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Accepted boundaries for barrier-free communication between autistic adults and non-autistic professionals

Abstract

In this research, we explored our autistic and non-autistic subjects' views on interactions and their interpretations of successful communication. We conducted qualitative analysis on semi-structured interviews with autistic adults requiring support (level 1) and professionals working with autistic people. Based on our results, we can argue that autistic and non-autistic individuals may similarly seek to construct a mutually successful interaction, as presupposed by the dynamic nature of communication. Both autistic and non-autistic people might have multiple challenges in an interaction. Limitations and strategies characterising both groups contribute to the social model of Double Empathy Problem.

Applying the terms of relevance theory, misunderstandings or failures of communication might happen in an interaction involving different neurotyped interlocutors unless extra cognitive effort is invested in the needed communicational strategies at a metapragmatic level. Barrier-free communication provides equal opportunities and can result in mutual understanding between people with complex communication needs and neurotypical people.

Keywords: autism spectrum condition, successful communication, barrier-free communication, Double Empathy Problem, relevance theory, reciprocity

1 Introduction

Understanding some sort of social behavioral forms and engaging in social interactions might be challenging for people on the autism spectrum (APA 2013).

While there is no doubt that a special perspective could have some valuable outcome (Happé & Vital 2009), the dissimilarity of neurotypical and autistic¹ people's cognition and social interactional characteristics might cause serious difficulties and potential misunderstandings on both sides.

According to the comprehensive research of the Hungarian MASZK Research Group (2020), the quality of life of adult autistic people and their parents is significantly worse than the results

¹ The majority of the autism community prefer identity-first language (Bottema-Beutel et al. 2021). On the contrary, some of our subjects chose person-first language during the interviews. Therefore, in this paper we use the expression 'autistic person' over 'person with autism' more frequently, but in order to express more respect for both the community and the research subjects, the authors have a preference towards the neutral 'on the spectrum' phrase.

of the neurotypical subjects and their families. Also, comparing adult people on the spectrum to younger ones, they have less support and services, which may lead to unemployment and lack of independence. Altering social abilities, challenges to suit the requirements of social norms might cause some difficulties in mutual understanding between autistic people and non-autistic people. As communication is a mutual process (Frith 2007), it is crucial to observe not just the atypical but also the presumably/ so-called typical language use and behavior in an unsuccessful interaction.

Due to the differences in cognitive mechanisms, we can assume that there is also a difference between the perspectives of autistic and non-autistic individuals. Among others, differences in social cognition, the sum of cognitive processes that allow us to interact with each other (Frith & Frith 2007), are related to deficits in language use (Bosco et al. 2018). Based on this, do we have a reason to say that autistic individuals might have different assumptions on what is called a successful outcome of an interaction? What kind of interactional barriers and coping strategies are these groups in a communicational situation characterized by?

In the first chapter of this paper, we describe successful communication and define barrier-free communication. In the second chapter, the autism spectrum condition is briefly presented with a special emphasis on its social-behavioral characteristics. Later, based on our empirical data, we introduce qualitative research on the different perspectives on successful communication and its interactional challenges. Our corpus involves semi-structured interviews with autistic adults and professionals who work with autistic people.

Some earlier results of the research were already presented, in the form of a lecture/presentation, at the 17th International Pragmatics Conference in 2021 under the title “Accepted boundaries in barrier-free communication between people living with and without autism” (Mezőlaki & Ivaskó 2021).

2 Communication as a goal-directed, social behavior

Communication is a form of social human behavior that cannot happen properly without mental state attribution and perspective-taking abilities.

According to Frith’s communication loop (2007: 175), communication is not a one-way process, as the way we respond to others alters their behavior. When we are pretending to do something, our partner has a belief what would happen if they have a pattern of our behavior in their mind. In a face-to-face interaction, the exchange of the meaning requires cooperation. An interaction is successful at a point where one’s model of the other’s meaning matches their own meaning, and it is no longer necessary to express that there is a communicational problem (Frith 2007: 175).

Regarding Balconi’s neuropsychological model of communicative behavior, human communication can be seen as a goal-directed behavior. Several human competences are involved to cooperate in a goal-directed interaction, in which human beings are trying to communicate. Due to executive functions and mental representation attribution, we are able to adjust our mental states and behaviors to be successful in this self-directed and controlled process.

The precondition of human social behavior is the intention to establish interpersonal contact with another human being. When the initiator wants to make manifest or more manifest something to the other person, their social behavior is ostensive. If the initiator does not want

to make manifest or more manifest any kind of information to the other person, they still may have the intention of not preventing the partner from being informed. But when the initiator's behavior is motivated not just by informative but communicative intention, the social behavior is communication (Ivaskó 1997; Ivaskó & Németh T. 2002).

According to the ostensive inferential communication model (Sperber & Wilson 1986), verbal communication is a form of ostensive behavior. Considering the dynamism of communication, in a verbal communicative process the speaker produces a verbal or non-verbal stimulus in order to request the attention of the listener and to make a set of assumptions manifest or more manifest with the speaker's informative and communicative intentions (Ivaskó 1997; Ivaskó & Németh T. 2002).

The speaker tries to produce stimuli in such a way that the listener can construct the intended cognitive representations by means of decoding and inferential procedures choosing the right context. Therefore, the precondition of successful communication is that during communicative behavior, the recipient infers a similar mental representation from the mutually manifested information that the communicator intended to represent with a physical stimuli. Optimally, the intended cognitive representations achieve the greatest effects possible with the least effort (Sperber & Wilson 1995).

Interactions could have an unsuccessful outcome when there is a breakdown at some point in the communication cycle and the initiation of the repair is failed (Schneider & Ifantidou 2020). Individuals with pragmatic impairments have different communicative abilities from people without impairments, therefore managing an interaction between these populations can be challenging for both participants.

2.1 Barrier-free communication in inclusion

According to the guidelines in official situations, barrier-free communication is defined in the following way:

Barrier-free communication is a very young and multifaceted research area. Against the background of the UN Convention on the Rights of Persons with Disabilities, and within the paradigm of social inclusion and participation, it aims to explore models and procedures to ensure access to information and training for people with visual, hearing or temporary cognitive impairments. Barrier-free communication is a prerequisite to guarantee everyone universal accessibility to all environments. (Jekat & Massey 2017: 1).

There are several declarations on how to involve inclusively those people who have different communicative problems to be a part of their interactions without communicative discrimination, and to support them to manage themselves based on their intact capacities (CRPD/C/11/3; Kovács & Simonics 2009; Jásper & Kanizsai-Nagy 2011; Ószi Tamásné 2016).

Mason and his colleagues also report on several identified barriers and facilitators that prevent or enable physical healthcare access to adult autistic people. According to their systematic review, patient-provider communication is one of the main barriers that emerge in healthcare situations (Mason et al. 2019).

These guidelines could lead different populations to share information via feasible and adaptable implementations of barrier-free communication. It could mean translations between different modalities, accessible codes, techniques to create interpretable communicative signals.

However, in everyday situations people manage their interactions using their own previous experience, and sometimes these strategies and signals are formulated intuitively.

Applying the terms of relevance theory (Sperber & Wilson 1995), misunderstandings or failures of communication might happen between people in an interaction involving different neurotyped interlocutors unless extra cognitive effort is invested in the needed communicational strategies at a metapragmatic level.

Barrier-free communication provides equal opportunities and can result in mutual understanding between people with complex communication needs and neurotypical people (Mezőlaki & Ivaskó 2021). Barrier-free communication is achieved when the interlocutors invest well-balanced effort in proportion to their own limits for mutual understanding. That is, if the possibility/solution to overcome an obstacle is mutually ensured for the partners. To do so, the two participants must accept and understand each other's difficulties and help each other to overcome them in order to successfully communicate.

3 Autism spectrum condition

Autism spectrum disorder is a neurodevelopmental condition with various forms of its presence. The diagnostic criteria requires evidence of 'impaired' or 'altered' features in social communication behaviors and evidence of restricted and repetitive behaviors. Hyper- or hyporeactivity to sensory inputs are also common characteristics. Autistic traits must be present in the early developmental period, and can be diagnosed mainly by behavioral marks. Unlike earlier editions, the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) does not specify a series of sub-classification of autism, such as Asperger's syndrome, but uses the umbrella term 'spectrum' to refer to the variability between individuals who share underlying features of the condition. Meaning, that the diagnosis must specify whether the person has accompanying intellectual impairment/ language impairment or associated with a known medical or genetic condition/ environmental factor, or with another disorder. The DSM-5 introduced three severity levels for autism spectrum: level 1 (requiring support), level 2 (requiring substantial support), and level 3 (requiring very substantial support) (APA 2013). In line with the heterogeneity of the condition, there is no monolithic cause of explanation for the core aspects of autism, at the genetic, neural and cognitive levels (Happé, Ronald & Plomin 2006). Socio-cognitive features (such as joint attention), cognitive coherence (such as context comprehension), and executive functions (such as cognitive flexibility or inhibition) are all linked to linguistic and communicative abilities, and are all affected in autism spectrum condition (Győri 2014).

3.1 Social communication and social interaction in autism

Just like other features, challenges with social interaction and communication can be variously manifested between individuals on the spectrum, but the pragmatic aspects of language use are usually affected at a certain level, even in the case of a person with fluent speech and intact syntax and lexicon. A few examples of these difficulties are listed below.

Some might have problems with conversation management, turn-taking, initiating or responding to social interactions. Reduced intention to sharing of interests, or, oppositely, oversharing is also common. Comprehending or producing non-verbal communicative forms,

and non-literal expressions can be also challenging for people on the spectrum. Developing, maintaining and understanding relationships, as well as adjusting to social contexts are common difficulties in autism (APA 2013; Fletcher-Watson & Happé 2019).

Perspective-taking and mental state attribution abilities are widely studied in the field of autism-research. According to the Theory of Mind (ToM) hypothesis (Happé 1993), these abilities are impaired in autism. The Theory of mind or mind-reading is the human metarepresentational ability to explain and predict one's own and others' behavior. It is crucial to understand others' perspectives and to attribute mental states. The Theory of Mind hypothesis is one of the psychological explanations why communicative intention can be hard to understand for people on the spectrum (Happé 1993), resulting in difficulties in social interactions.

The hypothesis of the Double Empathy Problem (Milton 2011) “refers to a breach in the ‘natural attitude’ that occurs between people of different dispositional outlooks and personal conceptual understandings when attempts are made to communicate meaning.” In Milton's model, the problem of mutual understanding is doubled, as both participants experience it, and it is “based in the social interaction between two differently disposed social actors [...] (Milton 2012: 4).” While the Theory of Mind is a domain-specific cognitive explanation that fits into the frame of a cognitive neuropsychological medical model, namely that autism is more likely to be seen as a disorder in an individual, the Double Empathy Problem is rather a social model due to its emphasis on reciprocity, mutuality, the role of society and the social context.

Morrison and her colleagues (2020), in line with the theory of the Double Empathy Problem, also suggest that social interaction difficulties in autism are rather relational than individual. In their study they examined interaction quality and first impression formation in real-time, cross and matched-neurotype social interactions between autistic and non-autistic people. On the one hand, all participants rated their autistic interactional partners less favorably than non-autistic partners, and only neurotypical adults were more interested in future interaction with other non-autistic people than with people on the spectrum. On the other hand, autistic participants preferred much more for future interaction with other autistic participants, and they felt closer to their partners than did non-autistic people. Also, they disclosed more about themselves to autistic partners relative to neurotypical participants.

According to Gillespie and Cornish (2010: 19–20), intersubjectivity is “the variety of relations between perspectives.” They argue that these perspectives may belong not only to individuals, but also to groups, traditions and discourses, and they might be taken for granted or reflected upon.

Heasman and Gillespie (2019) examined autistic participants via within-interaction variations, focusing on turn-takings. The authors investigate the features of how autistic individuals create social understanding. They found that neurodivergent intersubjectivity has the potential for unconventional forms of social relating, creating/leading to rich social interactions. When intersubjectivity is studied in autism based on interactions in which autistic and non-autistic individuals are involved, the difficulties of shared intentionality and reciprocal non-verbal communication become visible, resulting in the gap of mutual understanding that is described by the Double Empathy Problem. Autistic behavior should not be interpreted on neurotypical terms, as different contextual features of interactions can vary the possibilities for intersubjectivity, and they need to be understood outside of a normative criteria (Heasman & Gillespie 2019).

4 Research hypothesis

The above mentioned studies imply that both autistic and non-autistic individuals might have their own barriers when creating successful interpersonal interactions with the others, but also that social interactions could be manageable for the participants if the context is appropriate.

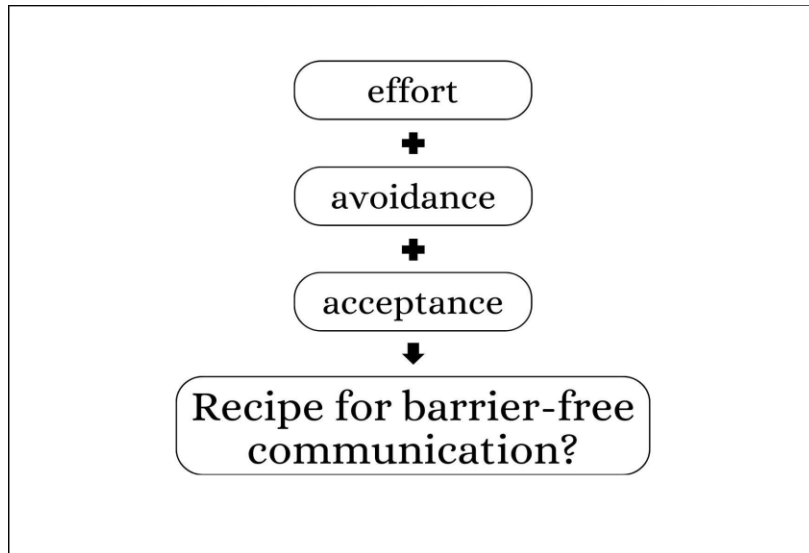


Figure 1. What are the specific presuppositions of barrier-free communication?

Differences in language use, dissimilar comprehension and production of implied meanings of verbal and non-verbal language might be some of the reasons why challenges appear in an interaction involving autistic and non-autistic participants. How can it be possible to manage a social interaction in which multiple perspectives meet in various everyday situations? As Figure 1 shows, we suggest that the main components of barrier-free communication can be captured in the act of efforts, the act of avoidance, and the act of acceptance. Our aim with our research is to open up and to concretize the aspects of these components. What kind of efforts does a mutually barrier-free interaction require? What kind of negative thoughts, attitudes or behaviors does it require? And what do the participants should accept? The hypothesis of this research is as follows.

The complexity of interpretation of successful communication can depend on the socio-pragmatic, neuro- and sociocognitive characteristics of the autistic and non-autistic interlocutors, as well as on their perspectives developed based on these properties.

In the present research we explore our subjects' views on social interactions and their interpretations of successful communication. We introduce their strategies they use in order to achieve mutual understanding and avoid breakdowns in conversation. Also, we present their views if they suggest that there is a lack of need for successful interaction.

5 Research method

Data collection was conducted from January to June 2021. One of the authors recorded semi-structured in-depth interviews with adult autistic individuals who require support (level 1)² and professionals who work with people on the spectrum. The interviews were conducted in an online environment via video calls due to COVID-19. One subject asked for an in-person interview, and their requirement was accepted. During the interviews, only the researcher and the participant were present. Before each interview we sent a brief summary of the aim of the data collection to the subjects, and they filled out a contribution statement. The participation was voluntary, data analysis was anonymous and is not retraceable. We did not require documents about autism diagnosis. Autistic subjects confirmed their diagnosis with their signature. Voice-recordings were used during the interviews with the subjects' permissions. We conducted qualitative data analysis on the typed material.

The authors assembled a questionnaire containing 25 semi-structured questions focusing on the areas of social interaction and communication, everyday situations and relationships, but further questions were added or skipped, aligned with the course of the interview. Two questionnaires were assembled, one for the autistic subjects and one for the professionals. Most of the questions had their 'pairs' in the other questionnaire based on the topic they involved.

In the following section, we introduce some examples of the questions. The order of the questions do not correlate with the serial number of the questions in the questionnaires.

- . a. Example from questions for professional subjects:
 - How do you think autistic people approach verbal conflict? Do you think there is a difference between these strategies and those used by non-autistic individuals?
- b. Example from questions for autistic subjects:
 - How would you approach a verbal conflict? Do you think there is a difference between these strategies and the strategies used by non-autistic individuals?
- c. Examples from questions for both subject groups:
 - Do you think there is a difference in your communication depending on whether it is with autistic people or non-autistic people? And if so, what kind?
 - How do you think successful communication is established between an autistic and a non-autistic person?

During the interview, we intentionally did not clarify what we mean by verbal conflict. If the participants asked, we encouraged them to approach the question from their own perspectives.

6 Subjects

All together 13 individuals participated voluntarily in the research as subjects: 7 female professionals, 1 male professional, 3 female autistic persons, and 2 male autistic persons. (As mentioned in the section on the research method above, the aim of the data collection had been introduced to the subjects, and the analysis was carried out with their consent.)

² Autistic subjects received Asperger's Syndrome diagnosis, which is no longer a diagnostic category according to APA's DSM-5 (2013).

Hungarian autistic adults (diagnosed with Asperger's Syndrome) who require support (level 1) and professionals who have work experience with autistic individuals are also involved as subjects in the research. These professionals are from the following areas: employers of daycare centers, mentors at higher education institutions, and executives of non-governmental organizations or foundations. Most of the professionals have experience with autistic individuals from the 'whole' spectrum. Some of them have degrees in autism-related fields (eg. special education teachers, psychologists), but some of them do not. Therefore, it is essential that they might have different experiences and beliefs about the condition. Thus thoughts on autistic people with co-morbid intellectual impairment could be represented in their mind in that way. Most professionals had already met a larger part of the spectrum before the interview, and they were able to share their experience with people in greater need of support.

However, the interviewer made it manifest that the focus of the study is on the communication of adult autistic people who require support (level 1).

7 Results

In-depth interviews lasted an average of one hour; however, depending on the amount of information respondents shared, the length of the sessions varied greatly. The shortest was 30 minutes and the longest was about 180 minutes. We collected a data set of a total of 785 minutes of audio material, of which nearly 27,000 written words were compiled by typing the relevant³ parts. We conducted qualitative data analysis on the written corpus.

Data from subjects are presented anonymously, coding is not related to the identity of the persons. In coding P stands for professionals, and A for autistic subjects. F stands for female, and M for male. The number in coding is a randomized identification number for the subject. All interviews were in Hungarian language, and the following extracts are translated by the authors.

The aim of the paper is to explore and introduce our subjects' assumptions on social interactions and their interpretations of successful communication, as well as their coping strategies, – or the lack of it –, in order to achieve mutual understanding and avoid misunderstandings in conversation.

7.1 *Personal challenges, social barriers, and lack of strategies*

In this section, we provide examples from the data on the various reasons why an interaction between an autistic and non-autistic individual could be challenging for people on the spectrum and for non-autistic people.

1. "The truth is that I forget quite a lot about the..., the autistic guys experience it, so this simplification is missing. And then they say that I am sorry I did not understand it. If there is a lot of work, then I might use too many sentences." (P2M)
2. "We consider a lot of forms of behavior as a communicational act. There are some types of behavior that are hard to decide what they refer to." (P3F)

³ Irrelevant refers to information that was off topic, private or sensitive information.

3. “[...] but also from the neurotypical side, it can go astray through intentional attribution because [...] it can be a misinterpretation of the other’s communication, I think that’s what can be the biggest hurdle.” (P5F)
4. “But of course there are a lot of learnt things behind what we see, and maybe what we assume to be kind, that is actually a totally learnt situative thing. But maybe things that we don’t recognise at all might be a kind of kindness that we cannot even understand.” (P8F)

Being constantly aware of one’s own communication can be hard. Professionals explained that they have to be focused in order to use language in a way that their autistic interlocutors can understand it. Some professionals shared that they (and non-autistic people in general) might have difficulties in comprehending communicative intentions of autistic people, as the implicit meaning might be different than they would expect.

5. “If we don’t find motivation in a young [autistic] person that makes it worthwhile for them to do what we ask, which can be any task, any communication, or any behavior, if we don’t find this motivation, then we can’t achieve it.” (P4F)
6. “Because there are people who experience their own diagnosis as a stigma, and for this reason they want to let as few people know about it as possible, and instead fight these challenges with their own strength [...]” (P5F)
7. “Because this can also be a problem, that the person living with autism does not indicate that he is stuck, but is just in this communication situation in a way that he listens, and he is there, but the information does not go through his head and he does not indicate when he is stuck [...]” (P5F)
8. “It is very difficult to stand up for themselves [for autistic people], say what they want, express their opinion. This is very, very common, I don’t like to generalize like that, but it’s really very common that they submit and leave it up to the other person that it’s fine, it will be the way you want it. This is a very big problem because they cannot stand up for themselves.” (P1F)

Professionals also mentioned challenges that might be present for autistic individuals in a social interaction. Disclosure of one’s condition could be beneficial for barrier-free communication, but the fear of stigmatization could make this decision hard to take. Also, according to the subjects, asking for help and standing up for themselves can also be more challenging for people on the spectrum. Some professionals shared their thoughts about autistic people who do not understand the function of communication in general, or some specific formulas, such as greetings, the nuances of gifting, or other polite forms.

Autistic people can also face challenges when an external factor makes their social well-being difficult. Thus, if the individual receives institutional daycare service, it is extremely important that his development continues at home in order to improve his condition. In order to help communication externally, it is extremely important that the individual concerned finds their own motivation for communication with help or by themselves.

9. “To understand the other, I need a lot of energy and it is not visible, but it is tiring [...]. And other factors, such as tone of voice, facial expressions, body language, in order to

interpret them, and I don't know that person that well, [...] I have to pay special attention to that, while I think it comes more instinctively for others." (A2M)

10. "It is easier for me to communicate verbally than in writing. Because then there is immediate feedback, but not in writing. And I'm usually afraid of offending or hurting people without meaning to." (A1F)
11. "I'm probably a lot more inflexible than my environment. So from my point of view, they are the inflexible ones." (A1F)
12. "As an autistic, I try to learn from non-autistic people, and it was a great realization for me when I realized that they don't even know what they're doing, they don't understand how to get to know each other, how to date." (A2M)

Some autistic respondents mentioned that they sometimes 'give lectures', in other words, they talk excessively about a topic they are interested in, and they have no need for any reflection. When they would like to engage in an interaction, they might have troubles with producing or interpreting utterances or prosodic elements of language use, and it also costs a lot of energy. Understanding the function of small talk and successfully participating in such interactions can be a challenge, as pragmatic abilities, such as comprehending non-verbal communication, are affected in this condition. Sensory issues may also cause focusing problems in a social interaction. Besides this, the success of communication highly depends on the modality of it. While some prefer to communicate in a written form, others may favor spoken language.

7.2 Coping strategies

Autistic subjects and subjects who work with autistic people shared their communicational strategies they apply to reach mutual understanding. Autistic subjects reported on interactions involving non-autistic people, and professionals reflected on interactions involving autistic people.

13. "But this is not necessarily autism-specific [...] I do the same with others, in that I try to adjust my communication both verbally and non-verbally to the partner's skills." (P5F)
14. "I also ask for feedback from an autistic person on what he understood. Very directly, [I want] as few misunderstandings as possible. I try to deliver short, concise and very clear messages." (P7F)
15. "The most important thing is that it is not only the environment that expects the person living with autism to adapt to it. And to have a kind of synchron." (P5F)

All of the subjects mentioned at least one behavioral strategy that they apply in order to reach mutual understanding. Most of the professionals listed practices such as avoiding figurative speech, requiring feedback, or using plain, easy language, adjusting to the others' linguistic abilities when interacting with someone on the spectrum.

The professionals emphasized that when they communicate with an autistic person, they do so much more consciously and in a more focused way, compared to their slightly more rambling and freer speech style with neurotypicals. They try to avoid ambiguity and unnecessary information, and they also aim to convey only important and informative details. Requiring feedback was considered as a good strategy, as it is important to check whether the information

was clear to the autistic hearer. Honesty cannot be replaced by humor, i.e. in an unpleasant situation, as it is important to clearly communicate the source of the problem instead of making jokes.

16. “I knew that if I didn’t look into the other’s eyes at certain intervals, they would think I was lying, and as a child I beat this into myself so that I could get over things faster.” (A1F)
17. “I think it’s much better for someone to see this and say that it’s autism, than if they only see this and don’t understand what it is.” (A1F)
18. “The question is more difficult with ordinary people. Because it’s okay that there might be a common topic, but I have to pay close attention to myself so that I don’t break into a monologue, let him have his say, and let a normal conversation develop. Don’t interrupt the other person at his word.” (A4M)

Autistic subjects reported about learning and using “neurotypical strategies”, even if they do not see the function of these behaviors. This is the strategy of ‘masking’ or ‘camouflaging’ when autistic individuals hide their autistic behavioral features in order to fit to the social norms. Some expressed that disclosing their condition helps them explain their autistic behavior and reach a level of/point of common understanding. Also, some autistic subjects told their need for feedback from their interactional partners in order to ensure that there is no misunderstanding between them. Avoiding monologues, paying attention to proper turn-takings is also a strategy that people on the spectrum might use.

7.3 Accepted barriers

Analyzing the corpus, we could identify several coping strategies that involve the acceptance of the partner’s communication or social difficulties. These acts adjust to the other persons’ communicative behavior.

19. “When we do not consider the autistic young person to be an equal partner, and we communicate with them in the same way as with each other, so we communicate a lot of similes, slurs, and sarcasm, they will not understand any of it. If these are just words and there are no [...] communication aids, little drawings, small flowcharts. Then it is very difficult, and we have also experienced many times that adults with autism are also spoken to as if they were a child or a child with poor abilities. They should be seen as partners. We have to communicate a little differently, and we have to pay close attention to how this is received and perceived.” (P2M)
20. “[...] I need to focus on what I want to say, and I try to say it concisely to them so that it is clear and that their energy, when they are with me and in these situations, is not spent on paying attention to what I say and what it really means.” (P8F)
21. “And what he does, for example, is that when his thoughts are well distributed, he records them at home in a small video recording, collects them, and when he feels that he is strong enough, he sits down with me and plays them. But even then he wouldn’t be able to say it there.” (P2M)

Both the neurotypical and the autistic group expressed that reciprocity is necessary for successful communication. Treating the other person as an equal partner does not mean that I talk to them on my own communication level, but that I take the other person's needs into account and try to adapt to them.

22. “[Successful communication] for autistics [people] is to consider [for example] non-autistic facial expressions and such, and for the non-autistic [people], it is to try to abstract from this that the other person may not do this, or may do it differently, and that such metaphors or such may not always be understandable to non-autistic people.” (A1F)
23. “For example, I don’t shake hands [...], I can communicate well with others if the other person doesn’t take it personally. [...] If this can be clarified, then I think communication can work. And I think that it is often not clarified by neurotypicals either. That’s why there are so many misunderstandings. Outside of a relationship, this is why friendship between men and women is so difficult, because they don’t know what it means now, and that’s why men and women backbite each other. [...]” (A2M).
24. “[Successful communication happens when] We find the voice with each other.” (A5F)

Acceptance and knowledge of autism – or the knowledge of the communication of the specific autistic interlocutor – and thus the selection of the necessary communication tool greatly influence the outcome of any interaction. However, it is not only the non-autistic person who must consider the autistic party's communication, but vice versa.

In addition to acceptance, both groups highlighted the importance of patience and kind attitude. One autistic interviewee added that it is not the difference of opinion that causes the failure of communication, but the negative attitude towards the other person. Another autistic subject emphasized that autistic or ‘atypical’ communication characteristics should not be taken personally or ‘taken to heart’. For example, avoiding eye contact may be a ‘typical’ autistic trait, which could be seen as an offensive or rude behavior according to ‘typical’ social norms.

7.4 Communication between autistic participants

25. “I approach different people differently, but I don’t differentiate between them because they are autistic or something.” (A3F)
26. “There were some others living with autism besides me, and I could not really communicate with them, because they had very special interests and they were only able to talk about these and after some time it was boring for me, and I became “sensorially overfilled” because they talked too much.” (A1F)

When autistic participants reported about their communication towards other autistic people, the experiences and approaches were diverse. It also varies whether autistic individuals seek the company of other autistic people. Some claimed that talking to other autistic people is easier for them than to talk to a neurotypical person; as in the first case they do not need to regulate their communication that much (to avoid monologues and interruptions). Some also said that being with other people on the spectrum helps them accept their condition and it provides them a ‘safe place’ to speak about autism without shame. Other subjects do not make any differences in their interactional style depending on their partners’ neurotype, whereas some shared that

they do not know how to interact with other autistic people, and that autistic people may tire them by talking about their special interests, or they might get sensory overloaded due to the such people's monologues. According to a professional subject, some autistic young adults prefer to be surrounded only by neurotypical people.

8 Discussion

Differences in cognitive mechanisms might result in different assumptions about the nature of successful communication. How do interlocutors with different sociopragmatic, neuro- and sociocognitive characteristics engage in an interaction? We conducted semi-structured interviews with autistic adults and professionals who work with autistic adults in order to understand their perspectives on successful communication and its personal challenges and coping strategies.

Due to cognitive differences, not just autistic, but neurotypical people have their own type of limitations during interactions in which autistic and non-autistic interlocutors participate. Several personal challenges were listed by both groups of subjects. Both autistic and non-autistic (professionals) subjects mentioned that they have challenges as a speaker. Autistic individuals might have difficulties controlling their monologues, finding the appropriate level of formality in a certain situation, representing themselves, asking for help, and sharing their condition in fear of possible stigmatization. For non-autistic subjects controlling their complex and long-winded, ambiguous monologues can be also hard. Perspective-taking abilities are crucial to successful communication and to interpret our partners' intentions. Independently of their neurotype, many of the subjects reported that they sometimes struggle to comprehend the communicative intentions of the other people with different neurotype.

According to one of the professional subjects in an interaction involving autistic and non-autistic people, it can be challenging for them to understand what some behavioral acts of autistic people mean, and whether they have a communicative intention or not. Also, some professionals mentioned that neurotypical people have to take into consideration that some autistic people might have a different way to communicate certain information than a neurotypical individual would expect. For autistic people interpreting implicatures or processing information that is not formulated in a modality suitable for the person, can be challenging. Overcoming these cognitive limitations of comprehending one's intentions and constantly monitoring one's own and the other's communication require a great effort from both the autistic and non-autistic interlocutors.

In order to reach mutual understanding to create the conditions of successful communication, participants practice different interactional managing and coping strategies. On the one hand, they list strategies that affect their own communication, and require independent adjustment of their own communication to the other's communication needs (such as avoiding figurative speech or camouflage). On the other hand, other practices involve expectations towards the other person as well, like requiring feedback or the disclosure of diagnosis. Another 'category' could be the 'category of attitude' in which openness, patience, acceptance, kindness, motivation and knowledge should be involved. Accepting each other's personal limitations, social and communicational barriers is a key feature of successful communication.

All of the strategies, coping mechanisms and attitudes require mental representation attribution abilities. This suggests that not just non-autistic, but also autistic individuals involved in

this study are able to reflect on their metapragmatic abilities, also, they are able to consciously control their communication during an interaction (even if it takes a greater amount of effort). Communication can be most successful if it is created at the minimum cost of mutual efforts with maximum effects, which can be achieved with mutual cooperation.

Despite the interactional boundaries that are present for both autistic and non-autistic individuals, mutual understanding seems to be a common goal. Based on the great varieties of interactional strategies provided by both subject groups in their everyday lives, we can argue that independently of their neurotype, generally, they have the intention of cooperation and communication in interactions involving autistic and non-autistic people. Limitations and strategies characterizing both groups contribute to the social model of Double Empathy Problem.

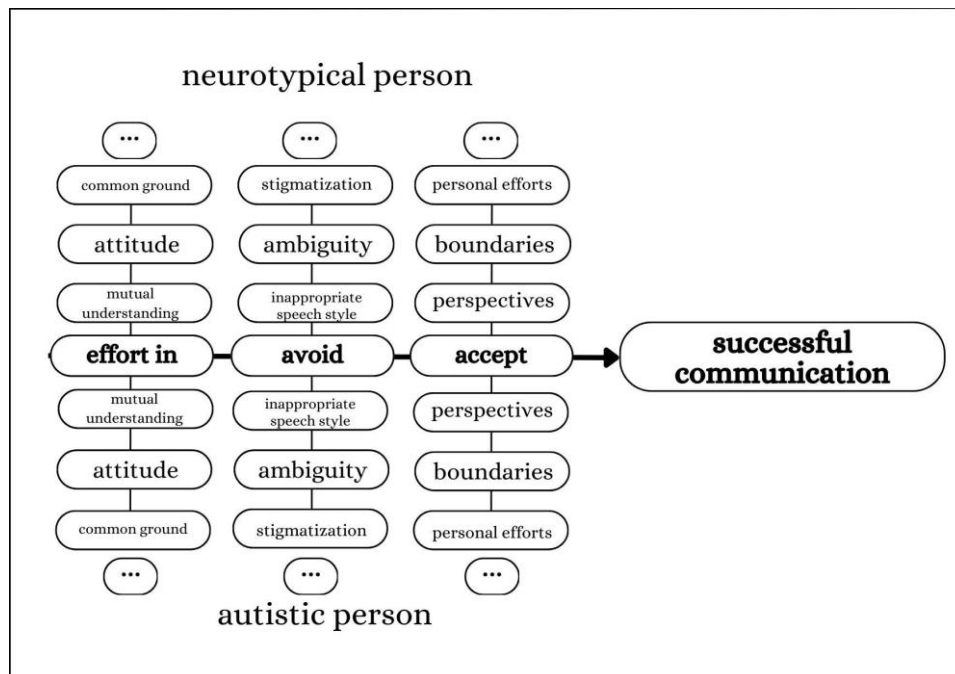


Figure 2. Factors contributing to mutual understanding and barrier-free communication.

Based on the discussion on the interaction between autistic and non-autistic people, a dynamic model of communication should be taken into account. The different perspectives of social behavior can be dependent on the interlocutors' cognitive abilities, their cognitive environment, different mental contexts and several other factors, like personality and the relation between the participants of an interaction. Communication is also dynamic in terms of the challenges and the strategies how human beings manage them on both sides. Focusing on optimal relevance, it is crucial to keep in mind that these different populations might have different contextual effects to be achieved with different effort. As Figure 2 shows acts, such as noticing these efforts, avoiding stigmatizing, accepting boundaries and needs are crucial to provide a barrier-free communicational situation. Based on the experiences of our participants, the main behavioral factors of successful communication that are required from both autistic and non-autistic persons are very similar at first glance, though the nuances of these acts and expectations are inherently different.

9 Conclusion

Based on our results, we can argue that despite the cognitive differences and divergent perspectives, autistic and non-autistic individuals may similarly seek to construct a mutually successful interaction, as presupposed by the dynamic nature of communication. Not only neurotypical subjects but also people on the autism spectrum take their own steps in order to create a successful interaction. Both autistic and non-autistic people might have multiple challenges in an interaction that can be similar or different depending on several factors. The guarantee of barrier-free communication could be explained as a social interaction where various perspectives are considered and personal boundaries are accepted.

Limitation: The data collection took place during the period of the Covid-19 pandemic, which negatively affected the number of interviewees who volunteered. The data collection was finally carried out in an online environment, a small but qualitatively meaningful corpus was gathered. Given that interpersonal communication can have culture-specific features and social norms, in the future it would be worth asking people of other nationalities and different socio-cultures about their thoughts on the success of communication. In addition, even though the professionals involved shared their experience with autistic persons who require more support, it would be worth including these autistic persons or their caregivers in the future.

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