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The Effects of Consensus Information on Perceptions of Children with Autism

Kaitlyn C. Thornton
Butler University

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(Name as it is to appear on diploma)

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Read, approved, and signed by:

Thesis adviser(s) R Brian Giesler 5/7/2021
Date

Date

Reader(s) Jason S. Lantzer 7 May 2021
Date

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Director, Honors Program Date

The Effects of Consensus Information on Perceptions of Children with Autism

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Kaitlyn C Thornton

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Abstract

Children with autistic spectrum disorder (ASD) are often the target of prejudice and discrimination. The current study was conducted to better understand why individuals react to children with ASD in a negative manner by focusing on the role of consensus information (i.e., what an individual perceives most others to believe). To investigate the potential impact of consensus information, we asked a sample of Butler University students (n = 111) to read classroom scenarios describing undesirable behaviors enacted by a student (e.g., interrupting the teacher). The target student was described as either a student from the general population or a student who has autism. Following each scenario were comments about the target student, either generally positive or negative, that were supposedly left by previous participants. Participants' reactions to the target student were then assessed. Although neither of the independent variables affected participants' reactions, there was a weak trend suggesting that consensus information did affect participants' reactions to the student, but only if the student has been portrayed as autistic. These findings suggest that one way to reduce prejudice and discrimination toward children with ASD may be to change individuals' perceptions of what they believe others' attitudes to be, as opposed to directly targeting individuals' attitudes about ASD.

Keywords: consensus information, autism spectrum disorder, ableism, school

Introduction

In a time of growing awareness of systems of oppression and progressive movements aimed at overcoming them, some forms of discrimination are still not widely recognized. Ableism, a form of prejudice that favors able-bodied individuals – and discriminates against individuals with any form of disability – tends to be overlooked in terms of advocacy and research (Storey, 2007). The prevalence of ableism is high, in part because disability is far more common than most people realize and affects ever greater portions of the population as time passes. Autism Spectrum Disorder (ASD), one common source of disability, has grown exponentially in prevalence rates over the past few decades (Centers for Disease Control and Prevention, 2020).

ASD is a developmental disorder marked by social, communication, and behavioral challenges that vary in severity. Because severity and associated features differ so greatly between individuals, diagnostic criteria for ASD were updated in the *Diagnostic and Statistical Manual of Mental Disorders* version five (DSM-5) in 2013 to follow a more dimensional, spectrum-based approach. These new criteria allow ASD to serve as an umbrella disorder that encompasses previous diagnoses of autistic disorder, Asperger syndrome, and related conditions. Usually, challenges associated with the disorder are evident at a young age, allowing for most children to be diagnosed before they begin formal schooling (CDC, 2020). Because the prevalence of ASD has grown rapidly over the past several years, there has been an increase in the need to place students with the disorder into general classroom settings (McGregor & Campbell, 2001). Despite the fact that studies examining the effectiveness of such integration have yielded inconsistent results, there exists one general conclusion that most research supports: the

effectiveness of the integration depends much more on the other individuals present in the classroom setting than it does on the characteristics of those with ASD (Gillespie-Lynch et al., 2015; Morton & Campbell, 2007).

As with other disabilities, perceived abnormalities in behavior that exist as challenges resulting from the disability lead to stigma and stereotypes that contribute to ableism (Kinnear et al., 2015). Because stereotypes inflate the differences between people, usually in an adverse manner, they can result in negative actions taken toward the target group(s). Rejection or exclusion of individuals who are labeled as unfavorably different is likely. Aside from the obvious social consequences these actions could have, research suggests that stereotyping can affect other crucial areas of the targeted individuals' lives. In school settings, for instance, the attitudes and behaviors of peers and educators contribute significantly to the academic success of individuals with ASD (Gillespie-Lynch et al., 2015). These findings highlight the major impact that others' perceptions and behaviors have on those with autism. From these findings, then, one can conclude that negative attitudes and stereotypes toward ASD can have particularly adverse effects on individuals with ASD.

Because of the potential detrimental effects of stereotyping, researchers have conducted numerous studies to determine the factors that influence others' attitudes toward ASD. One common focus of those studies has been exposure to information about ASD and/or people with ASD. Results from such studies, however, are contradictory. Some research, for instance, suggests that mere exposure to information about ASD is effective in minimizing stigma and stereotyping. A study on teachers' attitudes towards the integration of children with ASD into general classroom settings found that those

with specialized training and/or previous experience displayed more positive attitudes than teachers who had neither (McGregor & Campbell, 2001). Specialized training and direct exposure to individuals with autism are not feasible for an entire population of people, but some research suggests that "indirect" exposure has a similar effect on attitudes towards individuals with ASD. In one study, researchers found that even a short duration of exposure to fictional media about an individual with ASD led to significantly more positive attitudes towards individuals with the disorder (Stern & Barnes, 2019).

Contrarily, data exist that directly refute findings that such exposure affects attitudes towards ASD. In fact, some research has found that both new and previously existing knowledge has no significant effect on attitudes toward individuals with the disorder (Stern & Barnes, 2019; White et al., 2016). The contradictory findings in the literature make it difficult to discern whether exposure truly has an effect on attitude toward ASD.

Because past research suggests that mere exposure to information pertaining to the disorder does not have a consistent effect on attitudes toward ASD, the proposed study will take a slightly different route to examining what factors might influence such attitudes. Rather than focusing on exposure to general information, the proposed study will examine the effects of consensus information on attitudes towards individuals, specifically children, with ASD. This approach is derived, in part, from the social norm approach, a method that informs people about the typical view/attitude that most people hold toward a specific topic. If someone is made to believe that a majority of the population feels a certain way about a specific issue, that individual will be more likely to adopt – or at least outwardly display – that same attitude (Burchell et al., 2012; Stangor et

al., 2001). Essentially, such research suggests that people's attitudes toward certain topics can be influenced by the presentation of other's attitudes toward that topic. This concept can be applied to the topic of disability and, specifically, ASD.

Current Study and Hypotheses

The purpose of the current study is to determine if consensus information plays a specific role in the perception of children with autism. Specifically, we wanted to determine if a child's status (i.e., autistic or not) and consensus information (i.e., what others' beliefs are perceived to be) interact to affect individuals' reactions toward children who display problematic behaviors. Understanding this relationship is crucial to designing interventions capable of reducing prejudice and discrimination toward autistic children. To do so, we asked participants to read scenarios involving a school student who displays problematic behavior, as described more fully below in the Method section. The student was portrayed as either being from the general population or as having autism. Positive or negative consensus information was then provided concerning the student. We predicted that: (1) the students described as autistic will be perceived more negatively than students described as being from the general population; (2) students for whom a negative consensus is perceived will be evaluated more harshly than students for whom a positive consensus is perceived; (3) being autistic will amplify the effects of the consensus information. In other words, because stereotypes and prejudice tend to inflate differences between groups, we predicted that student status and consensus information will interact.

Method

Participants

Participants (n = 111) were undergraduate students who were recruited via convenience sampling using SONA, an online research participation system used by Butler University's Department of Psychology. They included 18 male- and 93 female-identifying individuals. Participants' ages ranged from 18 to 46 years with a mean of 20. In terms of race, 79.0% described themselves as White, 9.5% as Other or Multiracial, 6.7% as Asian, and 4.8% as Black or African American. About 6% described themselves as being Latino/Hispanic. Participation in this study was voluntary and had the potential to be worth extra credit if the participant completed the study through SONA.

Design

The current design utilized a 2 (Student type: General population student vs Student with ASD) x 2 (Consensus information: Positive vs Negative) between-groups design. Participants were randomized into one of the four groups. The primary dependent variables consisted of participants' judgments of how problematic the student's behavior was, how severe of a punishment the student should receive as a result of the behavior, and to what extent the behavior should be tolerated.

Materials

To conduct this study, we created a survey on Qualtrics, a web-based software program that allows the user to create surveys, distribute them electronically to participants, and generate reports. The survey consisted of three fictional classroom scenarios followed by a set of 'reaction' comments supposedly left by previous participants, all of which were created by us, the researchers. Participants' reactions were

assessed by self-report items, discussed in more detail below. SPSS, a statistical software program, was used to conduct analyses on the collected data. All study materials and procedures were approved by Butler's Institutional Review Board prior to data collection.

Procedure

Upon starting the study, participants were asked to read and electronically sign an informed consent. Those who agreed to participate were then presented with directions and a brief cover story about the study indicating the investigators were beta-testing some student teacher training materials. At this point, the participants were informed that they would be reading various scenarios, all of which would have a target character who was either (1) a child from the general population or (2) a child who had autism. The participants were then prompted to read the scenarios, in which the target exhibited an unfavorable behavior. The behavior described in the scenarios involved interrupting a teacher, refusing to stay seated during class, or striking another student. Although every participant read every scenario, due to a coding error, participants' reactions to only one of the scenarios were recorded by Qualtrics. Fortunately, the scenario was randomly selected, such that scenario severity was completely counterbalanced across conditions. After each scenario, participants read a series of comments about the target child supposedly left by previous participants. The comments that followed the scenario differed depending on whether the participant had been randomly assigned to read (1) primarily positive comments (i.e., the positive consensus condition) or (2) primarily negative comments (i.e., the negative consensus condition). Following each scenario, participants were asked to respond to a few prompts pertaining to the story, including

various questions gauging their reactions to the scenario, described further below. At the end of the survey, participants' attitudes toward individuals with ASD and demographics were assessed. The study concluded with a debriefing that explained the true purpose of the study and pointed to its potential future implications. Upon reaching the desired number of responses, all data were imported into SPSS to run the necessary statistical analyses.

Measures

Participants' reactions were assessed using three items: "How problematic is the student's behavior in the scenario?", which was measured on a 10-point scale anchored by not at all problematic and extremely problematic; "How severe of a punishment should this student face for their behavior?", which was measured on a 10-point scale anchored by no punishment and severe punishment; "How tolerant of the student's behavior would you be?", which was measured on a 10-point scale anchored by not tolerant at all and very tolerant. The extent to which participants felt the student's behavior was due to external situational forces was also assessed using the following item: "To what extent do you believe that environmental factors (e.g., a crowded classroom) triggered the student's behavior?", which was measured on a 10-point scale anchored by not at all and very much so.

At the end of the survey, participants' views of autism were assessed using a single item: "What is your general attitude toward individuals with Autism Spectrum Disorder (ASD)?", measured on a ten-point scale anchored by very negative and very positive and by a subscale of the Societal Attitudes towards Autism (SATA) scale (Flood et al., 2012). Participants were also asked how familiar they were with autism, using a

10-point scale anchored by very unfamiliar and very familiar, and if they had any relatives or friends who were autistic. These data were collected in case there was a need to control for possible confounding variables across conditions (e.g., familiarity with ASD). Finally, participants' views on how realistic the scenarios seemed to be were also collected using a 10-point scale anchored by not at all and very.

Results

It was predicted that the autistic student would evoke more negative reactions than the general population student, that negative consensus information would produce more negative reactions than positive consensus information, and that student status and consensus information would interact such that the effects of consensus information would be amplified when the student was autistic.

A 2x2 between-participants ANOVA was conducted to analyze the impact of student status and consensus information on participant reactions to the scenarios. To create an overall index of reaction, the scores from each of the three items used to assess this construct were first standardized using z-score transformations. The resulting transformed scores were then averaged together to create an overall reaction index for each participant. The three individual measures were all intercorrelated (r's > .55), and the resulting index exhibited a high degree of internal reliability (Cronbach's alpha = .86). The index was scaled such that *higher* scores indicate more negative reactions.

Unfortunately, the findings did not support the predictions, although the pattern of means was consistent with the study hypotheses. For example, reactions were about the same in the general population student/negative consensus condition (M = .0368, SD =

.912) and general population student/positive consensus condition (*M* =.0008, *SD* = .918); whereas the mean of the autistic student/negative consensus condition (*M* =.1010, *SD* = .975) diverged from the mean of the autistic student/positive consensus condition (*M* = -.1223, *SD* = .756) in the expected direction. However, the effect of student status was not significant, *F* (1,107) = .03, *p* = .86, the effect of consensus information was not significant, *F* (1,107) = .59, *p* =.45, and the interaction also failed to reach significance, *F* (1,107) = .31, *p* = .58. (See Appendix A for a graph of the results).

An exploratory analysis was undertaken to examine whether the predicted effects might be present when the most severe scenario was rated (i.e., the scenario in which the target student strikes another student), under the assumption that the provocative nature of the behavior might elicit more extreme reactions. Again, neither the main effects nor the interaction were significant, but the pattern of means replicated the pattern from the initial analysis and the interaction term trended toward significance *F* (1,31) = 1.73, *p* = .19. Of note, the difference between the means in the autistic conditions exceeded half of a standard deviation and likely would have attained significance if the sample size had been larger (See Appendix B for a graph of the results).

In an attempt to provide some converging validity for the prior findings, another exploratory analysis was undertaken to examine whether the two independent variables affected participants' attribution of the student's undesirable behavior to external, situational forces (e.g., an overly crowded classroom). Again, neither main effect (*p*'s > .57) nor the interaction (*p* = .39) was found to be significant. However, visually inspecting the pattern of means suggests that in the autistic conditions, participants were more likely to view the undesirable behavior as arising from the student in the negative

consensus condition, whereas in the positive consensus condition, the situation (e.g., crowded classroom) was perceived as more likely to be triggering the same behavior. (See Appendix C). Although these trends must be interpreted with considerable caution, again there are hints that consensus information is causing a difference in how the student is perceived, but only in the autistic conditions.

Finally, as a partial manipulation check, participants' perceptions of how realistic they found the scenarios to be were examined. On a ten-point scale, the average rating was relatively high (M = 8.32; SD = 1.68), suggesting that the scenarios were perceived as realistic, providing confidence that participants' reactions might generalize to 'real-world' settings. Familiarity with autism was also examined. On a ten-point scale, the average familiarity rating with ASD was relatively high (M = 6.18; SD = 1.50) and over half the participants reported having a good friend or relative who was autistic.

Discussion

Given that there were no significant main effects or interactions, the initial hypotheses were not supported. Unexpectedly, a majority of the participants reported that they were at least moderately familiar with ASD and/or had a relative or friend who has ASD. These high levels of familiarity with ASD and autistic individuals could explain why there were no significant effects. Because these participants were relatively well-informed about the disorder and had autistic friends and relatives, the manipulations were probably not strong enough to shift the beliefs and attitudes participants had developed on the basis of prior experience with ASD.

Though there were no significant findings, it is important to note that the first exploratory analysis replicated the trend found in the initial analysis, which suggested that participants were more heavily influenced by consensus data when the student was said to be autistic than when the student was said to belong to the general population. When the child was described as having ASD, participants' general reactions to the scenario tended to be pulled in the direction of the consensus information, either positively or negatively. In the general population student condition, however, the consensus information had minimal impact. The exploratory attributional analysis also produced a pattern of results that suggested consensus information may have affected judgments in the autistic conditions but not in the general population conditions. These patterns suggest that significant effects might result from a second iteration of this study in which the scenarios and/or consensus information are more impactful – for instance, if the consensus information was read aloud or observed in a video. Either of these alterations could produce a stronger and, in turn, potentially significant effect.

The lack of significant findings in the current study does not alter the fact that ableism persists as a significant issue across all ages and areas of life, and in particular, for individuals with ASD. Because ableism, like many other types of discrimination, inflates the differences that exist between people, it can result in stigmas and stereotypes that can negatively affect the targeted individuals (Kinnear et al., 2015). This is of particular concern for individuals who have disorders that can be diagnosed during childhood, such as ASD, for the challenges that they face can lead to discrimination against them at a very young age (CDC, 2020), resulting in decrements to their social lives, their self-esteem and their educational opportunities (Gillespie-Lynch et al., 2015).

As placement of students with ASD into general classrooms increases (McGregor & Campbell, 2001), it becomes increasingly important to discover what factors contribute to the existence and perpetuation of ableism in this setting.

As noted earlier, one promising factor that has been studied more heavily in the context of other systems of oppression than in terms of ableism is the influence of consensus information. According to prior work, individuals are likely to adopt whatever attitude they believe the majority of the population holds (Burchell et al., 2012; Stangor et al., 2001). Past research suggests that mere exposure to information about ASD has inconsistent effects on individuals' attitudes toward individuals with the disorder. The findings from the current study, though weak, suggest that new approaches relying on manipulating consensus information might prove more effective as a tool to reduce prejudice and discrimination against children with ASD, specifically, and ableism, in general.

Limitations & Future Directions

The current study possessed several limitations that should be noted. One of the primary limitations was the sample. The participants in this study do not represent the general population; they were mostly White, college-aged, female-identifying students who attended the same mid-sized, private university in the midwestern United States. Not only did the participants come from a very specific population, but they were also recruited through convenience sampling, which would have limited the generalizability of the results even further. The survey itself was administered virtually, so there exists the possibility that participants did not fully read each scenario and the subsequent comments due to the uncontrolled nature of the setting. Additionally, the survey questions asked

participants to self-report their reactions to the given scenarios. Participants were informed that their responses would remain anonymous, but there still exists the possibility that they were influenced by social desirability concerns that might have driven them to respond in a less extreme manner than they felt.

As mentioned previously, more impactful manipulations might have yielded significant results. A replication of this study that allows for the scenarios to be presented to the participants in a more meaningful way could turn the trends suggested by the exploratory analyses into significant effects. Future replications for this study, given this evidence, could use a video presentation of a child acting out the behaviors described in the scenarios and/or videos of supposed past participants reacting to the scenarios. These changes would undoubtedly have a greater impact on the participants, thereby increasing the likelihood of significant findings.

Conclusion

Although neither of the independent variables affected participants' reactions in the current study, there was a weak trend suggesting that consensus information did affect participants' reactions to the student, but only if the student has been portrayed as autistic. These findings suggest that one way to reduce prejudice and discrimination toward children with ASD may be to change individuals' perceptions of what they believe others' attitudes to be, as opposed to directly targeting individuals' attitudes about ASD.

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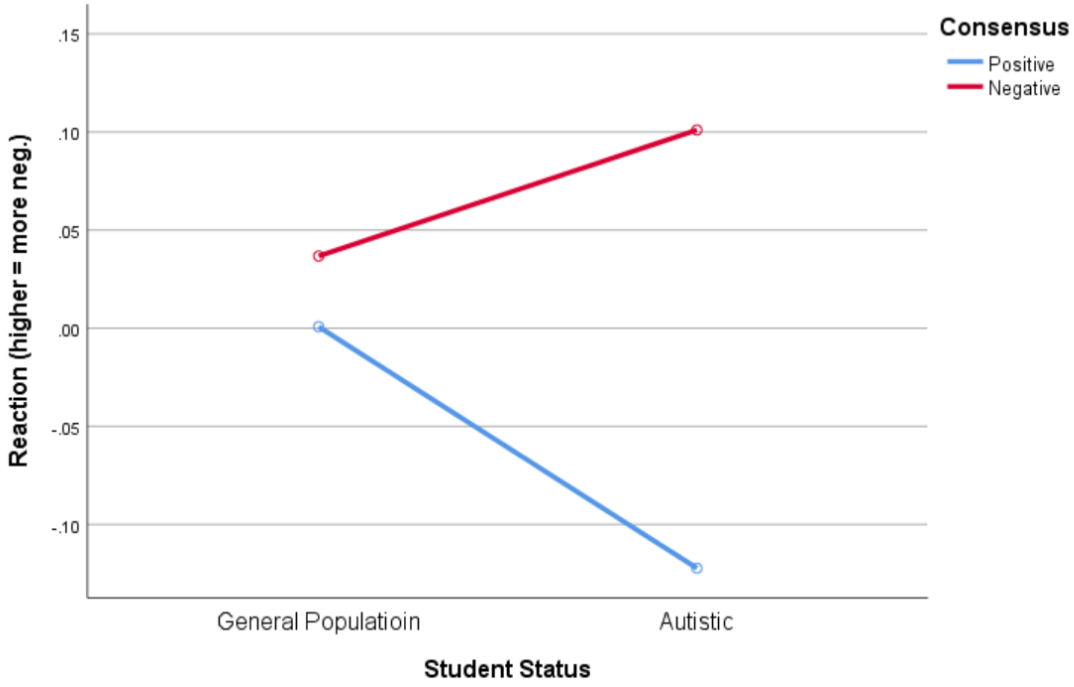
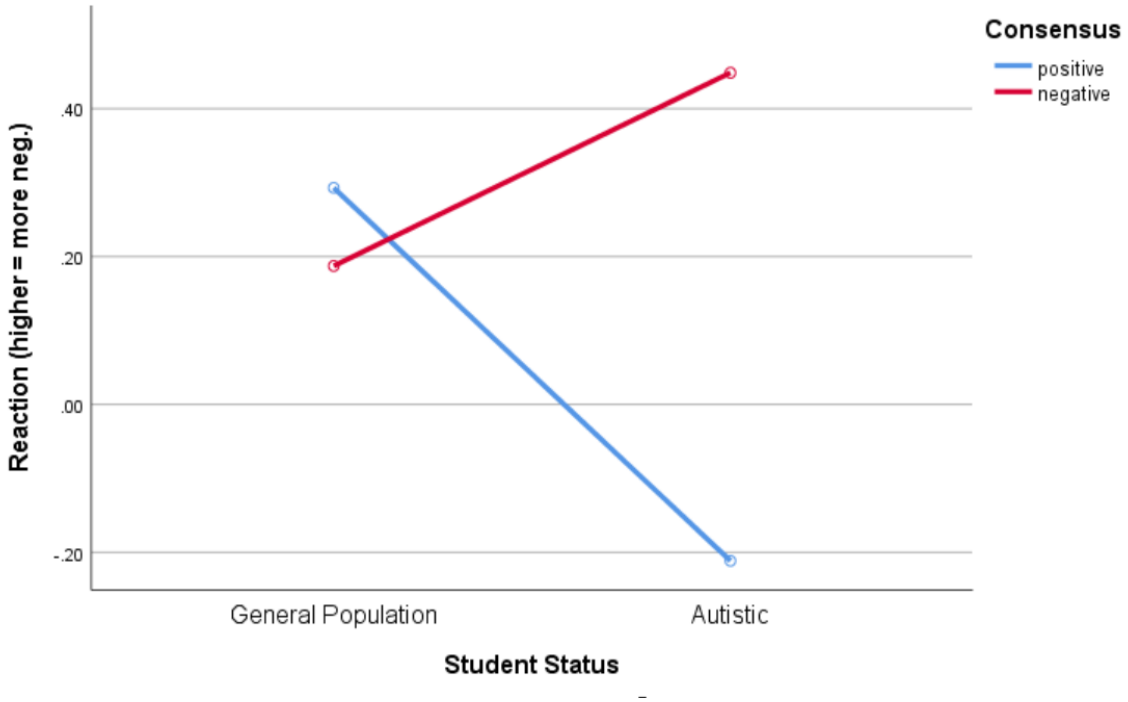
Appendix A

The impact of student status and consensus information on participants' reactions



Appendix B

The impact of student status and consensus information on participants' reactions to the most severe scenario



Appendix C

The impact of student status and consensus information on participants' attributions of what caused the target student's behavior