The Construction of Autism: Between Reflective and Background Knowledge

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> Context • Numerous analyses emphasize the historical variability and social construction of the autism category. As a result, many beliefs and stereotypes about autism function unconsciously in social awareness as background knowledge. **> Problem** • We present the results of a survey concerning the social perception of autism and we draw attention to the possible impact of the specific ways in which people with autism spectrum disorder (ASD) are perceived, as revealed in the survey, on how this social identity might be created. **> Method** • A questionnaire consisting of two parts – closed-ended questions and free associations – was used in the survey. 355 participants answered the questions concerning the nature of autism, its causes, sources of information and experiences in contact with people on the spectrum. **> Results** • The results shows that there exists a cognitively interesting divergence between the level of knowledge declared by the respondents, based on credible sources, which is indicative of a positive attitude toward people with ASD, and the more negative attitude seen in the free associations. **> Implications** • Despite the level of social reflective knowledge, relations between people with ASD and neurotypical people seem to be lined with feelings such as fear, anxiety or uncertainty. This should draw attention to the need for a deeper and more conscious analysis of societal beliefs about autism. **> Constructivist content** • The theoretical framework for this survey is social representations theory (SRT), which derives from the constructivist paradigm. By showing the important role of individuals' background knowledge in the construction of autism social representation, the results of the survey confirm the usefulness of the constructivist approach to the analysis of the autism phenomenon. **> Keywords** • **Autism spectrum, constructivism, social perception of autism, reflective knowledge, background knowledge, identity.**

Introduction

Constructivist background of the survey

« 1 » The American Psychiatric Association[1] and the World Health Organization[2] define autism, which according to a current estimate occurs in 1–1.5% of the population, as a neurodevelopmental disorder manifesting itself most often as qualitative dysfunctions in the areas of social interaction, verbal and non-verbal communication, and patterns of thought and behavior that are difficult to modify. With the increasing popularity of the topic in various spheres of public life, autism has emerged in the broader public awareness on a large scale. As a consequence, many stereotypes and myths have grown up around it, which affect the construction of this phenomenon, and consequently, affect the lives of people on the spectrum. For this reason, contemporary movements associated with the autism community try to counteract these stereotypes and hegemonic narratives, aiming at reconceptualizing autism as a different way of functioning, resulting from, among other things, a different-from-typical structure of the nervous system. Thus, their goal is to counteract the understanding of the spectrum as a deficit and to depathologize it in order to reduce social stigma.

« 2 » The survey discussed in this article was conducted within the general framework of social representations theory (SRT) (Moscovici 1973, 1988, 2001, 2008; Markova 1996) and with the use of critical discourse analysis (CDA) methodology – both representing the constructivist paradigm in the landscape of social sciences (Moscovici 1988; Wagner et al. 1999; Walmsley 2004). The main assumption of both SRT and CDA is the existence of a mutual relationship between constructed reality and the way it is presented in different discourses (family, media, academic, literature, medical, self-advocacy, etc.). They also emphasize the active role of language (as a symbolic sphere of society) for the construction of knowledge and perceived phenomena. Both these theories closely follow the basic assumptions of radical constructivism (RC), which, according to Ernst von Glasersfeld, can be described as

> “a possible model of knowing and the acquisition of knowledge in cognitive organisms that are capable of constructing for themselves, on the basis of their own experience, a more or less reliable world.” (Glasersfeld 1984: 39)

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[1] “Diagnostic and statistical manual of mental disorders,” fifth edition, 2013, https://doi.org/10.1176/appi.books.9780890425596

[2] “ICD-10: International statistical classification of diseases and related health problems,” second edition, 2004, https://apps.who.int/iris/handle/10665/42980

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In the present discussion, the relationship between SRT, CDA and RC is crucial, due to its emphasis on the role of the individual observer (and her individual cognitive abilities) in constructing reality and, consequently, the way in which autism is perceived.

« 3 » At this point, it is necessary to explain our use of the concept of "representation." Although this is a key concept in Serge Moscovici's SRT, we agree with radical constructivists who reject it. Typically, the concept of representation is associated with a picture – more or less accurate – of "true reality" in the mind of the experiencing subject. Adopting such a dualistic model presupposes that it is possible to access a mind-independent reality, while at the same time indicating the possibility, if only potential, of acquiring objective knowledge. The concept of representation is opposed by radical constructivists because they deny the possibility of access to "reality itself" and, therefore, the possibility of having its image in the form of a representation. Still, as we try to show, Moscovici's notion of representation is not only compatible with, but even fundamentally consistent with, the radical constructivist perspective. We contrast the traditional understanding of the concept of representation with the understanding described by Gerard Fourez, who sees "representation" not as an imitation of some external reality, but as a substitute – a replacement of one thing by another:

> “[R]epresentation is viewed in terms of one thing being substituted for another thing (but not for a 'thing in itself'). Thus a representation occurs 'in lieu of' (as a substitute for) our experience, much as whenever a person is said to be representing the minister at an event or gathering (that is, 'acting in the minister's stead'.” (Fourez 2007: 260)

« 4 » Another example given by Fourez that is more relevant to the topic of the present article is that of the patient's health record as a representation of the patient's health that allows other actors – with the appropriate conceptual framework, e.g., physicians – to gain insight into the patient's health status and undertake treatment without directly interacting with the patient. Without going into details, the meanings of the concepts constituting such a representation are standardized (even though they do not refer to "reality itself"), which renders them understandable so that other actors can use them as well. Such "representational knowledge" becomes the basis for effective action. This component of enabling efficient agency is a key element of representations understood as substitutes, i.e., as networks of mutually contingent and variable concepts that, without the ambition to explain what the world "really is," "serve[s] the organization of the experiential world" (Glasersfeld 1995: 18). It is in this sense that we speak of social representations of autism. Therefore, they are not mental images of an object that exists independently of the mind of the observer, but rather systems of concepts that are surrogates for the phenomenon called "autism" and that make it possible to relate to, and to take a particular kind of action in relation to the people who are the subject of the phenomenon – in this case, people on the autism spectrum (including the way people with autism relate to themselves). For example, to put it in very general terms, autism (re)presented as a mental disorder will enable and sometimes enforce a particular way of relating to a person on the spectrum, e.g., as a "patient," "person with a problem," "person with limited rationality," etc. By contrast, autism (re)presented as different but equal modi of being-in-the-world, will require efforts to better understand particular ways of and reasons for functioning in people with autism, without introducing a perspective that pathologizes them. Taken this way, "representations by no means serve to produce an image of a preexisting reality" (Fourez 2007: 262).

« 5 » In his 1988 article, responding to criticisms of his theory, Moscovici claims that SRT "from the very beginning, adopts a constructivist perspective" (Moscovici 1988: 211). He also insists from the outset that what makes these representations "social" is not "individual or group contribution" but "that they have been shaped by an exchange and interaction process" (ibid: 219). Therefore, Moscovici's concept of representation exists in the space between what is individually constructed and what is socially constructed, rather than between what is "objectively real" and what is represented (in the traditional sense rejected by radical constructivists). Moscovici explicitly gives voice to our postulated understanding of representation as something unrelated to "reality itself," defining it as an element that constructs what is socially acceptable as "reality":

> “We must therefore rid ourselves of the idea that representing something consists in imitating by thoughts or language facts and things that have a meaning outside the communication that expresses them. There is no social or psychological reality 'as such' […].” (Moscovici 1988: 230)

Analyzing Moscovici's notion of social representations, contrasting it with schemata, Wolfgang Wagner and colleagues point out that:

> “schemata are conceived as representations of reality, similar to a picturing process in people's minds, whereas social representations are conceived as negotiated constructs of social groups. Therefore the latter are out there in the talk and action constituting the social world of the community.” (Wagner et al. 1999: 121)

« 6 » Such an understanding of social representations does not point to a reference to "reality." Rather, it denies the existence of "reality itself" and emphasizes the active role of representations in constructing an individual's world and the fluidity of these constructions. Furthermore, it stresses the importance of representations for the possibility of effective action in the world and assumes the possibility of multiple equivalent worlds of individuals. Also, at the societal level, it explains the possibility of one representation dominating over others at a given time:

> “Moscovici also recognized that this leads to constant (re)negotiation as to what is accepted as reality in any given moment and, due to power differences in the social order, this then provokes conflict and dispute. Certain groups have different degrees of access to the public sphere and have different means with which to present and/or contest particular claims to 'the real,' as we have seen. Those who 'win' the battle over meaning and so the social construction of reality (for the moment – as meanings are constantly renegotiated) are those whose versions of reality are, or come to be, reified and legitimized as what is socially accepted as 'reality'.” (Howarth 2006: 75)

« 7 » In this article, we lean towards a broader than original conception of RC (and the individual observer). That is, the role of the observer in the process of knowledge construction is extended beyond the biological (neurobiological) context to socio-cultural aspects, as "observers are enmeshed in social communities and their respective cultural conditions" (Schmidt 2010: 9).

« 8 » According to von Glasersfeld, the fundamental principles of radical constructivism are:

> "1 • Knowledge is not passively received either through the senses or by way of communication;
> • knowledge is actively built up by the cognizing subject.
> 2 • The function of cognition is adaptive, in the biological sense of the term, tending towards fit or viability;
> • cognition serves the subject's organization of the experiential world, not the discovery of an objective ontological reality." (Glasersfeld 1995: 51)

« 9 » Although they do not state it directly, these RC principles are used by the researchers in the contemporary strand of critical autism studies (CAS) that focuses on analyzing the transformations of individual, and consequently also social, understandings of the concept of autism. One of the basic assumptions underlying the CAS research program is the belief in the processual, constructivist nature of knowledge about the autism spectrum and the ways of perceiving it in society, which have been (and still are) subject to change as a result of the clash of various discourses. The way in which this knowledge is produced by observers, who are entangled in numerous social and institutional networks and interactions, is influenced by the shape of dominant discourses on autism at a given time, and is simultaneously entangled in the processes of modification of these narratives. This belief makes it possible, on the one hand, to critically analyze hegemonic social narratives and associated relations of power and subordination, thus to consciously de-construct them. On the other hand, by taking advantage of this fluidity, CAS becomes a tool for their re-construction in a different shape from originally. The aim of CAS analyses is not to "ontologize autism," or to discover one "true" nature of this extremely diverse and complex phenomenon, but to construct its image and social understanding in such a way that it challenges the attempts to define what autism "really is," showing the diversity of human ways of being-in-the-world, emphasizing the equality of various ways of organizing the experienced world, and giving full meaning to seemingly senseless and "abnormal" behaviors. As Humberto Maturana and colleagues put it:

> "Notwithstanding this, we cannot but be aware that what seems to us to be an inadequate behaviour in a particular social domain is not inadequate in a different one, and that neither social domain is perverse." (Méndez, Caddou & Maturana 1988: 154)

Thus, CAS looks closely at the dominant narratives about autism, the ways in which knowledge is produced, and the conditions in which specific "epistemic communities" that produce particular kinds of knowledge about autism are formed and how they function in a given socio-cultural context (O'Dell et al. 2016; Davidson & Orsini 2013).

« 10 » With regard to autism, the constructivist nature of this knowledge might be seen in the history of variable medical categorization (as psychosis, mental illness, disorder or disability, Płatos 2018) or in the medical image of autism spectrum disorder (ASD) as a deficit that needs to be treated, as opposed to perceiving it in terms of diversity, i.e., something different and not inferior to the neurotypical[3] state (O'Reilly, Lester & Muskett 2017). More frequent attempts to describe autism as a condition of the body (autism spectrum condition, ASC) rather than a disorder can be observed. This is yet another element intended to construct a new way of perceiving autism – one that moves away from a rhetoric pathologizing it towards a rhetoric that emphasizes the variety of conditions of our organisms (Rynkiewicz, Janas-Kozik & Słopień 2018).[4]

« 11 » Adopting constructivist epistemological assumptions allows the researcher to see objects in her reality not as absolute, mind-independent entities but as entities that are constructed in a social context (O'Reilly & Lester 2017). When it comes to autism spectrum, it means that apart from its medical etiology, it critically examines how autism is presented through different kinds of discourse and, in consequence, the position of people with autism within society. For example, critical analysis of "normal" and "abnormal" discourse may show us that "norms" are not "natural laws" but merely social constructs – thus it may change the optic of viewing autism from a kind of deficit (deviation from the norms) to a different way of coping with and perceiving the world (different norms for different groups of people) (O'Reilly, Lester & Muskett 2017). The radical constructivist perspective, as shown by Maturana and colleagues (Méndez, Caddou & Maturana 1988) is of great use in analysing phenomena such as "mental health" or "mental

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[3] In this article, we use the term "neurotypical" to refer to people who are not on the autism spectrum. This is a term that emphasizes the different structure of people's nervous systems. Although we are unable to specify today whether there exists a fully "typical" nervous system, we believe that this perspective is rather axiologically neutral. This is because, as the contemporary neurodiversity movement claims, differentiating between "neurotypical" and "neuroatypical" people instead of "people without the disorder" and "people with the disorder" changes the way in which people with autism are perceived by the rest of the society and makes it possible to get rid of value-laden categories such as "disorder." This is the way of conceptually shifting from the "perspective of deficit" to the "perspective of difference" in which autism can be constructed. It thus helps to reduce stigma. However, we are aware of the debate in the scientific and self-advocacy community on the terminology used to describe people with autism and people without autism. The proponents of all terms ("person with autism," "autistic person," "neuroatypical," etc.) have their own strong arguments. This issue is an excellent example of how discourse can shape the identity of individuals, and it would be worthwhile to look into it more closely in studies on contemporary constructivism.

[4] See also presentation "ASD vs. ASC: Is one small letter important?" by Simon Baron-Cohen, at the 14th Annual International Meeting for Autism Research (IMFAR 2015). Salt Lake City UT. The recorded presentation was retrieved on 10 January 2021 from https://insar.confex.com/insar/2015/videogateway.cgi/id/693?recordingid=693.

problems" in general. It thus contributes to improving not only theoretical stances, but also the clinical practice of mental-health professionals by revealing the fluidity of such social constructs and refuting claims of objectivity and "objective truth." In the domain of mental health, this leads to better understanding of different parties. It thus helps to depathologize different human conditions and reduce stigma. This is, of course, of great importance for the way in which people belonging in a specific social group construct their own identity (Bagatell 2007). A person who considers herself as diverging from common norms – and thus as being removed from society – thinks one way. A person whose otherness is seen as a function of social diversity thinks another way.

« 12 » According to Moscovici's theory, all social representations, i.e., meanings and senses that are given to particular phenomena by society, are fluctuating permanently due to the constructive activity of individuals in a particular social group. Similarly to Moscovici, Wagner et al. emphasize a meaning of "representation" that is different from the conventional one (which defines it as an image of some external reality):

> “[…] schemata are conceived as *representations of reality*, similar to a picturing process in people's minds, whereas social representations are conceived as *negotiated constructs of social groups*. Therefore the latter are out there in the talk and action constituting the social world of the community.” (Wagner et.al. 1999: 121, emphasis in original)

This variable characteristic of social representations, which are "always in the making, in the context of interrelations and actions that were themselves always in the making" (Moscovici 1988: 219), enables researchers to examine changes in common knowledge and identify problematic or discriminating areas of social discourse, thus enabling the potential to change their social realities and the position of individuals in it.

« 13 » Similar to the basic assumptions of SRT, the goal of critical discourse analysis is to inquire about how certain thought patterns are determined in given groups and how it happens that they are strongly and imperceptibly naturalized and take root in social awareness (Duszak & Fairclough 2008).

Autism as a social construct

« 14 » The constructivist approach to the autism spectrum, as well as categories and terms such as "mental illness" or "normality," generally encourages more and more scholars to investigate these topics. The further these investigations go, the more the social and institutional influence on shaping the image of these groups of people is discovered, emphasizing the role of these studies in improving the happiness, autonomy, and wellbeing of people (Milner 2012). This improvement occurs mainly due to the overthrowing of many stereotypes and false beliefs that have arisen around autism over the past 70+ years, and which, despite much scientific evidence, are still deeply rooted in shared knowledge and social awareness. If it is assumed that "learning is performed as a self-organizing process of cognitively autonomous individuals and not as an information transfer or an implementation of knowledge into the pupils' cognitive systems" (Schmidt 2010: 7, see also Glasersfeld 2001), this could mean that stereotypes and prejudices are an important aspect of an individual's identity construction. Such a claim is supported by Hugh Gash's analyses of learning processes from the perspective of RC, indicating that "an individual's prejudices are personal constructions with social implications for the individual's identity and group membership" (Gash 1992: 150). Consequently, stereotypical ways of thinking about a phenomenon such as autism are often extremely difficult to modify or remove because they are deeply rooted in an individual's social construction of identity, which seems to be confirmed by the results of the survey we present below.

« 15 » For most of its history, since the publications of Grunya Suchariewa (Manouilenko & Bejerot 2015), Leo Kanner and Hans Asperger, autism has been presented – both in medical and social discourse – as a form of disorder, an abnormal state deviating from socially sanctioned norms (O'Reilly, Lester& Muskett 2017; Płatos 2018). To the contrary, the autism community (advocacy and self-advocacy movements, foundations, and other social organizations fighting for ASD-people's rights, critical scholars, etc.) has been trying to change this perspective for the past 10 to 15 years. This community advocates moving from perceiving ASD as a deficit to viewing it as a different form of experiential reality – which is not well adapted to a social environment created mostly for neurotypical people (Elster & Parsi 2020; Jongsma & Schicktanz 2020; McCoy et al. 2020; Ne'eman & Bascom 2020; Richman 2020). That is why the term "neurodiversity" was forged (Brownlow 2010; O'Dell & Brownlow 2015).

« 16 » While it is not a goal of the neurodiversity movement to discredit or deny the biological foundations of autism, its aim is to show how particular ways of representing autism can be reflected in the collective background knowledge of laypeople, and thus what negative consequences they might have for people with autism. Unfortunately, this "medicalized" discourse, which emphasizes what people on the spectrum *cannot* do instead of what they *can* do, is reflected in social behavior and results in negative labelling and stigmatization processes (Goffman 1968; Weinstein 1983). As Mark Osteen stated:

> “I believe we need to explore how various institutional relationships, expert authorities, and bodies of knowledge have sought to represent, divide, understand, and act on biologically based, but socially shaped and expressed, behavioural and cognitive differences such as autism.” (Osteen 2009: 79)

« 17 » The aim of the survey discussed below was to analyze the social perception of autism spectrum and to see whether there was a difference between the representation of autism at the level of conscious, reflective knowledge and unconscious background knowledge (Markova 1996). Additionally, we draw attention to the possible impact of the specific ways in which people with ASD are perceived, as revealed in the survey, on how this social identity might be created. The analysis of the survey results from a constructivist perspective reveals that our attitudes toward people on the autism spectrum are not always as unequivocal and rationally controlled as it would seem. Having laid out the basic theoretical assumptions, we will now proceed to present and discuss the methodology used in the survey as well as the results obtained.

Method

« 18 » The qualitative approach, which allows for an in-depth and individualized analysis of a given phenomenon or process (e.g., Spink 1993), is frequently applied in research on social representations. However, researchers increasingly opt to include the quantitative approach and combine these two research strategies, treating them not as opposites but rather as mutually complementary (Creswell 2013). This survey combines the qualitative and quantitative approaches, making it possible to re-construct a multi-dimensional representation of autism (Krasuska-Betiuk & Zbróg 2017) based on the respondents' knowledge as well as their convictions and feelings elicited by specific questions asked by the researchers, along with the less rigid free associations that the respondents were asked to formulate.

« 19 » The survey was conducted online from March to May 2020. There were 355 participants – volunteers who responded to an advertisement placed on Facebook. The research group was dominated by females (N = 274, 77%), 75 of the respondents were male (21%), three people declared a different gender, while another three chose not to answer this question. The place of residence was a factor that did not differentiate the respondents as much as gender did – the largest part of the group lived in cities of above 50,000 and below 500,000 residents (N = 138, 39%). For a more detailed description, see Table 1. A vast majority of the respondents declared that they had a university degree (N = 257, 72,5%), while nearly a third declared that the highest level of education they had completed was secondary school (N = 94, 26.5%). A question asking about familiarity with or the presence of someone with ASD in close family was of importance, according to the authors. A third of the respondents (34%, N = 120) said that they did not know anyone with ASD. A third responded that they had someone with ASD in their more distant acquaintances (33%, N = 118). To summarize, the group largely consisted of female, educated respondents living in cities and having experience of contact with people with ASD.

« 20 » A questionnaire consisting of two parts was used in the survey. The first part included single- or multiple-choice test questions, along with questions to which the respondents selected answers on a Likert scale. Issues covered in the first part included the basics of autism, i.e., the nature of the spectrum, its causes, sources of information, along with more subjective issues such as experiences of the respondents in their contacts with people with ASD, e.g., the feelings and impressions resulting from such contacts, and the respondents' impression about specific nature of these people with ASD. The results were analyzed quantitatively, using spreadsheets and SPSS. The survey's second part was based on free associations, making it possible to gather data without guiding, suggesting or forcing responses (Krasuska-Betiuk & Zbróg 2017). The free associations method makes it possible to observe and analyze hidden background elements (conscious or otherwise) that can be thickly veiled or left unsaid in reflective statements or, in our case, in the earlier survey questions (Ferrara & Friant 2015). In the survey, the respondents were asked to mention three words that first came to mind when thinking about autism. The 355 respondents provided 969 free associations (some associations were rejected as illegible or incomplete, e.g., strings of letters or syllables).

« 21 » The free associations collected in the survey were categorized thematically by members of a focus group (Silva 2012) and were subjected to a lexical and metric analysis carried out by the survey's authors. Due to the amount of data collected and a focus largely on the categorization and the frequency of expressions in general, ranking the responses was ultimately ruled out (researching the order of the frequency in which they appeared in the statements).

« 22 » As a result of work in the focus group, it was possible to build a multi-dimensional image of the autism spectrum. Five female participants were invited to the focus group. The participants were asked to familiarize themselves with all of the expressions collected in the survey, sorted alphabetically, and then to create categories that would allow the data to be ordered. Proposals by the focus group members were then unified, resulting in a final categorization and making it possible to conduct lexical and metric analyses. This work consisted of calculating the frequency with which specific expressions appeared. Those that received the highest number of mentions in the entire group were considered elements of the representation of autism most strongly embedded in societal thinking (background knowledge). The last activity carried out by the survey's authors was an attempt to indicate which of the terms (free expressions) could be considered stereotypical. The results of these analyses are described in the next section.

Gender	
Female	77%
Male	21%
Other	2%
Age	
Youngest	10 years
Oldest	70 years
Average	35.5 years
Education	
Primary	1%
Secondary	26.5%
Higher	67%
PhD or higher	5.5%
Place of residence	
Village	22%
City of up to 50,000 residents	15%
City of up to 500,000 residents	39%
City of over. 500,000 residents	24%
Do they know a person with ASD?	
No	34%
Yes, distant family or friend	33%
Yes, close family or friend	25%
Other response	8%

Table 1 • Data concerning the survey respondents.

What is autism? (Single-choice)	
Neurodevelopmental disorder	84%
Intellectual disability	7%
Somatic disease	5%
Mental disease	1%
Other response	3%

Table 2 • Responses to Question 1.

What is the cause of autism? (Multiple-choice)	
Unknown	72%
Genetic factors	47%
Medicines taken by the mother during pregnancy	10%
Vaccines	7%
Environmental pollution	6%
Intensive external environment	5%
Incorrect intestinal flora	5%
Emotional ties with parents	2%
Other mental factors	5%
GMO food	1%

Table 3 • Responses to Question 2.

Which traits are most closely associated with a person with ASD?				
Traits Level 1 ⟷ Traits Level 5		Deviation	Mean deviation	Standard deviation
Honesty	Dishonesty	−1.25	1.85	1.088
Specific appearance	No specific appearance	+0.87	3.87	1.394
Analytical thinking	Abstract thinking	−0.77	2.33	1.260
Openness to contacts	No openness to contacts	+0.70	3.70	1.282
Empathy	Lack of empathy	+0.54	3.54	1.357
Living in suffering	Ordinary life	−0.31	2.69	1.145
Aggression	Gentleness	−0.11	2.89	1.036
Alienation	Openness	−1.23	1.77	1.124
Fear of the world	No fear of the world	−0.82	2.18	1.123
Exceptional abilities	Average abilities	−0.71	2.29	1.169
Intelligent	Unintelligent	−0.64	2.36	1.117
Clumsiness	Normal movements	+0.32	3.32	1.297
Independence	No independence	+0.29	3.29	0.999
Good friend	Poor friend	+0.03	3.03	1.165

Table 4 • Responses to Question 3: Which traits are most closely associated with a person with ASD? (Select from a 5-level scale, difference between the mean of the Likert scale (3) and means of the traits' scales is presented in every example). Deviation = deviation from the center of the scale: "–" = toward 1, "+" = toward 5.

Results

« 23 » We first present the results of quantitative analyses, i.e., the responses to eight questions, in Table 2–9. Then we discuss the results of our research into the respondents' associations with the word "autism."

« 24 » To check whether the values provided by the respondents to Question 3 (see Table 4) significantly deviated from the mean, the One Sample *t Test* on SPSS was used (the scores were compared with the mean of the Likert scales). As can be seen in Table 10, differences on all of the scales aside from the "aggression-gentleness" and "good friend – weak friend" turned out to be statistically significant.

« 25 » Next, free associations provided by the respondents in the last question of the survey were analyzed (Table 11–12). The respondents were asked to list three words that first come to mind when thinking about autism. All of the associations, ordered alphabetically, were then discussed by the focus group. The discussion was intended to create principal categories and assign each of the words to them. Each member of the focus group prepared their own proposed categorization, which were then unified into a final list of categories. The selected categories were:

1. Characteristic (of a person) – positive terms (traits, behaviors, etc.),
2. Characteristic – neutral terms (traits, behaviors, etc.),
3. Characteristic – negative terms (traits, behaviors, etc.),
4. Relations with surroundings/reactions of the surroundings (how person with ASD relates with surroundings or how surroundings, e.g., other people, reacts to a person with ASD),
5. Social and cultural context (media, literature, arts, widely understood culture),
6. Biomedical context (industry jargon, medical descriptions, etc.).

Discussion

Closed-ended questions

« 26 » We will now discuss the results of analysis by referencing each of the questions in the order they were posed.

« 27 » In the first question (what is autism?), the option "neurodevelopmental disorder" was the most frequently chosen (84% of the respondents). This frequent choice is optimistic because this is a response in line with contemporary knowledge and diagnostical classifications. This terminology is slowly changing, and the term "autism spectrum conditions" is gradually entering everyday language (Rynkiewicz, Janas-Kozik & Słopień 2018), thus moving away from an unequivocal classification of autism as a disorder. This has immense significance when it comes to developing the social and individual identity of people with autism. When society stops talking about them as being in the category of "people with disorders" and starts noticing the specific way in which they function in the world (being-in-the-world), then what follows is a drastic shift in the way in which this group of people is perceived, both by the neurotypical part of society and by themselves (the way of thinking of a person with autism about herself and her place in the network of social relations). Unfortunately, 7% of the respondents identify autism with intellectual disability, which reveals common and erroneous thinking about the spectrum and intellectual disability as inextricably linked. Autism and intellectual disability are two significantly different conditions. However, in social perception they are often conflated, and the autism spectrum is understood as a condition in which cognitive abilities are restricted. This is definitely an incorrect image, as people with autism can have an IQ score that is average, lower than average or higher than average.

« 28 » It should be noted that in the second question, concerning the causes of ASD, physical and biological factors were chosen far more often than psychological factors. This question also generated responses that indicated vast knowledge and awareness among the respondents regarding the autism spectrum. There are many hypotheses regarding the causes of autism and a lot of data that is backed by research on large groups. The findings range from the role of various substances in the mother's organism during pregnancy, e.g., serotonites (Harrington et al. 2013), zinc (Babaknejad et al. 2016), testosterone (Whitehouse et al. 2012), or the general state of the mother's health, e.g., PCOS (Katsigiani et al. 2019), depression (Morales et al. 2018), genetic relationships (e.g., Almandil et al. 2019), through to various environmental factors (Karimi et al. 2017). It is difficult to form unequivocal and clear conclusions based on reading scientific data. The multitude and variety of factors that have been confirmed as being related to autism are problematic and make it impossible to unequivocally answer the question of what makes some of us "more autistic" than others, and why.

« 29 » In Question 3, the respondents chose which opposing characteristics better fit people with ASD. The results were rather stereotypical convictions. Considering neuroatypical people to be not empathetic, hardly eager to make contact, or having exceptional abilities is unjustified, as it concerns some people only, rather than everyone diagnosed with autism.[5] These stereotypical images were heavily accented in the free associations.

« 30 » Question 4 concerned "curing" autism. The thesis that autism can be cured, which elicits many controversies in the expert community and in families of people with ASD, is unjustified, according to researchers and scientists. Autism is not a disease that can be cured. According to diagnostical classifications, it is a neurodevelopmental disorder and according to the latest findings – a set of traits[6] that are an integral part of a person until the end of her life. Of course, with support activities (therapy, education, environmental modification) the well-being of such a person can be massively improved, and it is possible to support her in participating in professional and relational life in an optimal manner that is also socially acceptable. However, it does not mean that this person will ever stop being autistic. Despite this, over two dozen respondents (27 = 8%) stated that autism can be "cured." This is a large number, which shows that information on autism within social awareness is inconsistent and in some cases contradictory to current scientific knowledge. Unfortunately there are also numerous specialists who claim that they can "cure" autism, which is unjustified and inflicts harm on the potential buyers of their services – the families of people with ASD.[7] Most importantly, neuroatypical self-advocates say that they do not want to be subject to "curing" or being "cured."[8] Rather, they want to be supported in healthy development, taking into account their sensitivity and their different manner of processing information. A significantly large group of the respondents stated that autism is not curable (92%). Of course, this response is not synonymous with an attitude of respect, understanding and acceptance of the otherness of neuroatypical people. However, it is in line with current scientific knowledge and it is socially desirable, as it combats a false belief about ASD.

Can autism be cured?	
Yes	8%
No	92%

Table 5 • Responses to Question 4.

How do people most frequently react to contact with an autistic person? (Multiple-choice)	
Anxiety	65%
Compassion	50%
Reluctance	43%
Pity	33%
Indifference	27%
Interest	19%
No special reaction	12%
Willingness to help	11%
Acceptance	5%

Table 6 • Responses to Question 5.

« 31 » Question 5 in the survey concerned feelings and responses elicited in the participants when in contact with a person on the spectrum. The question contained nine possible answers, and the respondents could choose more than one. The most frequent (65% of the total) was "anxiety," meaning that a large proportion of the respondents

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[5] See, e.g., https://www.spectrumnews.org/opinion/viewpoint/people-with-autism-can-read-emotions-feel-empathy, https://www.spectrumnews.org/features/deep-dive/how-people-with-autism-forge-friendships, and https://www.spectrumnews.org/features/deep-dive/extraordinary-minds-the-link-between-savantism-and-autism; accessed 17 December 2020.

[6] https://www.autism.org.uk/about/what-is/asd.aspx, accessed 7 August 2020.

[7] On this subject, see various media publications. In Polish: https://wyborcza.pl/TylkoZdrowie/1,137474,16466065,Tajemnice_umyslu__Autyzm_mozna_wyleczyc.html and https://pubmedinfo.org/wyleczeni-z-autyzmu. In English: https://www.youtube.com/watch?v=swRBOlPKsX8 and Sitholey, Agarwal & Pargaonkar (2009).

[8] See statement by Katja Schrödinger, one of the first ASD self-advocates, that "a cat is not a broken dog," and that people with ASD are not broken versions of neurotypical people https://kobieta.interia.pl/raporty/raport-autyzm-bliski-daleki-swiat/artykuly/news-kot-to-jest-kot-a-nie-zepsuty-pies,nId,2446127, accessed 7 August 2020).

If you were searching for information about autism, which sources would you use? (Multiple-choice)	
Scientific articles	74%
Blogs by parents of autistic kids	64%
Psychologist or pedagogue	49%
Medical specialist	43%
Non-scientific articles	22%
Discussion groups	16%
Parenting websites	7%
Other	4%

Table 7 • Responses to Question 6.

Where do you encounter autism-related content? (Multiple-choice)	
Social media	51%
Talks with friends	46%
University or school	33%
Online forums	31%
Television	27%
Print media	27%
Streaming websites	19%
Other response	10%
I do not encounter this topic	3%

Table 8 • Responses to Question 7.

How frequently do you encounter information about autism in comparison with previous years?	
More frequently	72%
The same	19%
Less frequently	6%
No encounters	3%

Table 9 • Responses to Question 8.

are anxious about having direct contact with ASD people. This is an interesting and unsettling conclusion from the viewpoint of social awareness and one that deserves to be examined in greater detail in further research. According to half of the respondents, contact with a person with autism also elicits compassion. Regardless of the overtone, these responses are not supportive and empowering for parties on both sides of the relation. Anxiety or reluctance but also compassion may cause one of the parties to withdraw and make it impossible to build a relation in a partner-like manner based on exchange and reciprocity. When we are afraid of someone or feel antipathy toward someone, we do not want to meet with, talk, or contact her. It may sometimes be similar when we feel compassion. Of course, this is an emotion that encourages help, but it may put the other party in a lower, needing, passive position – which also makes it more difficult to maintain parity between the two sides. Some of the other responses also do not inspire optimism in thinking about the interactions of people with ASD with neurotypical people. One-third of the responses concerned pity that manifests itself in contact with a neuroatypical person. Indifference was selected nearly the same number of times (27%). An option that elicits positive feelings ranked sixth (being interested – 19%). Only a small proportion of the respondents (12%) stated that they pay no attention to such contacts. A similar group wants to help people with ASD (11%). It is somewhat surprising that just 5% of the answers showed acceptance of ASD people. This result shows that despite knowledge about autism, some familiarity with the topic and contact with ASD people, positive feelings and responses are far less frequent than negative ones. It seems that it would be interesting and worthwhile to expand on this issue and attempt to specify its causes in further studies. It also seems that this result is a direct argument for continuously creating all sorts of social campaigns for getting society familiarized with people on the spectrum and promoting self-advocacy movements that make it possible to meet and understand the neuroatypical world.[9]

« 32 » Questions 6–8 in the survey were related to the sources of information on autism that were preferred by or available to the survey participants. To find substantive and credible data on autism, the survey par. ticipants were most likely to reach for scientific papers (74% of the responses). It might be worth contemplating what type of publications are preferred by the respondents and what sources are the most frequently used (websites with foreign papers published in professional journals are often not available to the average reader). Examining this topic in greater detail and verifying the quality of content used by the respondents can be the object of further study in this field. This result, which indicates a rational approach to information sources, based on contemporary knowledge and science, unfortunately contrasts with the results of analysis of pre-reflective free associations. The difference seems to indicate the existence of a cognitively interesting situation of a "split" between reflective and pre-reflective (background) convictions. This thesis is also in line with SRT assumptions as to the nature of shared knowledge and the manner in which scientific knowledge diffuses into common knowledge.

« 33 » In the question about where the respondents find information, the responses were distributed slightly differently. Half of the responses indicated social-media websites, while slightly less than half (46%) selected talks with friends. Over one-third of the participants acquire this information in university lectures or school lessons (33%), as well as in online forums and discussion groups (31%). In the previous question, unprofessional sources, including online sources, were less trusted by the respondents. This means that although these sources offer a lot of news, the survey respondents do not consider them sufficiently credible and valuable. Further down in terms of popularity were the media (television and print – both responses 27% each). Just under one-fifth of the respondents obtain information using services such as Netflix, HBO GO, etc. (19%). This seems to be related to the growing popularity of autism themes in TV series and other shows (e.g., "Atypical," "The Good Doctor," "Love on the Spectrum"). A similar number of respondents declared that they obtain information during social or cultural

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[9] E.g., AutismTEAM Foundation, https://autismteam.pl and https://www.facebook.com/autismteam

Test for One Sample
Tested value = 3 (mean of the Likert scales)

	t	df	Significance (two-tailed)	Difference in averages	95% confidence interval for difference in averages	
					Lower boundary	Upper boundary
aggression ⟷ gentleness	–1.947	354	.052	–.107	–.22	.00
empathy ⟷ no empathy	7.508	354	.000	.541	.40	.68
Specific appearance ⟷ no specific appearance	11.764	354	.000	.870	.72	1.02
intelligent ⟷ unintelligent	–10.835	354	.000	–.642	–.76	–.53
exceptional abilities ⟷ average liabilities	–11.399	354	.000	–.707	–.83	–.59
suffering ⟷ ordinary life	–5.100	354	.000	–.310	–.43	–.19
alienation ⟷ openness	–20.674	354	.000	–1.234	–1.35	–1.12
openness to contact ⟷ no openness to contact	10.304	354	.000	.701	.57	.84
clumsiness ⟷ ordinary movements	4.705	354	.000	.324	.19	.46
good friend ⟷ weak friend	.501	354	.617	.031	–.09	.15
independence ⟷ no independence	5.474	354	.000	.290	.19	.39
fear of the world ⟷ no fear of the world	–13.753	354	.000	–.820	–.94	–.70
honesty ⟷ dishonesty	–19.791	354	.000	–1.144	–1.26	–1.03
analytical thinking ⟷ abstract thinking	–10.067	354	.000	–.673	–.80	–.54

Table 10 • Results of analysis of statistical significance of differences between scales in Question 3 of the survey and mean score.

events. 72% of the respondents encounter autism-related content more frequently than several years ago, which seems to indicate that social educational and information campaigns carried out in recent years have been successful. Over the past few decades, much has changed in thinking about and understanding autism, also in Poland.[10] In the 1990s, few specialists were able to diagnose autism, and even fewer could diagnose Asperger's Syndrome. There was almost no talk about autism among girls and differences due to gender (Werling & Geschwind 2013; Nguyen et al. 2020; Haney 2016), although the first individual research studies had been published much earlier (Lord, Schopler & Revicki 1982). In recent years, the topic of autism has become very popular among researchers and practitioners, thus support available to people with ASD has also considerably expanded. Thanks to initiatives by self-advocacy groups, the image of a neuroatypical person constantly evolves, and many societies are becoming more tolerant and open to otherness. The results of this research show that the level of knowledge in the selected group of participants is high, although potentially hurtful stereotypes can still be found. Moreover, autism still raises concern within society, and people with ASD appear to elicit more negative feelings than sympathy.

Analysis of free associations

« 34 » The number of expressions (as listed in Table 11) differed vastly between categories, making it possible to draw initial conclusions on the social perception of autism. Category 3, associated with negative expressions, had the highest number of mentions (410). Category 2 (neutral) had 238 expressions. Category 6, concerning professional medical descriptions, had the third-highest number of expressions (121). The finding that the category with negative expressions had by far the highest number of them is hardly encouraging and shows that autism is still rather negatively perceived by society. The expressions used by the respondents that were classified in this category included (in alphabetical order): aggression; alienation, anxiety; apprehension; asociality; barrier; being isolated; being lost; being withdrawn (in one's own world, in one's self); difficult contact with people; difficulties; distance; hardship; helplessness; hyperactivity; hypersensitivity; indifference; isolation; lack of communication; lack of contact, including eye contact or with surroundings; lack of empathy; lack of understanding; loneliness; nervousness; painfully honest; problem; restrictions; sadness; scream; social problems; suffering; weird; weirdo; withdrawal. Moreover, many of the more frequent expressions were in contradiction with scientific knowledge and current research on autism. Rather, they were more in line with colloquial knowledge that has been popularized by the media. This was especially visible in Category 6 – professional terms. The expressions appearing

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[10] See for example https://www.autismcenter.org/then-and-now-look-autism-over-last-20-years

Number of terms in each category			
		Total number of terms	Number of terms after removing repetitions
1	Negative terms	410	204
2	Neutral terms	238	129
3	Biomedical context	121	52
4	Positive terms	105	62
5	Relations with surroundings/reactions of the surroundings	66	35
6	Social and cultural context	29	20

Table 11 • Results of quantitative analysis of free associations.

there included: disease; disorder; echolalia; fixation; mental disorder; neurotransmitters; pain; savant; sick; stereotype; stimuli; therapy; vaccines. Interestingly, the image of autism that emerges from the expressions mentioned by the respondents is different from the image that emerged in the first part of the survey – closed-end questions. It had seemed that the respondents had wide and credible knowledge of autism, and any irregularities appeared in singular, infrequent cases. However, an analysis of the free associations revealed a different perspective.

« 35 » Also of significance was an analysis of the most frequent expressions (provided by the largest group of respondents). The most frequent expressions listed in Table 12 create a much less positive view of social awareness of autism. If we tried to reconstruct, on their basis, the most popular ways of thinking about people with ASD among the respondents, we would get an image of a lonely individual isolated from society, "closed-off in her own world" – and thus misunderstood, stigmatized and left to herself to deal with problems. If we add to this – also frequently selected – aggressive behavior, anxiety about the world and anxiety that others feel about her or the "otherness" of such a person, then it is clear that this image is not only far from being accurate for a large proportion of the ASD population but also far from being an acceptable, inclusive attitude toward neuroatypical persons. Moreover, the very frequent association of autism with a disease and disability leads to further stigmatization of people on the spectrum, and to perceiving them through the prism of their deficits and imperfections, a perception that – especially in the case of disease – can have serious consequences in the form of encouraging dangerous home "therapies" intended to "cure" autism. Even if society already has a large body of knowledge, it does not mean that the way the members of society think about people with ASD is aligned with this knowledge. We can once again note that the image of autism that emerges from this description is rather negative and based on incorrect and/or generic beliefs ("disease," "intelligence," "aggression").

« 36 » These attitudes toward people with autism, aside from obviously negative consequences such as a growing distance between the members of the neurotypical and neuroatypical social groups, may have a negative impact on how people with ASD perceive themselves – as entities incapable of establishing long-lasting social ties. This type of attitude is also self-confirmed through the stereotypes revealed in the free-associations survey, which concern the social isolation of people with autism, thus creating a feedback loop as described by Ian Hacking (2007) and Douwe Draaisma (2009), among others, which increases the alienation of people on the spectrum within society.

« 37 » Further in-depth research on the contradictions observed in this survey between reflective knowledge and knowledge that is not entirely conscious can help us to understand better the social situation of people with autism and, in consequence, in building a more open and tolerant society.

« 38 » One of the important issues related to the social construction of autism is self–illness ambiguity, which is the way a person with autism relates to her own mental states or actions in relation to the diagnosis received (Dings & Glas 2020). Whether a person views autism as part of her personality or as something external to it has enormous implications for her self-understanding and the ways in which she gives meaning and significance to her thoughts and actions. As with many other issues on the autism spectrum, there is no simple, straightforward answer as to what such a relation should look like, and there is ongoing discussion in the community about it. How a person deals with the issue of self–illness ambiguity influences, among other things, whether they perceive themselves as "disturbed" or "different from the majority," or whether they perceive their own diagnosis as "being lost" (when they perceive autism as obscuring something that they have constructed as their "true personality") or as "being found" (many people indicate that the diagnosis has helped them make sense of their own thoughts and behaviors and deal with self-stigmatization) or influences parents' attitudes toward their own children's behavior (whether, for example, when the child exhibits "difficult behaviors" it is "autism speaking" or whether they see these behaviors as part of her character).

« 39 » At the forefront of these disputes is the issue of language used to describe people on the spectrum: whether to use person-first (person with autism) or identity-first (autistic person) language. This is related to general attitudes toward mental disorders, in relation to which a person may be referred to as a person who "has a disorder" or a "disordered person." Proponents of both options have their arguments, and this is not an appropriate place to attempt to determine which is more accurate. We do not lean in either direction since in our opinion this should be a question largely left to the individuals on the spectrum themselves. As the research indicates, different sides of this argument prefer different terms (Kenny et.al. 2016; Bury et al. 2020). The situation is further complicated, today, as movements advocating for a break with classifying autism as a mental disorder at all are gaining ground.

Conclusion

« 40 » The radical constructivist perspective, which was adopted by Carmen, Méndez, Fernando Coddu and Humberto Maturana (1988) for the analysis of clinical psychology practice, turns out to be an extremely important and useful tool that facilitates the analysis and deconstruction of commonly accepted patterns of thinking about mental-health phenomena, both at the individual and social level. Consequences of adopting this perspective, resulting in what Méndez, Coddu and Maturana call "objectivity-in-parenthesis" makes it possible to reveal the socially constructed nature of notions like "mental health problem" or "psychopathology," by showing that they "are social assessments of situations of emotional contradictions that arise through the attempt to satisfy contradictory social expectations that are accepted as objectively legitimate" (Mendez, Coddu & Maturana 1988: 152), emphasizing their interrelated fluidity and context dependency.

« 41 » While not denying the possibility of an empirical (neurobiological) basis for phenomena such as autism or schizophrenia, RC allows for a critique of the current state of shared knowledge, pointing to the fluidity of these categories and their dependence on fluctuating interrelations between multiple observers and the realities they construct through means of communication (Kravchenko 2020). In this sense, RC does not strip such entities of their ontological autonomy at the biological level (as an epistemological stance, it has no ambitions to deny the existence of, e.g., genetic causes of autism), but enables the analysis of the epistemic processes that lead to the constitution of specific and socially accepted meanings of concepts like autism.

« 42 » Furthermore, education about autism (especially early education of school-age children), aimed at building appropriate attitudes and changing stereotypical ways of perceiving people on the spectrum, may be an excellent field for practical implementation of RC-based learning processes and ways of changing beliefs (Gash 1992). Adopting a radical constructivist perspective to analyze social epistemic processes can also provide an important counterbalance to the often dominant role of simplistic reasoning schemes (like heuristics) through which inappropriate and potentially hurtful images of people on the autism spectrum are constructed (Irwin 2020).

« 43 » As Michelle O'Reilly, Jessica Lester, and Tom Muskett state:

> "[…] identifying how ASD is *talked about* across different environments is evidently important for understanding broader social aspects of the diagnosis. This, therefore, opens up a further level at which to consider language, communication, and ASD – that being how the diagnosis is described and represented at a broader socio-cultural level, including within media and popular culture." (O'Reilly, Lester & Muskett 2016: 357, emphasis in original)

« 44 » The manner in which a given phenomenon is perceived and which resources of socially approved knowledge are drawn upon in shaping our daily interactions have an exceptionally strong impact not just on the social image of that phenomenon but also, and perhaps even more importantly, on how people in a given category – in this case, people with ASD – think about themselves and construct their own identity, both individual and social. Of course, this identity construction process is rather complex and identity construction trajectories are not the simple linear combination of several factors, thus are not easily predictable. As contemporary research shows, when analyzing a phenomenon of "autistic identity" (which is constructed mainly through different forms of communication) the issue of language plays a central role and there are many different perspectives that need to be taken into consideration (Kenny et al. 2016). However, the aim of the discussed survey was rather to check the occurrence of discrepancies between declarative and background knowledge about autism, and not to reconstruct the ways of identity construction. Nevertheless, it would seem that in order to capture and analyze the multi-faceted nature of the autism phenomenon and the numerous – clashing – discourses, narratives, and conceptualizations of the notion, as well as to identify potential models of identity formation of persons on the spectrum under the influence of these factors, a whole range of both first- and third-person perspectives would need to be considered.

Most frequent terms

Term	Number of times used
disease	25
withdrawn	24
intelligence	21
loneliness	21
own world	17
their world	16
alienation	16
isolation	14
apprehension	14
disorder	12
otherness	11
aggression	11
over-sensitivity	10
fear	10
disability	10

Table 12 • Results of quantitative analysis of free associations.

« 45 » The considerable presence of expressions, from the second part of the survey, belonging in the negative category, place autism as a sort of deficit. This means that autism is presented and perceived by many as a type of defect of the organism. According to many self-advocates or neurodiversity proponents it would be preferable for autism to be perceived as an atypical way in which the nervous system is organized and thus a different way of constructing social reality, or even as a specific human condition – which is what the aforementioned movements and organizations affiliated with the ASD community are fighting for these days. In connection with this, people with autism situate themselves as being in a "worse" position than neurotypical people, with a certain "defect" that needs to be "fixed," as can be seen in numerous first-person accounts (van der Cruijsen & Boyer 2020; Nguyen et al. 2020). This state of the matter has a negative impact on how people on the spectrum place themselves in social-relations networks. Of course, it is not our intention to deny that there are a considerable number of people on the autism spectrum who have special needs (medical, therapeutical, educational or other). However, there should be a clear distinction between autism and co-occurring disorders or illnesses, and an understanding that life's suffering, for those on the autistic spectrum, often results not from autism itself, but from co-occurring conditions or from societal misunderstanding of their specific needs and the failure of the environment to accommodate them – which is a postulate raised by many in the autism community. This misunderstanding results in large part from the specific construction of this societal phenomena, which "absorbs" a lot of other co-occurring conditions and makes autism a kind of "umbrella term."

« 46 » The most interesting observation from analyzing the two parts of the survey is a clearly visible divergence between responses provided in the closed-ended questions part and the open part (free associations). According to SRT, factors and convictions that are not entirely conscious, which become embedded in the process of socialization and which very often evade purely reflective and conscious analysis, play an exceptionally important role in building our worldview and the image of various phenomena and social groups.

« 47 » If we therefore assume that the first part of the survey was based mainly on responses that were deliberate, analysis-backed and based on relatively credible sources (as indicated by responses to Questions 6, 7 and 8), while responses given in the second part, concerning free associations (terms that first came to the respondents' minds, without attempting to rationally process them), were reflective of the attitudes and knowledge that were not entirely conscious, then the divergence seems to be in line with SRT.

« 48 » The way in which people with autism construct their social identity is strongly influenced by how they are perceived by the rest of society. This survey shows that this is not always as unequivocal and rationally controlled as it would seem. This leads to an interesting situation, a sort of cognitive dualism. Although, in the first part of the survey, the respondents provided answers largely in line with current popular scientific knowledge (according to which autism is a neurodevelopmental disorder the causes of which are not fully known but are most likely related to genetic factors, and autism is not curable), the second part of the survey, consisting of free associations, revealed beliefs that were vastly different from those found in the first part.

« 49 » In the second part of the survey, negative expressions were the most frequent. The results of this part of the survey present people with ASD largely as individuals who are asocial, suffering, shying away from contacts, "weird," hyperactive, nervous, incapable of independent living, socially isolated, causing problems, alienated from the world of interhuman relations and closed-off in their own world.

« 50 » Of course, despite the dominance of negative terms, this image was offset, although to a much smaller degree, by other less negative opinions. People with ASD were most often thought of as a child, often described as exceptionally gifted, especially mathematically, or even as geniuses, perceiving the world from their own perspective, or as introverts. Also noticed was their difference from the neurotypical part of society, their uniqueness and a certain eccentricity in behavior, sensitivity (including touch), ability to strongly focus on a task or thing, which was also related to living "in their own world." It should be noted here that even seemingly positive stereotypes concerning people with ASD – with the most frequent being the stereotype concerning their unique abilities and above-average intelligence – can have serious consequences. Judging on the basis of the frequency of mentions, these traits, although slightly more present in people on the spectrum than in the neurotypical population, create the misconception that all people with autism should have these abilities. This is not the case, of course. In connection with this, the perception of people with ASD as sorts of "geniuses" often exerts strong social pressure that causes them to feel obligated to fulfil this image society has of them. The inability to do so, in many cases, has a negative impact on their mental state, thus constituting a basis for depression – an exceptionally frequent occurrence among people with autism (Ghaziuddin, Ghaziuddin & Greden 2002; Stewart et al. 2006).

« 51 » An analysis of the terms assigned in this survey to the category expressing relations of people with ASD with society reveals the image of a person with ASD who does not feel accepted, requires help from other people, feels considerably anxious about the world and feels misunderstood. It seems that these observations are largely in line with the feelings reported by a large section of the ASD population, which would confirm that educational programs that raise awareness and sensitivity within society remain essential. Terms assigned to the biomedical context category also had a significant share in the study of free expressions. The large number of these terms appearing among the free associations seems to indicate that people with ASD continue to be perceived by society through the prism of the medicalization of autism. In light of the results of the first part of the survey, in which the respondents largely described autism as a neurodevelopmental disorder, the significant presence of terms such as disease, handicap and disability might be surprising. These not only emphasize the biomedical nature of autism but also do so in a clearly negative manner. Associating autism with this type of rhetoric strengthens the perception of autism as a phenomenon seen through the prism of medical classifications or diseases. This discourse, which has its roots in 19th-century psychiatry, as noted by contemporary researchers, leads to the association of autism with a certain type of deficit that should be removed from the organism (Osteen 2009).

« 52 » Many of the stereotypes indicated in this survey, which are constructed in social awareness through various discourses (media, academic, institutional, etc.), influence the social identity of persons on the autism spectrum, and therefore, influence the way they situate themselves (and how other members of society situate them) in the network of social relations, what roles and positions they take in it (e.g., as patients or individuals "with a mental problem," etc.). As contemporary research shows, the process of "autistic identity" construction is an extremely complex one and depends on many factors, thus describing it from a constructivist perspective would require a sepa-

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rate study (Bagatell 2007; Davidson & Henderson 2010; Anderson-Chavarria 2021). Nonetheless, it is worth noting that some of these stereotypes, such as those regarding “being closed in one’s own world,” “lack of interpersonal relationships,” or “avoiding eye contact,” are also relevant to health professionals.

« 53 » A 2016 survey conducted by the Polish JiM Foundation,[11] which advocates for people on the autism spectrum, found that 76% of children whose parents reported worrying symptoms during a visit to their primary care physician were not referred to a specialist who could conduct a more detailed examination or begin the process of diagnosing autism. One of the reasons for this state of affairs is the social image of a “person on the autism spectrum” as a (simply put) non-verbal individual, “cut off from the world.” Individuals who do not exhibit these, the best-known, characteristics or whose symptoms are insufficiently severe (insufficiently according to the prevailing social stereotype) often do not receive an appropriate diagnosis and related support.

« 54 » Similarly, the same stereotypes may play a negative role in the case of assessments made by medical experts involving people already diagnosed. When persons on the autism spectrum apply for state assistance (financial assistance or therapy), they often undergo various types of evaluations (which vary from country to country), during which experts are supposed to determine the level of the person’s functioning and decide whether or not to grant them assistance. Here, too, the stereotypical image of the “person on the autism spectrum” plays an important role. The judgment that the person assessed does not “fit” into the socially accepted pattern often influences the decision of the medical examiner, who questions the legitimacy of providing assistance or even leads to the negation of the diagnosis (Wodziński 2020). Thus, demonstrating the constructivist and fluid nature of phenomena such as autism, or even mental health more generally, can be beneficial not only in terms of constructing a social identity for people on the spectrum, but also in leading to an improved quality of psychiatric practice.

« 55 » The results obtained, and especially the divergence between the results of the two parts of the survey, show that despite a considerable positive change in the societal perception of ASD, further efforts are needed to educate and raise awareness within society. These efforts will make it possible for information reflectively obtained to be “imprinted” in our cognitive structure at a much deeper level so as to ensure that a social reality constructed together (also based on unconscious knowledge resources) is a place that takes into account the functioning of all individuals living in it.

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The authors declare that they have no competing interests.

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[11] Survey report and its summary can be found at https://jim.org/blog/2016/03/23/premiera-raportu-jim/

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