The Differences in Perceived Politeness and Friendliness between Neurotypical and Autistic Individuals.

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Abstract

Autism spectrum disorder (ASD) is a neurological and developmental disorder that affects how people interact with others, communicate, learn, and behave. It has been shown that people diagnosed with autism experience stigma. Previous research has mainly focused on children and adolescents. However, children and adolescents differ from adults, especially regarding their skills and ideas about verbal politeness and friendliness. In this study, we investigated if autistic individuals rate the requests uttered by their autistic peers as friendlier than the requests from neurotypical individuals. We also tested if neurotypical individuals rate the requests uttered by autistic individuals as less polite compared to the requests of other neurotypical individuals. This was tested by analysing 535 requests that were rated by 17 neurotypical (NT) individuals (M=21.94 years, SD=2.16 years), and by 32 autistic (ASD) individuals (M=43.00 years, SD=11.47 years). The analysis that was used was a MANOVA. After analysis, it showed that none of the results turned out to be significant. Therefore, we rejected both hypotheses. However, studies have suggested that non-verbal cues such as facial expressions, eye-contact, body language, intonation also have an influence on perceived politeness and friendliness. Thus, suggestions for future research would be to use a larger sample size with equal group sizes, and to take into account non-verbal cues. In conclusion, there were no differences found in the way ASD individuals rate ASD and NT requests on friendliness, there also was no difference found in the way NT individuals rate ASD and NT requests on politeness.

Keywords: Autism, ASD, friendliness, politeness, requests, neurotypical, perception

The Differences in Perceived Politeness and Friendliness between Neurotypical and Autistic Individuals.

In May, a video went viral on a social media platform where an autistic employee told the public he had made an office sign stating “I’m autistic. I prefer direct, literal and detailed communication. If I am not making eye contact; not greeting you back, not understanding your social cues, etc. – there is no malicious intent. It is the autism. Thank you for understanding.” He made this sign after he was called in for a disciplinary meeting with his boss for being a bad communicator (Mordowanec, 2022).

Zeidan et al. (2022) revealed that ASD has a median prevalence of 65/10.000. This shows that ASD individuals are not part of the majority, and that the general population mainly consists of neurotypical individuals. It is shown that minority groups in societies experience stigmatisation from the majority, and autistic individuals are also members of a minority group (Turnock et al., 2022). Thus, Mordowanec (2022) is a perfect example of how people with ASD often misunderstood by the general population of neurotypical individuals, and are seen as bad communicators and even as being impolite, unfriendly and rude.

As seen before in Mordowanec (2022) and as stated by Turnock et al. (2022), individuals that are diagnosed with autism spectrum disorder experience stigma, as they belong to a minority group in society. Botha et al. (2020) also stated that both the behaviours related to autism and the label are stigmatised. Aubé et al. (2020) stated that public stigma refers to people’s reactions to individuals that they perceive to be different from them. Public stigma includes stereotypes, attitudes (also called “prejudice”), and discrimination (Aubé et al., 2020). When autistic people are evaluated negatively by others, this represents an obstacle for them to be included (Aubé et al., 2020). Aubé et al. (2020) also stated that children with ASD are more likely to be perceived negatively by others, and experiences of discrimination are also more common among children with ASD.

This perceived stigma can have detrimental effects on the well-being of individuals diagnosed with autism spectrum disorder (Turnock et al. 2022). A study by van Heijst and Geurts (2015) also showed that there was a big difference in Quality of Life (QoL) between individuals diagnosed with ASD and individuals without ASD. This difference was consistent across the whole lifespan, and thus independent of age (van Heijst & Geurts, 2015). Individuals diagnosed with ASD experienced a lower quality of life compared to non-ASD individuals (van Heijst & Geurts, 2015). Therefore, this study will focus on how autistic and neurotypical individuals interpret politeness forms/requests of neurotypical and autistic individuals and if there is a significant difference in the perception of these two types of requests with regard to politeness and friendliness. This can be impactful in gaining more understanding about autism spectrum disorder and their way of politeness and friendliness.

In our study, we will have two different groups that are conceptualised in the following way. First, there are neurotypical individuals (NT), we use the conceptualisation also used in Attwood (1998), and the term neurotypical refers to individuals who do not have ASD. These individuals show characteristics of typical neurological development, and are not affected with a developmental disorder (especially autism spectrum disorder) (Merriam-Webster, 2020). The second group are individuals that are diagnosed with autism spectrum disorder. Autism spectrum disorder (ASD) is a neurological and developmental disorder that affects how people interact with others, communicate, learn, and behave (American Psychiatric Association [APA], 2013). According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), people with ASD often have difficulty with communication and interaction with other people, restricted interests and repetitive behaviours and symptoms that affect their ability to function in school, work, and other areas of life (American Psychiatric Association [APA], 2013).

Previous studies have already investigated the differences between individuals with ASD and non-ASD/NT individuals in their ways of communication and politeness. Volden and Sorenson (2009) investigated whether high-functioning speakers with ASD were able to adjust their language for requests along a continuum of politeness and bossiness, and whether they were able to correctly interpret different linguistic features comprising the politeness/bossiness aspects when instructed. Politeness is conceptualised as using more indirect syntax, and adding more semantic "softeners" like "please", "if you have time". Bossiness is conceptualised as using more direct syntax, and using more semantic aggravators (e.g., threats, such as "right now", "really"), and also using less semantic softeners (Volden & Sorenson, 2009). Volden and Sorenson (2009) used a population consisting only of children and adolescents. They created two conditions – spontaneous and prompted – to see how these high-functioning speakers made their requests. Requests are used in everyday conversations and play a role in coordinating social behaviours, achieving interpersonal objectives, and managing social situations and personal relationships (Forgas, 1999). Requests are an example of strategic communication and it demands individuals to actively interpret the social context that they are in, in order to match the ideal level of politeness for a specific task and/or situation, which then leads to them maintaining an appropriate face or social persona (Forgas, 1999). They found that speakers with ASD – like their matched controls (without ASD) – were able to adjust their language along a continuum of politeness and bossiness in the desired direction when instructed (in the prompted condition) and used similar types of adjustment as their matched controls without ASD (Volden & Sorenson, 2009).

However, another study by Yang et al. (2021) found that autistic individuals are perceived to be less polite, more uncertain and more informative when the task gives the participants equal roles, and there might be less of a need to be polite to the other participant compared to the typical development (TD) participants. Hence, it might be that neurotypical

individuals perceive ASD individuals to be less polite compared to fellow neurotypical individuals, and will rate the requests of ASD individuals to be less polite.

When we focus on perceived friendliness, we conceptualise friendliness as the quality of being friendly, and having a disposition to goodwill, warmth or kindness to others, but also the quality of being suited to particular needs, concerns, users etc. (Merriam-Webster Dictionary, 2020) A study by Crompton et al. (2020) found that autistic individuals felt they were often better understood by their fellow autistic peers compared to non-autistic individuals. They reported that they felt more feelings of comfort and ease when interacting with autistic friends and family, because their communication styles were similar, they understood each other more easily, there was an assumed mutual understanding and acceptance of autistic behaviours and ways of interaction, which led to conversations flowing more smoothly (Crompton et al., 2020). The participants also stated that there was a feeling of belonging and they were able to be their authentic self when they were around autistic friends and family (Crompton et al., 2020). The study by Crompton et al. (2020) also showed that autistic individuals experienced differences in verbal and non-verbal communication styles when interacting with non-autistic friends and family, which led to increased anxiety and high amounts of energy and effort when they were interacting with neurotypical individuals. Some participants also reported that they felt the need to fit in with and conform to their non-autistic friends and individuals and use the communicative styles and preferences of the neurotypical majority (Crompton et al., 2020).

Following the results of this study, it might be the case that autistic individuals feel more comfortable and at ease with the requests given by fellow autistic ‘peers’ and can relate to these requests more, and therefore view and interpret these requests as friendlier in comparison to the requests given by neurotypical individuals. However, little to no research has been done on the relationship between politeness, friendliness and autism spectrum

disorder. Also, most of the research that is done on this topic, is done on children and adolescents. However, children and adolescents differ from adults, especially regarding their skills and ideas about verbal politeness and friendliness.

It might also be that the requests uttered by the autistic individuals are perceived and/or rated as less polite by the neurotypical individuals in this study, as there were also equal roles for the participants. We want to investigate whether there is a significant difference in how autistic people rate these requests of fellow autistic people with regard to friendliness compared to the requests of neurotypical individuals and if neurotypical individuals rate the requests of autistic people differently than the requests of neurotypical individuals with regard to politeness. Therefore, the research questions are the following:

1. Do people diagnosed with autism spectrum disorder rate request uttered by autistic individuals as friendlier than neurotypical politeness requests?

2. Do neurotypical individuals rate the requests uttered by autistic individuals as less polite compared to the neurotypical requests?

Our research study will have two hypotheses. The first hypothesis is that autistic individuals will rate the requests uttered by their autistic peers as friendlier than the requests from neurotypical individuals. Secondly, we will test the hypothesis that neurotypical individuals will rate the requests uttered by autistic individuals as less polite compared to the requests of other neurotypical individuals.

Methods

Participants

For this research, the requests of the neurotypical and ASD individuals were rated by either autistic or neurotypical individuals. There was a neurotypical (NT) and an ASD group which rated the requests. The total sample consisted of 49 participants, divided into a NT

group and an ASD group. The NT group has a sample size of 17 students with an age range of 18-25 years (M=21.94, SD=2.16 years), which consisted of 14 women and 3 men. The ASD group had a slightly bigger sample size of 32 autistic individuals with an age range of 22-63 years (M=43.00 years, SD=11.47 years). The ASD group included 14 women, 17 men and 1 non-binary individual. All the raters had not participated in the previous two experimental study, and were blind to the conditions of the speaker of the request (being in the NT or ASD group).

All the participants were recruited during the study of Out (2021). The neurotypical group of raters was recruited via Tilburg University, and were given a course credit for their participation. However, the group of ASD raters was recruited via various different ways, such as through national autism interest groups, a Dutch online message board for autistic individuals, via LinkedIn, and through word of mouth. This group was offered five euros as reward for their participation, and were also given the opportunity to donate these five euros to an autism research institute (Autism Research Centre).

For the neurotypical group, the inclusion criterion was the ability to speak Dutch fluently; the exclusion criterion was having an ASD. For the ASD group, the inclusion criteria were the following: having ASD (for example, autism, Asperger's syndrome, PDD-NOS), the ability to read and write Dutch fluently, and being at least 18 years old. The exclusion criteria were: having an intellectual disability, not being able to speak Dutch fluently and receiving inpatient treatment. Participants that had additional psychiatric disorders were also excluded.

For this study, a power analysis was conducted with 2 groups using G*Power 3.1. There was an effect size (F^2) of 0.0625, α= 0.05 and thus power (1-β) = 0.95. This corresponds to a total sample size of 252 participants. This research study (Out, 2021) was ethically approved by the Ethical Review Board (ERB) of Tilburg University.

Procedure

In the previous study of Out (2021), there were conversations held between two people (dyad) that were either both neurotypical or autistic. These conversations were structured under the idea of getting to know each other better in the way of asking each other questions about 6 pre-set topics: debts, bullying, sexting, cheating (i.e., infidelity), excessive use of alcohol and sexual intimidation. For each topic, the participant was asked to ask their conversation partner about their experiences with that topic. Both individuals would ask questions about three of these topics, taking turns. These participants were also told that an audio recording would take place during their conversation, which would later be transcribed.

These conversations were transcribed by Out (2021) and a research assistant, and the requests were written down. For each topic that was discussed in the dyad, the first question that was asked by the speaker, was selected and classified as a request. In total, there were 585 requests counted, including 498 by neurotypicals, and 87 by autistic speakers. Requests that were identical or highly similar in content were merged, and this led to a total of 535 requests. This consisted of 88 requests about debts, 85 requests about bullying, 93 requests about sexting, 86 requests about cheating, 90 requests about excessive use of alcohol, and 93 requests about sexual intimidation.

In this study, they aimed to present randomized requests to the raters, but in a balanced manner, with regard to condition (NT or ASD) and conversation topic, the raters were also blind to the conditions of the conversation (NT or ASD dyad). For that reason, they created eight different versions, containing 23/24 unique requests. Then, all 84 requests by ASD speakers and 105 requests by NT speakers (which were randomly selected as well) were distributed over these versions.

After this all was structured, the participants were asked to rate all these unique requests. These raters were distributed randomly over all the conditions, until each version or collection of unique requests, was rated independently. Each of these eight versions had to be

rater by two or three neurotypical raters, and by four autistic raters. Finally, 401 requests were rated by NT raters and 756 by ASD raters. These raters had to rate these requests on Forgas' requests characteristic (Forgas, 1999), which were polite/impolite, direct/indirect, friendly/unfriendly, elaborate/simple, hedging/not hedging, and simple/complex.

Measures

Politeness: politeness was measured using the Forgas' request characteristics (Forgas, 1999). Politeness was rated on a 7-point Likert scale, ranging from 1 = polite and 7 = impolite. The interrater reliability was measured using Krippendorff's alpha (KALPHA). For the neurotypical raters, the mean $\alpha = 0.34$, while for the autistic raters, the mean $\alpha = 0.15$. This meant that the interrater reliability was low, when adhering to the recommendation to strive for $.80 \geq \alpha \geq .667$.

Friendliness: Friendliness was measured using the Forgas' request characteristics (Forgas, 1999). Friendliness was rated on a 7-point Likert scale, ranging from 1 = friendly and 7 = unfriendly. For concept two, we used the same values of Krippendorff's alpha (KALPHA) as mentioned before in concept one of politeness.

Statistical procedure

The data analysis was performed using IBM SPSS (version 26). For this research design, we performed a MANOVA. There were two independent variables, which were belonging to the neurotypical (NT) group or the autism spectrum disorder (ASD) group for the requests, and belonging to the NT or ASD group of raters. This research design also had two dependent variables, which were the ratings given for politeness and friendliness. We checked for missing variables in our dataset, and it turned out that seven requests were removed from the data set due to either technical errors, the speaker not discussing or misinterpreting the topic.

Preliminary assumption testing was done in order to check for assumptions of a MANOVA (Pallant, 2010), in order to successfully perform this analysis. First, there was the assumption of sample size: you need to have more cases in each cell than you have dependent variables. In our case, this means that this assumption was not violated as we have a total sample size of 49 for the raters. The assumption of normality was violated in our study, as we only had a sample size of 17 participants in the NT raters' group. In order to have robustness against this violation, we would have needed to have a sample size of 20 in each cell (ASD raters did have a sample size of 32). The assumption of linearity was met, as the plots did not show any clear evidence of non-linearity. The assumption of multicollinearity was checked as MANOVA works best when the dependent variables are moderately correlated. However, when the correlation is too high (around 0.8 or 0.9), then this would be a cause for concern. The correlation between 'friendliness' and 'politeness' was calculated using Spearman's rank-order correlation. There was a positive correlation between these two variables: $\rho = .762$, $n = 1157$, $p < .001$. So, the assumption of multicollinearity was not violated. The assumption of variance-covariance matrices was tested with the Box's test of equality of covariance matrices. The Box's M sig. value was .668, so this assumption was not violated. The Levene's Test of Equality of Error Variances also showed that none of the variables gave significant values, so we could assume equal variances.

Results

In this research study, we tested the following hypotheses: Hypothesis 1: Autistic individuals will rate the requests uttered by their autistic peers as friendlier than the requests from neurotypical individuals. Hypothesis 2: Neurotypical individuals will rate the requests uttered by autistic individuals as less polite compared to the requests of other neurotypical individuals.

In order to get insight into the data set, descriptive statistics were examined. Autistic raters rated the requests of neurotypical individuals (M = 3.41, SD = 1.355) the same as the requests of autistic individuals (M = 3.40, SD = 1.385) on friendliness. Neurotypical raters rated the requests of neurotypical individuals (M = 3.45, SD = 1.367) and the requests of autistic individuals (M = 3.49, SD = 1.317) on friendliness as well. Autistic raters also rated the politeness of the requests of neurotypical individuals (M = 3.50, SD = 1.603) and of the requests of autistic individuals (M = 3.57, SD = 1.679). Neurotypical raters rated the requests of neurotypical individuals (M = 3.55, SD = 1.550) and the requests of autistic individuals (M = 3,60, SD, 1.542) on politeness.

Then, we investigated the correlations between the various variables. The correlation between the two dependent variables ‘politeness’ and ‘friendliness’ was already calculated before. Spearman’s rank-order correlation was computed to assess the relationship between the variables ‘politeness’ and ‘friendliness’. There was a positive correlation between these two variables ($\rho = .762$, $n = 1157$, $p < .001$).

A MANOVA was conducted to investigate the differences in politeness and friendliness between neurotypical and autistic requests and between neurotypical and autistic raters. Two dependent variables were used: politeness and friendliness. The independent variables were having autism spectrum disorder (ASD) or not (neurotypical/NT), and being a neurotypical (NT) or autistic (ASD) rater.

There was no statistically significant difference between neurotypical (NT) requests and autistic (ASD) requests on the combined dependent variables, $F (2, 1152) = .297$, $p = .743$; Wilks’ Lambda = .999; partial eta squared = .001. There was also no significant effect between NT and ASD raters on the combined dependent variables: $F (2, 1152) = .392$, $p = .676$; Wilks’ Lambda = .999; partial eta squared = .001.

When the results of the dependent variables (politeness, friendliness) were considered separate of each other, there was also no significant difference found. When looking at the perceived difference between neurotypical and ASD requests on politeness: F (1, 1153) = .379, p = .538; partial eta squared < .001. When looking at the perceived difference between neurotypical and ASD requests on friendliness: F (1, 1153) = .034, p = .853; partial eta squared < .001. Then, we examined the difference between neurotypical or ASD raters on politeness: F (1, 1153) = .169, p = .681; partial eta squared < .001. We also examined the difference between neurotypical and ASD raters on friendliness: F (1, 1153) = .663, p = .416; partial eta squared = .001.

Table 1*:*

Estimated marginal means, standard errors, and results of MANOVA

	Politeness				Friendliness			
	M, SE	F (1, 1153)	P	η^2	M, SE	F (1, 1153)	P	η^2
Groupspeaker		.379	.538	< .001		.034	.853	< .001
NT	3,525; 0.067				3.431; 0.056			
ASD	3.586; 0.074				3.447; 0.063			
Grouprater		.169	.681	< .001		.663	.416	.001
NT	3.576; 0.081				3.474; 0.068			
ASD	3.535; 0.059				3.404; 0.050			

Discussion

In this research study, we investigated two research questions. First, we were interested in finding out if people diagnosed with autism spectrum disorder (ASD) rate requests uttered by autistic individuals as friendlier than requests of neurotypical requests. Previous research of Crompton et al. (2020) showed that autistic individuals felt they were

often better understood by their fellow autistic peers compared to non-autistic individuals, they also reported more feelings of comfort and ease around fellow autistic people . The participants also stated that there was a feeling of belonging and they were able to be their authentic self when they were around autistic friends and family (Crompton et al., 2020). Therefore, our first hypothesis stated that autistic individuals will rate the requests uttered by their autistic peers as friendlier than the requests from neurotypical individuals. We did not find a significant result. The mean friendliness rating that ASD individuals gave to ASD requests was 3.40, and the mean friendliness rating that they gave to NT requests was 3.41. Hence, we reject our first hypothesis, there is no significant difference in perceived friendliness between ASD and NT requests, when rated by ASD individuals.

Secondly, we were interested in whether neurotypical individuals will rate the requests uttered by autistic individuals as more polite than neurotypical requests. Previous research of Yang et al. (2021) found that autistic individuals are actually perceived to be less polite, more uncertain and more informative when the task gives the participants equal roles, and there might be less of a need to be polite to the other participant compared to the typical development (TD) participants. Therefore, our second hypothesis stated that neurotypical individuals will rate the requests uttered by autistic individuals as less polite compared to the requests of other neurotypical individuals. However, there also was no significant difference found. The mean politeness rating that NT individuals gave to ASD requests was 3.60, while the mean politeness rating they gave to NT requests was 3.55. However, this difference is too small to make inferences about when the results are non-significant. This means that we also reject our second hypothesis, there is no significant difference in perceived politeness between ASD and NT requests, when rated by NT individuals.

Thus, none of the results turned out be significant in our analysis. There was no statistically significant difference in the way the neurotypical and autistic (ASD) requests

were rated on both politeness and friendliness. There was also no statistically significant difference between the neurotypical and ASD raters on both friendliness and politeness. This result is accordant with Volden and Sorenson (2009), who also found that speakers with ASD – like their matched controls (without ASD) – were able to adjust their language along a continuum of politeness and bossiness in the desired direction when instructed and used similar types of adjustment as their matched controls.

Several implications can be made about our research study. As our result is in line with Volden and Sorenson (2009), there seems to be no difference in perceived politeness and friendliness between ASD and NT individuals. Different from Volden and Sorenson, our study was designed so that both NT and ASD individuals rated both the requests of ASD and NT individuals, while Volden and Sorenson (2009) only used two transcribers that transcribed the requests. This means that we accounted for the possible differences in perceived politeness and friendliness between ASD and NT individuals. Despite the fact that the results were non-significant, our research study gives more insight and information into the communication of ASD and NT individuals. As a consequence, the results can also help reduce the stigmatisation of people diagnosed with ASD.

These findings should be considered in light of several limitations. Foremost, the sample size of our study only had a total of 49 participants, and the two groups did not have an equally divided number of participants. Our power analysis also showed that we would have needed a sample size of 252 participants. It was also the case that the sample of NT individuals was not very representative of the population, as it consisted only of university students between the ages of 18-25.

Secondly, in our study, there were only transcribed requests (verbal communication) that had to be rated by the ASD and NT raters. Non-verbal cues (i.e., body language, intonation, eye contact) were not taken into account. However, non-verbal cues might also

have had an influence on the perceived politeness and friendliness. Crompton et al. (2020) stated in their study that autistic individuals experience differences in non-verbal communication styles as well when engaging with non-autistic friends and family, which led to increased anxiety and high amounts of energy and effort when they were interacting with neurotypical individuals. Grossman and Tager-Flusberg (2012) also found that adolescents with ASD showed greater deviation from expected in expressive tasks compared to receptive tasks. Expressive ability is conceptualised via a perceptual coding system using a four-point scale (“natural”, “slightly awkward”, “moderately awkward", and “unnatural”). Receptive ability is conceptualised in the form of accuracy Grossman and Tager-Flusberg, 2012). The typical development (TD) individuals in this research showed no significant difference between the expressive and receptive tasks (Grossman and Tager-Flusberg, 2012). It was the case that ASD individuals showed larger deviations from the expected range, while the TD individuals produced facial and vocal expressions within a fairly narrow range. The qualitative expressive differences for ASD individuals were found in a range of expressive non-verbal tasks, such as lexical stress, emotional prosody and emotional facial expression (Grossman and Tager-Flusberg, 2012). Thus, it might be the case that autistic and neurotypical individuals do show differences in their way of politeness and friendliness, but that this is influenced by their non-verbal communication, such as eye-contact, facial expressions, body language, intonation etc. As there were only transcribed requests (verbal communication) used in our study, this possible difference would not have shown up when rating these requests, as non-verbal communication signs were not accounted for in this study.

Furthermore, it could have also been the case that social desirability bias took place in the first study (where the conversations happened in dyads). Both conversation partners knew that their conversation would be audio-recorded and transcribed. This could have caused both autistic and neurotypical individuals to be more polite and friendly when stating their

requests, as they knew they were being recorded. It could have also been that the autistic individuals formulated their requests in more 'neurotypical' ways than they normally would because they were aware of being audio-recorded. Lastly, the six pre-set topics that the dyads had to ask questions about were very serious topics (debts, bullying, sexting, cheating, excessive use of alcohol and sexual intimidation). This could have caused the participants in the dyads to be more careful when stating their requests to the stranger in front of them, and thus using very standard, common questions, instead of using the language that they would normally use in a conversation with another individual.

Taking these limitations into account, several strong points about this research should be pointed out as well. Firstly, we made sure that the raters were blind to the conditions of the speakers (either NT or ASD), so that this would not influence their ratings. Secondly, this study allowed the ASD individuals to participate in an environment in which they felt comfortable, such as a church or library, instead of the lab. In this way, we tried to be open-minded and respectful to the needs of ASD individuals, and this flexibility led to easier recruitment of ASD individuals, as this made them more likely to participate in our study. Although our results turned out to be non-significant, our study gives more insight into the communication of ASD individuals, as there is little research done on the topic of politeness, friendliness, and ASD.

These findings give several alleyways into future research. Notably, the biggest suggestion for future research is to have a significantly larger sample size, and to make sure that the neurotypical and autistic groups are roughly the same size. It also would be important to make sure that both the neurotypical and autistic sample are representative of the whole population. Further, it would be useful for future research to investigate if non-verbal communication (e.g., facial expressions, eye-contact, body language, intonation) has an influence on perceived politeness and friendliness between neurotypical and autistic

individuals. It might also be interesting to perform research on less serious topics than the six pre-set topics that were used, and to let dyads hold a more casual conversation. Starting a conversation with a stranger about sexual intimidation or excessive use of alcohol will probably be uncomfortable and feel awkward for both autistic and neurotypical individuals, and it might be the case that this led to standard, simple requests for both groups.

In conclusion, this research has looked into two research questions. Firstly, we investigated whether people with ASD rate requests uttered by autistic individuals as friendlier than neurotypical politeness requests. Secondly, we looked into whether neurotypical individuals rate the requests uttered by autistic peers as less polite compared to neurotypical requests. We reject both hypotheses, as our results turned out to be non-significant. In our study, there were no differences found in the way ASD individuals rate ASD and NT requests on friendliness, there also was no difference found in the way NT individuals rate ASD and NT requests on politeness. However, more research is needed, especially with a larger sample size, and also taking into account non-verbal cues that can influence perceived politeness and friendliness, as it is likely that these also have an effect on perceived politeness and friendliness. In the end, it would be impactful for ASD individuals in our society if the stigmatisation they experience can be reduced.

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