

# Neurodiversity in the office

How to Create Neuroinclusive Workspaces?

WORKPLACE × SKANSKA



### Table of contents

About the Authors Editorial team Dictionary of the most imp

### From the beginning

From the Authors

From the Partner

Why did we write this repo

Who did we write the repo

Everyday life according to

How has the understanding

changed?

Understanding the potenti

Scientist's perspective

### Who is this report about?

Who is this report about?

Prevalence

Epidemiology

There is strength in divers

ASD

ADHD

IPD

	3	Awareness – why do we hear about neurodiversity
	4	more often?
nportant terms	5	We conducted a survey
	<b>6</b> 7 8	Key answers Conclusions Neurodiversity and business: why is it worth it?
oort?	10	Expert's perspective
ort for?	11	How to implement good practices?
o neuroscience	12	Where to look for advice?
ing of neurodiversity	13 14 15	Solutions – start today! Different neuroatypical groups and office space Experiencing the space Office space components
t?	16	Building an office space
?	17	Individual workplace
	18	Open space for individual work
	19	Closed space for individual work
rsity	20	Space for cooperation
	21	Social Restoration Zone
	22	Sensory Restoration Zone
	23	Active Restoration Zone

### Checklist

### Summary



### About the Authors

### workplace

SKANSKA

### Workplace

A team of innovators specializing in shaping work environments, responsible for creating the greenest offices, implementing less waste solutions and inclusive practices. They combine research and strategic competences with technology and architecture for the benefit of people and the planet. Dominika Zielińska, co-owner of the studio, is an architect with many years of experience and knowledge in psychology, strategy and business.

### Skanska

Skanska office company in Poland is an innovative developer of sustainable, timeless office buildings. We have been present here since 1997. We build open, lively spaces where employees feel good. Our office projects are certified by LEED and WELL Core & Shell, as well as WELL Health-Safety Rating. Moreover, our new investments in Poland have the "Facility without Barriers" ("Obiekt bez barier") certificate, which proves that they are adapted to be used by people with various needs, including people with disabilities or parents with small children. We operate on seven markets: Warsaw, Wrocław, Poznań, Łódź, Kraków, Katowice and the Tri-City.

### Impronta

An Italian consulting company focused on designing for health and well-being, specializing in translational research from neuroscience and behavioral sciences. Its co-founder and research lead is Natalia Olszewska, a graduate of medicine, neuroscience and neuroscience applied to architectural design and a professor at the NAAD (Neuroscience) Applied to Architectural Design) course organized by the luav University in Venice. NAAD is the first course of its kind in Europe.



### SAIDTS

### Saints Copywriters

Marketing communication studio founded by Agnieszka Starzyńska-Krawczyk, a copywriter with twenty years of experience, lecturer in the language of advertising at the Jagiellonian University, and the AGH University of Science and Technology, Ph.D. student in cognitive linguistics, associated with the Polish Academy of Sciences. Saints is a studio focused on UX writing, i.e., communication based on 3 principles: simplicity, brevity and usability.

#### business \_\_\_ link Business Link

Business Link is an office space operator that deals with design, creation and service of flexible workspace within the Skanska Group. Business Link has 5 locations downtown of the fastest growing Polish cities. Majority of them in buildings constructed by Skanska. Twenty thousand square meters of uniquely designed office space. Business Link provides workspace for teams of few people up to few hundred. Everyday, highly appreciated service cares for the clients, their guests, allowing them to fully focus on their business operations. Business Link offers three-month as well as long-term short notice contracts; and prompt and flexible change in rented space. Tailor-made corporate solutions, rotating access and hybrid services are becoming the most popular in our offer.



### **Editorial team**

### Patroni medialni



MY

#### **Publication Concept**

Bartłomiej Budnicki, Skanska Dominika Zielińska, Workplace Elżbieta Rotblum, Skanska Justyna Abramowska, Business Link Magdalena Ujda-Tarczyńska, Skanska

#### Authors

Agnieszka Starzyńska-Krawczyk, Saints Copywriters Aleksandra Piotrkowicz, Workplace Barbara Majerska, Workplace Dominika Zielińska, Workplace Miriam Hoffman, Impronta Natalia Olszewska, Impronta Urszula Kuc, Workplace

**Research and fact checking** Olga Szadkowska, Workplace

**Neuroscience consultant** Natalia Olszewska, Impronta

Free of charge distribution. Reproduction of this publication in whole or in part, only upon permission expressed by Workplace. Quoting and using data is allowed only if the source is provided.

WORKPLACE × SKANSKA

**Graphic design and typesetting** Weronika Kuc, Tinge Studio

**Editing and proofreading** 

Agnieszka Starzyńska-Krawczyk Edyta Kaleta Magdalena Hutny Sylwia Reguła Weronika Gieniec

Translation **INT Solutions** 

Publisher

Workplace Sp. z o.o. Sp. k. UI. Domaniewska 17/19 lok. 133 02-672 Warszawa www.workplace.pl

Warszawa, 2023

ISBN

978-83-968037-1-9

### Dictionary of the most important terms

Neurodiversity	Natural diversity of human minds. It covers the full spectrum of operational modes and nervous system development stages.			
Neurotypical	Term used to describe characteristics of a person whose neurological development is ,typical'. It covers a variety of human minds.			
Neuroatypical/neurodivergent	Term used to describe characteristics of a person whose neurological development deviates from the typical one, may be associated with a diagnosis of ASD, ADHD and others.			
ASD	Autism Spectrum Disorder			
ADHD	Attention Deficit Hyperactivity Disorder			
IPD	Information Processing Disorder, e.g. dyslexia, dyscalculia and dysgraphia.			
Hypersensitivity/ Highly sensitive	Increased sensitivity to environmental stimuli, such as sounds, light or colors.			
Hyposensitivity	Decreased sensitivity to environmental stimuli, such as: sounds, light or colors.			

\_\_\_\_\_

\_\_\_\_\_



## From the beginning





### From the Authors



Dominika Zielińska CO-CEO, FUTURES DESIGNER, WORKPLACE

The biggest discovery when working on this report was understanding how new, unexplored and ambiguous the subject of neurodiversity is. We lack proven, tested solutions. We understood that the years of our design work and listening to the users' needs involve also searching for solutions for neuroatypical people. That's why this report includes many photos from our projects. The report is an opportunity to tell a story: about co-creation, listening and testing. The outcome is inclusive design and real change for people remaining on the sidelines of the discussion about the working environment.



Natalia Olszewska CO-FOUNDER, RESEARCH LEAD, IMPRONTA

Neurobiology is a field of science that infiltrates, among others, architecture. Nowadays, thanks to information technology, there are opportunities to conduct research in the work environment. The information obtained this way allows us to verify intuitive design assumptions, affecting the quality of created workspace, improving the well-being of employees. Creating comprehensive solutions requires further research in neuroscience and their bold implementation in the spaces. The cooperation of architects, neuroscientists and business is the only way to achieve the goal.



#### Agnieszka Starzyńska-Krawczyk FOUNDER, SAINTS COPYWRITERS

Linguistic communication is a creation as beautiful as it is also the source of the greatest interpersonal misunderstandings. Therefore, when working on the report, I made every effort to ensure that, despite its scientific potential, it is a text that is simple to understand and unambiguous in meaning. I was also perfectly aware of its ambitious mission: to provide readers with high-quality knowledge in the area that A. is becoming fashionable, and thus will soon become McDonaldized, and B. deals with what is most important – a dignified human life. I felt this enormous responsibility the entire time I was working on this report.



### From the Partner



**Ewelina Kałużna** CEO BUSINESS LINK, HEAD OF STRATEGIC WORKPLACE SOLUTION ADVISORY IN SKANSKA OFFICE CENTRAL AND EASTERN EUROPE (CEE)

Few people realize that we spend 90% of our lives indoors, and that by the time we are 50 years of age, we have spent nearly 45 years of our life indoors. What's more, we spend a third of our lives at work. Going a step further, it can be assumed that many readers of this study will be spending time in their office spaces while reading this. So the rooms we live and work in have a huge impact on our health and well-being. Thus, it can be safely assumed that even the slightest discomfort in these spaces, experienced constantly and often, can adversely affect our well-being and job satisfaction. With this in mind, at Skanska and Business Link we pay great attention to the details of the workplaces we create. Because in the long run, they affect the comfort of users and improve their well-being.

Care for life is one of the values of the Skanska Group. Our philosophy of creating offices that ensure the well-being of people who work in them stems from it. Clean air, thermal and acoustic comfort, appropriate lighting, greenery and space for rest are the foundations on which we can now build even more human-centric solutions.

We believe in empathy and building knowledge through experience. After all, we are often unable to know the feelings and the way others experience the world, and at the same time we want to be aware of that and take into account the perspective of different stakeholders in order to create the most inclusive workplaces. Where it's possible, we try to create conditions that make everyone feel equally comfortable. Our office modus operandi is to think about the needs of people with limited mobility by following the guidelines of the "Facility without Barriers" certication. We subject our facilities to LEED and WELL certification, examining the impact of our buildings on the functioning of users even before these offices are built. We explore and promote areas that may seem completely unrelated to the design of office space at first glance, but in our opinion they also have a huge impact on the employees' experience of staying in a given work environment. I mean, for example, the inclusivity of LGBTQ+ employees and the need to transform workplaces into safe havens where everyone can develop their full potential.

It's time for the next step – an effort to understand and translate the needs of neurodiverse people into the language of office space functions and architecture. Just as we once started to adapt offices to the needs of people with physical disabilities, now we hope to soon be able to take into account various neuroatypicalities in each office project, and together with our clients, the employers, create spaces that support the well-being and effective work of people whose brains work in different ways.



Awareness is the first step.

In order to have a truly human-centered design approach, it is necessary to deepen understanding of the needs of the end-user. We feel that by inviting scientists, researchers and design practitioners to cooperate and contribute to this report, we take an active part in expanding awareness of neurodiversity and promoting qualitative knowledge and easy-to-implement practices.



9

### Why did we write this report?

We hear the word "neurodiversity" more and more often, which is why we consider it necessary to undertake this difficult and responsible task. This work is an attempt to set a conceptual, semantic and contextual framework for neurodiversity. At the same time, we are aware that "what these terms and diagnoses mean now is different from what they will mean in five years, which in turn will be different from what they will mean in another twenty years."1.

#### Next tech, digital natives and employee of the future

The acceleration of digitization, of which we are all not only observers, but also participants, and often creators as well, forces us to adapt to the changing world at a previously unimaginable pace. It is important, however, to be able to distinguish what is a passing trend from phenomena that requires deeper reflection in this futuristic gallop. This is exactly what this report was created for - we want to provide its readers with something more than a collection of information on neurodiversity. It is intended to be a document that will equip the reader with knowledge and practical

tips on how to design office spaces where we on average spend 90,000 hours of our lives<sup>2</sup>.

The labor market is a space that reacts vividly to the ongoing changes. How vividly? Just take a look at three observations that we all have experienced:

The emergence and growing popularity of new professions that were difficult to imagine just a few years ago (e.g., technical storyteller).

A new situation on the consumer market and a reality in which, for the first time in the history of a mankind, "marketers around the world have to reach five different generations"<sup>3</sup>.

0

The need to deal with varying degrees of technological proficiency of all age groups active on the labor market (generally speaking digital natives and digital immigrants)<sup>4</sup>.

OUR POINT OF VIEW

The most important value of the labor market in the next tech era is the potential of every human being. We believe this is the reason why neurodiversity began to be noticed and widely discussed.



### Who did we write the report for?



WHO?	Business	Neuroatypicals	Project managers and architects
WHY?	To provide them with the knowledge that, in the context of changes in the employee market, is becoming increasingly valuable.	So that neurodiversity ceases to be a taboo topic.	So that they feel responsible in their actions and include facilities for neuroatypical people in their daily practice.
	To help one understand the importance of employees' well- being in the workplace based on information from reliable sources.	To give a clear signal that no one is alone with the difficulties encountered in everyday office life, and that with an effort such as the preparation of this report, this everyday life can improve.	To equip them with knowledge, concepts and facts that will make them feel comfortable talking about neurodiversity, making them excellent allies.
HOW?	<ol> <li>Collecting previously unstructured information and attempting to formulate a science-based definition of neurodiversity.</li> <li>Using the knowledge to squash stereotypes and actively contribute to increasing the role of acceptance of various neuroatypicals in society.</li> <li>Sharing practical ready-to-use solutions for every office.</li> </ol>		







### Everyday life according to neuroscience

The nervous system collects information about the physical environment through the engagement of sensory and motor systems. Specific behaviors are reactions to these stimuli.



**Cognitive** – thought processes, such as decision-making, i.e., thinking style or mechanisms of attention,



Behavioral - human reactions at the level of behavior and patterns of behavior, e.g., movement.

Understanding how differently people deal with everyday struggles is an opportunity to raise awareness and respect for neurobiological differences. As a consequence, this will affect the creation of supportive work environments and offices.

WORKPLACE × SKANSKA

EXPERT'S COMMENT

It is a complex process, so this report will focus on three aspects of human functioning:

**Sensory** – transmission of information

"Our interest in how architecture affects human biology is growing. The <u>Academy of Neu-</u> roscience for Architecture has been operating in the United States since 2003. The first neurobiological models explaining the experience of architecture are emerging. As neuroscience advances, our understanding of human-environment interactions will deepen."

#### Natalia Olszewska

MEDICAL DOCTOR, SPECIALIST IN NEUROSCIENCE AT ARCHITECTURE, NAAD LECTURER AT THE IUAV UNIVERSITY OF VENICE, SCIENTIFIC CONSULTANT AT IMPRONTA





## How has the understanding of neurodiversity changed?

#### First there was medical understanding

Historically, the initial context used to evaluate and attend to neurodiversity has been a strictly medical paradigm, such as 'illness', 'disability', and 'disorder'. Things changed in 1998, when sociologist Judy Singer and journalist Harvey Blume highlighted the diversity of human minds in areas such as sociability, learning, attention, and mood. Soon a neologism<sup>5</sup> was created, originating from a combination of neurology with diversity, and thus the understanding of neurodiversity only in the context of medical nomenclature became outdated.

#### Contemporary understanding

It is stressed today that the exclusion of neurodiverse people is a result of rigid social norms. Neurodiversity is the natural diversity of human minds that embraces the full spectrum of how the human nervous system works and develops. Neuroatypical people show their own strengths and struggles that are different from those with typically functioning brains.

#### **Evolution of understanding**

Defining is a natural human need. To name something, to define it - means to tame it, to embrace it with the mind. However, understanding of neurodiversity changes rapidly since neuroscience research evolves, and it brings new findings which expand our current understanding. As a result we modify the definitions. Therefore, we strongly encourage you to expand your knowledge in this area gradually.



### Understanding the potential of neurodiversity

In this report, we focus primarily on understanding the potential of neuroatypical people in physical workplaces, i.e., offices. This potential can be fulfilled if the architecture of the immediate office work environment takes into account the challenges, needs and capabilities of these people.

In the research and presented information, conclusions and solutions, we focused on the needs of neuroatypical people, who are able to work independently, given appropriate working conditions. At the same time, we worked on this report fully aware that there are many neuroatypicals who cannot live independently.

This should be emphasized: the introduction of the recommended solutions will have a positive impact on the comfort of work for all employees, also the neurotypical ones.



"If I had to sit at a different desk every day, I would stress out the evening before my work. I wouldn't think of anything else. Situations where I sit at a fixed desk and the people around me change could also be difficult. I want to work and I know that my work represents great value. But I need a workspace that will allow me to do that. Only that, and so much."

#### Katarzyna

32 YEARS OLD, ENGINEERING COMPANY EMPLOYEE, ASD







### Scientist's perspective



#### Dr Michał Tomczak

FACULTY OF MANAGEMENT AND ECONOMICS AT GDAŃSK UNIVERSITY OF TECHNOLOGY COCREATOR OF THE POSTGRADUATE PROGRAM "NEURODIVERSITY IN THE WORKPLACE" STUDIES AT THE SWPS UNIVERSITY IN WARSAW

I have been dealing with the issue of neurodiversity in the work environment for several years now and I am glad that recently it has become a more popular topic in Poland. Companies are beginning to realize that including atypical people in their teams is no longer a "charity activity" and goes beyond CSR or Employer Branding. It is simply a great way to expand the pool of candidates and use the unique competences of neurodiverse people to achieve business goals. It can also be a source of competitive advantage.

Previously, research in work-related neurodiversity focused mainly on issues related to the modification of the recruitment process (skill-based recruitment), the optimization of management processes, and the work environment in terms of the needs of people with autism. The report "Neurodiversity in the office" is the first publication on the Polish market that analyzes the problem of inclusion of atypical people, sector-by-sector, in terms of designing a friendly and inclusive office space, while on the other hand, taking into account the specificity of other groups within the neurodiverse community, i.e., not only employees with autism, but also people with ADHD, dysgraphia, dyslexia or dyscalculia. The report dispels stereotypes, as well as provides specific recommendations regarding the arrangement of office space. It also provides a tool: the checklist to facilitate the design of an inclusive space for neurodiverse people.

I fully agree with the authors of the report that the introduction of the recommended solutions may have a positive impact on the comfort of work of all employees, regardless of the cognitive style they represent.

I highly recommend the report and encourage you to read it!





## Who is this report about?



### Who is this report about?

This report focuses on the three most frequently diagnosed neuroatypical groups:



Autism Spectrum Disorder

Attention Deficit Hiperactivity Disorder

WORKPLACE × SKANSKA

### ADHD

### IPD

Information Processing Disorder, e.g., dyslexia, dyscalculia, dysgraphia



### Prevalence

## 15-20%\*

### of humanity is neuroatypical.

SOURCE: NATIONAL CANCER INSTITUTE

\* The values provided are estimates. There are differences between countries or continents resulting from: the actual occurrence of neuroatypicality, existing definitions, diagnostic criteria, research methodology, levels of awareness.

WORKPLACE × SKANSKA



### Epidemiology

9–12%

Dyslexia is diagnosed worldwide regardless of culture or language. It affects about 9–12% of the world's population.

DATA: EUROPEAN DYSLEXIA ASSOCIATION

1% About 1% of children worldwide are diagnosed with autism.

DATA: ŚWIATOWA ORGANIZACJA ZDROWIA

4,6% This percentage of adults have been diagnosed with ADHD. DATA: NATIONAL INSTITUTES OF HEALTH<sup>6</sup>



### There is strength in diversity



#### Natalia Olszewska

MEDICAL DOCTOR, SPECIALIST IN NEUROSCIENCES IN ARCHITECTURE, NAAD (NEUROSCIENCE APPLIED TO ARCHITECTURAL DESIGN) PROFESSOR AT THE IUAV UNIVERSITY OF VENICE, SCIENTIFIC CONSULTANT ATIMPRONTA

"By using the diagnostic criteria listed in the DSM-57, the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition<sup>7</sup>, which remains a key tool for neurologists and psychiatrists around the world, we can begin to understand challenges faced by people with ASD, people with ADHD, and people with IPD.

At the same time, when creating this study, we drew from the scientific literature describing the strengths of neuroatypical people. However, one should remember that from the clinical diagnostics perspective specialists are looking for repetitive patterns that characterize individual groups of neuroatypical people, but from the neuroscience perspective each of us is unique, each of us has a different story, grew up in a different environment or culture."



### ASD

### Autism Spectrum

The autism spectrum manifests itself in persistent deficits in social communication. It is most often diagnosed in early childhood due to atypical social and behavioral presentations. There are also diagnoses in adolescence and adulthood. We discuss the differences of people with ASD at the sensory, cognitive and behavioral levels. People who are diagnosed with ASD will likely experience some autistic features as challenges in certain situations while at times these same features might serve as strengths.

WORKPLACE × SKANSKA

- Greater sensory sensitivity in the field of visual modality allows one to see details and patterns invisible to others.
- Tasks assigned appropriately to cognitive preferences create opportunities for concentration and enhanced memory usage.
- Decreased emotional capabilities in people diagnosed with ASD can be an asset in professions that require rational decision making and problem solving.

Traits such as perfectionism and commitment.

### Cognitive challenges are often related to difficult social communication at work. The reason for this is, e.g., varying degrees of cognitive control (attention control, cognitive flexibility, etc.).

- As a result, these people may experience increased stress. Routine and sameness in the environment are important for people with ASD, as these help in self-regulation.
- Concentration (both hypo and hyper) can also be a challenge, due to the malfunctioning of cognitive control.

CHALLENGES

STRENGTHS





### ADHD

### Attention Deficit Hiperactivity Disorder

ADHD spectrum is defined as a persistent pattern of inattentiveness and hyperactivity or impulsivity. It is usually diagnosed in childhood. This syndrome significantly affects all three aspects of functioning: sensory, behavioral and cognitive.

WORKPLACE × SKANSKA

- The ability to hyper-focus under right circumstances.
- People with ADHD are characterized by visual-spatial skills as well as creativity.
- Hyperactivity can be an advantage. It can be a kind of driving force that enhances multitasking or focus.

#### STRENGTHS



- Difficulty keeping attention sustained becomes a cognitive challenge.
- People with ADHD are often characterized by psychomotor hyperactivity.
- This group of neuroatypicals seek sensory stimulation and is easily distracted by external stimuli. This results in ambiguity of behavior.
- People with ADHD may have difficulty learning, have a predisposition to abuse psychoactive substances. They can also often suffer from insomnia.

Sources <sup>11 12</sup>



### IPD

### Information Processing Disorder, e.g., dyslexia, dyscalculia, dysgraphia

Information processing disorders can significantly impede learning processes or academic skills. They are usually diagnosed in children at the school stage. They manifest themselves as:

> Dyslexia - problems with accurate or fluent word recognition and spelling, poor ability to understand meanings,

**Dyscalculia** – difficulty processing or learning numerical information, as well as performing accurate or fluent calculations,

**Dysgraphia** – impairment of writing abilities. Information processing disorders are particularly visible in cognitive problems.

WORKPLACE × SKANSKA

People with dyslexia develop features that are particularly important in professions related to entrepreneurship. These are leadership skills, innovative thinking, verbal communication fluency or the ability to delegate.

People with information processing disorders are often more creative than neurotypicals. They have demonstrate visualspatial and storytelling skills.



STRENGTHS

Information processing disorders hinder effective communication, as well as organization and time management. This group often suffers from self-esteem issues. This manifests

itself in a high level of frustration or inability to cope with stress



The above-mentioned strengths and challenges for neuroatypical people in the context of the workplace can be considered in terms of four areas<sup>16</sup>:



WORKPLACE × SKANSKA



Effective communication

Getting to know the specifics of neurotaypical people allows you to understand their needs in the workplace. As a result we can create purposeful and respectful working environments. So that everyone can use their full potential and develop their abilities.







Awareness – why do we hear about neurodiversity more often?



Elaine Aron, Ph.D. – American clinical psychologist – in the review of Janera Nerenberg's book *Divergent mind. Thriving in a world that wasn't designed for you* justified the breakthrough of the publication with its mission to "abandon the pathologizing approach of dividing brains into 'normal' and 'abnormal' in order to strengthen the unique features of our minds". This is just one of the examples demonstrating that the wide range of population becomes familiar with the topic because it becomes more comprehensive, and thus popular.

How popular? It is enough to look at straightforward summaries from the statistics of scientific studies, provided by Google and social media - they are a litmus test of trends. They are a good evaluation of growing trends, they provide us with numerical, not qualitative data – which should be clearly emphasized.



### Scientific studies

Neurodiversity is an increasingly frequent subject of research. Referring to the English-language catalog, the National Library of Medicine, an increase in published publications can be observed. In the years 2009–2020, a total of 134 texts focused on neurodiversity were created. The next year (2021) is the first visible increase in published scientific papers, which – looking at the overall statistics of the catalog – can be considered as a noticeable beginning of interest in neurodiversity in science.



### Internet searches

Referring to the statistics of searches for the phrase "neurodiversity" in Google Trends, we see that:

- low,
- intained throughout the year,



2009 Source 20

• in 2018 interest in the subject of neuroatypicality was

• the year 2021 turned out to be a breakthrough – the number of searches not only increased, but also ma-

• in 2022, interest in the subject increased significantly.

2022

### Social media

Social media is packed with materials devoted to the subject of neurodiversity, which can be considered a sign of the growing interest of users in this area. A clear example of this is Instagram, where hashtags such as #neurodiversity or #neurodivergent reach the number of mentions up to 500–600 thousand. In turn, Facebook and Tik-Tok, a phenomenon of recent years, are main platforms for users who promote neurodiversity-related content. Their posts gain impressive attention - the most watched video formats have up to 8,000 likes.





When examining the current state of knowledge about neurodiversity, the information available on the above-mentioned platforms could not be omitted..

The report's authors were able to confront popular beliefs with knowledge supported by research and scientific studies - so that in the reality of information overload, they create a document presenting practices of high quality.





### We conducted a survey

In order to expand the amount of data available and explore the office work environment, we decided to conduct a survey of 120 people

- from the business world,
- from various industries,
- from different age groups (25-64 years),
- mostly in companies with 250+ employees (69%),
- in high positions (managers and decision makers).

#### The survey consisted of two parts:

- 1. a quiz that checked the level of knowledge and awareness of the environment in the subject of neurodiversity,
- 2. a section about changes in regards to neurodiversity in work environments - those already implemented and those possible.

The averaged results do not give a full picture of the situation – in each of the groups there were people with both a very high level of knowledge and a very low one. As you can see, the respondents were unable to accurately determine their level of knowledge at the beginning of the survey.



**NONE 17%** 

CAWI surveying is illustrative and cannot be considered representative for the studied population.

AVERAGE NUMBER OF CORRECT ANSWERS IN EACH GROUP: 10/16 9/16 10/16 9/16 10/16 9/16

**KEY OBSERVATIONS** 

The declared state of knowledge is not related to the real one - the percentage of correct answers was similar in all groups.

The higher the position held, the more often the respondents declared a good or very good level of knowledge, which was not reflected in the results.

Younger people answered correctly to questions on neurodiversity more frequently.











### Key answers

The most common incorrect answers allowed us to observe the following beliefs:

BELIEFS



#### REALITY

In reality you can treat symptoms not the cause

Neuroatyipcals are 15-20% of entire population

Talents are true but not for majority

Neuroatypicality is not a disease

## 55,1%

of the respondents indicated the definition of neurodiversity compliant with current state of knowledge:

Neurodiversity is a concept that refers to the diversity in the structure and functioning of the nervous system. This may include differences in the structure and number of neurons, in the way they are connected, and in the way they process information.





### Conclusions

Majority of respondents declared they were motivated to make changes in their organization in the favor of neuroatypical people work comfort.

There is a large discrepancy between the declared level of current activities and the possibilities of introducing changes.



these areas:

Conversation 22%

Educational activities 9,3%

Flexible working models 14,4%

Educational materials 7,6%

Office space 7,6%

Support programs 0,8%

Recruitment programs2,5%

WORKPLACE × SKANSKA

38,1%

of respondents admitted that their organization is addressing the topic of neurodiversity at least within one of



## 94,9%

of respondents see the possibility of introducing changes in their organization at least within one of these areas:







### Neurodiversity and business: why is it worth it?



### Expert's perspective



**Tina Sobocińska** HR4FUTURE FOUNDER & HR STRATEGIC ADVISOR CO-ORGANIZER OF THE "NEURODIVERSE WORKPLACES CONFERENCE"

As proved by the examples of the first companies in Poland creating friendly conditions for neuroatypical employees in Poland and the growing interest of business in gaining knowledge on this subject, neurodiversity in the professional context is gaining strategic importance. I have been involved in the HR area of large companies for over 20 years, therefore I am glad that organizations recognize the positive impact of neuroatypical people on creativity, innovation, productivity, lower turnover in the company, as well as increasing the sense of inclusivity or trust in the organization of all employees. At the same time, I hope that the number of such companies will continue to grow, because this is an area with great potential.

"We are all neurodiverse, everyone has a different brain operating

system," Weronika Tomiak said that at a conference entitled "Neurodiverse Workplaces" that took place in late March 2023. She is a co-organizer and founder of The Neurodiversity Foundation (Fundacja Neuroróżnorodni). Building a work environment open to neurodiversity is a path worth starting from a meeting with experts from foundations or others focusing on this subject. They will help in developing an approach that really meets the needs of employees of a given company, in spreading awareness in teams, suggest what mistakes to avoid, and connect with other organizations that are already operating in this area.

Extensive education of people working in the area of HR, managers, leaders and employees, open communication of undertaken actions – these are initiatives that may result in the readiness of neuroatypical employees to engage, e.g., in building an internal community or in cooperation with the employer in terms of educational activities. It is worth remembering that these are not and should not be activities to be done overnight – they require time and energy, both at the design stage, as well as implementation or modification. These should also not be one-off actions, but rather a one or two-year plan to reach the desired state of inclusion. A review of the work model, internal procedures, signposts and HR processes – from recruitment, which is often a bottleneck for neuroatypical people, to career paths - may be the next stage where neuroatypical people or experts can help. Similarly, experts and self-advocates, e.g., people with ADHD or ASD, can help in the preparation of good practices related to communication and a flexible work model.

An important element of conscious activities supporting neurodiversity in the workplace is also the workspace and its appropriate equipment with solutions ensuring healthy acoustics, a chance for deep work, appropriate lighting or other elements that architects design using neuroscientific findings. Finally, on the way to creating neuroinclusive workplaces, the person responsible for the topic of neurodiversity in the organization is of crucial importance. The one that can coordinate all internal activities, as well as cooperation with external experts or partners.

33

In the United States, it is estimated that 85% of people with autism are unemployed compared to 4.2% of neurotypicals<sup>21</sup>.

Not excluding anyone because of outdated social norms can provide many business benefits and contribute to improvement in terms of:



Talent pool Different people have different abilities.



**Innovative solutions** 

By combining different perspectives, which translates into financial results.



Company image

By creating an open workplace that attracts potential employees.

The support of neuroatypical employees significantly improves the situation in the company. Why? Because it has a positive impact on internal communication, which becomes more direct and makes the recruitment process more inclusive.

#### Quality of work

Acceptance in the work environment means improved well-being, and thus commitment and productivity. Neurodiverse test teams are 30% more productive. This is likely a result of the above--average abilities, such as pattern recognition (one of the characteristics of people with ASD) and the ability to spot mistakes.

A neuroatypical employee at a major tech company helped developing a key tech fix. Employed through the neurodiversity program, contributed to change implementation estimated at \$40,000,000 in savings.







Source <sup>22</sup>

### How to implement good practices?

Inclusive practices are not only communication campaigns, slogans or training in the area. These are activities for an inclusive work culture via:

#### Leaders

through activities for an inclusive environment, mentoring, impartiality and support of employees.

### **Co-workers**

through the real implementation of respect, understanding and mutual support in everyday work.

### Organizations

by creating strategies and standards that aim to create a discrimination-free, friendly culture.

This is essential for developing the potential of neuroatypical people.

#### DO I FEEL INCLUDED?



### Where to look for advice?

The Atypowi Foundation promotes neurodiversity, i.e., knowledge about the potential and value of neuroatypical people. They are the initiator and author of the "Neurodiversity in the Workplace - inclusive recruitment and management" study program at the SWPS University. This is the first postgraduate course of its kind in the world.

The Foundation offers training and professional advice on recruiting employees and adapting the work environment to the needs of neuroatypical people. In 2022, they trained over 500 managers from Polish and international companies. The members of the foundation form a team of experts in the field of neurodiversity, unique on a national scale. They also collaborate with: Nancy Doyle - founder and manager of the world's first workplace neurodiversity research center at Birkbeck University London, Hiren Shukla - founder and leader of EY Global Neuro-Diverse Centers of Excellence (NCoE) and Steve Silberman, author of the book "Neurotribes" selected

as one of the best books of 2015 by The New York Times.

and universities.

FOR MORE INFORMATION, VISIT ATYPOWI.ORG



fundacja dla neurokultury

In partnership with the NCoE, the Foundation plans to further develop their training offer and cooperate with foreign organizations




## Solutions – start today!



# Different neuroatypical groups and office space

In search for solutions, we started with an analysis of data on the strengths and weaknesses of particular groups of neuroatypical people. We assigned the results to specific zones of the office. This way we created solutions that you can implement in your own space.

The list of solutions remains open...

Listening to the needs of employees and testing solutions aids creation of new opportunities within the organization. The solutions can be freely modified and configured. The key is remaining focused not as much on the spatial solutions, as on the rationale behind them.

Everything in order to find answers customized to the nature of the organization.



#### SCAN THE CODE OR

CLICK HERE

AND ANSWER SOME QUESTIONS!

This report can be a source of knowledge also for us – its authors. If you are a person with diagnosed neuroatypicality or know/work with such a person, please send us your feedback.

- Did you find anything in the report particularly interesting?
- Did you like any of the solutions?
- Please let us know about solutions at your workplace that you find helpful.

Thank you very much. Your help means a lot to us!

## Experiencing the space

The environment can significantly affect they way we feel and behave. This is what tells us a neuroscientific model called "neuroaesthetic triad"<sup>24</sup>. According to this model, three large-scale systems generate aesthetic experiences: sensory-motor, knowledge--meaning, and emotion-valuation systems.

With this awareness, we can consciously shape spaces that affect our behavior and emotions.









KNOWLEDGE-MEANING SYSTEM



EMOTION-VALUATION SYSTEM

WORKPLACE × SKANSKA







## Office space components

### The working environment consists of three basic functions:

Spaces for individual work - they should provide conditions for focusing and performing individual tasks. They are particularly important for neuroatypical people, because some of them perceive the office primarily as a place to work. Other functions, such as socializing, knowledge exchange or building a sense of belonging, are of secondary importance for them.

Spaces for cooperation - they complement the basic functionality of any office. Without them, focus within individual work zones becomes impossible, as collaboration generates noise and therefore should take place in appropriate places.

Spaces for restoration - they are equally important in maintaining focus and productivity. Restoration can take place in silence, actively or during shared meals. There should be a suitable place considering all your needs.





# Building an office space

An inclusive office requires appropriate distribution of functions in space, so that it is intuitively used. Harmony is key for organization of activities and functions.





For the purposes of the study, we proposed the distribution of functions on the example of the existing Skanska building - Centrum Południe in Wrocław.



k zones 🛛 🔰 clo

closed individual work zones

cooperation work zones

Entry

Buffer zone separating workspace from the entrance.

#### Common area

Having a restorative impact and accessible to all. Ideally, it should include the best view in the whole office.

#### Communication routes

Clear and improving navigation in space.

#### Modularity

The rhythm of small individual work and cooperation zones gives the impression of harmony. At the same time, it facilitates orientation.

#### Buffer zones

Limiting the flow of stimuli between common areas and work zones. Coworking zones or even shelves with greenery often play this role.

#### Unambiguity

Determining the functions of the space, even the multifunctional ones, is crucial.

#### Division

For quiet and loud functions - it's good to separate them when possible.



#### Noisy functions

Separated (mainly acoustically) from the rest of the space (preferably with doors).



#### Wayfinding

Marking paths and functions throughout the office.



## Individual workplace

The equipment and location of the individual workplace may influence the decision whether a neuroatypical person comes to the office. The workplace should meet several requirements.

Together with the storage space, it should be permanently assigned or rented for a predictable period (e.g., 6 months). When supporting emotional management and improving work efficiency, it is crucial to ensure a sense of control over the environment (e.g., possibility of control over visual and sound stimuli). Most of the solutions below will benefit all employees, regardless of their neurotypology. They will work in case of the individual office, a work room for several people, as well as in open spaces.



#### Individual workspace

#### Visual and acoustic separation

It can be achieved thanks to pots with greenery or desk panels – when applied within the corridor or between desks it will limit the number of disturbing visual stimuli. People with ADHD and ASD will find it easier to focus.

#### Desk lamp

Ability to adjust the lighting on your own desk gives you a sense of control over the environment and it allows you to regulate the flow of stimuli. People with ADHD and ASD often have unusual sensory sensitivity - control over environment reduces their stress and supports focus.

#### Long-term booking

Ability to keep routine provides people with ASD with a sense of security. For people with ADHD, habits make it easier to concentrate.

#### Active seats

Such as balls, stools and steppers - they provide changes in muscle tone and enable the use of excess energy. Thereby they stimulate cognitive processes, help to interpret the environment and strengthen focus in case of people with ADHD. On the contrary, lack of stimulation causes impatience and stress, involuntary repetitive movements, such as rocking in a chair, which are common among people with ASD.

0

stress management



#### Distant view

Ideally of nature, it provides a sense of space and depth, and aids attention restoration<sup>25</sup>. The view of nature outside the window reduces stress, tension, anger and fatigue. These factors support concentration for people with ASD, ADHD and all employees.

#### Large displays

Preferably two monitors. For people with ASD and ADHD, alternating between windows on one screen can be challenging. For people with IPD (dyslexia), the ability to clearly magnify the content constitutes a great support for smooth and correct recognition of words and spelling.

#### Desk with adjustable height

Ability to change your working position allows you to release muscular tension and to use excess energy. This way cognitive processes can be stimulated, environment can be comprehended and concentration can be increased for people with ADHD.

#### Sensory accessories

Can help people with ASD to reduce stress. In case of people with ADHD, engaging in some movement around the station helps them stay focused on the task at hand.

#### Personal storage

Situated preferably within the assigned desk. A necessity to move everyday items from the locker to the desk and to arrange them in the right way can be time and energy consuming and can easily disrupt the routine of people with ASD.

















Arup | Workplace

WORKPLACE × SKANSKA

## Open space for individual work

Working in a typical open office space is very challenging for neuroatypical people, and sometimes even impossible. Work zones should be divided into spaces with specific functions (e.g., a quiet zone) and surrounded by auxiliary zones.

It is also worth creating zones with the possibility of assigning desks in a place with the least possible circulation, e.g., in the corners of the building or areas separated from the corridor by a buffer zone. Desk groups should consist of no more than four elements.

Moreover, it is important to ensure a sense of control over the environment by zoning lighting and ventilation systems.



### Open space for individual work

#### Nearby auxiliary zones

Noise can be a challenge for people with ASD. Diverse spaces and a work culture in which everyone uses the space appropriate to the activity performed (e.g., phone call, meeting) reduces noise in common spaces. For people with ADHD, being able to move and change the environment can satisfy a need for stimulation.

#### Visual aids

Access to tool such as whiteboards, monitors, easily accessible calendars and planners. People with IPD and ADHD have good visual and visuospatial reasoning skills. The ability to write down tasks and ideas can be supportive of work organization, task prioritization and productivity.

#### Variety of finishes

Variety of colors, textures, coverings from the corridor (full walls, foils, curtains), sounds or furniture allow you to choose a space compatible with your own sensory sensitivity. The right level of stimuli can be chosen by people with ASD and ADHD. It reduction of stress and distractions, making it easier to maintain focus and productivity.



0





#### Artificial light control

Access to lighting control system on a desk provides a sense of control and helps to regulate the flow of stimuli. People with ADHD and ASD often have unusual sensory sensitivity.

#### Daylight control

Lighting solutions such as light shelves and blackout blinds help to diffuse and reduce daylight, and at the same time avoid glare which can be distracting for all office workers, especially people with ASD.

#### Visual and acoustic separation

Walls, screens or curtains organize the space and work as partial acoustic isolation, limiting the number of stimuli. They aid focus of people with ADHD and ASD.











WORKPLACE × SKANSKA



## Closed space for individual work

For neuroatypical people, the optimal working environment is an office or rooms designed for 2-4 2-4 persons for work in absolute silence. For people with ASD, a long-term booking system is essential. People with ADHD should be enabled to move around, use various forms of seats or turn on music.

In each office there should be at least two such rooms located close to the entrance and slightly differing in terms of use. This way people with extremely different neurotypology can use them without disturbing each other. Other desks could be booked by neurotypical employees with similar preferences.



### Closed space for individual work

#### Separation from the corridor

Curtains and milk glass film covering the entire height of the glazing aid separation from the corridor and limit distractions (e.g., traffic in the corridor). For people with ASD, limitation of excessive stimuli aids stress reduction and it promotes concentration.

#### Water point

Water point allows people with ASD to reduce or avoid social interactions and undesired visits to social areas costing them a lot of effort. People with ADHD are eager to engage in social interactions and can find it difficult to return to work. In moments of intense work, access to water gives them a choice whether they want to expose themselves to distractions.





stress management

#### Environment management

Control of light, sound, smell and temperature provides you with a sense of control over environment. The ability to regulate the influx of various stimuli enables adjusting them to the level of non-standard sensory sensitivity characteristic for people with ASD and ADHD.

#### Visual aids

Access to tools such as whiteboards, monitors, easily accessible calendars and planners. People with IPD and ADHD have good visual and visuospatial reasoning skills. The ability to write down tasks and ideas can be supportive of work organization, task prioritization and productivity.

#### Audio support

Text To Speech software is a great support for people with IPD and ADHD. It enables quick and correct understanding of large amounts of written content.

山口

D

=









Onet RASP | Workplace

WORKPLACE × SKANSKA



# Space for cooperation

A sense of control over social relations and environment is crucial for neuroatypical people.

Selected conference rooms should be appropriately larger and offer a variety of furnishing layouts in order to allow you to choose the right place in the space according to meeting type.

Some of the solutions are light, mobile equipment and spacious rooms (no low ceilings or layouts that are tight and impossible to rearrange).

Diversity in the amount of sensory stimuli provided (via colors, textures, light, moving furniture) is also important. Hypo- and hyper-sensitive people need various levels of sensory stimulation. Users should be able to choose the right space and have individual control over factors such as light intensity and temperature.



Arup | Workplace



#### Space for cooperation

#### Room height

Rooms that are too low can create a feeling of oppression and evoke a sense of danger for people with ASD.

#### Daylight control

Blackout blinds reduce daylight and disperse glare which can be disturbing for people with ASD to concentrate.

#### Second row

Arrangement of rooms with sideline seats for people with ASD enables participation in meetings in accordance with one's own personal space boundaries, guaranteeing a sense of security and comfort. For people with ADHD, possibility to stand or engage in a gentle movement (e.g., on a moving stool or swing) aids concentration.

#### Active furniture

Such as balls, stools, swings and lifted table tops – they provide changes in muscle tone and enable the use of excess energy. At the same time they stimulate cognitive processes, help to interpret the environment and strengthen focus in case of people with ADHD.sens Lack of stimulation causes impatience and stress, involuntary repetitive movements, such as rocking in a chair, which are common among people with ASD.



CZ

#### Artificial light control

Lamps in meeting rooms should have adjustable intensity. For people with ADHD and ASD, it is a sense of control over the environment that allows them to regulate the flow of stimuli, reduce stress and aid concentration.

#### Finishing materials

Smooth, shiny and reflective surfaces can be distracting for people with ASD due to the ambiguity of visual stimuli. Avoiding them on large surfaces reduces distractions and supports concentration.

#### Large furniture

They can provide people with ASD who are very sensitive to touch with a sense of comfort and help in controlling their stimuli.

#### Separation from the corridor

Curtains and milk glass film covering the entire height of the glazing aid separation from the corridor and limit distractions (e.g., traffic in the corridor). For people with ASD, limitation of excessive out-of-control stimuli aids stress reduction and it supports concentration.













Arup | Workplace

WORKPLACE × SKANSKA





### **Social Restoration** Zone

An effective restoration zone implies a choice of the right place (access to natural light) and the right size, next to diversity of lighting and acoustics solutions. Divided into functions: lunch, coffee, rest or socialization, it should provide a choice between various levels of social interaction. It includes both work and restoration spaces — both for personal and common use.

A clear purpose of space makes it easier for neuroatypical people to make decisions and is conducive to focusing on specific activities.



### **Social Restoration Zone**

#### Closed kitchen

Separation of intense smells from the kitchen (especially distracting for people with ASD) makes the use of common areas more comfortable.

#### Decaffeinated drinks

Caffeine may enhance excessive arousal in people with ASD and ADHD. Choice helps them avoid unwanted states.

#### Various dining areas

Possibility to choose your own place provides you with a sense of control. For people with ADHD, large tables and common areas are an opportunity for interaction, which is so important for a sense of belonging. For people with ASD, an access to a separate place (alcoves, diners) means they can use space on their own terms, limiting undesired social distractions.

#### Casual meeting spaces

Staircases, cafe zones and places where employees cross their paths can contribute to community building . For people with ADHD, this is important: they can feel part of the group, and utilise the surplus of energy.

sensory sensitivity



H







Generali | Workplace

WORKPLACE × SKANSKA







Nowy Targ | Skanska

WORKPLACE × SKANSKA





### Sensory **Restoration Zone**

Sensory impressions: their perception, interpretation, and the response, are processed differently by neuroatypical people. Routine disruption and high levels of stimulation, especially in case of people with ASD, can trigger a meltdown. It is an intense reaction to strong feelings or stimuli that can take many different forms (i.e. crying, aggression).

It is important to provide a sensory relief, for example a private space with an access to daylight can soothe the senses and enhance a connection with oneself.

It can also be used by neurotypicals for emotional self-regulation. Acoustic and visual separation is important - it makes it possible to avoid people and stimuli that can be an additional challenge.



### Sensory Restoration Zone

#### Squeezable pillows

In moments of crisis, stimulation of proprioception releases muscle tension helping people with ASD to calm down.

#### Loudspeaker

Allows you to adjust the level of sound stimuli. For people with ASD and ADHD, it aids calm and restoration.

#### Fragrance pillows

Closed in the accessory cabinet allow you to adjust the level of olfactory stimuli. For people with ASD and ADHD, it aids calm and restoration.

#### Sensory floor

Textured ground has a positive impact on the proprioceptive stimulation. It is particularly beneficial for people with ASD and ADHD



#### Mood lighting

Indirect soft light. The possibility of adjusting the color and intensity adjustments allow you to calm down in times of stress or excessive arousal. This is especially important for people with ASD.

#### Breathing exercises

They relax the body and mind. Helpful for people with ASD and ADHD in calming down and combating excessive stress.

#### "Do Not Enter" sign

People with ASD are often ashamed of being sensory overloaded. Full privacy helps them avoid unnecessary stimuli in difficult moments.

#### Soft furniture

They improve comfort, allow muscle relaxation and help to calm down through alternation of body position. This is basic equipment that benefits everyone.















Arup | Workplace

WORKPLACE × SKANSKA





### Active Restoration Zone

Movement, sports or games satisfy our need for activity. This is important for hyposensitive people, e.g., for people with ADHD it has a motivating effect, as in their case lack of stimulation can affect work commitment.

It can be a separate room or specific solutions introduced into other spaces. It is important that these zones are separated acoustically and are away from the work and relaxation zones.



### Active Restoration Zone

#### Biophilic design

Contact with nature is a universal need of every human being. It is a source of peace, energy and creativity. It regenerates and improves mood.

#### Exercise equipment

Such as gym ladders, balance beams, trampolines or bicycles. Exercise reduces stress and improves your mood. It helps people with ADHD to use excess energy and restores their ability to concentrate.

#### Pattern on the floor

Balance track, hopscotch, maze can help to focus and to relieve difficult emotions in an active way for people with ADHD.

sensory sensitivity



#### Stimulating finishes

Colors, patterns and bold materials provide the right level of stimulation for hyposensitive people (characteristic of ADHD).

#### Team games

They provide an opportunity to build relationships and build affiliation. It helps people with ADHD to use excess energy and regenerate their ability to concentrate.







Ørsted | Workplace

WORKPLACE × SKANSKA





## Checklist



<b>Diagnosis</b> ARE THERE ATYPICAL PEOPLE IN YOUR ORGANIZATION?	□ yes	
	🗆 no	
	□ I don't know	
Space DOES YOUR SPACE INCLUDE:	wayfinding (readability of paths and functions),	a separate dining area (e.g., a side table, an American Diner),
	biophilic design (colors, materials, greenery, light),	$\Box$ coffee/water point in a quiet place (far from the main social area),
	□ plants,	$\Box$ lockers for personal belongings (close to the workplace),
	separated open space (for quiet work),	$\Box$ acoustic panels or greenery separating work zones (reducing distractions),
	$\Box$ office for rent (with access for everyone),	$\Box$ furniture conducive to movement and change of position (lifting desks and stools,
	<ul> <li>closed work room for 2-4 people (available, bookable for 4-6 months),</li> <li>inclusive layout of the meeting room (see page: 52),</li> <li>a visually secluded meeting room (at least one),</li> <li>acoustic booths (at work zones),</li> <li>room for sensory restoration (see page: 59),</li> <li>room for active restoration (see page: 62),</li> <li>closed kitchen (smell emitting),</li> </ul>	<ul> <li>swings),</li> <li>additional screens (upon request or at some workstations),</li> <li>adjustable lighting in work zones (zoning, desk lamps),</li> <li>adjustable lighting in the coworking and regeneration zones (dimming function),</li> <li>temperature control (for small zones),</li> <li>visual aids for better organization of work (e.g., whiteboards),</li> <li>no smooth, reflective surfaces (can be supplemented with acoustic boards or panels).</li> </ul>
<b>Space management</b> TO SUPPORT NEUROATYPICAL PEOPLE, IT IS WORTH	<ul> <li>Possibility to book your own desk for a minimum of 6 months (meeting the office-first criteria)</li> <li>Visible booking and occupancy of rooms (e.g., "Do Not Enter" sign in restorative areas).</li> </ul>	Each organization means different need

INTRODUCING:

yanizadun means uneren The list is waiting for even more suggestions.





# Summary



This report was created for a very specific purpose: to provide the business community with practical knowledge and solutions for creating neuroinclusive office spaces in the world overwhelmed by information.

At this point, however, we must emphasize that neuroscience is developing dynamically and therefore one should be aware that the knowledge contained in the report should be continuously updated and supplemented.

We deeply believe that the future belongs to everyone, including those who, due to their age, gender or cognitive challenges, have lived in a world of limited possibilities. We are happy that with our report we were able to take a small step towards this great, ambitious and necessary goal.



This report can be a source of knowledge also for us – its authors. If you are a person with diagnosed neuroatypicality or know/work with such a person, please send us your feedback

- Did you find anything in the report particularly interesting?
- Did you like any of the solutions?
- Please let us know about solutions at your workplace that you find helpful.

### Thank you very much. Your help means a lot to us!

#### SCAN THE CODE OR

CLICK HERE

AND ANSWER SOME QUESTIONS!



#### Literature

- 1 Nerenberg Jenara, Divergent mind. Thriving in a world that wasn't designed for you, Polish edition: Wydawnictwo Krytyki Politycznej, 2022, p.229.
- 2 https://www.gettysburg.edu/news/stories?id=79db7b34-630c-4f49-ad32-4ab9ea48e72b, dostęp: 20.04.2023
- Kotler Philip, Kartajaya Hermawanm, Setiawan Iwan, Marketing 5.0. Technologie 3 Next Tech, MT Biznes, 2021, p. 29
- 4 Jabłońska Marta, Człowiek w cyberprzestrzeni. Wprowadzenie do psychologii Internetu, Wydawnictwo Uniwersytetu Łódzkiego, 2018, p. 13
- 5 Lawrence K. Fung, M.D., Ph.D., *Neurodiversity: From Phenomenology to* Neurobiology and Enhancing Technologies, American Psychiatric Association Publishing, Washington 2021, p. 3
- 6 Ramos-Quiroga et al., Attention deficit hyperactivity disorder in the European adult population: prevalence, disease awareness, and treatment Guidelines, Curr Med Res Opin, 2013
- The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)
- 8 Salari Nader, Rasoulpoor Shabnam, Rasoulpoor Shna, Shohaimi Shamarina, Jafarpour Sima, Abdoli Nasrin, Khaledi-Paveh Behnam, Masoud Mohammad, The global prevalence of autism spectrum disorder: a comprehensive syste*matic review and meta-analysis*, Italian Journal of Pediatrics, 2022
- 9 Russell Ginny, Kapp K. Steven, Elliott Daisy, Elphick Chris, Gwernan-Jones Ruth, Christabel Owens, Mapping the autistic advantage from the accounts of adults diagnosed with autism: A qualitative study, Autism in Adulthood, 2019
- 10 The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)

- The Clinical Neuropsychologist, 2002
- 12 The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)
- 13 Logan Julia, Dyslexic entrepreneurs: the incidence; their coping strategies and their business skills, Dyslexia, 2009
- 14 Logan, J., Martin, N., Unusual Talent: a Study of Successful Leadership and Delegation in Entrepreneurs who have Dyslexia, Inclusive Practice, 2012
- 15 *The Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (DSM-5)
- 16 Categories based on: Tomczak, M. T., How can the work environment be redesigned to enhance the well-being of individuals with autism?, Employee Relations: The International Journal, 2022
- 17 source: TIK TOK, access date: 20.04.2023
- 18 source: Instagram, access date: 20.04.2023
- 19 National Library of Medicine, searched term: neurodiversity, / access date: 03.04.2023
- 20 source: Google Trends, access date: 25.01.2023
- 21 Mahto, M., Hogan, S.K. Hatfield, S., Sniderman, A rising tide lifts all boats, Deloitte Insights, 2022
- 22 Austin, R.D., Pisano, Gary P., Neurodiversity as a Competitive Advantage, Harvard Business Review 95, no. 3 (May–June 2017), p. 96–103.

11 Woods Steven Paul, Lovejoy W. David, Ball J. D., *Neuropsychological* Characteristics of Adults with ADHD: A Comprehensive Review of Initial Studies,

- 23 Goldstein, D., Pineault, L., Schaninger, B., Smallets, S., *How people not just* policies – make or break inclusive workplaces, McKinsey & Company [dostęp: 17.04.2023]
- 24 Coburn, A., Vartanian, O., Chatterjee, A. (2017). *Buildings, Beauty, and the Brain:* A Neuroscience of Architectural Experience, Journal of Cognitive Neuroscience, May 11, 2017, p. 1–11.
- 25 Colliers, Skanska, Report Zaprojektuj biuro Przyszłości







# Would you like to learn more? Or maybe you would like to join the project?

WORKPLACE × SKANSKA



Contact us at: hello@neuroinclusive.design

