Children's Judgments of Moral and Conventional Violations Committed by Individuals with Disabilities

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Abstract

Young children are sensitive to actions that violate moral or conventional norms, and often conceptualize people who commit such violations as unkind and deserving of punishment. However, there are many circumstances in which people behave in non-normative ways because they cannot act otherwise—for example, if they possess a disability that prevents them from behaving in accordance with norms or prescriptions. This study was designed to explore whether children (ages 4.00-8.99 years) alter their evaluations of people who commit violations when those persons have disabilities. A total of 77 children were presented four scenarios in which each of three characters (one typically-developing, one who possesses a perceptual disability, and one who possesses a physical disability) commit either a moral or conventional violation. For each scenario, children were asked about each of the three characters' intent and degree of naughtiness. Results indicated that regardless of violation type (moral vs. conventional), younger children (4.00-6.49 years) and older children (6.50-8.99 years) both judged the characters with no disabilities as naughtier than the characters with disabilities; older children judged the characters with disabilities as less naughty than younger children.

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Children's Judgments of Moral and Conventional Violations Committed by Individuals with Disabilities

Approximately 1 in 6 children in the United States have been diagnosed with a developmental disability, and the majority of these children attend school with typically-developing classmates (Huckstadt & Shutts, 2014). These children are victimized much more often than their typically-developing peers--with victimization rates approaching 50%--and this has serious implications for their physical and psychological well-being (Koller, Le Pouesard & Anneke Rummens, 2018; Rose & Gage, 2016). Compared to their typically-developing peers, children with disabilities are rated by their peers as less likable and are less often sought as friends or playmates. In a national survey measuring the social inclusion of students receiving special education or related services, less than 25% with a diagnosis of Autism Spectrum Disorder (ASD) or Intellectual Disability (ID) socialized with friends outside of the classroom (Rossetti & Keenan, 2018). Even within inclusive settings, children with disabilities consistently develop relationships with typically-developing peers that are lower in both number and quality (Koller & San Juan, 2015). One explanation for why children with disabilities may experience these lower levels of social inclusion is that their integration is not only dependent on their own abilities, but on the beliefs and expectations of their typically-developing peers (Diamond & Kensinger, 2010; Koller et al., 2018).

Another explanation for why children with disabilities experience lower levels of social inclusion and higher rates of victimization is because of the way that society situates similarity and difference into "oppositional frameworks:" something is either "good and accepted" or "bad and to be feared/avoided" (Jones & Augustine, 2015). These ideas are then normalized and reinforced in multiple realms as children grow up (Jones & Augustine, 2015). So, when applying these oppositional frameworks to disability, the presence of typical abilities or behaviors may be

normalized as “good,” while the presence of atypical abilities or behaviors may be normalized as “bad.” Previous research on children’s judgments of the behaviors of peers with disabilities, though limited, supports this idea by suggesting that there may be a critical set of behavioral cues that guide typically-developing children in seeking out specific classmates over others as desired playmates (Diamond & Kensinger, 2010; Koller et al., 2018).

One example of what could qualify as atypical behavioral cues can be seen with Autism Spectrum Disorder (ASD). A common manifestation of ASD is a persistent and visually apparent fixation on certain topics, items, and behaviors at a level of intensity that often deviates from the norm (Schroeder, Cappadocia, Bebko, Pepler & Weiss, 2014) and may lead to especially high rates of victimization (38%) (Limber, Kowalski, Agatston & Huynh, 2016). Atypical behavioral cues can also occur with more concrete disabilities, such as physical disabilities, because of salient differences in the performance of demanding motor skills such as eating or throwing a ball (Diamond & Hong, 2010).

Thus, the behaviors that people with disabilities display often manifest as “violations” to the norms that society has established and maintained in regard to what is “good” and what is “bad,” even though these violating behaviors are an unintentional product of the disability, rather than a product of “free choice”. “Freedom of choice” refers to the restriction or lack of restriction placed on an agent of behavior (Josephs, 2016). Huckstadt and Shutts (2014) suggested that young children (3-5 years), aware of and sensitive to the presence of norm violations (such as those that result from a disability) may come to conceptualize children with disabilities as “violators,” even if their violations are not intentional or of free-choice.

There are two main categories of norm violations: moral violations and conventional violations. Moral norms involve potentially universal concerns with harm, justice, and rights. For example, “it’s wrong to steal”. Conventional norms are specific to individual social systems and

build upon arbitrary, mutual expectations for behavior (Ball et al., 2017). For example, “it’s not acceptable to scream in a library.” Conventional norms are judged as wrong by children as young as 3 or 4 years of age, even though such violations typically do not cause obvious harm to others (Dahl & Kim, 2014; Göckeritz, Schmidt & Tomasello, 2014). Children this age can also differentiate between moral and conventional violations, conceptualizing moral violations as more extreme, more punishable, more universal and less dependent on context than conventional violations (Hardecker, Schmidt, Roden, & Tomasello, 2016). Past research by Tisak and Turiel (1988) indicates that overall, both younger (1st and 2nd grade) and older (5th grade) children judge moral violations as naughtier than conventional violations, and moral rules as more critical than conventional rules.

When comparing children’s judgments of naughtiness and intentionality between moral and conventional violations, Schmidt et al. (2012) found that younger children (3-year-olds) hold ingroup and outgroup members equally accountable for moral violations, hold ingroup members accountable for adhering to conventional norms more often than outgroup members, and display high levels of protest at ingroup violator actions for these conventional norms. Riggs and Kalish (2012) further explored age-related differences in children’s processing of norm violations; specifically, among children 4-5 years and 7-8 years. They found that general normative information is more salient to younger children, while specific, psychological information is more salient to older school-aged children. For example, younger children simply use the presence, or lack-there-of, of a violation to form their judgments (Cushman et al., 2013), while older children may consider the motives of the violator or the consequences of the violation for the self or others (Riggs & Kalish, 2012). Older children determine actions with good intentions or a lack of intentionality to be less deserving of punishment than younger children, who tend to disregard the actor’s motives when forming judgments (Mammen et al., 2017).

Research on developmental differences in children's concepts of disability can serve as a theoretically-intriguing extension of what is known about children's concepts of norms for a number of reasons. It first provides insight into what characteristics, visible (e.g. physical impairment) or not (e.g. sensory or cognitive impairment), of a norm violator are salient to or understood by children of different ages. Diamond and Hestenes (1996) found that children ages 2-6 years were most aware of and best understood the consequences of a physical disability (e.g. being unable to walk) as compared to sensory (e.g. being unable to see) or cognitive (e.g. Down's Syndrome) disabilities because physical disabilities are often more concrete and visually salient (Diamond & Hestenes, 1996). Whereas past research on children's concepts of perceptual disability has largely been focused on visual impairments (Diamond & Hestenes, 1996; Huckstadt & Shutts, 2014), the current study is designed to explore children's concepts of auditory impairments. Children as young as 3-4 years have at least a basic understanding of the relation between sound and hearing and understand that information can be passed from one individual to another through means of spoken communication (Lane et al., 2016). Williamson et al. (2015) suggests that children may learn about auditory perception through a multitude of sources: statistical, observational learning of others' responses to sound, everyday parental explanations (e.g., "use your quiet voice," "don't wake the baby"), and their own personal experiences with sound.

Examining children's developing concepts of norm violations committed by persons with disabilities extends psychological theories such as "oppositional frameworks" (Jones & Augustine, 2015) and "freedom of choice" (Josephs, 2016) (described earlier) to contexts with practical, applied implications. As previously discussed, children with disabilities experience higher rates of bullying and exclusion than typically-developing children (Koller, Le Pouesard & Anneke Rummens, 2018; Rose & Gage, 2016). Work by Diamond, Hong and Tu (2008)

illustrated that young children (3-6 years) are aware that some activities may be unachievable or undesirable for a child with a physical disability and base their social inclusion decisions on this awareness. For example, that a child with a physical disability may have more difficulty dancing than completing a puzzle (Diamond, Hong and Tu, 2008). However, children may not account for disabilities when evaluating other people's behavior. In one of the only studies to explore the intersection of disability and norm violation, Huckstadt and Shutts (2014) found that experimenter-created conventional violations ("reaching into a box to explore an object rather than looking through a viewfinder to do so") committed by characters who were illustrated and described as visually-impaired were consistently rated by both 3 and 5 year olds as equally naughty as the same violations committed by children without disabilities. It is unclear, though, whether children evaluated the characters with disabilities as equally bad as the typically-developing characters because the children did understand "accommodations" (they did not believe that the disabilities were an "excuse" for the behavior), or because of negative biases that the children may have held toward particular physical features of the characters with the visual impairments (these characters were depicted as wearing dark glasses/did not have visible pupils). Children's concepts of moral violations were not explored in this study.

The purpose of the current study is, in part, to address limitations found in past research on children's concepts of disability and their judgments of norm violations. First, much of the research focusing on the inclusion/exclusion of children with disabilities in settings with typically-developing peers asks participants to evaluate children whom they know well; such as those in their classrooms or on their teams (Diamond, Le Furgy & Blass, 2010; Huckstadt & Shutts, 2014). The studies revealing higher exclusion and lower preference rates for these children with disabilities fail to consider confounding variables that may drive the results. These include the appearances of the children being evaluated (separate from their disabilities), past

experiences (positive or negative) with these children, and the attitudes expressed by authority figures towards them (Huckstadt & Shutts, 2014). Thus, the current study asks children to evaluate the behaviors of novel children, increasing the internal validity of the design.

Second, research has supported the idea that young children (4-5 years) are highly sensitive to visually salient differences in others, such as use of medical equipment, and judge individuals with these differences more negatively than peers or characters without these differences; even if just presented with photographs and no further information (Diamond & Hestenes, 1996; Huckstadt & Shutts, 2014). Yet, most research on children's concepts of others with disabilities has employed visually salient markers of disability (such as a wheelchair to mark a physical disability or sunglasses to mark a visual impairment) in pictures or descriptions (Diamond & Hestenes, 1996; Huckstadt & Shutts, 2014; Koller & San Juan, 2015). In order to address this limitation, this study does not use visually salient or concrete markers of disability: all characters, regardless of the presence or type of disability, are graphically presented sitting in a chair, with no apparent physical differences other than features that vary across typically and atypically developing persons (e.g., hair color, hair style, eye color, clothing color, skin-tone); these features were randomly distributed across characters. This design is critical in controlling for the possible biases that children may hold against visually-salient disability equipment, which may in turn, bias their judgments of a violator's behavior.

Third, most studies on children's concepts of norm violation have used experimenter-created games and experimenter-created norms and violations (Josephs et al., 2016; Huckstadt & Shutts, 2014; Riggs & Kalish, 2012; Schmidt et al., 2012). For example, Josephs et al. (2016) used a puppet named "Bilbo" that committed violations with respect to an experimenter-created marble apparatus. Similarly, Schmidt et al. (2012) used ingroup/outgroup puppets named "Max" and "Henri" and an experimenter-created board game to depict norm violations in their study.

Considering that these games and violations were unique to their study context, their findings are of questionable generalizability. To address this limitation, the current study is focused on moral and conventional violations that could realistically occur for most children in their everyday encounters with others (e.g. not helping a child who trips, not playing with another child during recess, speaking too loudly in the classroom, not picking a book for reading time). This method increases the external validity of the study while reducing demand characteristics.

With regard to the types of violations presented in past research, gaps remain for moral violations concentrated on helping; the majority of work has been focused on hurting, especially physical hurt. Because children conceptualize concrete outcomes (such as someone experiencing visible, physical pain) more readily than less obvious outcomes (such as being neglected or experiencing psychological pain (Ball et al., 2017; Diamond & Hestenes, 1996), the generalizability of findings on just one type of moral violation is limited. For example, in a study by Dahl and Kim (2014), most of the moral violations involved hurting behaviors (physical and psychological hurt): hitting, shoving, calling names, and stealing. This study was designed to address this gap in the literature by using moral violation scenarios that specifically address the moral concept of helping and further explore psychological hurt (e.g. hurt feelings).

In sum, the current study was designed to address the following research questions: (1) How do children's judgments of others' naughtiness differ across early development (4-8.99 years) for violations committed by persons with a disability versus persons with no disability? (2) How do such judgments differ across early development when the violations are moral versus conventional?

Consistent with past research (Hardecker et al., 2016; Riggs & Kalish, 2012; Schmidt et al., 2012; Tisak & Teriel, 1988), I hypothesized that children's judgments of character naughtiness would be more severe for moral violations than conventional violations among both

younger (4.00-6.49 years) and older (6.50-8.99 years) children. With regard to the more novel aspects of the study, I hypothesized that older children (6.5-8.99 years) would attribute less naughtiness for violations committed by individuals with disabilities versus individuals with no disabilities, and younger children would attribute equal naughtiness to all individuals (Diamond & Hestenes, 1996; Huckstadt & Shutts, 2014). Although I have collected data on children's intent judgments as a part of this study, those data are currently being coded and are not yet available for analysis. Thus, this thesis is focused primarily on children's judgements of others' naughtiness.

Method

Participants

Participants (n = 77, 39 girls) included typically-developing children ages 4.00-8.99 years. To examine age-related differences, approximately half (n =38) of the children comprised a younger group (4.00-6.49 years), and the other half (n = 39) comprised an older group (6.50-8.99 years). Of the participants, 21 were recruited by phone using Tennessee State birth records. Parents of children in the target age-range who were living in the Greater Nashville area were called and asked to have their children participate in a study at Vanderbilt University. Children whose parents expressed interest and consented to participate completed the study in a lab on the University's campus. The remaining 56 participants were recruited by distributing informed consent documents to a private school in Nashville, TN. Children whose parents offered consent participated in a quiet location at their school.

The only exclusion criteria for participation were that children were within the target age range and fluent in English. 87% (n = 67) of the participants were identified by their parents as White/Caucasian, 6.5% (n = 5) as Asian, 3.9% (n = 3) as Black, 2.6% (n = 2) as Hispanic, and 1.3% (n = 1) as Other. 33.8 % (n = 26) of parents identified themselves as having a Master's

degree, 28.6% (n = 22) as having a Doctorate, 28.6% (n = 22) as having a Bachelor's degree, and 6.5 % (n = 5) as having some college.

Materials

Materials included a clear plastic box with dividers that created 6 sections. The box held laminated, novel vector-graphics (approximately 1.5'' x 2.5'' in size) uniquely designed for this study depicting seated characters (18 girls, 18 boys) with differing surface features (e.g., hair color, hair style, eye color, clothing color, skin tone). As well, the box contained 4 laminated graphics depicting a "fallen" girl, and 4 graphics depicting a "fallen boy" (approximately 2.5'' x 1.5'' in size) (see Appendix C for example graphics). Two additional scenes (one of a classroom and one of an outdoor playground) were printed on 8.5'' x 11'', laminated paper. Studies sessions were recorded via a small audio recorder (if parents consented to audio recording).

Design

The study is a 2 (Child Age: 4.00-6.49 years vs. 6.50-8.99 years) x 2 (Violation: moral vs. conventional norm) x 3 (Character Disability: no disability, perceptual disability, physical disability) mixed-effects design. Violation and Character Disability were manipulated within-participants. Judgments of the characters' naughtiness and intent were the dependent variables.

Procedure

Before beginning the study, participants spent several minutes building rapport with the experimenter. Once comfortable, the experimenter directed the participant to sit in a chair on the experimenter's left side, with both the experimenter and participant on the same side of the table. In both the lab and school setting, the study was run in a quiet room away from distractions. The participant was read the child-assent, and if given parent-consent to be audio-recorded, made aware that the tape recorder on the table "Will just be listening to what we talk about today." The study began with the experimenter pulling out two gender-matched characters from the plastic

box at random, and one-at-a-time. The participant was given an auditory description of the first character with a physical (walking) disability, asked memory-check questions about their disability ("So what part of this boy's/girl's body doesn't work?"; "Can this boy/girl walk/hear?"), and then given a description of the second character with a perceptual (hearing) disability followed by the same questions. The experimenter then presented the first of four (two moral violation scenarios and two conventional violation scenarios) scenarios, with order dependent on the protocol version the participant was assigned at random.

In one scenario (see Appendix A for example script), the experimenter placed the classroom scene graphic in front of the participant and randomly selected 3 seated characters and 1 fallen character from the box. After placing the characters on the scene from left to right (with the fallen character on the far right), the experimenter told the participant that one character in the classroom (while pointing at the fallen character) falls down and screams for help, and that the other three characters do not help (moral violation – fallen child). The participant was then introduced to each of the sitting characters one at a time: all had unique names and abilities (one had no disability, one had a perceptual disability, and one had a physical disability). To direct the participant's focus to whichever character was being featured at a specific point in the scenario, the experimenter moved it off the scene, away from the others, and closer to the child. When that character was finished being discussed, the experimenter moved it back onto the scene and the same procedure was repeated with the next character. The character with no disability was always introduced first across conditions. In this scenario, the participant was told that this character "can walk", "can hear", and "doesn't help the fallen character". The experimenter then asked a question about that character's intent ("Why did [*character's name*] not help the boy/girl who fell?") and naughtiness ("Is [*character's name*] naughty for not helping?" If yes, "Is [*character's name*] a "little or very naughty?"). After these questions were answered, the

experimenter introduced either the character with the physical or perceptual disability next, depending on condition, in the same manner as the character with no disability. This meant that while the character with no disability was always placed on the far left in the scene, the subsequent positions of the characters with disabilities were random depending on condition.

For the character with the physical disability, the experimenter first made the general description of physical disability (given at the very beginning of the study) salient by asking the participant, "Remember when we talked about boys/girls whose legs don't work? [*Character's name*] is one of those boys/girls." Then, with a structure identical to that of the character with no disability, the participant was told that the character with the physical disability "can't walk", "can hear", and "didn't help the boy/girl who fell" (moral violation – fallen child). Unique to the characters with disabilities, the participant was then asked questions to check their memory and comprehension of the mentioned disability ("So what part of [*character's name*]'s body doesn't work?") For each question answered correctly, researchers provided affirmative feedback ("Yeah, their legs/ears don't work"), and for questions that were answered incorrectly, researchers provided corrective feedback ("Actually, their legs/ears don't work"). Thus, children were attentive to information about the characters' disabilities and retained that information. Finally, they were asked the same two questions about character intent and naughtiness as the character with no disability. For the perceptual disability condition, the procedure was identical to that of the physical disability condition except that the participant was reminded of the general description of perceptual disability instead of physical and told that the character "can walk" but "can't hear".

The same procedure was repeated for three more scenarios. In a second scenario (conventional violation – talking too loudly), participants were shown the same classroom scene with the same 3 "sitting characters" as in the moral violation – fallen child scenario (the 4th,

"fallen character" was removed or added to the scene dependent on the order of these two scenarios) and told that they are "all supposed to be working quietly in the classroom" but talk too loudly. In a third scenario, participants were shown the playground scene, and the experimenter randomly selected four new sitting characters from the box to be placed on the scene from left to right. In this scenario (moral violation – asking to play at recess), the participant was told that one of the 4 characters (the far-right character on the scene) asks the other characters to play tag or on the jungle gym during recess with him/her, and that the other three characters do not play with him/her. In a final scenario (conventional violation – not picking a book for reading time), participants were shown the same playground scene as in moral violation – asking to play at recess with the same 3 sitting characters (the 4th, "far-right character" was removed or added to the scene dependent on the order of these two scenarios), and told that the teacher "asks the class to walk to the bookshelf (a bookshelf graphic was added to the scene here) and pick-out a book to read for reading time" and that none of the characters do it. The order in which the four scenarios and three ability types were presented was counterbalanced, creating 4 unique versions of the study protocol.

The entire study session lasted approximately 20 minutes, after which participants were allowed to choose a small toy as a gift and were returned to their parents or classroom. Parents completed a short, 7-item questionnaire that asked how important they feel it is that their child makes friends with other children with disabilities, how important it is to them to teach their child about the fair treatment of others, how often their child is around children with disabilities in their school, and how often their child interacts with people with disabilities outside of the classroom setting. Additionally, they were asked if themselves or any other caregivers read books or stories about how to treat different types of people to their children and were given the opportunity to list those book titles. Finally, they provided information on their child's ethnicity

and the education levels of themselves and the child's other parent (see Appendix B for example questionnaire).

Although the results of the parent questionnaire will not be analyzed in detail for the purpose of this thesis, they are reported below. In response to the question "How important is it to you that your child makes friends with children with developmental differences?", 41.3 % (*n* = 31) said "Important," 40% (*n* = 30) said "Very Important," and 17.3% (*n* = 13) said "Somewhat Important" In response to the question "How important is it to you to teach your child to treat different types of people fairly?", 94.7 % (*n* = 71) said "Very Important" and the remaining 4% (*n* = 3) said "Important." In response to the question "How often is your child around children with disabilities in his or her classroom or school?", 57.7% (*n* = 41) said "Rarely," 26.8% (*n* = 19) said "Often," 8.5% (*n* = 6) said "Never," and 7% (*n* = 5) said "Very Often." In response to the question "How often does your child interact with people with disabilities outside of the classroom setting?", 80% (*n* = 60) said "Rarely," 10.7% (*n* = 8) said "Often," 8% (*n* = 6) said "Very Often," and 1.3% (*n* = 1) said "Never." Finally, in response to the question "Do you or other caregivers read books or stories to your child about how to treat different kinds of people; for example, stories about children with disabilities?", 64.8% (*n* = 46) said "No" and 35.2% (*n* = 25) said "Yes."

Scoring

For the introductory questions and memory-check questions, correct answers were coded '1' and incorrect answers were coded '0'. Responses to the focal questions about whether each character is naughty were assigned scores of '0' for "no", '1' for "yes" followed by "a little", and '2' for "yes" followed by "very". Six naughtiness composite scores were computed by averaging across responses for each of the six pairs of violation-ability scenarios: Conventional-No Disability; Conventional-Perceptual Disability; Conventional-Physical Disability; Moral-No

Disability; Moral-Perceptual Disability; Moral-Physical Disability. Scores for each composite could range from 0-2.

Results

The interview session began with a general introduction to novel characters with perceptual or physical disabilities, and children were asked basic questions about the location of the physical or perceptual disability ("So what part of this boy's/girl's body doesn't work?"). Overall, 87% of participants correctly answered the introductory question about physical disability and 94.8% correctly answered the introductory question about perceptual disability. Similar memory-check questions were asked about different characters who were the focus of the main scenarios ("So what part of (insert character)'s body doesn't work?"). Overall, 76.6% of participants correctly answered the memory-check questions regarding physical disability, and 87% of participants correctly answered the memory-check questions regarding perceptual disability.

I now turn to the focal analyses: tests of whether children's naughtiness ratings varied by participants' age, character's disability, and violation type. A 2 (Participant's Age: 4.00-6.49 vs. 6.50-8.99 years) X 2 (Violation Type: conventional vs. moral) X 3 (Character's Disability: none vs. physical disability vs. perceptual disability) ANOVA revealed significant effects of participants' Age ((F (1, 75) = 10.57, p = < .01) and Violation Type (F (1, 75) = 12.14, p < .01) on children's Naughtiness ratings. As expected, younger children judged characters as naughtier (M = .84, SE = .06) than older children (M = .55, SE = .06). Unexpectedly, children judged the characters who committed conventional violations as naughtier (M = .78, SE = .06) than those who committed moral violations (M = .62, SE = .05).

More critically, this analysis revealed significant effects of Character's Disability (F (2, 74) = 83.32, p < .01), as well as a significant interaction of child's Age X Character's Disability

(F (2, 74) = 4.15, p = .02). Post-hoc pairwise comparisons revealed that, on average, children judged the characters with no disability as naughtier (M = 1.16; SE = .06) than the characters with a physical disability (M = .49, SE = .05, p < .001) and the characters with a perceptual disability (M = .44, SE = .05, p < .001). Judgments of naughtiness did not differ for characters with physical versus perceptual disabilities (p = .14). Although younger and older children both judged the characters with disabilities as less naughty than the characters with no disability, there were age differences in how naughty children judged the characters with disabilities as. Younger (M = .84, SE = .06) and older (M = .55, SE = .06) children judged characters with no disability as equally naughty (p = .34). However, older children (relative to younger children), judged characters with physical disabilities as less naughty (M = .33, SE = .07; M = .66, SE = .07; p < .05), and judged characters with perceptual disabilities as less naughty (M = .22, SE = .07; M = .65, SE = .08; p < .001). As depicted in Figures 1 and 2, the effect of Character Disability and the interaction of Disability X Age were evident whether children reasoned about moral violations or conventional violations. No other interaction effects were significant (Ability X Violation: F (2, 74) = 2.48, p = .09; Violation X Age: F (1, 75) = 1.06, p = .31; Ability X Violation X Age: F (2, 74) = .80, p = .45).

Discussion

The primary goal of this study was to investigate whether, across early development (4.00-8.99 years), children judge individuals with physical or perceptual disabilities as more or less naughty than typically-developing children when they commit moral or conventional violations. The results of the introductory and memory-check questions suggest that, in both age groups, children had a strong understanding of the basic relationships between “legs” and “walking,” and “ears” and “hearing.” The high percentages of correct responses to these questions are encouraging indicators that the novel descriptions of physical and perceptual

disabilities used in this study were developmentally appropriate and clear. Most notably, these results provide strong support for the rejection of a lack knowledge regarding these abilities as a potential confounding variable.

Based on past research exploring children's moral development (Ball et al., 2017; Tisak & Turiel, 1988), I first hypothesized that both younger and older children would judge moral violations as naughtier than conventional violations. The results of the study failed to support this hypothesis, with conventional violations being judged as significantly naughtier than moral violations by children of both age groups. While this contradiction was unexpected, there are a number of reasons why this could have been the case.

All of the norm violations in this study were chosen or created to incorporate some aspect of audition or movement, since the abilities or disabilities attributed to the characters in the study explicitly had to do with "hearing" and "walking". This intentional restriction, in addition to the decision to use realistic classroom violations to increase the generalizability of the study findings and address past limitations, prevented the utilization of "well-established conventional violations" (e.g. "wearing pajamas to school" (Tisak & Turiel, 1988)) in the study design. Taking both of these restrictions into consideration, the conventional violation scenarios in this study involved a greater "authority" piece than traditionally-used conventional violation scenarios for the purpose of morality research.

The conventional violation – talking too loudly scenario ("The kids are supposed to be working quietly in the classroom…all of them talk too loudly in the classroom"), by virtue of being set in a classroom context, may have increased the salience of "classroom/teacher rules". So, while the intention in designing this scenario was to target the conventional norm of "speaking quietly in quiet spaces," children may have instead formed their judgments around the "disrespect of authority" piece; what may be considered as more of a "moral violation".

Additionally, this violation has a less concrete "mobility" piece than the other three violations. In so, it is plausible why the character with the physical disability in this scenario may have received higher naughtiness ratings than in the other scenarios, further influencing the overall naughtiness average for this violation.

The conventional violation – not picking a book for reading time scenario ("The teacher asks the class to walk to the bookshelf and pick out a book to read for reading time…none of them pick out a book"), included the "teacher asked" component in order to incorporate "audition" like the other violations. But, similar to conventional violation – talking too loudly, it is possible that by adding this dimension of authority to the scenario that children placed more emphasis on the moral "disobedience of authority" piece than on the conventional "didn't pick a book for reading time" piece in forming judgments of character naughtiness. Further dissection of the wording of these scenarios and the limitations in their formulation can provide insight into why the naughtiness scores for these "conventional" violations may have actually reflected that of "moral" violations, quantitatively.

Another potential explanation for why conventional violations may have received significantly higher naughtiness ratings than moral violations, failing to support the first hypothesis, is because of the moral violation – asking to play at recess scenario. One of the limitations of past research, intentionally addressed in this study, is the tendency to use moral violations mostly concentrated around "physical hurt." The moral violation – asking to play at recess scenario ("One boy/girl asks the other kids to run and play with him/her during recess…the other kids don't run and play with him/her"), specifically addressed "psychological hurt": a type of moral violation that is very commonly seen for children with disabilities in classroom settings in the form of social exclusion or bullying (Koller, Le Pouesard & Anneke Rummens, 2018; Rose & Gage, 2016).

Past research has suggested that violations involving psychological hurt demand a more advanced theory of mind than violations involving physical hurt, making them more difficult for children to conceptualize when forming naughtiness judgments (Ball et al., 2017). This cognitive threshold could potentially explain why the naughtiness scores for this "moral" violation may have actually reflected that of a "conventional" violation. Considering the intricacies of both conventional violations 1 – talking too loudly and 2 – not picking a book for reading time and moral violation 2 – asking to play at recess, it is viable why the results failed to support the first hypothesis. It is as equally important to note, though, that there were no significant interaction effects of Violation and Age, Violation and Disability, or Violation, Age, and Disability. This result demonstrates that the effect of character disability-status on children's naughtiness judgments was present despite whether the violation scenario was moral or conventional.

Though modest, the literature on children's concepts of norm violators with and without disabilities suggests that young children (3-5 years old) rate violators as equally naughty; disability-status of the protagonist is not salient in judgments of violations (Huckstadt & Shutts, 2014). Research supports the idea that this effect could be attributed to developmental differences in what is most salient to children when forming judgments of violations (Riggs & Kalish, 2012): younger children seem to base their judgments on the presence of a violation alone (Cushman et al., 2013) while older children place more emphasis on less concrete factors such as the intent of the violator or consequence of the violation to the self or others in the formation of their judgments.

Based on these findings, I hypothesized that only children in the older age group (6.5-8.99 years) would judge violations committed by characters with disabilities as less naughty than characters without disabilities, while children in the younger age group (4.0-6.49 years) would judge them as equally naughty. The results only partially supported this hypothesis: there were

significant, age-related differences in Naughtiness ratings, a significant interaction effect of Disability and Age, and an overall significant effect of Disability on Naughtiness ratings. Children in the younger age group (4.00-6.49 years) rated characters as naughtier overall, and children in the older age group (6.50-8.99 years) specifically rated characters with disabilities as less naughty relative to younger children. Both of these findings support the hypothesis stated above and are consistent with existing literature. However, contrary to my hypotheses and in contrast to prior findings, children in both age groups rated characters with disabilities as less naughty than characters with no disabilities (although this pattern was more exaggerated among older participants).

Perhaps the strongest explanation for why this finding is inconsistent with past research is in how this study explicitly addressed a limitation of this past research, which represented disability through the use of assistive or medical equipment (e.g., a wheelchair, sunglasses). In this study, descriptors attributing ability or disability to characters were exclusively verbal (e.g., "he/she can walk but can't hear"). Because the only remaining visually salient differences between characters were surface-level (e.g., hair color, eye color, clothing color, skin tone), and characters were shuffled and selected randomly across participants for each individual scenario, visually-salient differences that could evoke negative biases were well controlled for.

Without this kind of controlled design, it is difficult to separate children's judgments of "disability" from children's judgments of "disability equipment." The results of this study not only reveal that children conceptualize violators with disabilities as significantly different from violators without disabilities, but that they do so in isolation from visual representations of disability. And perhaps most notably, the way in which they do so diverges from what several studies have contended. Instead of judging characters with disabilities as equally naughty (Huckstadt & Shutts, 2014) or even more negatively than children with no disabilities (Koller et

al., 2018), the current findings purport that children in both the younger (4-6.49 years) and older (6.50-8.99 years) age groups consistently give characters with disabilities more "slack" across scenarios.

This outcome may have important implications for how concepts of disability are introduced and taught to children ages 4-9 years. For example, it may advance the development of alternate approaches to the current order in which disability concepts are introduced to children. Instead of using dolls, storybooks, or media that portrays children with disabilities with adaptive equipment outright, there may reason to spend more time on "non-visual" demonstrations of disability concepts, first.

Significance of the Current Work

The goal for this study was to expand the present literature on children's concepts of disability and norm violation in a number of significant ways. First, I considered how having young children evaluate real classmates with disabilities, as past studies have done, can elicit biases rooted in past experiences that potentially skew findings (Diamond, Le Furgy & Blass, 2010; Huckstadt & Shutts, 2014) Accordingly, I designed and utilized novel characters and scenarios. Second, I gave appropriate attention to the consistent literature on children's sensitivity to and negative perceptions of visually salient differences in others (Diamond & Hestenes, 1996; Huckstadt & Shutts, 2014) by choosing to use verbal markers of disability rather than visual markers of disability. Third, I emphasized the importance of generalizable findings in this area of research by using realistic moral and conventional violation scenarios rather than experimenter-created, study-specific violations (Josephs et al., 2016; Riggs & Kalish, 2012; Schmidt et al., 2012). Finally, I expanded the current methodology used to study children's concepts of norm violation (Riggs & Kalish, 2012) by including a moral violation that addresses "psychological hurt" and one that addresses "helping."

Limitations

Potential limitations of this study include a tradeoff of external validity for internal validity in regard to the decision of novelty for the characters with disabilities, and the use of verbal markers of disability rather than visual markers of disability. Additionally, novel moral and conventional violations, instead of well-established violations, were used in order to incorporate aspects of "audition" and "movement" into the scenarios. Finally, the inclusion of only two specific types of disabilities (physical (walking) and perceptual (hearing)) limits the extent in which the findings reflect children's conceptions of disability more broadly.

Future Directions

In this area of research, a number of overarching, pressing considerations drive future directions of study. For example, reflection on whether people are ever able to separate naturally occurring, negative implicit attitudes about the agents of conventional and moral violations from people with disabilities; unintentional "violators." Or whether the high rates of exclusion and victimization for people with disabilities/differences could be altered if young children understood the constrained "freedom of choice" of, or accommodations needed by, people with disabilities in performing certain activities.

Though it was not analyzed for the purpose of this thesis, I hypothesized that only children in the older age group (6.5-8.99 years) would attribute less intent for violations committed by a character with a disability versus a character with no disability. Children's intentionality judgments were measured through open-ended, qualitative questions ("Why did [*character's name*] [*insert violation*]?") and are currently being coded into empirically-meaningful categories. The categories are as follows: "Disability – Hearing or Mobility" (e.g., "because her ears don't work"), "Unaware (Benign)" (e.g., "because she didn't notice"), "Conflicting Desire" (e.g., "because she wanted to play by herself"), "Motive – Antisocial

(Protagonist)" (e.g., "because, well, she is doing it on purpose"), "Trait – Negative (Protagonist)" (e.g., "because maybe she was a bully to her"), "Diffusion of Responsibility" (e.g., "because she thinks someone else will do it") and "Other" (e.g., "because he's sitting"). Participant responses will be scored a 0 for "Not Mentioned", a 1 for "Mentioned", and 99 for "No Answer/I don't know" within these categories. Based off of the current literature on children's concepts of intentionality, I anticipate that analysis of these qualitative responses will not only provide insight into the developmental differences in children's naughtiness judgments in this study, but produce a plethora of research questions for future investigation. One such question is whether the presence of a "why" intentionality question, alone, may have caused children to pause and reflect in a way that influenced their naughtiness judgments in this study.

With regard to the "morality-related" components of this study, future directions will concentrate on introducing some measure to ensure that the incorporated "audition" and "movement" levels are more consistent across violations, eliminating it as a potential confound to children's naughtiness judgments. Additionally, all references to authority will be intentionally removed from conventional violation scenarios in future studies to eliminate its salience in the formation of children's moral judgments. Alternate ways to incorporate audition and movement, despite this removal of authority, will be explored. For example, the delivery of auditory messages by a non-direct human source: a speaker or television. Future directions will also consider the matriculation of additional moral violations targeting "psychological hurt," to better clarify whether children's naughtiness judgments for the moral violation 2 – asking to play at recess scenario stemmed from the theory of mind demands of a less concrete moral violation, or the particular scenario itself.

With regard to the "disability-related" components of this study, the most pressing area for future research is the expansion of the disabilities studied here (physical (walking) and

perceptual (hearing) disabilities) to include “cognitive disabilities” (e.g., Autism Spectrum Disorder (ASD), Down’s Syndrome, and ADHD). Considering that these findings suggest children are conceptualizing the behaviors of characters with disabilities as significantly different from the behaviors of characters with no disabilities based solely on verbal descriptors, there is reason to hypothesize that this effect may extend to more “invisible”, cognitive disabilities as well. Future efforts will be directed at developing illustrative, yet child-friendly, verbal descriptions of the aforementioned cognitive disabilities, to be used in future studies.

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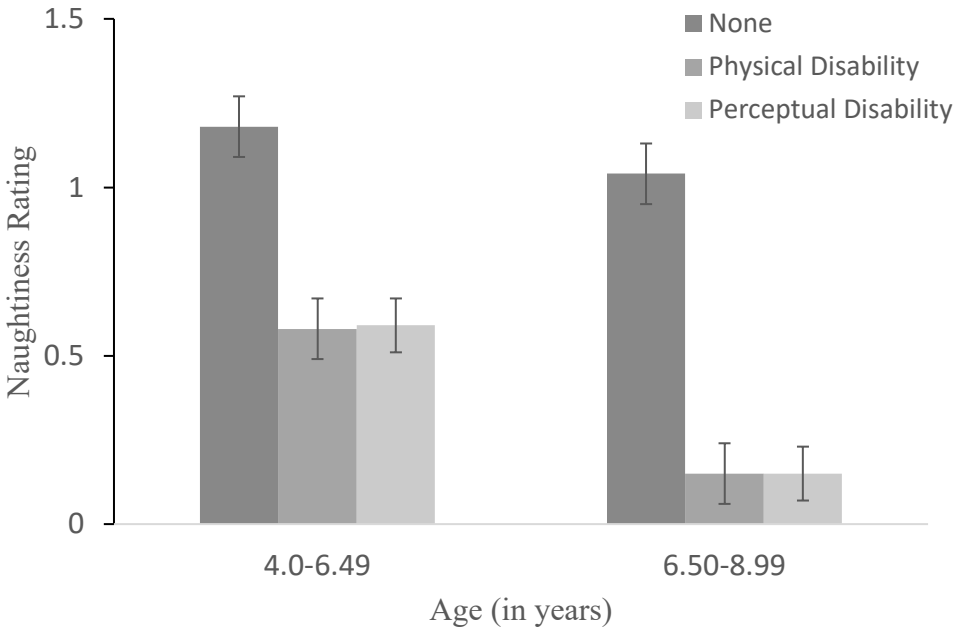


Figure 1. Younger (4.00-6.49 years) and older (6.50-8.99 years) children's naughtiness ratings of characters who committed moral violations. Characters either possessed no disability, a physical disability, or a perceptual disability. Individual scores can range from 0-2. Error bars represent +/- 1 standard error of the mean.

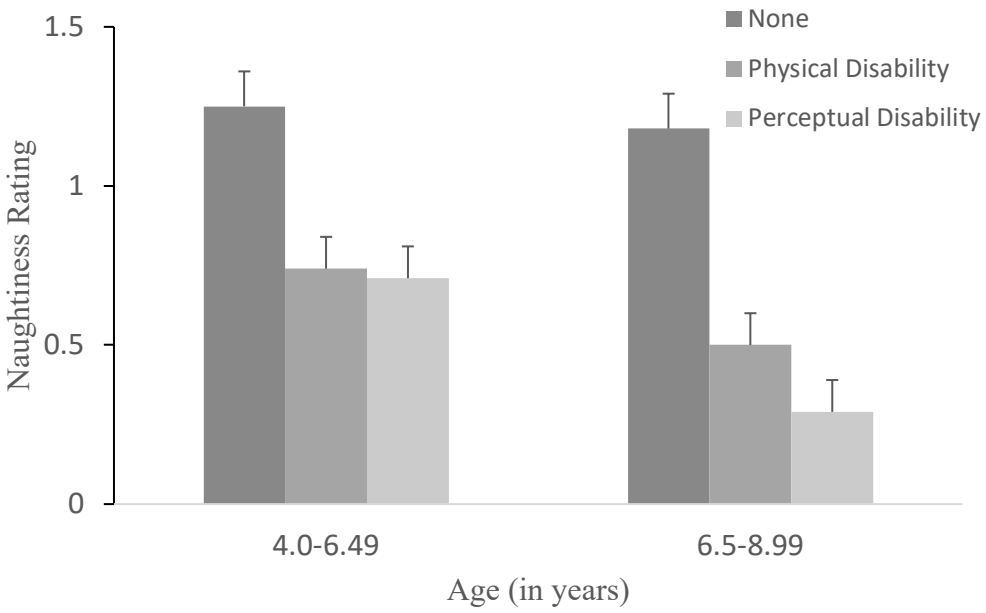


Figure 2. Younger (4.00-6.49 years) and older (6.50-8.99 years) children's naughtiness ratings of characters who committed conventional violations. Characters either possessed no disability, a physical disability, or a perceptual disability. Individual scores can range from 0-2. Error bars represent +/- 1 standard error of the mean.

Appendix A

Example Interview Script

INTRODUCTION

[Experimenter sits on same side of table as participant]

[Select one character at random from the boy or girl "chair character" bag, and place it in front of the participant]

Physical Disability:

This boy's/girl's legs don't work. They can't get out of their chair and move around if they want to. They can't run around the playground. They can't walk to the front of the classroom to ask the teacher questions if they need help.

So what part of this boy's/girl's body doesn't work?
- *If 'LEGS': "Yeah, their legs don't work!"; If OTHER: "Actually, their legs don't work!"*

Can this person walk?
- *If 'YES': "Actually, they can't walk, because their legs don't work."*
- *If 'NO': "Yeah, because their legs don't work ."*

[Set old picture to left; select new character at random from "chair character" bag. Place it in front of participant.]

Here's a new kid!

Perceptual Disability:

This boy's/girl's ears don't work. They can't hear if a firetruck is coming down the street. They can't hear the school bell at the end of the day. They can't hear their friends yelling on the playground.

So what part of this boy's/girl's body doesn't work?
- *If 'EARS': "Yeah, their ears don't work!"; If OTHER: "Actually, their ears don't work!"*

Can this person hear?
- *If 'YES': "Actually, they can't hear, because their ears don't work."*
- *If 'NO': "Yeah, because their ears don't work."*

Now I'm going to tell you some more stories, and I'll ask you some questions about different people! There are no right or wrong answers, I just want to know what you think. OK?

Moral Violation – Fallen Child

[Place classroom scene on table. Randomly select 3 characters from 'chair' character bag; place characters on scene.]

These 3 kids [point to scene] are in the same classroom.

[Randomly select one character from "fallen kid" bag; place it at the far right of classroom scene.]

Another boy/girl [point to fallen character] trips and falls down. He/she screams for someone to help.

***Neurotypical**:*

This is Chris/Christine (point to far-left character). Chris/Christine can walk and he/she can hear.

Chris/Christine doesn't help the boy/girl who fell (point to fallen character).

1. Why did Chris/Christine not help the boy/girl who fell?

2. Is Chris/Christine naughty for not helping?
- If "YES": So you think Chris/Christine is naughty. Is he/she a little naughty, or very naughty?

***Physical Disability**:*

This is Danny/Danielle (point to character second from left). Remember when we talked about boys/girls whose legs don't work? Danny/Danielle is one of those boys/girls. Danny/Danielle can hear but he/she can't walk.

So what part of Danny's/Danielle's body doesn't work?
· If 'LEGS': "Yeah, their legs don't work."; If OTHER: "Actually, their legs don't work."

Danny/Danielle doesn't help the boy/girl who fell (point to fallen character).

1. Why did Danny/Danielle not help the boy/girl who fell?

2. Is Danny/Danielle naughty for not helping?
- If "YES": So you think Danny/Danielle is naughty. Is he/she a little naughty, or very naughty?

Perceptual Disability:

This is Gabe/Gabby (point to character third from left). Remember when we talked about boys/girls whose ears don't work? Gabe/Gabby is one of those boys/girls. Gabe/Gabby can walk but he/she can't hear.

So what part of Gabe's/Gabby's body doesn't work?
· If 'EARS': "Yeah, their ears don't work."; If OTHER: "Actually, their ears don't work."

Gabe/Gabby doesn't help the boy/girl who fell (point to fallen character).

1. Why did Gabe/Gabby not help the boy/girl who fell?

2. Is Gabe/Gabby naughty for not helping?
- If "YES": So you think Gabe/Gabby is naughty. Is he/she a little naughty, or very naughty?

Appendix B

Parent Questionnaire

Please mark your answers with an 'X'.

1. *How important is it to you that your child makes friends with children with developmental differences?*
   ___Not at all Important ___Somewhat Important ___Important ___Very Important

2. *How important is it to you to teach your child to treat different types of people fairly?*
   ___Not at all Important ___Somewhat Important ___Important ___Very Important

3. *How often is your child around children with disabilities in his or her classroom or school?*
   ___Never ___Rarely ___Often ___Very Often

4. *How often does your child interact with people with disabilities outside of the classroom setting?*
   ___Never ___Rarely ___Often ___Very Often

5. *Do you or other caregivers read books or stories to your child about how to treat different types of people; for example, stories about children with disabilities? ___Yes ___No*

***If so**, please list those books or stories:*

_____

_____

Below are some questions to help us learn a bit about the demographics of our participants:

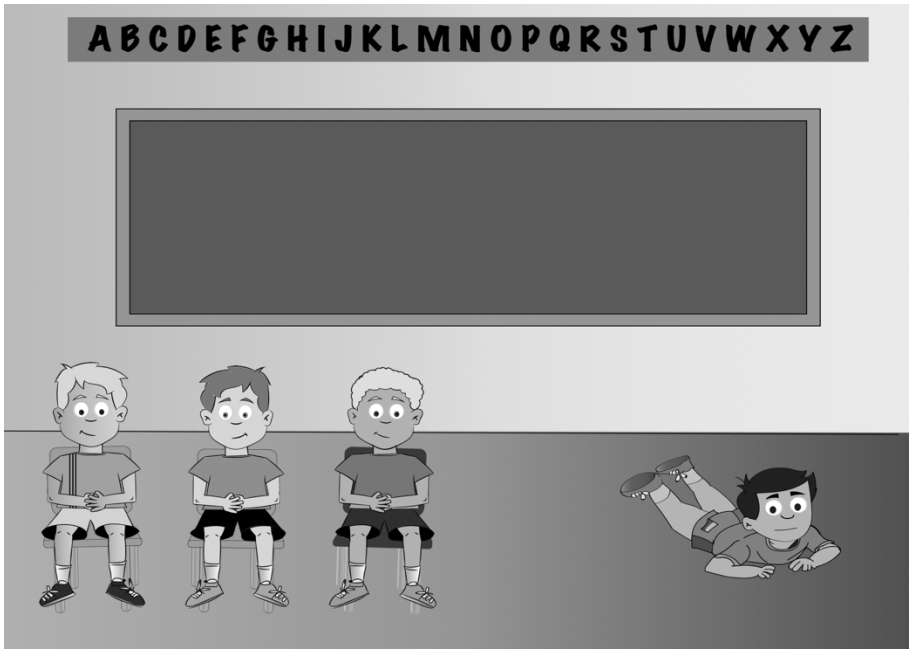
6. *With which ethnicities does your child identify (check all that apply)?*
   ___White/Caucasian ___Black/African American ___Asian/Asian American
   ___Native American ___Hispanic or Latino ___Other (please specify) _____

7. *Below, please indicate the highest level of education that you and your child's other parent have completed.*

	Some high school	*High school diploma*	*Some college*	*Bachelor's degree*	*Master's degree*	*Doctorate (PhD, MD, JD, EdD)*
Self						
Other parent						

Appendix C

Example Stimuli



Classroom scene, with three (randomly selected) boys sitting in chairs, and a fallen boy (moral violation – fallen boy).

Playground scene, with three (randomly selected) girls sitting in chairs, and a book case (conventional violation – not picking a book for reading time).