoolers (e.g., Diamond & Hong, 2010), the present study extends this research by including a wide range of age groups and thus taking a developmental perspective.

Further, we hypothesized that as children age they attribute increasingly more moral emotions (e.g., guilt, sadness) to excluders. Related research in the happy-victimizer

paradigm has shown that preschool children are most likely to expect a moral transgressor to feel happy. During the course of elementary school, children's positive emotion expectancies decrease and moral emotion expectancies increase (e.g., Krettenauer et al., 2008; Malti & Krettenauer, in press). As older children have a more nuanced understanding of psychological harm than younger children (Smetana, 2006), we expected a similar developmental trajectory for emotion expectancies in the context of disability-based exclusion.

Finally, we investigated the role of inclusive education compared to noninclusive education on children's judgments and expected emotions about exclusion of children with disabilities. Intergroup contact is one of the most important conditions for the reduction of intergroup prejudice (Dovidio, Glick, & Rudman, 2005), not only for racial or ethnic encounters (e.g., Crystal, Killen, & Ruck, 2005), but also with regards to disability (Maras & Brown, 2000; Pettigrew & Tropp, 2006). Meta-analytic findings indicate that inclusive classrooms, when compared with noninclusive classrooms, have a medium sized positive effect on children's attitudes towards persons with disabilities (Nowicki & Sandieson, 2002). However, contact with children with disabilities may not be the only difference in the experience of children within inclusive and noninclusive classes. For example, research has revealed that children from inclusive preschool classrooms, compared to children from noninclusive classrooms, experienced qualitatively higher levels of interactions with teachers (Hestenes, Cassidy, Shim, & Hedge, 2008). Thus, inclusive settings may be more likely to provide an emotionally supportive environment, which represents an important condition for children's social adjustment (Murray & Pianta, 2007). We therefore expected a positive effect of inclusive settings on children's expected choices and emotions. The effect of inclusive vs. noninclusive education was tested separately for classes that either included a child who has a mental disability or a child who has a physical disability. Therefore, the design of this study included disability type (mental disability vs. physical disability) on two different levels: First,

on the level of classroom type (noninclusive, inclusive mentally disabled, inclusive physically disabled) and second, on the level of exclusion target (nondisabled, mentally disabled, physically disabled). As no previous research investigated differential effects of inclusion for different disability types we had no hypothesis regarding differences between children from classes including either a child who has a mental or a physical disability. We controlled for gender in all analyses because previous research has indicated gender differences in children's judgments about social exclusion (e.g., Killen et al., 2002).

Method

Participants

The sample consisted of 422 Swiss kindergarten and elementary school children from 14 inclusive classrooms and from 10 noninclusive classrooms. These classes were chosen to compare noninclusive and inclusive educational settings. For the latter, we also differentiated the type of inclusion: Eight of the inclusive classes contained a child with a physical disability and six classes contained a child with a mental disability. There were 113 kindergarten children (51 girls, $M = 6.07$, $SD = 0.62$), 160 second and third graders (77 girls, $M = 8.75$, $SD = 0.78$), and 149 fifth and sixth graders (72 girls, $M = 11.79$, $SD = 0.75$). One-hundred and ninety-six (46%) children were from noninclusive classrooms, 122 (29%) children were from classes including a child with a physical disability and 104 (25%) children were from classes including a child with a mental disability. Children in classes with a child who had a mental disability and children in classes with a child who had a physical disability were similarly distributed within the different grades (6-year-olds: 31% vs. 34%, 9-year-olds: 26% vs. 21%, 12-year-olds: 29% vs. 22%). With respect to nationality, 84% of children were Swiss, 14% were from other European nationalities, and 2% were from non-European nationalities. Moreover, an estimate of the socio-economic background of the families was calculated based on the type of community in which the parents lived. Of the

parents 21% had completed high school and 75% of the parents had completed a higher

course of education. The composition in terms of nationality and socio-economic background

was very similar across the three types of classrooms. Informed written parental consent for

participation was obtained and the participation rate was high (92%).

In order to avoid confounding with other stereotypes, we only selected inclusive

classes in which the children with disabilities were of Swiss nationality, had not been

diagnosed as behaviourally disturbed (i.e., conduct disordered or ADHD), and were not

multi-disabled (e.g., children with mental *and* physical disabilities). Moreover, the inclusive

classes either included a child who had a mental disability or a physical disability, but not

both. The children who had a mental disability included children with mild mental retardation

(IQ > 50 and < 70). The children who had a physical disability included children with a range

of impairments limiting the physical functions of limbs or fine and gross motor ability (2

Spina Fida, 4 Paresis, 1 caudal regression syndrome, 1 walking disability). Six-year-olds with

disabilities had been included into mainstream classes for 1.5 years, 9-year-olds for 2.9 years

and 12-year-olds for 4.4 years. All of the children with disabilities had been educated full

time in their mainstream class. Children with mental disabilities received 5.7 hours of

additional support from a special needs educator, and children with physical disabilities

received 3.5 hours of support. Children from noninclusive classes attended schools in

communities where children with disabilities were sent to special education schools and thus

did not have contact with children who have a disability within their classes or school.

In Switzerland, the regular education teacher has the main responsibility for the

inclusive class. Additional support provided by special education teachers to individuals who

have a disability is the most common form of inclusion in Switzerland (Bless, 2007). This

may involve extra assistance in a regular classroom or in a separate classroom in a regular

school. The special education teacher is often affiliated to a special education centre and

provides therapeutic and educational support to the child with the disability for a certain amount of lessons. They also consult with the regular education teacher with regard to the included children with disabilities.

Procedure

Children were interviewed individually by undergraduate special needs education students in two separate sessions, each lasting approximately 20 minutes. The two sessions included either three exclusion stories with children who had a mental disability or three exclusion stories with children who had a physical disability. The two sessions as well as the three stories within each session were presented in a counterbalanced order. The stories were illustrated with coloured pictures and matched for the child's sex. The interviews were audiotaped and later transcribed for subsequent coding.

Design and Measures

The story format as well as interview questions were adapted from previous research on children's evaluation of stereotypic exclusion (e.g., Malti, Killen, & Gasser, 2012; Theimer, Killen, & Stangor, 2001). The measures include (a) children's general moral judgments about excluding children with disabilities; (b) children's expected choices of children with and without disabilities in concrete situations; and (c) children's expected emotions of excluders in the case of disability-based exclusion.

General moral judgment. Children were asked to evaluate the straightforward exclusion of children with disabilities and justify their evaluation ("Is it right or wrong to exclude a disabled child from a group of children?", "Why?"). By asking the two questions, we aimed to assess children's general understanding of the moral dimension of exclusion if it is solely based on disability. Because we wanted to assess children's overall judgment for the exclusion of children with disabilities, we did not differentiate for disability type and we did not provide children a definition of general disability. We conducted a pilot study including

20, 6-year-olds from noninclusive classes to ensure that children understood the term

"disability". They were presented with eight descriptions of children with disabilities (e.g.,

"this child needs a wheelchair because he or she can't walk") and without disabilities (e.g.,

"this child needs glasses because he or she doesn't see well") and were asked to indicate their

disability status ("Is this child disabled or nondisabled?"). Nearly all children (92%) correctly

identified the disability status of the children described.

Psychological judgments. Psychological judgments were assessed by children's

expected choices and expected emotions within multifaceted situations.

Expected choice. We asked for expected inclusion decisions across various situations

because of our interest in how children weigh social-conventional concerns compared to

moral concerns when making exclusion decisions in multifaceted situations. We used six

stories in which a child with and a child without a disability wanted to join a group of two

children, but the group was unable to include more than one child. The stories were varied

with regard to *type of disability* (mental disability vs. physical disability) and *type of group*

activity (academic, social, athletic). Before presenting the stories, the meaning of each

disability type was explained to each child. We used descriptions from previous research on

children's conceptions about disabilities in preschool and middle childhood (e.g., Smith &

Williams, 2001). For example, mental disability was explained as follows: "The following

stories are about children who have a mental disability. These are children who have a lot of

difficulties with learning things. For example, compared to other children they have more

difficulties in remembering things and are less fast in their thinking. Therefore, they often

need additional help from others. Apart from that, they are like children that do not have a

mental disability." The three group activities contained the following content: Stories

including an academic group activity were about two children that had to resolve a

cognitively challenging task in kindergarten or at school, whereas the teacher only allowed

for groups of two children. The stories describing social group activities were about two

children who wanted to go to the circus and had a ticket to spare for another child. In the

stories with athletic group activities a team of two children was supposed to include an

additional child for a tug-of-war game. The story format is illustrated for the athletic group

activity with a child who had a mental disability:

> "During a physical education lesson two teams compete in a tug-of-war game. Each
>
> team is supposed to consist of three children. In one of the teams there are two
>
> children only - Sarah and her friend. Melina, a child with a mental disability, who is
>
> strong, asks if she can join the group. Also Laura asks if she can join the group. Laura
>
> is strong too. In contrast to Melina she has no mental disability. Sarah is not able to
>
> include both children in the group, because four playing against three would be unfair.
>
> She has to decide between either Melina or Laura."

In cases where the inclusion of the child with a disability did not interfere with the

group activity, we told the child that the children with and without disability are equally

qualified to take part in the group activity. Immediately after hearing the stories, children

were asked to predict the choice of a group protagonist and to justify their decision ("Who

will Sarah pick?", "Why?").

Expected emotion. Children were then asked to predict the protagonist's emotion in

the case of exclusion of the child with a disability ("Imagine Sarah includes Melina into the

team? How will Sarah feel?"). With this question, we aimed to assess children's conceptions

about the emotional consequences of disability-based exclusion.

Coding. Moral judgments were coded as 0 when exclusion of children with

disabilities was judged as right and as 1 when exclusion was judged as being wrong.

Expected choices were coded as 0 when the child without disability was chosen (i.e.,

exclusion) and as 1 when the child who had a disability was chosen (i.e., inclusion). Expected

emotions were coded as moral and as amoral. Moral emotions included sadness, guilt or empathy and were coded as 1. This classification was drawn from recent research and conceptual models that elaborate on emotions in the context of moral conflict and exclusion (Malti et al., 2012; Malti & Ongley, in press). Amoral emotions included emotions such as anxiety, anger, happiness or neutral emotions and were coded as 0.

Categories for coding the children's justifications of their general evaluation of exclusion and inclusion choices were adapted from previous research on social exclusion (e.g., Killen & Stangor, 2001). Moral justifications referred to equal value and rights of persons with disabilities (e.g., "children with disabilities are worth the same as other children", "everyone has the right to learn") or to the positive and negative consequences of inclusion and exclusion (e.g., "he will be happy to be with the other children", "the child might be sad when being excluded"). Social-conventional justifications referred to limited group functioning (e.g., with children who have disabilities, the group works more slowly and "they can't win with the child who has a disability") or stereotypes ("children with disabilities are not nice"). Answers from categories that could not be classified as either moral or social-conventional either had frequencies that were too low to build independent categories or pertained to undifferentiated justifications (e.g., "It's just wrong") and therefore were excluded from further analysis. 6-year-olds provided more justifications pertaining to the undifferentiated or other categories (32%) than 9- or 12-year-olds (9% both). These developmental differences in children's undifferentiated reasoning parallels findings from other studies (e.g., Malti, Gasser, & Buchmann, 2009) and reflect a general developmental trend in children's ability to increasingly provide elaborated justifications to moral conflicts (Malti & Ongley, in press). A child's answer was coded 1 if it was assigned to a category and 0 if it was not. We did not create proportional justification scores because children mentioned

more than one justification after probing very infrequently ($<$ 1%). Interrater reliability

between the two coders, based on 42 interview transcripts (i.e., 10% of the data), was $\kappa = .86$.

Results

Data Analytical Strategy

We used hierarchical linear models to test our hypotheses, because our data were nested (i.e.,

children were nested within classroom). Furthermore, multilevel analyses allow investigating

how different classroom settings (i.e., inclusive vs. noninclusive) contribute to the

explanation of variance, or, in other words, how much variance is explained at the classroom

level relative to the total variance. Hierarchical linear modelling (HLM) analyses use the

intra-class correlation (ICC) to determine the amount of variation in the outcome variable

attributed to classroom-level effects. However, due to the dichotomous nature of our outcome

variables, the individual-level variance was heteroscedastic. This made the ICC non-

informative (Raudenbush & Bryk, 2002). Therefore, unconditional two- and three-level

models for all dependent variables were first run to ascertain the significance of the random

variance component at level 2 (and level 3, respectively). The models suggested that the

variance of the dependent variables across classrooms was significantly greater than zero;

thus, we proceeded with both within- and between-classroom models in HLM.

Furthermore, preliminary analyses indicated no gender or story order effects on the

main study variables. We tested class sizes as a covariate in preliminary analyses because

class size was smaller for inclusive than for noninclusive classes ($M = 16$ vs. $M = 21$). The

results showed that class size did not have any significant effects. Thus, none of these

variables were considered in the final data analysis. Table 1 displays frequencies of moral

and psychological judgments by classroom type, and Table 2 by situational context, disability

type and age group.

General Moral Judgment about Exclusion

Overall, the majority of the children evaluated exclusion of children with disabilities as wrong (89%), for moral reasons (75%). Social-conventional reasons were only mentioned infrequently to justify a general evaluation of disability-based exclusion (6%).

To test our hypothesis regarding whether moral evaluation of exclusion and reasoning about straightforward exclusion varied by the age of the participants and type of classroom, a series of hierarchical linear models in HLM Version 7 was run. These models included two levels for the two dependent variables 1) children's moral evaluation of exclusion and 2) moral justifications: Child level (Level 1: age group) and classroom level (Level 2: classroom type). Because the outcomes were dichotomous, HLM Bernoulli models were utilized. Dummy variables were created for age groups. The independent variables were age group (6-, 9- and 12-year-olds) and type of classroom (inclusive mentally disabled, inclusive physically disabled, noninclusive). Due to the low occurrence of social-conventional justifications, no multilevel model analyses were conducted for this dependent variable. Missing data points were infrequent ($< 1\%$) and were eliminated in the multilevel analyses.

The findings of the multilevel analysis for moral evaluation and moral justifications are displayed in Table 3. There were main effects of age group on the judgment of exclusion of children with disabilities as wrong. These main effects indicated that 12-year-olds evaluated it as more wrong than 6-olds to exclude children with disabilities (99% vs. 70%, $p < .001$), and 9-year-olds evaluated it also as more wrong to exclude children with disabilities than 6-year-olds (93% vs. 70%, $p < .001$). Contrary to our expectations, there was no main effect of classroom type on children's moral evaluations (see Table 1).

With respect to moral justifications, we found, as expected, main effects of age group. These main effects revealed that 12-year-olds used moral justifications to evaluate exclusion more frequently than 6-year-olds (98% vs. 40%, $p < .001$) and 9-year-olds (98% vs. 79%, p

< .05). In addition, 9-year-olds used moral justifications more frequently than 6-year-olds

(79% vs. 40%, $p < .001$). There was no main effect of classroom type on moral justifications.

Psychological Judgments about Inclusion and Exclusion

Next, we tested our hypotheses regarding psychological judgments about inclusion and

exclusion of children who had a disability (i.e., expected choices about inclusion,

justifications of expected choices, and expected emotions). Overall, 51% of children expected

that the story protagonist would choose the child who has a disability. Children similarly used

moral reasons (45%) and social-conventional reasons (40%) to justify their inclusion

decisions. Additionally, 59% of children expected that the protagonist would feel bad after

excluding the child who has a disability.

We utilized multilevel modelling to examine how psychological judgments varied by

age group, situational context (i.e., school, social, athletic), disability type (i.e., mentally

disabled, physically disabled), and classroom type (i.e., inclusive mentally disabled, inclusive

physically disabled, noninclusive). As the dependent variables were binary, a series of HLM

Bernoulli models were run. The models consisted of three levels: within-individual (Level 1:

situational context and disability type), child level (Level 2: age group), and classroom level

(Level 3: classroom type). These levels were employed in conjunction with a two-way

interaction between situational context and age group, as well as disability type and age and a

three-way interaction between situational context, age group, and disability type. The latter

was included in order to investigate if children's ability to coordinate situational context and

disability type increases with age. The simple intercepts and simple slopes for the two-way

and three-way interactions were probed to examine which effects were statistically significant,

following the procedure outlines by Preacher, Curran, and Bauer (2006).

Regarding situational context, the academic and athletic contexts were dummy coded,

and the social context was specified as reference category. We did not contrast athletic versus

academic contexts because of our interest in judgments about exclusion in disability-specific

contexts in comparison to a neutral context (e.g., athletic versus social context for physical

disability). Furthermore, we created dummy variables for age groups. Preliminary analyses

indicated no effect of gender on any of the outcome variables. Thus, gender was not included

in the final HLM multilevel analysis. The findings of the multilevel analysis for expected

choices and expected emotions are presented in Table 4, for moral and social-conventional

justifications of expected choices in Table 5.

Expected choice. Confirming our expectations, the models for expected choices

revealed a main effect of age group, indicating that 6-year-olds were less likely to include

children with disabilities than 9- and 12-year-olds (ps < .05). In contrast, the 9- and 12-year-

olds did not differ in their inclusion decisions (see Table 2). As expected, we also found a

main effect for classroom type revealing that children from classrooms including children

who had a mental disability were more likely to opt for the inclusion of children with

disabilities than children in noninclusive classrooms (ps < .01) (see Table 1). However, no

effect of inclusion was found for children from classes inclusive of children who had a

physical disability.

As expected, the findings also revealed main effects of situational context, indicating

that children were less likely to include children with disabilities in both academic and

athletic contexts (51% and 44%, respectively) compared to social contexts (61%) (ps < .001).

Moreover, there were two way-interactions between disability type and situational context as

well as between age group and disability type. These two-way interactions were qualified by

three-way-interactions between disability type, age group, and situational context (see Table

4). While 6-year-olds did not coordinate disability type with situational context, both 9- and

12-year-olds were less likely to predict inclusion of children with mental disabilities in

academic than social contexts (9-year-olds, p < .05; 12-year-olds, p < .01). In addition, the

12-year-olds compared to the 9-year-olds were even less likely to include children with mental disabilities in academic than social contexts ($p < .001$, see Figure 1). In contrast, 12-year-olds compared to 6-year-olds and 9-year-olds less frequently decided to include children with physical disabilities in athletic than social contexts ($p < .001$ and $p < .05$, respectively. The 9-year-olds did not differ from the 6-year-olds.

Justifications of expected choice. We also tested our hypotheses about whether children's justifications of expected choices varied by age group, situational context, disability type, and classroom type. Another series of HLM Bernoulli models was run for the dependent variables a) moral justifications and b) social-conventional justifications about expected choices.

The models for *moral justifications* of expected choice revealed a main effect for age group, indicating that 6-year-olds were less likely to use moral justifications than 9- and 12-year-olds (ps $< .001$). In line with our expectations, we also found a main effect for classroom type. Children from classrooms inclusive of students with mental disabilities were more likely to use moral justifications than children in noninclusive schools ($p < .05$). In contrast, children from classrooms inclusive of physical disability did not differ from noninclusive classrooms regarding their moral justifications. In addition, there was a significant main effect of situational context and significant two way-interactions between situational context and disability type, as well as between age group and disability type. Yet, these two-way interactions were qualified by three-way-interactions between disability type, age group, and situational context (see Table 5). While 6-year-olds did not differentiate academic and social contexts in their moral justifications for situations describing children with mental disabilities, both 9- and 12-year-olds compared to 6-year-olds provided less moral justifications in academic than social contexts for situations describing children with mental disabilities (ps $< .01$). In contrast, 9- and 12-year-olds, compared to 6-year-olds referred less to moral

justifications in athletic than social contexts for situations describing children with physical disabilities ($p < .001$ and $p < .05$, respectively). Nine and 12-year-olds did not differ.

The models for *social-conventional justifications* of expected choice revealed a main effect for classroom type. This effect indicated that children from classrooms inclusive of children with mental disabilities were less likely to use social-conventional justifications than children from noninclusive classrooms ($p < .05$). Again, no difference between children from noninclusive classrooms versus from classrooms inclusive of physical disability was found. As expected, we also found main effects for situational context, indicating that children were more likely to use social-conventional justifications in both academic and athletic contexts (41% and 48%, respectively) compared to social contexts (32%) (ps $< .001$). Again, we found significant two way-interactions between disability type and situational context as well as between age group and disability type, which were all qualified by three-way-interactions between disability type, age group, and situational context (see Table 5). The three-way-interactions indicated that 12-year-olds compared to 6-year-olds used more social-conventional justifications in academic compared to social contexts for situations describing the exclusion of children with mental disabilities ($p < .05$). In addition, both 9- and 12-year-olds compared to 6-year-olds used social-conventional justifications more frequently in athletic compared to social contexts for situations describing children with physical disabilities ($p < .01$ and $p < .001$, respectively, see Table 2).

Expected emotion. The multilevel models for expected emotion revealed that 9- and 12-year-olds compared to 6-year-olds were more likely to expect that excluders of children with disabilities would feel moral emotions ($p < .01$ and $p < .001$, respectively); 9-year-olds were also less likely to expect moral emotions compared to 12-year-olds ($p < .05$) (see Table 2). In addition, independently from disability type, children were less likely to expect moral emotions following exclusion decisions in athletic contexts compared to social contexts (p

< .01). In addition, there was a significant three-way-interaction between disability type, age group, and situational context (see Table 4): While 6-year-olds did not differentiate athletic and social contexts in their anticipation of moral emotions for children with physical disabilities, both 9- and 12-year-olds compared to 6-year-olds provided less moral emotions in athletic than social contexts for situations describing children with physical disabilities (*ps* < .05). The 9-year-olds did not differ from the 12-year-olds.

Discussion

The present study aimed at investigating children's moral and psychological judgments about exclusion of children with mental or physical disabilities across different contexts (i.e., academic, athletic, social). We also examined developmental differences in children's judgments about the exclusion of children with disabilities, as well as the role of inclusive educational settings on these judgments. Even though previous studies have investigated children's attitudes towards children with disabilities (for a review, see Siperstein et al., 2007), most of this research used context-independent assessments and was not developmental in nature (Nowicki, 2006). We investigated these research questions in Swiss schools. Switzerland represented an interesting cultural context for the study of children's moral and psychological judgments about disability-based exclusion as the Swiss society can be considered as holding ambiguous attitudes towards the inclusion of children with disabilities into regular school classes (Bless, 2007; Sermier Dessemontet et al., 2011).

One main finding was that children predominantly evaluated straightforward exclusion of children with disabilities from a group as wrong for moral reasons, such as equal rights (e.g., "children with disabilities have the same right to participate as children without disabilities") or negative implications of exclusion (e.g., "children with disabilities will be sad if excluded"). Even though a majority of kindergarten children did not condone straightforward exclusion, they were more tolerant of straightforward exclusion than older

children. These findings are in line with previous research on exclusion based on gender. For example, about two-thirds of preschoolers condemned straightforward exclusion based on gender (Theimer et al., 2001), whereas nearly all elementary school children judged gender-based exclusion as morally wrong (Killen & Stangor, 2001). With age, children thus increasingly judge straightforward exclusion in relation to disability as wrong. This might reflect advances in social-cognitive development because it involves applying concepts of welfare to situations entailing psychological harm, the latter being less concrete compared to physical harm and thus harder to understand for younger children (Smetana, 2006).

Consistent with predictions from developmental research on social exclusion about race and gender (Killen et al., 2006), children's judgments about multifaceted situations revealed a more complex pattern of findings. Overall, only 51% of the children reported that they would include the child who has a disability in these multifaceted situations (compared to 89% in straightforward contexts). Moreover, social-conventional justifications were mentioned more frequently in these contexts, compared to straightforward contexts. These findings are consistent with results from social domain studies (Killen et al., 2002). Whereas moral concerns predominate in straightforward moral transgressions, multifaceted situations require children to balance moral concerns with social-conventional concerns, such as group functioning. Moreover, non-moral concerns might even be more salient in children's psychological judgments than in children's moral judgments of social conflicts because they require children to think about the real motives instead of the desired motives of a person's actions (Posada & Wainryb, 2008).

As expected, both kindergarten and elementary school children were more likely to opt for including children with disabilities into group activities in which group functioning was less salient (i.e., social group activities) than into group activities in which group efficacy was more salient (i.e., academic and athletic group activities). This finding indicates that all

children, including 6-year-olds, displayed an understanding of how the inclusion of children

with disabilities may impede effective group functioning. This is consistent with research by

Diamond and colleagues (Diamond & Hong, 2010; Diamond & Tu, 2009) who found that 4-

5-year-old preschool children were more likely to accept exclusion of children with physical

disabilities in situations where the disability interfered with the activity (e.g., kicking a ball)

than in situations where disability did not affect group functioning (e.g., drawing).

Another main finding of this study was that children's ability to coordinate group

activity with disability type strongly depended on development. While 6-year-old children's

inclusion decisions did not differ for disability type of exclusion target, 9-year-olds and, to an

even stronger degree, 12-year-olds were more likely to expect the inclusion of children with

mental disabilities in the social than in the academic context. Conversely, older children

expected the inclusion of children with physical disabilities more frequently in the social

contexts than in the athletic context. Moreover, the contextual differences for elementary

school children's moral and social-conventional justifications following their inclusion

decisions were the same as for expected choices. Taken together, these findings indicate that

with increasing age, children become more sensitive towards inclusion and exclusion

contexts (i.e., they exhibit a more advanced understanding of how mental and physical

disabilities interfere with the specific demands of different group activities, such as academic

or athletic performance). These findings are in line with social domain research, indicating

that with age, children become increasingly able to coordinate multiple issues and to include

different point of views in morally relevant conflicts (Smetana, 2006). For example, Killen

and Stangor (2001) found that older children were more likely to take account of context

when evaluating gender- and race-based exclusion. That is, only seventh graders but not

fourth or first graders differed in their inclusion decisions for a non-stereotypic child if this

child was equally or less qualified than the stereotypic child. Children may increasingly

understand social-conventional concepts, such as functions of peer groups, making them more sensitive towards peer group norms and related expectancies in situations in which conventions and moral norms conflict (Killen et al., 2006).

Children's increasing ability to coordinate multiple considerations in moral conflicts has been explained by advances in the cognitive and social-cognitive domain (Killen & Rutland, 2011). On the one hand, growing executive and reflective competencies enable children to take multiple aspects into account, which in turn allows reacting to the demands of multifaceted moral conflicts in more specific ways (Richardson, Mulvey, & Killen, 2012). On the other hand, recent research revealed that children's moral judgments of exclusion depend on their social-cognitive development such as their false belief understanding (Diamond & Hong, 2010; Killen, Lynn Mulvey, Richardson, & Jampol, 2011). An important social-cognitive explanation for kindergarten children's failure to differentiate between contexts might be that kindergarten children have a biased understanding of ability and disability, respectively. Even though young children understand that, for example, someone who has a low cognitive ability will show poor cognitive performance in new situations, they have more difficulties understanding the independency of implications of intellectual ability or disability from traits in other domains (e.g., social or athletic domain) (Droege and Stipek, 1993; Heyman, Gee, & Giles, 2003). As a consequence, young children show a tendency to generalize the deficits from one domain to other domains, even if not affected by the specific disability (Smith & Williams, 2001). This bias for overgeneralizing decreases in middle childhood. To explain this phenomenon researchers have argued that young children use an evaluative dimension (good vs. bad) when reasoning about ability and disability, respectively (Heyman et al., 2003; Nowicki, 2006). Our finding that 6-year-olds, compared to older children, were less likely to include children with disabilities and much less likely to attribute moral emotions strongly supports the conclusion that kindergarten children applied a negative

evaluation dimension when judging inclusion and exclusion of children with disabilities. As children's understanding of ability or disability might show important relations with children's stereotyping, future research should investigate how conceptions about disabilities affect children's social and moral reasoning about disability-based exclusion.

The present study contributed to the literature on moral emotions in the context of social exclusion. Thus far, the development of moral emotions has mostly been investigated within straightforward moral transgressions, such as bullying (for an exception, see Malti et al., 2012). Similar to the findings in the happy-victimizer tradition, our findings indicated that with increasing age, children were more likely to expect that excluders of children with disabilities would feel guilty or sad. Especially in the older age groups, the majority of the children expected the excluders to feel moral emotions. This finding is consistent with those from Malti et al. (2012), indicating that adolescents from majority groups (Swiss nationals) expected the excluder of a peer from a national minority group to feel bad, even though they sometimes judged nationality-based exclusion as right for reasons of group functioning.

Moreover, children attributed more moral emotions to excluders in the social than the athletic context, which again might be explained by the increasing considerations about group functioning in the athletic context. In addition, similar to the findings for expected choices and reasoning, we found that children's anticipation of moral emotions depended on development, group activity, and disability type. While moral emotions in 6-year-old children did not differ for disability type of exclusion target, 9-year-old children, and to an even stronger degree 12-year-old children, were more likely to expect moral emotions following the exclusion of children with physical disabilities in the social than in the athletic context. These findings support our findings for expected choices and reasoning about the inclusion of children with physical disabilities, i.e., that children increasingly coordinate situational context and disability type when anticipating emotions following acts of exclusion.

As expected, children from classrooms inclusive of children with mental disabilities were more likely to expect the inclusion of children with disabilities than children from noninclusive classrooms. Moreover, they used more moral and less social-conventional reasons in their justifications of inclusion decisions. This finding supports research on the positive effect of intergroup contact on children's social and moral judgments of exclusion or intergroup attitudes and extends it to the disability domain (Killen & Rutland, 2011). For example, 7- and 10-year old children from ethnically heterogeneous schools (i.e., schools that provided multiple opportunities for intergroup contact) were less likely to display interracial bias than children from homogenous schools (McGlothlin & Killen, 2010). Contrary to our hypothesis, children from classrooms inclusive of physical disabilities did not differ in their judgments about disability-based exclusion compared to children from noninclusive classrooms. An explanation for these differential findings may be that children's contact experiences are qualitatively different for the two disability types. For example, communicating with children who have a mental disability may be more challenging because of their limitations in the social-cognitive domain (Diamond et al., 2011). Therefore, contact with children who have mental disabilities requires stronger adaptations than contact with children who have physical disabilities, which in turn, might evoke more profound reflections in children with regard to the moral implications of disability-based exclusion.

Inclusive education may affect children's judgments about disability-based exclusion also in other ways than by the experience of contact. The inclusion of children with mental disabilities requires a more essential adaptation of teaching methods and classroom management than the inclusion of children with physical disabilities. More specifically, mainstreaming children with mental disabilities goes along with high cognitive and social classroom diversity, which is best managed by educational strategies that put less emphasis on general instructions and focus more on child-centred and cooperative classroom activities

(e.g., Diamond, Hong, & Baroody, 2008). Child-centred teaching practices are sensitive to the child's specific needs and thus positively contribute to a classroom norm that each child, independent of academic performance, should be respected and included (Mikami, Griggs, Reuland, & Gregory, 2012). In addition, cooperative classroom activities may provide children with important interactional opportunities for the development of social skills in contact with children who have disabilities (Murray & Pianta, 2007).

Contrary to our hypothesis, children's general moral judgments and expected emotions did not differ for the different classroom types (i.e., noninclusive versus inclusive of physical or mental disability). Therefore, we could not find an overall positive effect of inclusion on children's moral and psychological judgments about exclusion. These non-significant findings for inclusive education might indicate that other aspects of the classroom environment are more important than classroom type. For example, teachers differ in the extent to which they promote positive social relationships in their classrooms (Murray & Pianta, 2007), represent models for fair treatment (Crystal, Killen, & Ruck, 2010), and encourage children to engage in moral discourse (Nucci, 2009). Children's perceptions of these teacher's dimensions represent important references for the weighting of moral and non-moral considerations in their reasoning about exclusion (Horn, Daddis, & Killen, 2006).

Finally, it should also be considered that social inclusion of children with disabilities not only depends on the social context but also on the individual characteristics of these children (Diamond et al., 2011). Research by Odom and colleagues (2006) revealed that social exclusion of children with disabilities is more likely to occur when disabilities are associated with deficits in problem solving and emotion regulation. Even though our study excluded children who had disabilities with behavioural disturbances, it is likely that children with disabilities differed with regard to their ability to effectively engage in social interactions. These individual differences might in turn have implications for children's

disability-related attitudes. For example, it is likely that children's contact with children who have disabilities and show aversive social behavior is less likely to elicit positive views about these children than having contact with socially more competent children with disabilities.

There are several limitations to our study that should be considered when interpreting the results. First, our measure of classroom type assessed children's actual experience with a certain disability type in their classroom and not their past experiences in former grades or their experiences outside the classroom. Therefore, children's experiences with different disability types might not be as homogenous as suggested by our measure of classroom type. Second, our study did not include measures on the level of classroom or school which allow measuring qualitatively different levels of inclusive education. For example, inclusive classrooms differ with regard to a variety of service arrangements (e.g., team-teaching of regular and special education teachers vs. separated areas of responsibilities) as well as the quality of teacher-child interactions, which has implications for children's social and moral development (e.g., Diamond et al., 2011; Murray & Pianta, 2007; Odom et al., 1999; Tsao et al., 2008). Third, we did not assess children's real-life inclusive or exclusive behavior. Therefore, the statement that children's judgments about exclusion are behaviorally relevant remains a hypothesis that needs to be tested.

Despite these limitations, the present research importantly contributes to the literature on social inclusion and exclusion, by providing insights into how children of different age groups and different educational systems understand disability-related inclusion and exclusion. Children with disabilities frequently experience peer rejection and victimization in regular kindergarten and elementary schools (Odom et al., 2006). It is an important scientific goal to gain a better understanding of children's deliberations underlying their inclusion and exclusion decisions in order to enhance social inclusion of children with disabilities.

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Table 1

Percentage Frequency of Moral and Psychological Judgments and Social Reasoning by Type of Classroom

	Type of classroom		
	Noninclusive	Inclusive MD	Inclusive PD
General Moral Judgment			
Evaluation of exclusion	92	89	85
Justifications			
Moral	77	77	72
Social conventional	5	4	9
Psychological Judgment			
Expected choice	50	62	47
Justifications			
Moral	43	53	39
Social conventional	43	30	45
Expected emotion	57	58	62

Note. MD = Mental disability. PD = Physical disability.

Table 2

Percentage Frequency of Expected Choice, Justifications of Expected Choice, and Expected Emotion by Disability Type, Situational Context, and Age Group

Situational Context	Mental disability			Physical disability			Total
	Academic	Social	Athletic	Academic	Social	Athletic	
Expected Choice							
6 yrs	44	50	41	40	48	34	43
9 yrs	53	68	56	65	66	39	58
12 yrs	36	60	54	64	67	38	53
Justifications of Expected Choice							
Moral							
6 yrs	33	34	27	31	28	26	30
9 yrs	44	63	48	59	58	36	52
12 yrs	34	52	48	56	63	36	48
Social-conventional							
6 yrs	37	32	39	37	34	48	38
9 yrs	45	30	39	32	32	56	39
12 yrs	61	36	40	33	28	61	43
Expected Emotions							
6 yrs	38	36	31	34	39	37	36
9 yrs	62	63	62	66	61	55	62
12 yrs	70	72	65	78	82	69	73

Table 3

Parameter Estimates (Standard Errors) of Independent Variables on General Evaluation and

Moral Justifications: Two-Level HLM Bernoulli Model Analyses

| | General moral judgment | | | | | |
| | Evaluation of exclusion | | | Moral justification | | |
Parameter	ß (*SE*)	*t*	OR	ß (*SE*)	*t*	OR
A1	1.85 (0.57)	3.27***	6.38	1.82 (0.40)	4.58***	6.17
A2	4.34 (1.12	3.83***	64.44	4.35 (0.69)	6.29***	77.49
A3	0.87 (0.38)	2.29*	2.38	0.53 (0.64)	2.53*	2.11
Inclusive classroom: PD	-1.17 (0.64)	-1.82	0.31	-0.09 (0.45)	-0.21	0.91
Inclusive classroom: MD	-0.10 (0.69)	-0.13	0.91	0.99 (0.49)	0.02	0.99

Note. OR = Odds Ratio. A1 = 6 years vs. 9 years. A2 = 6 years vs. 12 years.
A3 = 12 years vs. 9 years. MD = Mental disability. PD = Physical disability.
p < .05. **p* < .01. ***p* < .001.

Table 4

Parameter Estimates (Standard Errors) of Independent Variables on Expected Choice and Expected Emotion: Three-Level HLM Bernoulli Model Analyses

Parameter	Psychological Judgment					
	Expected choice			Expected emotion		
	ß (*SE*)	*t*	OR	ß (*SE*)	*t*	OR
A1	0.65 (0.25)	2.60*	1.92	0.93 (0.34)	2.73**	2.53
A2	0.51 (0.22)	2.34*	1.67	1.46 (0.33)	4.39***	4.32
A3	0.13 (0.19)	0.68	1.14	-0.56 (0.21)	-2.58*	0.57
Disability	-0.01 (0.09)	-0.17	0.99	0.06 (0.08)	0.78	1.07
Context: Academic[1]	-0.41 (0.08)	-5.34***	0.67	-0.01 (0.08)	-0.07	0.99
Context: Athletic[1]	-0.70 (0.08)	-8.51***	0.49	-0.25 (0.08)	-3.29**	0.78
Inclusive classroom: PD	-0.37 (0.26)	-1.44	0.69	0.37 (0.22)	1.74	1.45
Inclusive classroom: MD	0.61 (0.29)	2.11*	1.83	0.24 (0.32)	0.74	1.26
Disability X Context (academic)	0.25 (0.08)	3.14**	1.29	-0.06 (0.07)	-0.88	0.94
Disability X Context (athletic)	-0.31 (0.09)	-3.48**	0.73	-0.08 (0.06)	-1.19	0.92
A1 X Disability	0.09 (0.15)	0.61	1.10	-0.08 (0.15)	-0.53	0.92
A2 X Disability	-0.12 (0.08)	-1.45	0.89	-0.01 (0.07)	-0.10	0.99
A3 X Disability	-0.28 (0.15)	-1.78	0.76	-0.04 (0.14)	-0.31	0.96
A1 X Context (academic) x Disability	0.48 (0.19)	2.49*	1.61	0.25 (0.13)	1.88	1.27
A2 X Context (academic) x Disability	0.53 (0.20)	2.74**	1.71	0.13 (0.14)	1.12	1.14
A3 X Context (academic) x Disability	0.35 (0.07)	4.75***	1.42	0.24 (0.13)	1.88	1.33
A1 X Context (athletic) x Disability	-0.23 (0.13)	-1.85	0.79	-0.25 (0.10)	-2.55*	0.76
A2 X Context (athletic) x Disability	-0.56 (.014)	-4.09***	0.57	-0.35 (0.13)	-2.49*	0.70
A3 X Context (athletic) x Disability	0.33 (0.15)	2.25*	1.39	0.03 (0.11)	0.30	1.03

Note: Two-way interactions between age group and situational context were not reported because none were significant. [1]Reference category: Social. A1 = 6 years vs. 9 years.   A2 = 6 years vs. 12 years.   A3 = 12 years vs. 9 years.   MD = Mental disability.   PD = Physical disability. OR = Odds Ratio.
p < .05. **p* < .01. ***p* < .001.

Table 5

Parameter Estimates (Standard Errors) of Independent Variables on Justifications of Expected Choice: Three-Level HLM Bernoulli Model Analyses

Parameter	Moral justification			Social-conventional justification		
	ß (*SE*)	*t*	OR	ß (*SE*)	*t*	OR
A1	0.95 (0.22)	4.37***	2.59	-0.03 (0.23)	-0.15	0.97
A2	0.86 (0.20)	4.38***	2.37	0.10 (0.23)	0.45	1.11
A3	0.09 (0.17)	0.55	1.10	-0.13 (0.19)	-0.68	0.88
Disability	0.08 (0.09)	0.86	1.08	0.03 (0.08)	0.43	1.03
Context: Academic[1]	-0.31 (0.11)	-2.82**	0.73	0.41 (0.10)	4.08***	1.50
Context: Athletic[1]	-0.60 (0.10)	-5.89***	0.55	0.66 (0.09)	7.17***	1.93
Inclusive classroom: PD	-0.30 (0.22)	-1.34	0.74	0.31 (0.25)	1.22	1.36
Inclusive classroom: MD	0.56 (0.25)	2.29*	1.75	-0.78 (0.29)	-2.73*	0.46
Disability X Context (academic)	0.27 (0.08)	3.26**	1.31	-0.28 (0.07)	-3.88***	0.76
Disability X Context (athletic)	-0.22 (0.08)	-2.61**	0.80	0.36 (0.08)	4.35***	1.43
A1 X Disability	0.33 (0.15)	2.17*	1.39	-0.12 (0.14)	-0.80	0.89
A2 X Disability	0.59 (0.16)	3.60***	1.80	-0.31 (0.14)	-2.27*	0.73
A3 X Disability	-0.24 (0.16)	-1.51	0.78	0.21 (0.13)	1.54	1.23
A1 X Context (academic) x Disability	0.54 (0.18)	2.96**	1.72	-0.27 (0.19)	-1.41	0.77
A2 X Context (academic) x Disability	0.45 (0.15)	2.97**	1.56	-0.36 (0.16)	-2.20*	0.70
A3 X Context (academic) x Disability	0.12 (0.15)	0.80	1.12	0.08 (0.15)	0.55	1.09
A1 X Context (athletic) x Disability	-0.36 (0.13)	-2.19*	0.70	-3.39 (0.14)	-3.39**	0.62
A2 X Context (athletic) x Disability	-0.71 (0.14)	-4.42***	0.49	0.64 (0.11)	5.98***	1.89
A3 X Context (athletic) x Disability	0.01 (0.16)	0.02	0.98	-0.07 (0.16)	-0.43	0.93

Note: Two-way interactions between age group and situational context were not reported because none were significant. [1]Reference category: Social.
A1 = 6 years vs. 9 years.   A2 = 6 years vs. 12 years.   A3 = 12 years vs. 9 years.   MD = Mental disability.   PD = Physical disability.
OR = Odds Ratio.
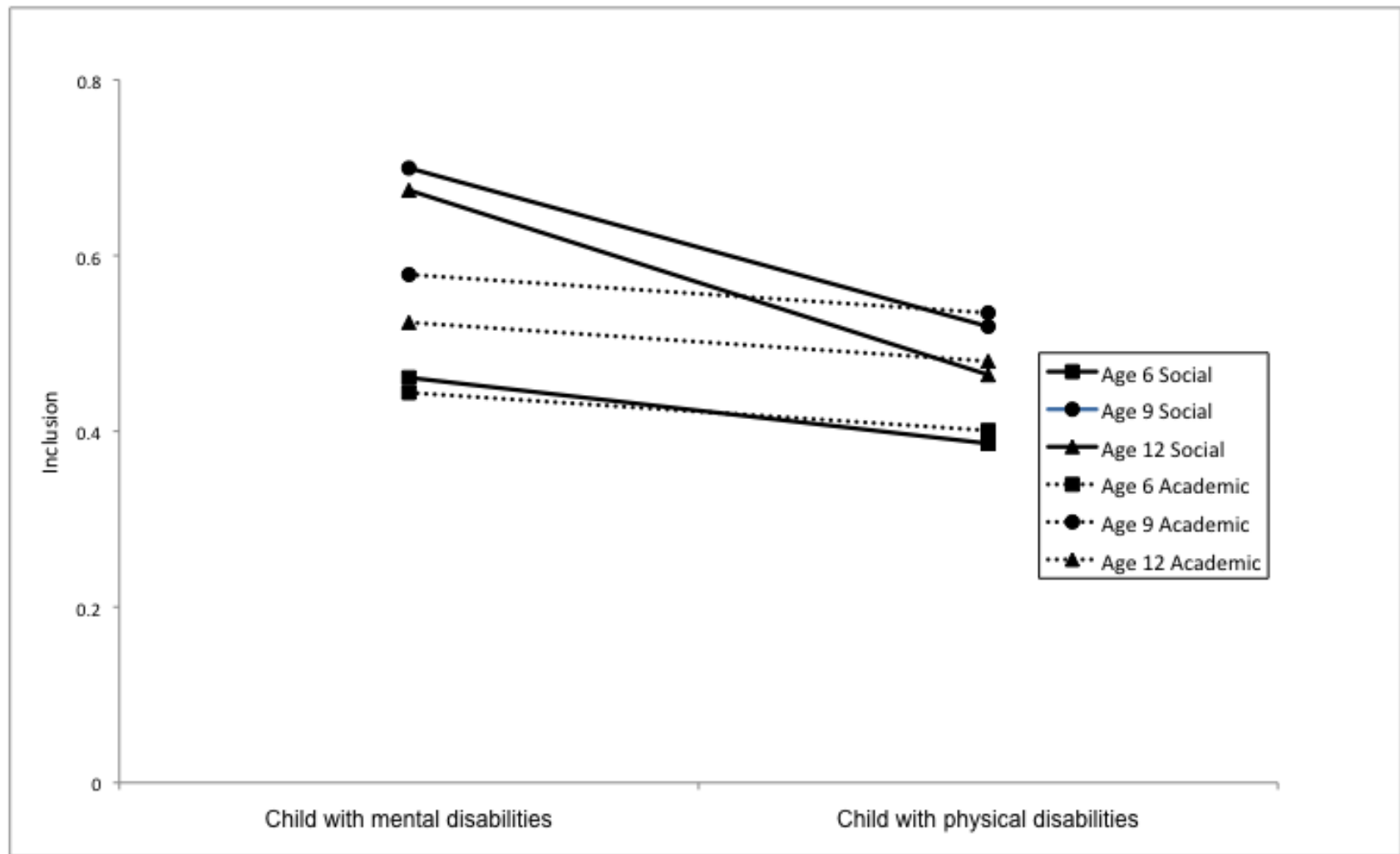*p < .05. **p < .01. ***p < .001.

Figure Captions.

Figure 1

Three-way-interaction of disability type x age group x situational context (i.e., social vs. academic) on expected choice about inclusion.