Autism
Controls
Spectrum
Disease
Autistic person
Aspie
Disability
Identity
Allistics
Challenges
Deficits
Impairments
Neurotypicals
Brain
NOMENCLATURE
PERFORMANCE

Is there a universally accepted term
to refer to Autism?

SUMMARY

page **02**
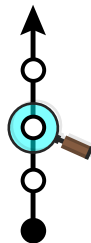
Is there a universally accepted term to refer to Autism?

Editorial Committee

Sur le spectre :

New for you in this number!

Valérie Courchesne Ph.D.

Chief editor

With this issue, we are launching a new series of articles: *Historical Perspective*. Through the articles in this series, we will look at the impact that some of the research has had on the field and attempt to give you an overview of the history of some of the fields in autism research.

Also in this issue, you will find an article that summarizes the debate and research around the terms and language to be used when talking about autism. This is an issue that comes up constantly, both in the community and in research and clinical settings, so we hope that this article will serve as a reference in the future. We have also included several scientific references so that you can refer to them if necessary.

Then, in this issue, we also continue the Science FAQ series, with an article explaining the different research designs, which can serve as a basis for better understanding the designs discussed in the other articles we cover in the magazine. Another article summarizes the state of scientific knowledge about the psychotherapeutic treatment of depression in autism.

Finally, the last article in the issue summarizes two scientific articles that looked at what parents and teachers report as being most positive about their child or student with autism.

I would also like to take this opportunity to encourage you to listen to the 4 Sur le Spectre podcasts, produced by Janie Degré-Pelletier, and available on our YouTube channel as well as several other platforms. **The episodes are conversations between researchers and adults with autism on the topics of parenting, autism in women, relationships and interests and passions.**

You can easily find them by following the links below:

YouTube – https://youtu.be/TNvdZnA4iIQ
Spotify – https://open.spotify.com/show/49CmvRVuU8KKSDeq8SZCC5
Amazon Music – https://music.amazon.ca/.../35b4.../sur-le-spectre-le-balado
Deezer – https://deezer.page.link/A3WhvzJjib1yErqW7

We invite you to **subscribe to our Youtube channel**, where two new animation videos will also be available soon. This is a direct way to support the project and to help us get funds to make new videos and other podcasts. Also, **sign up for our mailing list** if you haven't already done so.

Happy reading and listening!

> I would also like to take this opportunity to encourage you to listen to the 4 Sur le Spectre podcasts, produced by Janie Degré-Pelletier, and available on our YouTube channel as well as several other platforms.

Autism

Autistic person

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PERFORMANCE

None of the proposed autism terminology was endorsed by 100% of participants.

Is there a universally accepted term

to refer to Autism?

By ICIAR ITURMENDI-SABATER

'Autism', 'Is autistic', 'Neurological/Brain difference', 'Neurodivergent', 'Challenges' and 'Neurotypical' are amongst the most common terms used by autistic English speakers to distinguish between autistic and non-autistic people. Yet there is no universally accepted way to refer to autism; his is what a recent study published in November 2022 in the journal Autism Research found. The study examined the language

preferences of over 650 English-speaking autistic adults internationally (1).

Two previous studies investigating autism-related language preferences had found that although 'Autistic' and 'Autistic person' are the preferred ways to refer to autism in the UK and Australia, over 40% of autistic individuals in the UK did not endorse these terms (2,3). The reasons behind these diverging preferences remain unknown, and autistic persons, researchers and clinicians continue to wonder whether such language preferences may vary across cultures.

To answer these questions , Connor Keating at the University of Birmingham conducted a large study across English-speaking countries: Canada, the US, Ireland, Australia, New Zealand and the UK. The mixed-method nature of the study (see the Science FAQ article in this issue about research methods for more details) allowed them to *quantitatively* analyze which terms are more popular over others, and to further *qualitatively* examine participants' responses to why they may choose one term over another to refer to autism. Keating's team consulted with a group of autistic community members to develop their survey. They then asked 654 autistic adult participants which terms they were *happy to use* when talking about autism, describing themselves or others as autistic, referring to someone's autistic identity, talking about
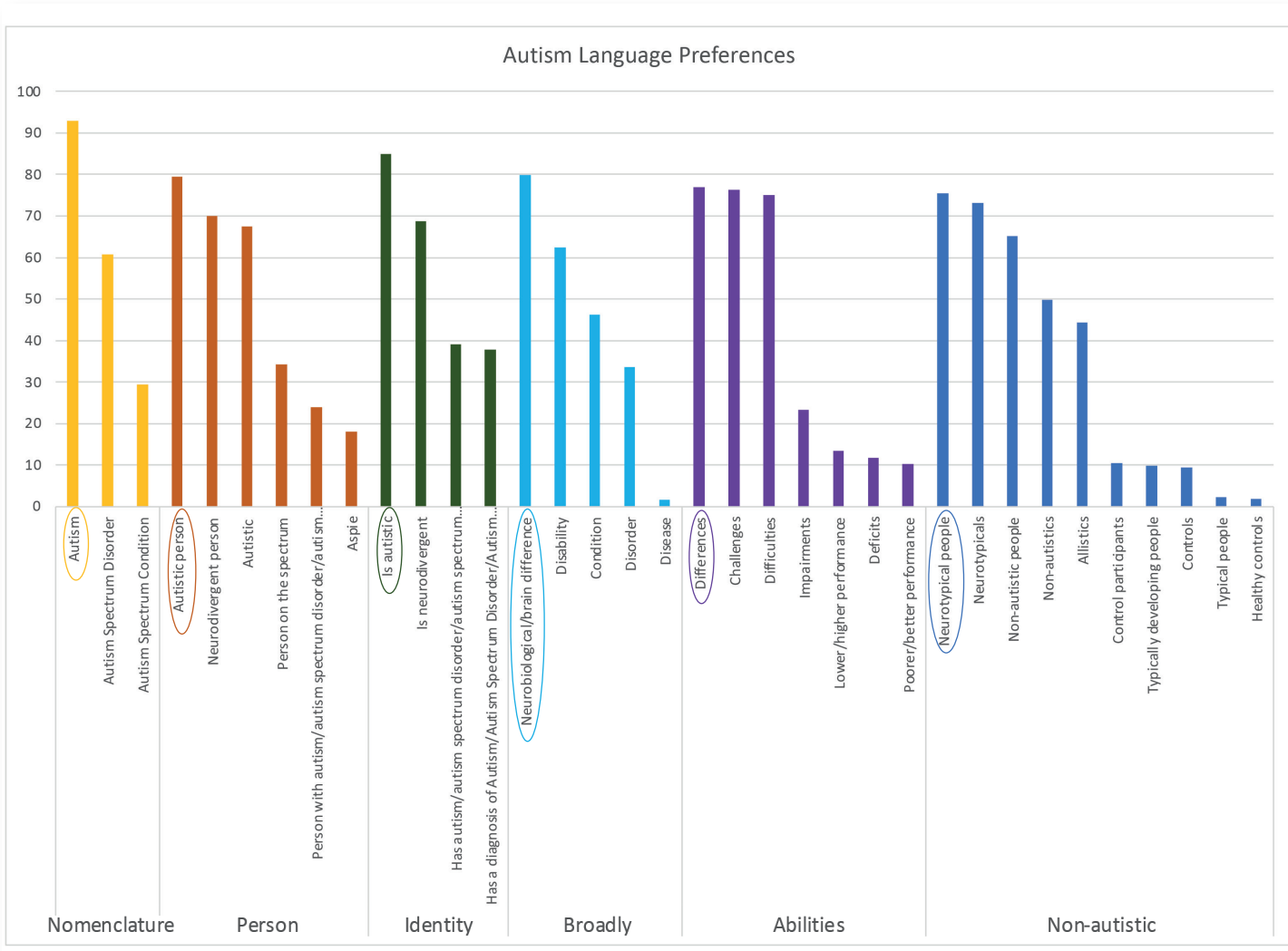
Autism Language Preferences

Differences exist on how people select their words to refer to autism, and language choices reflect the way we understand the condition.

the challenges associated with autism, and when talking about non-autistic people.

Across countries, respondents most frequently endorsed the term 'Autism' to generally refer to the condition, 'Is autistic' and 'Autistic' to refer to an individual and their identity personally, 'Neurobiological/ Brain condition' to describe autism broadly, 'Differences' or 'Difficulties' to name specific autistic abilities, and 'Neurotypical people' to refer to non-autistic individuals. Yet **none of the proposed autism terminology was endorsed by 100% of participants as a word they would be** *happy to use* (see **Figure page 3**). In general, these preferences did not vary between countries.

When it comes to the reason for their preferences, different themes became clear.

The first of these themes had to do with using language to unify versus separate autism into various subgroups. This is a current hot discussion topic in the community of autistic individuals, care providers and researchers.

Some argue that those autistic individuals having greater support needs, intellectual disabilities and very limited language (4), should constitute a separate group , which were not represented in Keating's study sample. In 2021, the term 'Profound autism' was proposed to refer to this subgroup (5). Those in favour of differentiating between autistic persons by their support needs argue that if this distinction is not made, research efforts and services may end up only geared towards autistic persons with lower support needs, overshadowing those with high support needs (6).

Others oppose the idea of adopting labels such "Profound autism" or "high-level autism" to differentiate subgroups along the autism spectrum, a view that seems to be reflected in Keating's study. From this perspective, autism is understood as a constellation of individual characteristics that make each autistic person unique. Consequently, splitting the autistic population in two would generate a false split, leaving those in the middle unrepresented. Thus, terms such as 'Profound autism', 'Low/High functioning autism' and 'Asperger Syndrome' are considered misleading and offensive by some (7). Importantly, this view is held by autistic individuals with a diverse range of support needs, intellectual and language abilities, including members of ethnic, sexual and gender minorities (8).

Another identified theme was that the use of these categorical terms may lead to lack of recognition of autistic potential and over-focusing on 'difficulties,' 'challenges' and 'deficits'. In their opinion, avoiding these negatively valued terms does not mean under-funding research that attempts to explain the causes underlying these differences, nor her giving less priority to treatment and clinical care (1). Instead, it is argued that using neutral terms to refer to subgroup differences prevents language-driven stigmatization (9). In contrast, others propose that any term used to refer to autism could be potentially stigmatizing, and that we as language users can challenge stigma depending on the meaning we give to our words (10). Whatever meaning is implied through word choices, Keating's study participants emphasized that chosen language should convey that autistic persons 'are different, not less'.

To recognize the unique characteristics of each person on the spectrum avoiding negative connotations, participants proposed to use concise and specific language to refer to the abilities or challenges of each autistic person, rather than general labels. For instance, instead of using the term 'Profound autism', we could just refer to the person as an autistic individual with intellectual disability, language difficulties and high support needs. Using accurate descriptors adapted to each person can help value individual identities. While some of the participants responding to Keating's survey highlighted that autism is a core part of their identity, others emphasized that their autism does not define them. **An overarching theme across responses was the importance of making autistic voices prevail.** Thus, listening to each individual's language preferences, or asking the individual's preferences when in doubt is an easy way to respect everyone's identity.

Differences exist on how people select their words to refer to autism, and language choices reflect the way we understand the condition. This diversity of views may be seen as a debate that is dividing and polarizing the field. But another perspective is that this may be a fruitful discussion leading to a richer, integrated way to understand autism.

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Together, let's rekindle that glimmer of hope that shines in the eyes of every child!

The "Best Things" About Autism

By SAMANTHA N. WUNDERLICH

Thanks to approaches such as positive psychology, which pushed researchers to study human qualities, for example, perceptions regarding autistic individuals have been changing in recent years. This change is partly due to innovative co-design research that captures perspectives from autistic individuals, and allows recording of the autistic person's, their families', and other stakeholders' points of view. Despite this change and neurodiversity frameworks (see our paper on this subject in the 7th issue of Sur le Spectre), most published research focuses on deficits in autism rather than adopting a strengths-based approach.

Character traits are an important part of an individual's personality, which guides their behaviours. Until recently, there was a dearth of literature on the stability and evolution of character traits in young autistic children.

To further research in this area, two studies published in the Journal of Autism and Developmental Disorders documented how positive character traits evolve in autistic children, and how these trait endorsements vary as a function of educational placement. Both studies used data from the Pathways in ASD longitudinal study.

The "Best Things" According to Parents

In the first study, parents answered an open response question, "What is best about your child?" at three instances where their autistic child was between 2-4, then 7-8, and then between 10-11 years old. The responses were then categorized using the Values in Action (VIA) Classification of Strengths model, which consists of 24-character traits across six domains: Wisdom and Knowledge, Courage, Humanity, Justice, Temperance, and Transcendence.

Authors found that parent-endorsed traits were consistent across time, and that most endorsements occurred in the humanity category. More specifically, parents most endorsed the following traits: love, happiness, kindness, humour and intelligence. Further analysis showed that from ages 2-4 and 7-8, the presence of internalized child behaviours (those directed internally like fear and anxiety) and externalized child behaviours (those directed externally like

aggression) reduced the likelihood of parents endorsing humanity traits. From 7-8 years old, researchers found that more severe autism symptomatology was associated with the increased parent endorsement of specific skills from the open question.

The "Best Things" According to Teachers

In the second study, the same methodology was used with teachers as respondents instead of parents, and at two time points (instead of 3): 7-8 and 10-11 years old.

Many of the teacher participants were female regular class teachers, and approximately 2/3 of the autistic students were in the regular curriculum. Over both time points, most endorsements were in the humanity category. At 7-8 years old, traits most frequently endorsed by teachers were kindness, specific skills, happiness, self-regulation, and perseverance. At the second time point, when the children were 10-11 years old, most-endorsed traits were similar, but

friendliness emerged among the most endorsed, rather than happiness.

No differences in trait endorsement were found at 7-8-year-olds between regular-class and specialized-class students, nor between those following a regular versus a modified curriculum, but as of ages 10-11, regular-class educators endorsed perseverance, wisdom and knowledge significantly more. Teachers endorsed more intelligence ratings for students likely to participate in general education or adapted curriculum compared to modified or life skills curriculum. At 7-8 years old, higher externalizing and internalizing behaviour, and higher autism severity scores, were associated with the decreased likelihood of teachers endorsing perseverance. Furthermore, at 10-11 years old, increased externalizing and internalizing behaviour reduced the likelihood of teachers endorsing happiness when asked the open question: what is best about this child?

Most published research focuses on deficits in autism rather than adopting a strengths-based approach.

Kind/care about people

"A bundle of joy and a ball of energy,"

Hard working

He has a super great heart

Works quietly and independently

Always in a good mood

Well-behaved

What did we learn and what should be the takeaway?

In line with other research with neurotypical children, happiness and kindness were most frequently identified by both teachers and parents of autistic children. Teachers most often endorsed traits pertaining to self-regulation, and least often endorsed traits relating to cognitive ability. Furthermore, as the child aged, parents were more likely to describe their child by true character traits rather than their specific skills and abilities. These results could be due to the development of these

traits as the child ages as they progress in the school system.

Thus, the educational system would gain by leaning more on a strength-based approach. By identifying the child's strengths, both cognitive and in terms of personal qualities, relationships between the parent, teacher, and the child can be improved. Following positive psychology, learning could therefore be geared to improving quality of life compared to "fixing" deficits.

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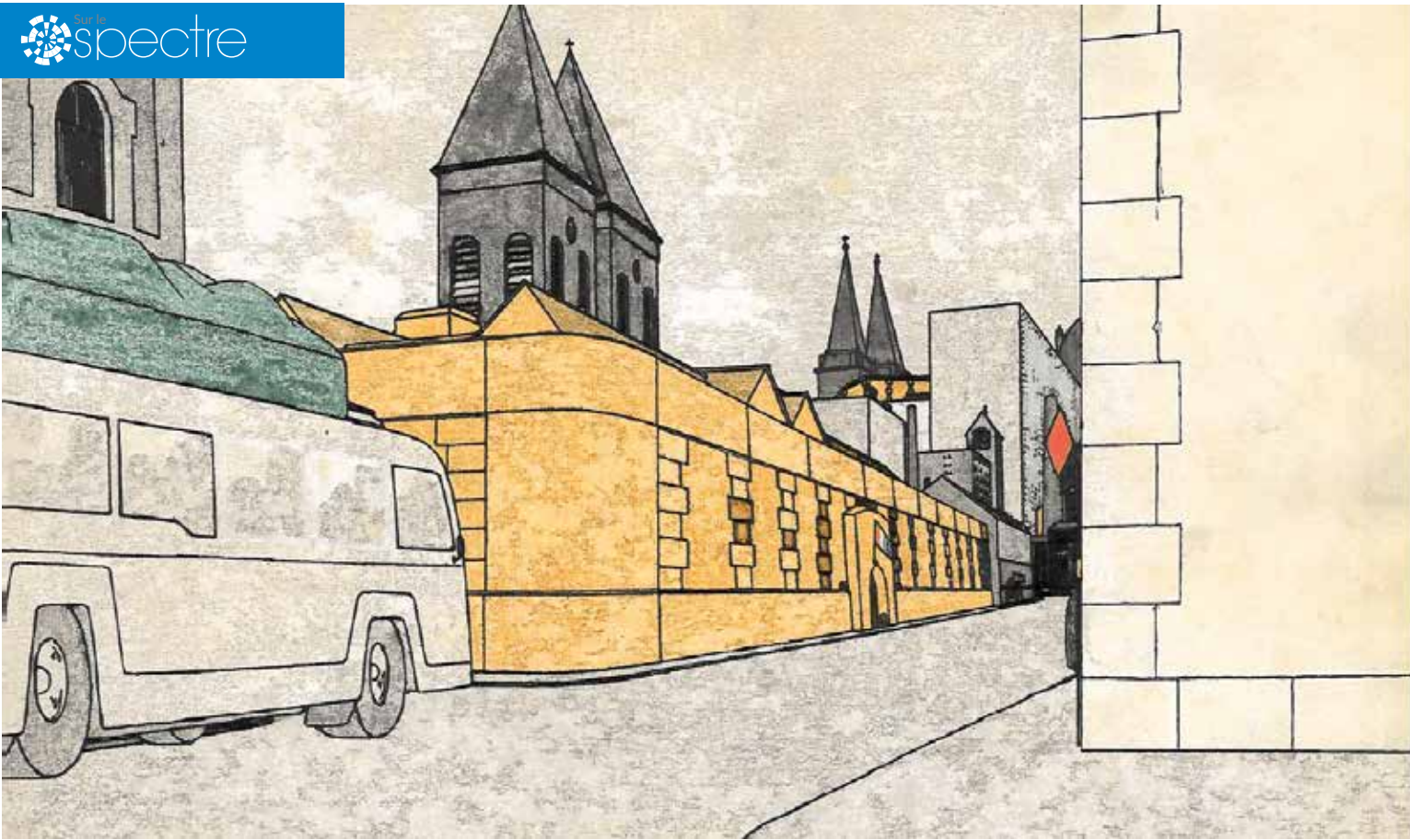
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These models are inspired by Bayes' theorem in statistics, which makes it possible to calculate the probability of an event occurring while taking into account data from events that have already taken place.
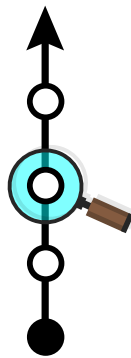
Historical Perspective:

From a Case Study to Bayesian models,
How do Autistic People Perceive
Their Environment?

By SOPHIA DRAAOUI

We are offering a brand-new series of articles that will provide a better understanding of how certain key studies have influenced the course of autism research, and by extension, our understanding of autism. The first article in this series focuses on the evolution of our understanding of perception in autism. .

1993: A Case Study

Thirty years ago, researchers Laurent Mottron and Sylvie Belleville published an in-depth case study of an autistic man, EC, with exceptional drawing skills. EC is an autistic savant: he has particularly high skills in one specific area, namely drawing, and the ability to memorize visual information in three dimensions and then reproduce it graphically. When he draws, EC does not make any erasures, even when he is asked to copy images that are optical illusions, and he never uses an eraser. He also does not use shades of color in his drawings but uses mostly pencil and solid colors.

Observations and Results

The goal of this case study was to assess, using several tasks involving perceptual processing and the reproduction of images or objects, whether EC's performance differs qualitatively from that of typical people. Thereby, allowing us to understand how he processes the visual information presented to him, and how this may explain his prodigious abilities.

The researchers asked EC to perform a first series of experiments measuring the ability to analyze 2-D images, to represent, recognize and name 3-D objects, and to color images representing everyday objects. Almost all the results obtained in this first set of tasks were similar to those obtained by the control participants, except for a partially inadequate use of colors. To simplify this, his perception was normal.

EC was then exposed to a second series of tasks aiming to evaluate how information contained in an image is hierarchized in his brain: what is processed the most, or first, in an image. The goal was to observe if EC perceived primarily the details or the general shape of an image. At the beginning of this study, the hypothesis was that autistic people would prioritize details, or the local level, while neurotypical people would prioritize the general form of an image. The researchers found that when the information presented was congruent at the local and global levels (for example, a large letter "C" made up of several smaller "c" letters), then EC responded in a similar way to neurotypical participants: he responded more quickly to the global form similar to neurotypical people. In contrast, when there were discrepancies between the letter represented by the global image and its component details (e.g., a large "C" made up of small "O" letters), EC, unlike neurotypical individuals, did not show a global-level interference effect in his local response. The authors concluded that he prioritized information at the local level, thus the perception of details.

Hypotheses

Based on the results obtained in the different experiments offered to EC, and also drawing on their general knowledge of autism, the researchers suggested several hypotheses on the possible influence of this difference in the prioritization of information on certain behaviors or skills in autistic people.

First, these observations indicate an atypical hierarchy in the analysis of local and global information in EC.

This result, obtained in a neuropsychological task, is consistent with what the researchers observed when he draws: he draws the features contiguously, detail after detail, rather than drawing the overall shape of the object and then adding the details later.

The priority perception of details could explain why autistic people perform better than neurotypical people in solving certain puzzles or in tasks where a hidden figure must be located in a complex image. In the case of EC, it could also explain why he is less sensitive to optical illusions.

There could also be more abstract impacts of this prioritization of detail perception. Indeed, the particular perceptual processing observed in EC could perhaps explain his difficulties in understanding humor or in logical reasoning tasks. More generally in autistic individuals, this difference in their perception of the environment could also have an impact when planning an activity in which a succession of small tasks (local level) must be planned in order to achieve a more general goal (global level). A mismatch in detail between the successive small tasks that the person has anticipated and what is actually happening could then disrupt the sequence and lead to an interruption of the activity.

Following the publication of this case study, several hundred articles have studied how autistic people perceive their environment and fundamental differences could be confirmed.

Today: Bayesian Models and Autism

What are Bayesian models?

These models are inspired by Bayes' theorem in statistics, which makes it possible to calculate the probability of an event occurring while taking into account data from events that have already taken place. This is what is used, for example, to detect fraud on your credit card based on your usage habits.

Bayesian models are used today to describe how prior knowledge and expectations influence the processing of information present within the environment, and how these expectations are formed according to the greater predictability (or volatility) of this environment. According to this model, when put in a new situation, a neurotypical person relies significantly on their past knowledge and experience to interpret the data of this new situation. This allows them to be more ef-

Autistic people would therefore look at the world more as it is, making them less sensitive to optical illusions resulting from our "expectations" about the world.

> For others, the difficulty lies in the excessive accuracy of their predictions. This could explain the need for predictability in autistic people and the discomfort generated by change

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fective in interpreting the new situation, and to be able to predict what will happen more accurately or quickly.

However, this can also result in a bias in the perception of the new situation. For example, a person interviewing for a job similar to others in the past may expect to be asked the same questions, that there will probably be a Human Resources person present in addition to the future employer, that the interview will last a certain amount of time, etc. His or her predictions may be wrong, or it could be that his predictions are correct and that relying on his past experiences is reassuring and effective. On the other hand, it is also possible that she relies too much on this information and omits relevant information in her preparation.

Application of Bayesian models to autism

In autistic people, the Bayesian hypothesis can lead to contradictory predictions. For some, it predicts that the influence of previous experiences on perception would be less important. Their perception of the situation would therefore be less likely to be biased by their prior experiences. Thus, they would give more weight to perceptual signals. Autistic people would therefore look at the world more as it is, making them less sensitive to optical illusions resulting from our "expectations" about the world. The less weight given by the autistic person's brain to prior knowledge when interpreting their environment could result from a greater influx of information (or details) from their environment, which could explain the sensory overload often reported in autism.

For others, the difficulty lies in the excessive accuracy of their predictions. This could explain the need for predictability in autistic people and the discomfort generated by change since they cannot manage the discrepancy between what they predict from their past experiences and what happens in reality. Thus, since they have more difficulty in finding the right level of accuracy in predictions about their environment, each situation can bring a sense of novelty and insecurity that can lead to significant discomfort.

A final word

This first article in the historical perspective series shows how certain studies, such as the case of EC, are able to highlight important phenomena in autism, and subsequently lead to numerous research and discoveries in the field. It has contributed to a variety of theories of autism, each of which attempts, with varying degrees of success, to account for a particular aspect of autism.
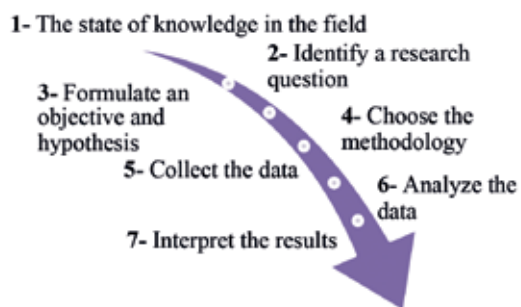
Science FAQ:

Research Designs.

By JADE DESROSIERS and ERIKA NEVEU

What is the purpose of research, in concrete terms? How does a research project work? What are the specific issues in the field? At the heart of autism neuroscience research are many techniques and methodologies. This is the 4th article in the series: *Science FAQ* which will give you a better understanding of the different research designs, this is to say the different ways researchers can choose to advance science.

What exactly is a research design?

Is there only one right way to advance knowledge? Of course not! That is why researchers in all fields approach research in different ways, that is, through different methodologies. Whether the approach used includes a single person, a large group, last for many years, or only a few months, each approach (or design) has its own advantages and disadvantages. All the research team has to do is try to find the approach that will answer their research question as accurately as possible.

To achieve this, researchers must first assess the state of knowledge in the field through the existing scientific

1- The state of knowledge in the field
2- Identify a research question
3- Formulate an objective and hypothesis
4- Choose the methodology
5- Collect the data
6- Analyze the data
7- Interpret the results

literature. Then, it will be possible to identify a research question that has not yet been answered. Based on the knowledge and the question, it will be possible to formulate the objective and the hypothesis of the research project. Once the research team has chosen the question it wants to answer and formulated its objective and the hypothesis, the team can now choose the most appropriate methodology to obtain the desired information. Each methodological choice allows for a different perspective on a research topic.

> Researchers in all fields approach research in different ways, that is, through different methodologies.

11

All the research team has to do is try to find the approach that will answer their research question as accurately as possible.

Quantitative

Quantitative designs aim to describe, explain, or establish a prediction about a phenomenon based on the collection and analysis of numerical data. For example, determining the number of positive or negative emotions in autistic and neurotypical children in a game situation[1].
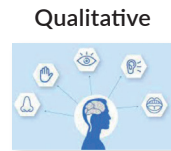
Qualitative

Qualitative design is a research design with one or a few participants which aims to collect a large amount of information to understand a phenomenon in-depth. For example, an interview could elicit a great deal of information about an autistic person who has the ability to recognize and name a note when heard (perfect pitch)[2].

Mixed

Mixed design is a mixture of quantitative and qualitative design. The objective is therefore to collect numerical data (quantitative), detailed information (qualitative), and to analyze the data together to understand the phenomenon under study.

One of the methodological choices that researchers must make is the number of participants they wish to study, in other words, whether to conduct a group study or a case study. The number of participants included in a study is extremely variable and depends on many factors, including the design chosen.
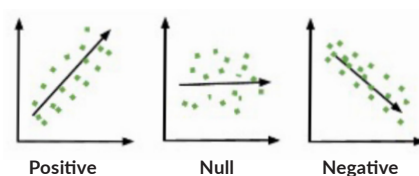
Group Study

In a **group study**, many participants will be included in order to be able to apply the findings of the study to a large group of people; this is called generalization.

Case Study

A **case study** examines a single participant or phenomenon to understand in detail the aspect of the person or situation of interest.

Correlational

Positive   Null   Negative

A **correlational** design attempts to determine what the relationship is between two variables, and if there is one, how strong that relationship is. If there is a relationship between the variables, the correlation can be either positive or negative. A positive correlation indicates that the two variables vary in the same direction, i.e., when the value of one variable increases (or decreases), the value of the other variable also increases (or decreases). For example, in neurotypical participants, the greater the duration of deep sleep (one of the phases of sleep), the greater the ability of participants to recall a large

number of figures in a declarative memory task (ability to recall things consciously)[3]. In contrast, when the correlation is negative, the variables vary in opposite directions, i.e., one variable increases while the other decreases, and vice versa. For example, the more time autistic participants spend in deep sleep, the worse their performance is on a sensory-motor procedural memory task (the unconscious memory of motor skills)[3]. Finally, if the correlation is null, the variables vary randomly with each other. For example, in autistic participants and neurotypical participants, increasing or decreasing the duration of REM sleep (another phase of sleep) will cause an increase, decrease, or no change in procedural memory in a randomized fashion[3]. Thus, this type of research does not establish a cause-and-effect relationship, since it is impossible to determine which variable influences the other; it is only possible to determine whether they vary together or not.
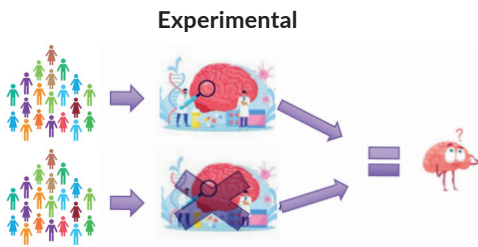
Experimental

The objective of an **experimental** design is to determine the effect of one variable on another using two groups of people. To do this, researchers make experimental manipulations, meaning that one group will participate in the experiment, while the other will not (control group). For example, researchers might want to determine whether visual attention training improves the academic performance of students with low IQs[4]. If the experiment produces an effect in the experimental group and there is no change in the control group, then the researchers can establish a causal link and, therefore, say that their experiment causes the measured effect. In this example, if visual attention training improves academic performance in the training group and the academic performance of the control group does not improve, then the researchers can conclude that the visual attention training causes the improvement in academic performance among students with extremely low IQs. On the contrary, if the two groups remain the same, or both improve in a similar way, then the researchers cannot establish a causal link, so they may conclude that they did not observe an effect caused by their experiment. In this example, if the participants who did the visual attention training have similar academic outcomes to those who did not, then the researchers may conclude that they did not find an effect of visual attention training on academic outcomes in students with low IQs. Therefore, with this type of design, it is possible to determine whether the observed effect is caused by the variable manipulated during the experiment, which is called a causal link.

> It is therefore essential to keep in mind that all types of choices are equally important, and that they are above all complementary!

Longitudinal, Transversal, or a Single Time Measurement

A research estimate can extend over time or capture a specific moment. We can compare the collection of information by taking a photo, or in other words, we collect, at a specific time, data that can then be analyzed. Thus, we can take several or a single photo.
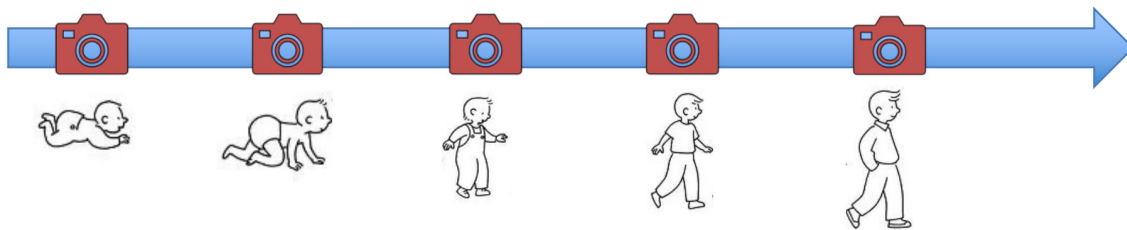

A **longitudinal study** design is carried out over a long period of time with the objective of seeing the evolution and development of the phenomenon studied. This means that the data collection will have to be done at several timepoints, similar to if we take several photos that we keep in an album to look at them several years later. In this album, we will be able to see, or not see, the evolution and development of the people concerned. For example, researchers might want to see the evolution of language skills in autistic people, and therefore measure the skills of the same participants at different times in their lives.
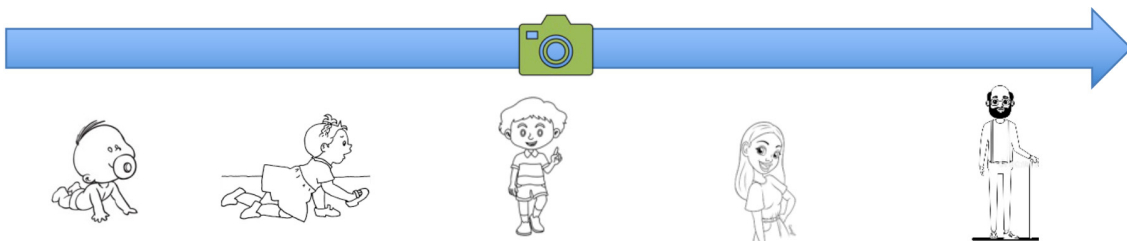
A **cross-sectional design** has a single measurement time, but collects information from participants of different age groups with the objective of seeing the evolution of the phenomenon being studied. This means that the data collection will have to be done at a single point in time, with people of different ages, as if we

Methodological choices allow researchers to highlight different aspects of a phenomenon depending on what they are trying to determine.

were taking a picture of different age groups at a specific point in time and putting them side by side to see, or not see, the evolution of our phenomenon. For example, researchers might want to study the memory abilities of autistic people at different times in life, and therefore assess the memory abilities of autistic people in different age groups.
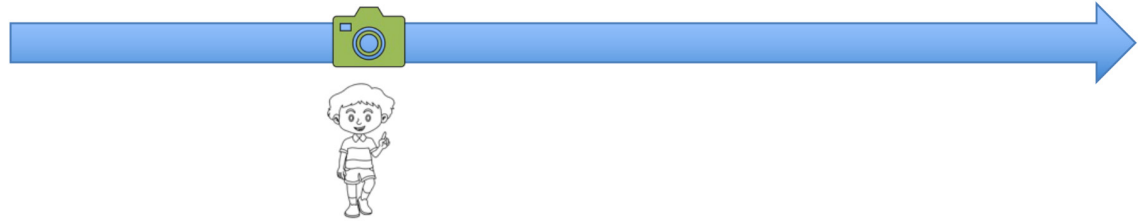
A research design can also have o**nly one measurement time**. This type of design will make it possible to obtain precise and circumscribed information about a precise moment. In this case, we take a single photo to come and analyze it at that time. For example, researchers might want to measure semantic (language-related problem solving) and visuospatial (problem solving related to the ability to represent space)5 abilities in autistic individuals.

Methodological choices allow researchers to highlight different aspects of a phenomenon depending on what they are trying to determine. There are several other designs that are not detailed here which can be combined in larger studies as well. Thus, each design contributes in their own way to the advancement of knowledge. It is therefore essential to keep in mind that all types of choices are equally important, and that they are above all complementary!

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How can we better treat depression in autistic people?

By JULIE CUMIN

Research on mental health interventions consistently tops the research priorities of autistic people and their families. Yet it is one of the least funded areas, well behind research into the biological causes of autism and development of screening tools.

However, the urgency seems clear for clinicians working in this field, as well as for those most concerned. Autistic people have more depressive symptoms than the general population and are 4 times more likely to experience a major depressive episode. Autistic people also have an increased risk of suicidal ideation and are more likely to attempt suicide during their lifetime. The mental health of autistic people is therefore a major public health issue.

What could lie behind these preoccupying figures? Several causes seem to be at play. Some could be linked to the experience of being autistic in a world designed by and for neurotypicals. It is also possible that there are inherent risk factors for autism. For example, difficulties in emotional and sensory regulation, as well as cognitive rigidity, could predispose some autistic people to a depressive or anxious "background". However, this would not prevent them from living a rich and fulfilling life, with personalized support and adaptations in the person's environment.

Despite these alarming findings, clinicians are forced to refer to best practice recommendations for neurotypical individuals, as studies specific to autism are

> Autistic people also have an increased risk of suicidal ideation and are more likely to attempt suicide during their lifetime.

15

Article of number 12 page 5.

In autistic people without intellectual disability, depression is diagnosed according to the same criteria as for neurotypicals.

lacking in this area. In addition to the lack of resources, research on the treatment of depression in autistic people faces significant methodological limitations. In order to limit contaminating variables, researchers may want to study a relatively homogeneous group. This can lead to exclusion criteria for participants on medication or with additional comorbidities (e.g. OCD). The results are therefore not generalizable to the reality of many autistic people.

It is also necessary to differentiate the detection and treatment of depression in autistic people with and without Intellectual Disability. In autistic people, even with an average to superior intellectual level, identifying and verbalizing feelings can be difficult. It is therefore necessary to remain attentive to other indirect signs of depression (for example, turning away from one's special interests). In autistic people without intellectual disability, depression is diagnosed according to the same criteria as for neurotypicals.

In this context where the implementation of "classic" studies remains complicated, an English research team conducted a clinical consensus study with therapists providing psychotherapy to autistic adults and adolescents. This type of study was mentioned in an earlier issue of Sur le Spectre (issue 12 page 5). Although this study does not provide the same level of proof as a study with two comparison groups, it is a quick way to synthesize decades of experience, by asking expert clinicians to agree on recommendations for good practice (Delphi method).

The 18 clinicians included in this study all practiced Cognitive-Behavior Therapy (CBT). This style of therapy is widespread and has proven effective in the general population for treating anxiety and depression. Some aspects of CBT may be particularly suitable for autistic people (structured sessions, use of diagrams, specific goals and directive style of therapy) but the researchers wanted to know which modifications could be useful in adapting the therapy to an autistic patient. 155 recommendations were made and considered relevant by all participants.

The participants first noted the importance of defining the setting and nature of psychotherapy more explicitly than for a neurotypical patient. It was deemed necessary to explain the "role" of the therapist, the patient, the list of subjects that could be discussed, the duration of an appointment and to bring predictability to the sessions (schedule, timer).

The participants also recommended good knowledge of the cognitive particularities of autistic people. For example, they advocated systematically assessing for alexithymia. This inability to verbally express one's emotions is frequent in autism and therefore requires specific work on the physical feelings of emotions, naming them and the thought-emotion connection.

The participants also recommended taking into account the cognitive specificities of autism that could impact therapy attendance and homework. For example, therapists should not necessarily see a lack of motivation where differences in memory or visual processing may be involved. Participants therefore recommended developing visual and personalised tools and rating scales (eg. for symptoms) according to patient interests or way of describing emotions.

Psychoeducation was considered an essential tool. Participants all recommended ensuring their patient had a good understanding of their autism diagnosis and explaining the interaction between certain autistic particularities and depressive symptoms. Psychoeducation around social relationships was also highlighted as particularly relevant to autistic patients, in order to support them to better protect themselves from abuse, harassment and scams. For example, a therapist may break from typical protocol to differentiate healthy friendship behaviours from abuse and bullying.

Finally, the authors underline the flexibility and creativity necessary when providing care to this particular population. Although the structured nature of CBT may be suitable for autistic patients, the biggest pitfall would be to apply an identical therapy protocol to each person. Pending comparative studies to determine whether these adaptations increase the effectiveness of the therapy, this study aims to equip practitioners but also autistic people seeking care. Future research will need a broader focus on comprehensive care, combining psychotherapy, effective drug treatments and socio-professional support.