## University of Arkansas, Fayetteville

## ScholarWorks@UARK

Rehabilitation, Human Resources and Communication Disorders Undergraduate **Honors Theses** 

Rehabilitation, Human Resources and **Communication Disorders** 

5-2020

## Social Conformity and the Line Judgement Task for Adolescents with ASD

Jamie McClendon

Follow this and additional works at: https://scholarworks.uark.edu/rhrcuht



Part of the Speech and Hearing Science Commons

#### Citation

McClendon, J. (2020). Social Conformity and the Line Judgement Task for Adolescents with ASD. Rehabilitation, Human Resources and Communication Disorders Undergraduate Honors Theses Retrieved from https://scholarworks.uark.edu/rhrcuht/65

This Thesis is brought to you for free and open access by the Rehabilitation, Human Resources and Communication Disorders at ScholarWorks@UARK. It has been accepted for inclusion in Rehabilitation, Human Resources and Communication Disorders Undergraduate Honors Theses by an authorized administrator of ScholarWorks@UARK. For more information, please contact ccmiddle@uark.edu.

# Social Conformity and the Line Judgement Task for Adolescents with ASD Jamie McClendon

University of Arkansas

**Abstract** 

The primary intent of this study is to add to the growing research regarding social

functioning and theory of mind (ToM) of young adults with autism spectrum disorder (ASD).

This study takes into account the Solomon Asch line judgement tasks effect on peer pressure and

social conformity. Previous research has shown that there is a discrepancy in the conformity

exhibited by typically developing individuals (TD) and ASD individuals. This study seeks to

address the degree to which ASD individuals are affected by social influence and how likely they

will be to conform. Conformity rates will be compared to that of TD college age students as well

as students with various intellectual disabilities (ID).

Keywords: Autism, social conformity, theory of mind, Asch line judgement task

## Social Conformity and the Line Judgement Task for Adolescents with ASD

Solomon Asch devised the line judgement task in 1951. This classic experiment in social psychology, whereby there was an obvious answer to a line judgement task, was created to test social conformity (McLeod, 2018). The findings of this experiment were as he expected; when individuals are faced with social pressure, they are likely to conform to the popular opinion.

In order to test social conformity, Asch devised an experiment in which 50 male students were presented with an experiment that he claimed as a 'vision test.' Using a line judgement task, Asch put a naïve participant in a room with seven confederates. The confederates were staged participants. The naïve, or true participant did not know this and was led to believe the other individuals were true participants like themselves. In the experiment, each person had to state aloud which comparison line (A, B or C) was most similar to the target line (McLeod, 2018). The correct line was always obvious, and the confederates agreed in unanimity to a false comparison beforehand. The 'vision test' was presented 18 times, 12 of which were critical trials, where the confederates gave the wrong answer.

Throughout the critical trials, Asch determined that most participants conformed to the majority view at least once. Roughly, 32% of participants, about one third conformed with the incorrect answer on the majority of the critical trials. Over the 12 critical trials, over 75% of participants conformed at least once, and 25% of participants never conformed.

Conformity is an individual's tendency to follow the unspoken rules or behaviors of the social group to which he or she belongs. Asch determined that participants were likely to conform for two different reasons. The first is due to the desire to fit in, Asch deemed this normative influence. The second is due to the belief that the group is better informed than individuals perceived themselves to be. This is referred to as informational influence.

Individuals conform because they are dependent upon having an accurate perception of reality and desire to be accepted by other people. Individuals commonly believe that a group is more likely to be correct than themselves. This informational influence generally produces private acceptance as well as public compliance (Levine, 2020). Informational influence plays on the insecurities of one's individual beliefs and makes them dependent on others for information. Additionally, individuals conform most frequently when they doubt their own competence and believe that other group members are more proficient in the task (Levine, 2020). Conformity played a large role in Asch's experiment with typically developing (TD) individuals.

For TD individuals, the understanding that others don't share the same thoughts and feelings, develops during childhood. Roughly between 3 and 4 years of age. This is deemed Theory of Mind. Theory of mind (ToM) is an essential function in individuals that allows them to attribute mental states to themselves and others. ToM helps individuals to understand, empathize and relate to others. This is considered an essential developmental process.

Intellectual disabilities (ID) are characterized by significant limitation in intellectual functioning as well as adaptive behavior, that begins before the age of 18. Individuals with ID exhibit limitations in self-regulating behaviors and difficulty in establishing and maintaining interpersonal relationships and social skill deficits. These deficits have been attributed to difficulties that children with ID experience in understanding other people's beliefs and desires (Campbell, 1997).

ASD is characterized by difficulties in social communication and restricted, repetitive behavior, as well as difficulty with Theory of Mind (ToM). Since impaired ToM was specifically reported in children with ASD, difficulties with understanding the mental states in both self and others, are believed to be core to social-communication deficits (Lai, Lombardo, Baron, 2014).

A lack of ToM impacts individuals ability to respond appropriately in a socially acceptable manner towards others. This can lead to conflict and poor relationships with others.

While Autism (ASD) is the primary focus of this experiment, conformity rates for individuals with ID was also taken into consideration. While 10% of individuals with ID have ASD, a much higher percentage of individuals with ASD have ID, roughly 31%. With the high correlation between ASD and ID, this study compares the conformity rates exhibited by the two groups.

Previous research has shown that individuals with ASD are less likely to conform due to their resistance to social pressure. Since ASD is characterized by social isolation and disengagement, this study seeks to address whether peer pressure will lead individuals into social conformity.

It is feasible that susceptibility to social pressure would be weakened in ASD, given the nature of the social difficulties shown. From early in development, when compared with TD individuals, those with ASD exhibit impaired joint attention, less social interest and reduced orientation to social cues (Yafia, Verier, Reidy, 2014). Most individuals when faced with a group of members who unanimously express a belief to be contrary to one's own will conform their judgement to align with the crowd. However, the ToM difficulties characteristic of ASD, as demonstrated in social-perspective taking tasks, may also impede the perception of social pressure, resulting in a lack of conformity (Yafia, Verier, Reidy, 2014).

Given the importance of conformity as a theoretical construct in social psychology and the profound implications ASD has for social function, little research has been done on whether ASD is associated with the propensity to conform to a social majority (Yafair, Verrier, Reidy, 2014). ASD is characterized by the inability to understand peer relationships and share other's

interests. Therefore, one could conclude that those with ASD would not be as susceptible to the implications of peer pressure and social conformity.

It is important to note that the perception of peer pressure that leads to social conformity is an essential factor in learning and maintaining social norms. Therefore, the lack of social conformity noted in ASD individuals may be a significant impairment in the way these individuals relate to society. When faced with a situation in which members of the group unanimously express a belief that is contradictory to one's own, most individuals will alter their judgement to align with the crowd (Lazzaro, 2019).

Based on the findings from previous research, the main objectives of this study are as follows:

- 1- To determine if there is a discrepancy in the social conformity observed in TD compared to individuals with ASD.
- 2- To describe social conformity noted in the Asch Line test and to discuss differences noted in young adults with ASD.
- 3- To add to the body of literature on social conformity and functioning and skills of individuals with ASD.

#### Methods

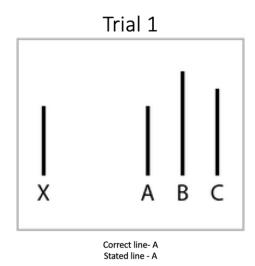
## **Participants**

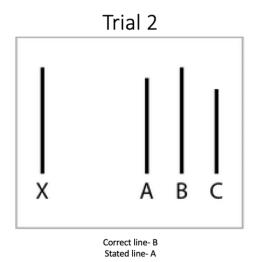
This study identified 6 college age students who had ASD or an ID as well as 7 college students of comparable age to play the role of confederates. The participants were identified through an emailed questionnaire or on a volunteer basis and signed a consent form that has been approved by the University of Arkansas Institutional Review Board. Of the participants, 4 had

ASD: 3 male and 1 female. 2 individuals had an ID: both female. Each participant was a member of the University of Arkansas Empower program and was a college-age student.

### **Materials**

Each participant was told they were participating in a "visual acuity" test that consisted of 16 different trials. Each trial consisted of a target line and 3 lines of comparable lengths. The lines were presented by a projector and the true participant sat in a room at the end of the line with the 7 confederates. On 12 out of 16 trials the confederates claimed that line A, B, or C was equivalent to the presented line, even though it was clearly false. These were considered the critical trials. Below are two trials that were used in the experiment. Trial 1 is an example of one of the 4 trials where confederates gave the correct answer. Trial 2 is an example of one of the 12 critical trials where confederates gave false answers. Confederates gave correct answers on trials: 1, 3, 8 & 14. Confederates gave incorrect answers on trials 2, 4, 5, 6, 7, 9, 10, 11, 12, 13, 15 & 16.





## **Procedures**

Each trial included one true participant at a time. The 7 confederates all stated aloud which line they believe to be the same as the target line, before the participant. The line was determined prior to the experiment and agreed upon unanimously. During each round, the participants responses were recorded on the basis of whether or not they conformed and agreed with the majority view. This data was evaluated on the basis of social conformity. Results were then compared to address this study's question: are ASD individuals as likely to conform as TD.

## **Analysis**

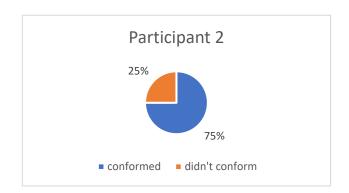
Data from each experiment was categorized to determine a group percentage rate on the basis of conformity for the two studied groups: individuals with ASD and individuals with an ID. Only data from the critical trials was included when determining percentage rates of conformity. Data from previous studies conducted with TD was used as a comparison.

## **Results**

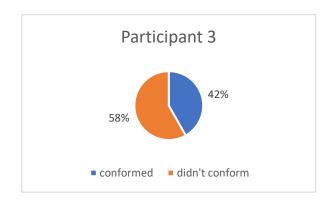
Rates of conformity for each individual participants:

## Participants with Intellectual Disabilities





## Participants with Autism Spectrum Disorder



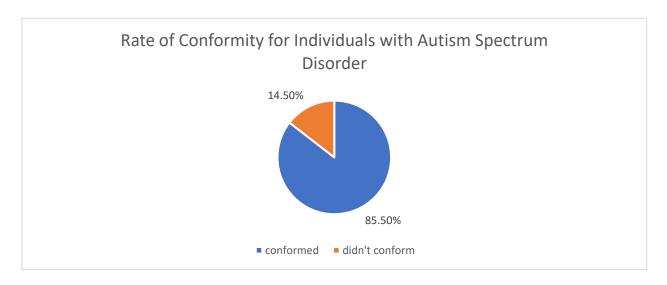


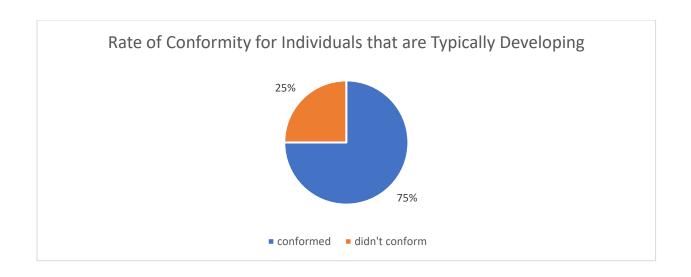
## Cont.

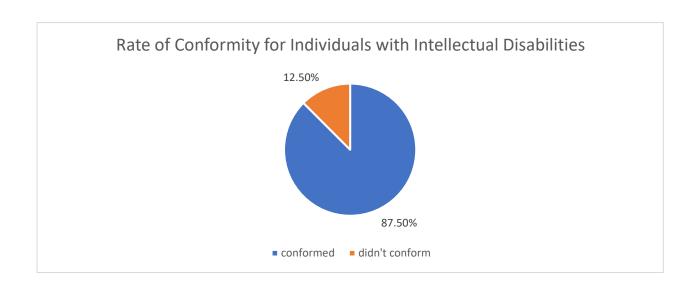




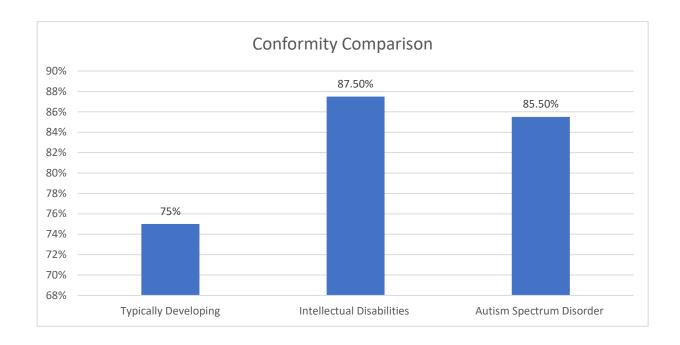
## Conformity rates among groups:







## Conformity comparison for all groups:



While rates of conformity varied from each individual, results were combined to make a grand total. In my experiment, the rate of conformity for individuals with ASD was 85.5%. Individuals with ID conformed at a comparable rate of 87.5%. In previous studies using the Asch line judgement task, TD individuals were reported conforming at a rate of 75%. Conformity among ASD and ID was more closely related than that of TD individuals. Given these findings, one can conclude that, individuals with ASD are more likely to conform than individuals that are TD.

## Discussion

Individuals conform for a variety of reasons. It is a common belief that the majority view is correct and that the group is better informed than the individual member. While many often times don't agree with the group, they will go along in order to save face and prevent the

occurrence of embarrassing events. Individuals will privately accept that they are incorrect, and believe that other group members are more competent. When majorities exert social influence, they produce compliance. That is, individuals will publicly accept the majority view while privately retaining their initial view, motivated by a desire not to appear deviant or to risk possible negative sanctions from the majority such as ostracism or ridicule (Bond, 1996).

Another consideration is that conformity is to some extent a cultural condition. While some cultures produce groups that are conforming and submissive, others are independent and assertive. The values of a culture can shape and influence one's rate of conformity.

Individualistic cultures produce individuals that are separated from society and focused on individual achievement. These cultures would not likely produce individuals that will conform.

On the other hand, collectivistic cultures are likely to produce individuals that will conform due to their emphasis on group decisions and cohesiveness. Collectivistic cultures give priority to group preferences and discourage questioning of the status quo and individuality.

It is important to note that conformity is largely dependent upon time period. Results from previous conformity experiments within a society produce different results at different points in time (Bond, 1996). Therefore, time period as well as culture play an impact on one's conformity.

One explanation for the conformity exhibited by ASD individuals in this study is that perhaps their inability to attribute the mental state of others prevented participants from realizing they were being deceived. Conforming could have been an attempt to save face when they encountered potential embarrassment.

On the other hand, it may be that adults with ASD have acquired social conformity as a social strategy, whereas ASD children may have yet to develop such a strategy (Lazzaro, 2019).

This probes the idea that perhaps individuals with ASD can develop ToM, or compensate for the lack thereof through social conformity.

#### Limitations

While the aim of this study was to address the ToM of individuals with ASD, there were several limitations that should be addressed in future studies. Firstly, this study's participants were members only of the EMPOWER program and not representative of all college age individuals with ASD. The EMPOWER program director also noted that some individuals may have a hard time understanding and following directions in the experiment. It is important to note that the severity and skills vary widely for each individual with ASD.

Additionally, the small sample size made results difficult to interpret. The sample size of individuals with ASD versus ID differed, which could have skewed results. Also, conformity rates of TD individuals from previous experiments was used as a measure. Previous experiments did not include a sample size, so results could be varying. Lastly, confederates were all college aged females. While I don't believe this produced different results, a more diverse confederate group could be beneficial in future studies.

#### **Future Research**

Future studies should include a larger sample group, with the same number of participants for each group tested. Rather than using data from previous experiments, TD individuals should be tested in future studies using the same experiment material. Additionally, finding participants with ASD that are a part of the college, but not in the EMPOWER program

could be beneficial for future experiments. Lastly, future studies should seek to find participants that are age and gender equivalent to participants.

## **Conclusions**

This study is intended to add to current research on theory of mind and conformity in individuals with Autism. Research was conducted using the Solomon Asch line judgement task and recorded on a basis of conformity when experiencing social pressure. Future studies and research is needed to adequately address the research question: are individuals with Autism more likely to conform? Despite its limitations, this study contains pertinent data for those who work with Autism or intellectual disabilities and may benefit the study of the theory of mind as well.

#### References

Bond, R. (1996). Culture and conformity: A meta-analysis of studies using Asch's (1952b, 1956) line judgment task. *Psychological Bulletin*, *119*.

Cáceres, A. S. J., Keren, N., Booth, R., & Happé, F. (2014). Assessing Theory of Mind Nonverbally in Those With Intellectual Disability and ASD: The Penny Hiding Game. *Autism Research*, 7(5), 608–616. doi: 10.1002/aur.1405

Campbell, D. (1997). Theory of Mind Deficits in Children With Intellectual Disabilities: A Test of Specificity and Uniqueness Hypotheses. https://ro.ecu.edu.au/theses\_hons/785

Cherry, K. (2019, September 29). Asch'S Seminal Experiments Showed the Power of Conformity.

Lai, M., Lombardo, M. V., & Baron-Cohen, S. (2014). Autism. *The Lancet*, *383*(9920), 896-910. doi:http://0-dx.doi.org.library.uark.edu/10.1016/S0140-6736(13)61539-1

Lazzaro, S. (2019). Social Conformity in Autism. *Journal of Autism and Developmental Disorders*, 49(3), 1304–1315.

Levine, J. (2020). Conformity. In *Encyclopædia Britannica*. Retrieved from <a href="https://academic-eb-com.eu1.proxy.openathens.net/levels/collegiate/article/conformity/604126">https://academic-eb-com.eu1.proxy.openathens.net/levels/collegiate/article/conformity/604126</a>

McLeod, S. A. (2018, December 28). Solomon Asch- Conformity Experiment.

Mefford, H. C., Batshaw, M. L., & Hoffman, E. P. (2012). Genomics, intellectual disability, and autism. *The New England Journal of Medicine*, *366*(8), 733-743. doi:http://dx.doi.org/10.1056/NEJMra1114194

Ulrich, S. M., & Reinhold, R. (2017). What Difference Does It Make? Implicit, Explicit and Complex Social Cognition in Autism Spectrum Disorders. *Springer Science Business Media*. doi: 10.1007/s10803-016-3008-x

Yafai, A. F., Verrier, D., & Reidy, L. (2014). Social conformity and autism spectrum disorder: A child-friendly take on a classic study. *Autism*, 18(8), 1007–1013.