

Building Empathy

Autism and the Workplace

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About the research partners

The Kingwood Trust

Kingwood is a registered charity providing support for adults and young people with autism. Its mission is to pioneer best practice which acknowledges and promotes the potential of people with autism and to disseminate this practice and influence the national agenda. Kingwood is an independent charity and company limited by guarantee.

www.kingwood.org.uk



The Helen Hamlyn Centre for Design, Royal College of Art

The Helen Hamlyn Centre for Design provides a focus for people-centred design research and innovation at the Royal College of Art, London. Originally founded in 1991 to explore the design implications of an ageing society, the centre now works to advance a socially inclusive approach to design through practical research and projects with industry. Its Research Associates programme teams new RCA graduates with business and voluntary sector partners.

www.hhcd.rca.ac.uk



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Foreword

Lady Hornby, Chair, Kingwood

One of the most significant aspects of our lives is work, it can provide financial rewards and as a result independence and a more dignified life, but perhaps more importantly it can provide purpose, meaning and a sense of self worth.

These benefits are as important for people on the autism spectrum as they are for the rest of society and as such the information and guidance contained in this publication, which represents another year of research from the expert team at the Helen Hamlyn Centre for Design, is of paramount importance to the autism community and those that might seek to employ them.

For the residents that we at Kingwood support, who might not all be able to take up employment through traditional routes, all have the potential to be involved in some form of structured work activity that provides benefits for themselves and society.

To make this possible it is clear that reasonable adjustments could be made to make work more manageable for people with sensory processing and social interaction issues, whether

this be through staff training, modifications to the work environment, or simply a better understanding of autism as a spectrum condition.

This publication attempts to help organisations that might potentially employ people on the autism spectrum by detailing simple, clear guidance on creating empathy and making reasonable adjustments and provides some easy to adopt tools and techniques and I can not recommend it strongly enough.



Introduction

This publication is the sixth in a series that describe design research projects carried out by the Helen Hamlyn Centre for Design at the Royal College of Art in partnership with autism charity The Kingwood Trust, who provide support and accommodation for adults with autism.

The work engages directly and creatively with autistic adults and their support network, employing qualitative methods using design ethnography techniques. In addition to a person-centred design approach this project takes a strengths-based approach that views autism through a positive and enabling lens.

The work aims to improve the everyday experiences of those with autism through better understanding of their sensory preferences, interests and action capabilities with the physical environment.

Past studies have focused on different environmental context of the home, ranging from the built environment, garden design, adaptation of household objects and communication tools – both digital and analogue. This project steps outside the domestic realm and into the workplace, which investigates

what the physical and social demands of the workplace might be for autistic people and explores ways to overcome potential difficulties. It also explores how to foster understanding and empathy between autistic employees, managers and co-workers, to support a neurodiverse workplace.

Autism is a lifelong and complex neurodevelopmental condition that affects the way a person communicates and relates to other people and the world around them. As a spectrum condition it affects people in different ways. People with autism may have rigid routines and special interests – they can be sociable or find social situations difficult. Some have learning disabilities whilst others possess high levels of intellectual ability. It is estimated that one in every 100 people is diagnosed with autism (Baird et al, 2006; Brugha et al, 2009), and with one per cent of the adult population of the United Kingdom having autism spectrum disorder autism is no longer considered rare.

Although autism is often associated with its effects on social communication and interaction, the latest revision of diagnostic criteria by the Diagnostic and Statistical Manual

of Mental Disorders (Fifth Edition; DSM-5, 2013) recognises the unusual way that autistic people respond to sensory input. These so-called 'sensory sensitivities' can affect a person's ability to interpret, filter and regulate sensory information, leading to a person becoming hypersensitive (over-stimulated) and/or hyposensitive (under-stimulated) to incoming information, thereby influencing how they experience their environment. For example, while some autistic people find certain sounds upsetting (e.g. dogs barking) or visual input (e.g. fluorescent lights) disturbing, others seek and take pleasure in such stimuli.

To create a holistic approach the design team invited autistic adults across the spectrum to take part in the research. This included people with limited verbal speech and additional learning disabilities, who live in supported housing and are described as having high support needs (receiving more than 15 hours support per week). In addition autistic adults who typically do not have delayed language development and may require short-term practical support, were also invited to participate.

Context

Autism and work



For most adults, work is a major part of life. Whether it is paid or unpaid, work is good for our health and wellbeing. We develop skills and it makes us feel productive, valued and builds our confidence.

Unfortunately for people on the autism spectrum employment outcomes are poor. Only 15 per cent of autistic people are in full-time employment (Howlin et al, 2013), despite the fact that 79 per cent of people with autism on out of work benefits want to work (Redman, 2009). Although there is a high rate of unemployed autistic people, there are only a handful of practical tools available that address this and provide

support and advice for prospective employers and autistic people to attain and sustain employment.

Finding, applying and sustaining employment is a complex process involving a number of hurdles for autistic people, who may experience stress, bullying, low quality and low paid work that does not match their abilities. Therefore, the success rate of sustaining a job is low (Hurlbutt & Chalmers 2004; Burkhardt & Cardillo, 2012; Griffith, 2011; Schaller, 2005). Mullar et al (2003) interviewed 18 adults with autism about their experience with the workplace and found highly educated employees working at

entry-level jobs. Hagner & Cooney, (2005) interviewed 14 supervisors of employees with autism and found that the main barriers were sensory sensitivities, for example, difficulty for autistic employees to deal with unusually loud noises. Results from an online survey by Kirchner et al, (2014) revealed that social interaction and sensory issues were most often rated as interfering with work performance.

Many autistic people have led successful careers that have been carved and shaped around their special interests. Temple Grandin, an American autism activist and bestselling author, has a successful career designing livestock equipment. She gives credit to her science teacher Mr Carlock who helped Grandin realise her abilities. Her interest in automatic doors inspired her teacher to encourage her to investigate this further, which led Grandin to become an engineer. During the last decade there has been growing efforts to create job opportunities for autistic people through start-up companies in the information technology sector, such as Specialisterne (Denmark and Iceland), Passwerk (Belgium) and Aspiretech (United States). The special

interests amongst autistic people have begun to be recognised as a valuable resource when developing employment strategies for people with autism (Kirchner & Dziobek, 2014). An example of this is Specialisterne, who are a social enterprise founded in Denmark in 2004, and have successfully placed thousands of people with autism into specialised jobs. They acknowledged how an autistic person's skills in pattern recognition, attention to detail and ability to repeat tasks without losing interest, are complimentary to the information technology sector.

However, jobs like this match the specific strengths of only a small subgroup of autistic adults, and there still remains a lot of autistic adults who remain unemployed and whose skills and interests do not necessarily relate to the information technology sector. In light of this, the research also explores how a microenterprise can be developed for and with autistic adults across the spectrum, that carves and creates work opportunities to match their range of interests and skills. To put this concept into practice the design team aims to integrate the world's biggest online marketplace, eBay, into The Kingwood Trust. It will

be used as an important platform to match jobs with the skills, interests and preferences of the autistic people Kingwood support.

Whilst there is growing support and guidance for employers who are now starting to recognise the importance and value of a person on the autism spectrum, many employers continue to take on board a 'one size fits all' approach to workplace satisfaction, and therefore may lack the experience and ability to support a person with autism in the workplace.

Research suggests that an employer's lack of understanding (Forsythe et al, 2008) and failure to make reasonable adjustment for autistic employees in the workplace, are significant barriers to work. Reasonable adjustments are a key part of the Equality Act 2010 (EA) and essential to enabling a disabled person to retain employment. Whilst some employers make reasonable adjustments to the work environment to support people with different physical abilities, there is little support and awareness for what a reasonable adjustment is for a person with different cognitive abilities, whose needs may not be so obvious. Hence, little research has been conducted to

assess what adjustments are needed for people with autism or the extent to which employers need to make these adjustments (Hagner & Cooney, 2005).

To fill this gap in research this project will take a person-centred approach to investigate what the physical and social demands of the workplace are, and to explore what workplace satisfaction means for an autistic person. The project proposes that small personalised adjustments can be made. However, for this to happen, there needs to be better understanding and empathy between autistic employees, their co-workers and managers, to create a positive working culture where everyone in the workplace shares an equal understanding and awareness.

Through the literature review the design team have identified three important design themes:

1. To explore the sensory and social challenges of the workplace.
2. To explore how to build empathy and understanding in the workplace.
3. To create work opportunities at Kingwood that match the wide range of interests and skills of the autistic people they support.

Research Methods

The design team engaged directly and remotely (through online forums) with autistic adults whose work experience ranged from paid and voluntary work to being self-employed or unemployed. Support staff, job coaches and social interpreters were also invited to take part in the research to gain further insights into the challenges autistic people experience throughout the different steps of applying, attaining and sustaining work.

The research took a mixed methods approach that involved informal interviews and communication tools to help prompt discussion and generate more context-specific insights. The design team also facilitated a series of co-creation workshops and focus groups, which encouraged autistic adults and their support network to generate design ideas on how to improve the workplace experience. Together, the methods generated a rich pool of insights and ideas, where key opportunities for innovation were identified.

Online Forums and Interviews

Online blogs and forums such as 'Wrong Planet' have created global conversations between autistic people to share and exchange thoughts and

experience of everyday life. This growing online community was a good way for the design team to gather perspectives and insights into how autistic people experience the workplace. The subject of the workplace featured highly, and the majority of the challenges experienced could almost be divided into social and sensory. For example, the sensory and social aspect of the physical space appeared to be the key areas which autistic employees struggle with. On the right are some examples of the sensory and social challenges found in the workplace, taken from online blogs and autistic adults who participated in the research.

Work Repertoire

Research by Julian Thompson (2014) explored an autistic person's response to marginalisation and exclusion at work. The study involved the analysis of 82 online texts taken from autism specific blogs, which revealed a number of strategies autistic people use to resist exclusion and strengthen their position at work. Thompson identified and mapped four repertoires that describe how autistic people experience and use strategies: in the workplace; survivor; specialist; outsider and nerd. Each repertoire is described and illustrated on the following page.

Sensory Observations

"I keep ear buds in at all times because even the small chatter that goes on in my office is EXTREMELY distracting."

"I used to be in an open plan office but that is horrendous for people with autism, so I cut myself off. I have to wear headphones because I can't stand the noise. The more people they put in the open plan office the worse it gets."

"I work upstairs. The noise from the floor is constantly irritating: air compressors; doors opening and closing etc. I often find myself drumming on the table, rubbing the keyboard, bouncing my feet around, or rubbing my hair to block out this external stimuli."

Social Observations

"The change that people need to do is in their heads."

"An important question is whether the co-workers know that this person is autistic because if they did and understood what it is that they needed to do differently then they would behave in a different way."

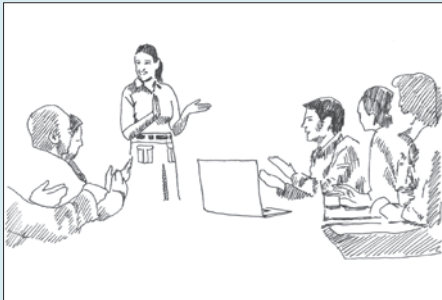
"Most employers can cope with the physical adjustment but they can't cope with attitude adjustment."

Survivor



The Survivor repertoire avoids discrimination and exclusion through camouflage and concealment, whereby an employee is expected to fit in and meet the employer's needs.

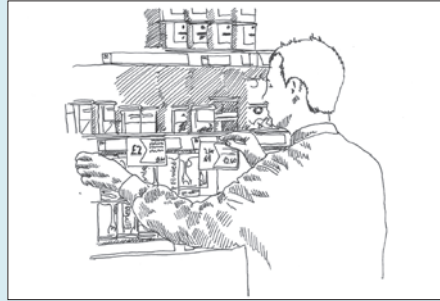
Outsider



For the Outsider repertoire, the autistic worker discloses fully their autism diagnosis to their employers and co-workers. This repertoire does not attempt to change themselves to fit into the workplace, instead, the autistic worker advocates a workplace that accepts difference.

(Thompson, 2014)

Specialist



For the Specialist repertoire, the autistic worker is acknowledged and valued for their specific strengths and abilities and is not expected to conform to a conventional neuro-typical working culture.

Nerd



The Nerd repertoire escapes conventional employment through self-employment and/or focus on special interests, so that they can employ an entirely autistic way of working.

*"When I started at university I was **Specialist** repertoire, because the geology department, where I was trained, saw something in me that I didn't, and it was 1980 before I was diagnosed with autism. I had this ability to systemise and learn really well **Specialist** wise at university, and I specialised in things like time and fossils. I was using my abilities as an autistic person without knowing it. The people in charge thought me a bit odd but I got everything done.*

*When I left university I went into the **Survivor** repertoire, it wasn't so much passing off 'normal' against autism, it was passing off normal against 'stupid and weird'. I knew I wasn't but I knew I was different, so I developed strategies. I went with the **Nerd** repertoire as I didn't fit in o an ordinary job, but I could draw and make things, so I became self-employed as an illustrator. I am now in-between **Survivor** and **Outsider**."*

Autistic participant

*"I am hovering between the **Outsider** repertoire, where I am trying to make them listen to what I need as a person in work and the way I need to be treated, and a **Survivor**. You get so fed up with saying – this is what I need, that you don't bother any more. So I hover between the whole lot, I would really like to be the **Specialist** one where you are valued for what you do where it is judged on the end product and not on the pattern and the way you work."*

Autistic participant

Research Methods

Co-creation workshops



There are approximately 170 support staff at Kingwood Trust who play an important role in the lives of people with autism and provide assistance with meal preparation, shopping, managing money, leisure activities and personal care. This support helps each autistic person to develop a greater degree of independence in order to help unlock their potential and live full and active lives.

Through their collective observations, support staff and family members are pivotal in understanding how autistic people perceive and experience everyday life and are best placed to notice what a person enjoys and responds to, as well as what might trigger stress and anxiety. As some of the autistic participants in this research have limited speech with additional learning disabilities, the designer sought expertise and

guidance from support staff, through the process of co-creation workshops.

The co-creation workshops involved 23 support staff. Through a series of creative activities the support staff were encouraged to share their ideas, experiences and thoughts around the subject of autism and work (paid and / or voluntary). Here are descriptions of each activity:

Activity 1: Physical and Social Challenge

Every workplace is different. Depending on the type of work involved, workplaces are furnished and structured in ways that influence different levels of social interaction. For example, a librarian, cataloging and sorting books, may work independently. This is in contrast to a nurse, who works in a team.

To explore how autistic people may experience different types of workplaces, each participant was given a set of 10 cards that visually represent

a range of workplace settings: library; café; supermarket and factory floor.

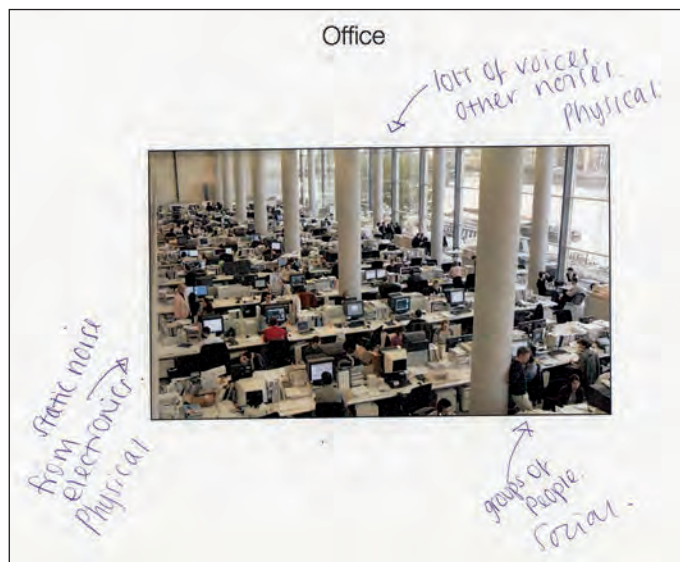
The support staff were invited to look at the different workplace contexts and describe what they thought the physical and social challenges might be for the person they support.

Results

Some of the sensory issues raised occurred in different workplace environments. For example, audio distractions included: the sound of trolleys being pushed; typing on a keyboard and people talking on the

phone. Visual distractions included: bright lights; clutter; shiny surfaces; piles of reading material and too many pictures and signs on the walls.

Potential social difficulties were also identified such as: lack of personal space; being in the same space as lots of people; being randomly approached by customers; small talk; people asking for food not on the menu and making eye contact.



Research Methods

Co-creation workshops

Activity 2: Mapping Sensory Preferences – Model of Workplace

The aim of this activity was to encourage the support staff to explore what a comfortable and enjoyable workspace might be for the person they support, and to create a model of it using a small white box and a selection of materials including Argos catalogues.

To help this process, firstly the participants were invited to map the sensory preferences of the person they support using Sensory Preference Cards produced by the design team in the 'Exploring Sensory Preferences' project (Brand & Gaudion, 2012). Once categorised into groups of likes, dislikes and neutral, the cards created a visual mood board. By framing the autistic participant's sensory preferences within the context of the workspace, the participants were able to make design decisions on how to make their workplace models.

One participant's sensory cards revealed that they like darkness, and spending time alone, which suggests that this person may benefit from a private workspace away from direct sunlight. In this instance, the

participant created a workspace in the bedroom of the person they support, as they felt it was where they might be most comfortable to work. The cards also highlighted colour preferences, which helped inform the choice of colour for the flooring, walls and furniture.

In addition to a person's sensory preferences the support staff also took inspiration from a person's interests, which created ideas for job type and furnishings. For example, one participant made the workplace floor into a football pitch and put images of footballers on the walls. Another participant connected the person they support's interest in make up and created a workplace that incorporated a make-up counter.

Results

The co-creation workshops proved effective in identifying recurring themes and the needs of those being considered. It was also a good tool for engaging people and eliciting anecdotes. The activity encouraged the support staff to reflect, share ideas and experiences on the topic of autism and the workplace as demonstrated to the right:

"When somebody starts a job they don't just need a job description, they need to know the social rules i.e. we always stop at 10am to have a cup of coffee, and knowing that you can get a drink of water downstairs and there is toilet on the second floor."

Support staff

"Breaks – when an employer takes somebody on with autism it might be hard to get them to break for lunch. One parent told me about their son who got a job where he was sitting at a computer. The manager had to go and switch his computer off so that he would take a lunch break, because otherwise he just would not move."

Support staff

"What most people with autism like is instant messenger and email, which can be the best way to interact as it gives them that time to think about what you just asked them."

Support staff



A selection of workplace models made by support staff and people with autism

Research Methods

Autism and empathy

Debunking the Myth

Empathy is 'the ability to be aware of, understand and be sensitive to another person's feelings and thoughts without having had the same experience' (IDEO, 2014). Being aware of other people's feelings and understanding their needs is crucial in the workplace, it helps to create a more caring and supportive work environment, enabling co-workers to overcome challenges together. Lack of empathy creates misunderstanding and mistrust, which in turn may corrode productivity and happiness.

In 1985 a study showed that autistic children had a deficit of Theory of Mind (TOM) (Baron-Cohen et al), which means they lacked the ability to take on another person's perspective. Since then TOM deficits has become a defining characteristic of autism and has become embedded within autism research (Baron-Cohen, 2011). Consequently it is a common and widespread belief that autistic people lack empathy, however autistic self-advocates suggest that the opposite is true, and in fact often feel intensely and easily overwhelmed by the emotions of those around them.

This project has the view that although

autistic people may have difficulty navigating social norms and reading non-verbal cues, it does not mean they cannot feel another person's pain or happiness. This study reverses the 'lack of empathy' theories by questioning how much empathy non-autistic people have towards people with autism. This resonates with Damian Milton's Double Empathy Theory which he describes as: 'a disjuncture in reciprocity between two differently disposed social actors which becomes more marked the wider the disjuncture in dispositional perceptions of the life world – perceived as a breach in the 'natural attitude' of what constitutes 'social reality' for 'non-autistic spectrum' people and yet an everyday and often traumatic experience for 'autistic people' (Milton, 2012, p.2).

Whether autistic or not, we all have different levels of empathy. Everyday we engage in small empathic acts in response to a person's emotions, for example, on a bus, we might decide to speak quietly on our mobile phone to try not to disturb the person next to us. If a friend is feeling unwell in a car we might stop or open a window to give them some fresh air. All of these actions require empathy, which is the



key to understanding another person's feelings, so when we empathise we respond to a person's feelings and adjust the situation accordingly. Empathic acts in daily life can also extend to the workplace, for example we might empathise with a colleague if they are late for work due to traffic, or are nervous about public speaking – particularly if we have experienced that situation ourselves. Whilst there is a lot of support and advice for people on the autistic spectrum on how to develop empathic skills in the workplace, the same is needed for managers and co-workers so that empathy and understanding can be fostered reciprocally between everyone.



Building Empathy Workshop

It would prove impossible for the design team to develop a prescriptive set of guidelines that advise people how to develop empathic potential as each individual is different. Instead, the design team developed a Building Empathy workshop, which was facilitated in three locations; The Kingwood Trust, Royal College of Art (RCA) and at the Autism and Good Design Conference (2015), organised by the National Autistic Society.

Support staff, art and design students and delegates at the conference were invited to explore what empathy means to them and how empathy

can be developed, particularly when in the company of people who experience and perceive the world differently to themselves.

The workshop began with a description of the designer's own subjective journey in which she developed a framework to help expand her own empathic abilities whilst working with autistic adults with limited speech and additional learning disabilities.

The second part of the workshop encouraged the participants to use the Sensory Preference Cards (Brand & Gaudion, 2012) to reflect upon their own sensory likes and dislikes. In

teams, they selected one person's sensory profile and decorated an umbrella accordingly. As an important part of developing empathy is to consistently challenge our own assumptions and develop better self-awareness, the workshops concluded with a range of interactive activities that challenged the participants own sensory perceptual awareness.

The workshop with the RCA Masters students differed slightly as three autistic speakers were invited to share their own experiences with the students.

Research Methods

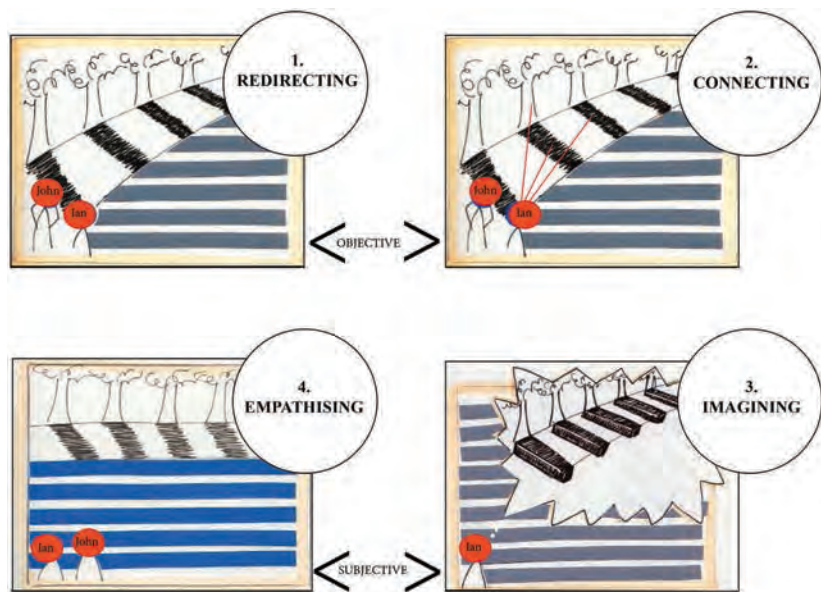
Autism and empathy



Storyboard by Ian Wilson

Designer's Journey

The designer explored the question of empathy by observing the support staff who carried out empathic acts for the autistic person they support. The designer noticed that the support staff were experts at avoiding fundamental attribution errors, as they were able to objectively connect an autistic person's emotions to the surrounding environment, rather than internalising their thoughts and explaining another person's actions through their own.



Empathic Framework

To explain this further, a storyboard (above left), drawn by Ian Wilson, who facilitates creative workshops with autistic artists, describes his experience of walking in a park with John, an autistic man who has limited speech. John becomes anxious when they get to a path containing shadows cast by the trees, as he might perceive the shadows as black holes.

This storyboard provides important clues for how a person was able to interpret emotional responses to a

situation and empathise without the support of spoken language. By sketching and reflecting upon similar experiences made by the support staff and analysing the storyboard, the designer identified four stages of empathic understanding: **Redirecting; Connecting; Imagining** and **Empathising** (see above).

This framework suggests how Ian built empathy by objectively observing a situation and subjectively forming an understanding of the situation.



For example, in: **Redirecting and Connecting**, Ian redirected his own thoughts, externalised and connected John's behaviour to the shadows in the environment. Conversely, in **Imagining and Empathising**, Ian subjectively formed an understanding of the situation by imagining and adapting the situation accordingly.

Umbrella Activity

Whether autistic or not, our sensorial experience of the surrounding environment can be very different and unique. To encourage the participants to explore and reflect upon their own sensory experiences they were invited to visually map their sensory likes and dislikes using the Sensory Preference Cards (Brand & Gaudion, 2012).

Once complete the cards create a clear visual indicator of how we all have different sensory likes and dislikes.



In teams the participants were then asked to select one person's sensory profile and create an environment for that person using transparent umbrellas. This exercise encouraged the participants to creatively explore how a person's sensory preferences can help inform the design of spaces and decisions upon tangible outcomes.

When complete, the umbrellas showed how everyone has a unique sensory profile but more importantly how adjustments can be made to make their environment more comfortable for them (by understanding their sensory likes and dislikes). The umbrella activity is an important method that could be transferred into the work environment to explore what reasonable adjustment might be for an employee.



Sensory Perceptual Awareness Activities:

1. Simulations

Several people with autism have created short films to serve as simulations of what background noise and sensory overload feels like to them. These short films are available on YouTube and are a good tool in a workshop to encourage people to imagine how it might feel to experience sensory sensitivities in everyday life.

Trip to the Supermarket: <https://www.youtube.com/watch?v=lcS2VUoe12M>

Daily Situations: <https://www.youtube.com/watch?v=KurXpARairU>
<https://www.youtube.com/watch?v=K2P4Ed6G3gw>

Walking along a Street: <https://www.youtube.com/watch?v=plPNhooUUuc>

2. Paper Clip and Rice

The aim of this activity is to simulate the tactile confusion that some

Research Methods

Autism and empathy



autistic people might experience. The activity involves a pair of rubber gloves, rice and paper clips. Simply pour rice into a small container and add up to 10 paper clips and mix them into the rice. The participant wears the rubber gloves and is asked to remove the paper clips from the rice. For added complexity the participant can wear a blindfold, this highlights our dependency on sight to feel things. In a group situation it is fun to make this into a game – those that can pick out 10 paper clips the fastest

have won! This sense of competition escalates the participant's sense of confusion and helps them to imagine how frustrating it would be to experience tactile confusion on a daily basis.

3. Mirror and Maze

The aim of this activity is to help people understand the difficulties autistic people can have accomplishing a seemingly simple task when surrounded by sensory overload, and heightens awareness of hand-eye

coordination. For this activity the participants are each given a piece of paper with a maze on it. A mirror is held up on a table reflecting the maze and the participant has to get from A to B on the maze using a pencil, but only by looking into the mirror. At the same time music and a flashing torch can be aimed at the mirror to create visual and audio distraction.

4. Where's Wally?

Some autistic people may have an excellent focus on details and experience weak central coherence (Uta Frith, 1989). This theory describes how an autistic person tends to focus on the small details of the environment rather than perceive it as a whole. The aim of this activity is to encourage the participants to explore their own abilities on attending to the detail of things and illustrate how we all attend to things in different ways. This activity works well for a group. Each participant receives five prints of different 'Where's Wally' scenes ensuring that they are all looking at the same theme and are asked 'Where's Wally?' at the same time. The first person to find Wally might suggest they have good attention to detail.



5. Binocular Vision

Some autistic people may have poor Integration of central and peripheral vision; this activity invites participants to imagine what it would be like to navigate a space without peripheral vision. This activity requires a large area of floor space away from any obstacles. A long piece of coloured tape is then stuck to the floor and each participant is given a small pair of binoculars. Each participant is asked to walk as straight as they can along the line of tape, but only when looking through the binoculars the wrong way round. This activity will give the participants a sense of binocular vision and a sensation of detachment from their body.

6. Pasta on String

Some people with autism may experience difficulties developing motor skills and have poor dexterity which may affect their ability to carry out everyday tasks such as tying shoelaces or handwriting. The aim of this activity is to encourage the participants to imagine how it would feel to have poor dexterity whilst carrying out a simple task. The participants are each given a pair of gardening gloves, a piece of string and a small plastic box containing

different sizes of pasta tubes. Wearing the gloves the participants have to thread the string with the pasta tubes, soon they will experience frustration as inflexibility of their fingers makes the activity extremely difficult.

Guidelines

Whilst it is difficult to create a generalised guideline on how to build empathy, based on this research and what was learnt from the workshops, here are some suggestions of things to think about:

- Listen
- Reflect and be aware of your own actions
- Externalise your thoughts (fundamental attribution error)
- Observe
- Imagine
- Connect
- Always remember when you have met one person with autism, you have met one person with autism.

Findings

Six key findings



1. Social and Sensory Challenges

Blogs, interviews and co-creation workshops revealed that the sensory and social aspects of the workplace can be the most challenging elements for autistic adults.

Whilst some autistic people develop their own strategies for overcoming some of these challenges (i.e. learning the techniques of small talk and eye

contact) understanding the sensory and social challenges can be less obvious for managers and co-workers. A person may not be able to anticipate or articulate what the challenges of the workplace might be until they are in it. Consequently there needs to be a better and more comfortable way for autistic employees to communicate these challenges before and during employment.

2. Empathy and Understanding

There appears to be too much of a focus on the lack of empathy as a trait of autism; however, the research reveals that there is also a lack of understanding and empathy by managers and co-workers, even though support and advice is available for them and for autistic employees. Although it is segmented, it is not viewed as a reciprocal activity. There needs to be more focus on how to build understanding and empathy between everyone in the workplace, a way of doing this might be to explore differences but also identify commonalities.

3. Promote Self Advocacy

Only when an autistic person is in employment can they begin to know what could be adapted for their needs in the workplace. The research highlights how many of the challenges experienced by autistic employees in the workplace are socially orientated, which can be difficult to talk about, particularly if they have limited speech and find social interaction challenging. Therefore a communication tool that empowers an autistic employee to self-advocate their needs would be beneficial.

4. A More Personalised Approach

Whilst there is advice and guidance available to help managers and organisations to support autistic employees in the workplace and *vice versa*, it is often in the form of a long list of generalised recommendations. Whilst this can be useful, it might also be daunting and overwhelming for any employer, who may then form an unrealistic impression of what a reasonable adjustment might be for their prospective autistic employee. By involving the employee at the start and enabling them to express what adjustments they may need, this may reveal that only small changes may be required to increase their level of comfort at work.

5. What Does a Reasonable Adjustment Look Like?

There is generic support and advice available for organisations and managers that list examples of what a reasonable adjustment might be for an autistic employee. However, a 'reasonable' adjustment can mean different things to different people so the important challenge is to understand what a person's level of reasonable adjustment is for them. Support and assessment tools need to be developed where individuals feel



able to discuss their specific needs without fear of discrimination or negative attitudes and managers can work with autistic employees, rather than relying solely on generic advice.

6. Neurodiversity

It is important to recognise that many autistic employees may either not realise they are autistic or choose not to disclose it. To ensure their

needs are heard it is important that information and support is not segregated but available to everyone in the workplace, and tools can be created which brings people together to work towards an inclusive workplace that values differences.

Workplace Activity Box

To address the six key findings, a workplace activity box was created. The workplace activity box contains three activities that invite managers, supervisors and employees (autistic or not) to understand more about themselves and their peers within different workplace settings.

The visual card-based nature of each activity helps to mediate conversation, identify differences and also commonalities between all those involved.

The workplace toolbox aims to encourage people to discuss and share their thoughts and ideas about what a reasonable adjustment might be for them in an informal manner to provoke discussion on how a workplace can be adapted to make

it more comfortable, productive and enjoyable.

Activity 1: People & Things: Individual, one-one or group based activity

The aim of this card based activity is to encourage participants to discover, share and communicate what a reasonable adjustment in the workplace means to them, and start the process of what needs be adapted in the workplace to make it more comfortable.

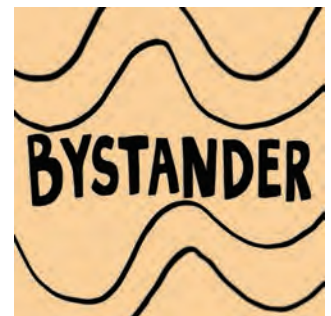
Activity 2: Disc-it: Communication tool

This tool was inspired by Autscope which is a conference created by and for autistic people. At Autscope there is a colour-coded badge system, which indicates at what level a delegate would like to participate.

The design team transferred this idea into the workplace context, as how we feel and what we are doing affects our levels of participation, which can change and vary throughout the working day.

Activity 3: Mapping Sensory Patterns: Individual, one-one or group based activity

This card-based questionnaire invites a person to explore their own sensory pattern and that of others, and provides ideas on how to design and/or adapt a workspace to accommodate different sensory patterns. (The sensory mapping activity was translated from an existing sensory pattern questionnaire found in the book *Living Sensionally* (Dunn, 2009).





Participants engaging with the People & Things cards



Workplace & Activity Box containing the activities

Workplace Activity Box

Activity 1: People & Things in the workplace

People & Things

From greeting a person, eating lunch, borrowing a pencil, having team meetings to serving a customer and going to the office party, there are many situations at work that involve some form of interaction with another person. In the workplace, social skills are important now more than ever, due to the evolving nature of work that is putting more emphasis on team-work and collaboration.

The social aspects of the workplace might be particularly challenging for an autistic person who may find initiating conversation, reading social cues and knowing when to speak and other forms of social interaction difficult. A person may be judged as rude, insensitive, aloof or incapable of understanding, when, in reality they merely process information differently.

To add another layer of complexity, workplace etiquette is an important set of unwritten rules that guides social behaviour in work environments – in terms of what people are expected to do and say, or to avoid what should not be said or done.

Workplace etiquette may vary from one workplace to the next which is

defined by the culture of the workplace made up of the values, beliefs, underlying assumptions, attitudes, and behaviours shared by a group of people. However, as unwritten rules are not explicitly defined it can be particularly difficult for some people who find social situations challenging to pick up on the nuances of what is acceptable in different work situations. The unwritten rules of the workplace are not always easily understood, or even known to exist, by autistic people. It is therefore important not to assume that unwritten rules of the workplace are understood.

Reasonable Adjustment?

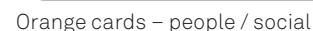
Employers may need to make certain modifications, adaptations, and allowances for autistic employees to enable and encourage them to thrive in the workplace. A reasonable adjustment might be modifying the environment to help minimise sensory overload. This can include avoiding fluorescent lighting by replacing it with subdued lighting; introducing soft furnishings and carpets in a large room to muffle the harsh sounds and echoes; using screens or partitions to divide up large rooms, or by providing a quiet corner in a noisy office.



People & Things in the Workplace

The workplace preference on each card is described in simple words and illustrated by Ben Connors. The cards act as visual prompts in particular to support autistic people who may not be able to verbally articulate their preferences. The *People & Things* activity is flexible and can be used in an individual, one-to-one or group basis to help a person to express which cards relate to them.

The card activity can be used pre, during or post-employment. The advantage of this is that in some situations it might be difficult to anticipate what needs to be adjusted at work, and it is only once a person is in the workplace that they are able to identify what needs to be adapted.



Workplace Activity Box

Activity 1: People & Things in the workplace

The cards are not a definitive list of recommendations as it would be impossible to gather everyone's preferences within different workplace settings. Consequently blank cards are provided to enable the participants to express a specific need that may not be in the pack.

The *People & Things* activity is not intended to be an autism specific activity, in fact a person may relate to certain cards whether they are autistic or not. They provide a useful prompt to ensure that new employees have the opportunity to share and be open about their specific need and subsequent reasonable adjustment. The main aim of the card activity is to help an autistic employee to advocate and for their managers and co-workers to advocate their needs and foster understanding and empathy within the workplace culture.

Trialling the People & Things Activity

The design team trialled the *People & Things* cards on three separate occasions involving five autistic adults and a social interpreter in an individual and group setting. On a practical level the card trials immediately revealed any misunderstanding and ambiguity within the text of each card, and also where recommendations overlapped.

These insights helped the design team to refine the cards and reduce the pack into a more concise and manageable amount. In the group-based trial, which involved autistic and non-autistic participants, the cards mediated conversations and showed differences and commonalities between the participants.

"I like the potential for a discussion, there might be something that is an autistic trait, but as an neurotypical you may relate to those things too, it might be a bit cementing."

Workshop participant

"Its about highlighting commonality instead of widening the gap between autistic and non autistic people."

Workshop participant

"It's a really good team building exercise for everyone to understand one another. You can have an open discussion and people can be a bit more sympathetic to everyone's needs."

Social interpreter

"For co-workers and for managers this would be great and show beautifully that although you may only have four people who have autism in your team they won't all be the same, so you can't apply the same rules."

Social interpreter

"From a learner's point of view as training tools. This is active participation and learning and goes a long way to embodying the learning and understanding – it's not just sit in front of a presentation and off you go."

Social interpreter



Change

"When I was working with people and when those people weren't working there any more, and there were new people, this change was something difficult to deal with."



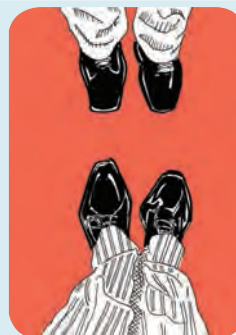
Lunch

"Sometimes I prefer not to join people for lunch I'm alright with one person or maybe even two, but when it comes to groups of people I find that really difficult, and it plays on my anxiety."



Small Talk

"I prefer not to engage in small talk I'm trying to get better at that so I would say that's important I need to get better at this."



Eye Contact

"I used to be terrible at eye contact, I used to be looking at the floor a lot more than the person and that was down to nerves and processing information and I think that has developed a lot."



Honesty

"I am pretty honest, too honest sometimes, which can also be because of Asperger's. I've got myself into trouble when I have been too honest."



Move Around

"If I am sat down for too long then sometimes I may have to get up and have my own space to chill out a little bit."

Provoking conversation: during the trials the cards helped to probe conversation and gain a deeper level of understanding

Workplace Activity Box

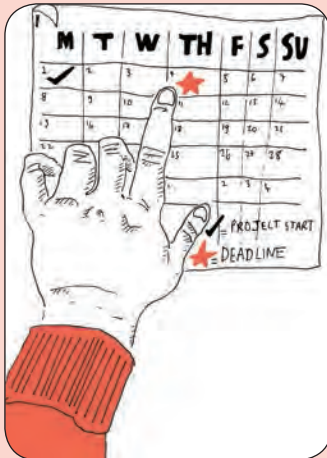
Activity 1: People & Things cards



**I LIKE MY
WORKSPACE TO
BE NEAR
NATURAL
SUNLIGHT**



**PLEASE DON'T
OVERWHELM
ME BY ASKING
TOO MANY
QUESTIONS AT
ONCE**



**I PREFER CLEAR
DEADLINES AND
LIKE TO
KNOW EXACTLY
WHEN THINGS
NEED TO BE
DONE**



**I LIKE TO HAVE
MY OWN
DESIGNATED
WORKSPACE**

Examples of People & Things cards (illustrated by Ben Connors). To see complete pack: www.hhcd.rca.ac.uk



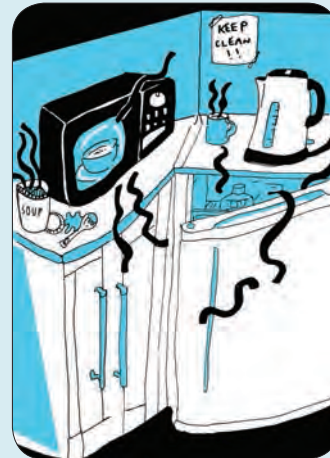
**I PREFER TO
WORK IN A QUIET
SPACE WITH
OPTIONAL
ACCESS TO MORE
ACTIVE AREAS**



**I ENJOY
MEETING
NEW PEOPLE**



**I DO
WANT
TO MAKE
FRIENDS**



**I AM SENSITIVE
TO CERTAIN SMELLS
AND WOULD PREFER
MY WORKSPACE
TO BE POSITIONED
AWAY FROM A
KITCHEN/CANTEEN**

Workplace Activity Box

Activity 2: Disc-it, a workplace communication tool

Disc-it

Disc-it is a communication tool inspired by Autscope, which is a conference created and led by autistic people (www.autscope.org).

Autscope provides a colour-coded badge system that indicates at what level a delegate would like to participate and enables the delegate to choose and communicate their level of preferred social interaction and simultaneously helps others to be mindful of this too.

Autscope Coded Badge System:

- **White/ No Badge:**
I am able to regulate my own interaction.
- **Green:**
I would like to socialise, but I have difficulty initiating, so please initiate.
- **Yellow:**
Please do not initiate unless I have already given you permission to approach me on a yellow badge.
- **Red:**
Please do not initiate any interaction with me.

Physical notifications such as this can also be found in other contexts such as hotel rooms and long-haul flights

in the form of labels to hook on door handles or colour-coded stickers on seats to indicate to the flight steward to: 'wake me up when dinner is being served'. These notifications are essentially tools to help one person communicate to another without the need for verbal speech and to help minimise interruptions.

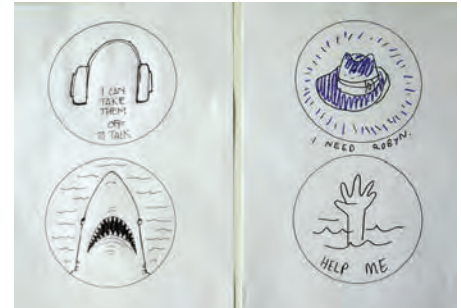
Design Adaptation

The design team built upon the Autscope badge system and transferred it into the context of the workplace, as depending on how we feel and what we are doing everyone's levels of participation can change and vary throughout the working day, equally it can be difficult to know when to approach a colleague at work.

Instead of a badge the design team created a simple disc and stand system called Disc-it. Disc-it is comprised of six coded discs that convey simple information and blank discs for more personalised information. The disc's slot onto a stand which can be positioned anywhere on a person's workspace.

Feedback

The design team presented Disc-it to a focus group for feedback and who



also were presented with blank discs to generate ideas on what other Disc-its might be useful to them (see image above).

"It would be really helpful for me if other people had the symbol on their desks. I don't know whether to interrupt other people when they are at their desks – that's what I find really difficult."

Focus group participant



Disc-it activity

Workplace Activity Box

Activity 3: Mapping sensory patterns

We are exposed to stimuli on a regular basis and each new environment we encounter brings with it a host of new sensations. For example some of the sensations that we may typically experience every day are: the feel of a chair; lighting levels; smells; the sound of people and the breeze from an open window.

The workplace is furnished with furniture and equipment that contain and emit sensory data: the noise of an air conditioning unit, phone or printer, the smells from food or deodorants and changes in air temperature. How we feel about our workplace is dependent upon what information we pick up through our senses and how we respond to these.

As we are all on a sensory continuum, how we respond, process and integrate the sensory elements of the workplace can vary from one person to another. People who have a low tolerance to sensory input might prefer to work in a quiet space on their own, conversely those who seek out sensory stimulation might prefer to work in a busy and bustling workplace. We may continually modify our workspace to satisfy our sensory needs. For example, if a

person becomes distracted by the sound of colleagues in an open plan office, they may choose to wear noise-cancelling headphones.

Autism and Senses

Autistic people may find it difficult to interpret, filter and adjust to the sensory information in their work environment, leading a person to become hyper and / or hypo-sensitive to incoming information, thereby influencing how they experience their environment.

A person may find it difficult to focus and concentrate on some activities as they become distracted with the sensory information that surrounds them. For example, the workplace can be full of different sounds that could be uncomfortable: fire alarms; chairs scraping on the floor; and other people speaking. Being in a workplace that does not account for an autistic person's sensory sensitivities may trigger anxiety, which may diminish an individual's motivation and confidence, and create barriers in sustaining employment.

Potentially, an average workplace could cause sensory overload for a person with autism, therefore, it is

important to explore ways to manage their sensitivities so the quality of stimuli relating to sight, sound, smell and touch can be modified to suit their preferences and reduce or even eliminate their sensory dislikes. The first step to achieving this is to explore what a person's sensory needs are.

Exploring Sensory Patterns

To help identify and map a person's sensory preferences, in addition to using the Sensory Preference Cards (Brand & Gaudion, 2012), the design team used an existing sensory pattern questionnaire found in the book *Living Sensationally* (Dunn, 2009). In contrast to the sensory preference cards the questionnaire offers a more universal outcome. Once completed a person's responses are grouped into four sensory patterns: *Avoider*, *Sensitive*, *Bystander* and *Seeker* (see illustrations on opposite page).

Putting these sensory patterns into the context of holiday choices something a lot of people can automatically identify with. For example if you like adventure holidays you might be a sensory seeker or if you like to retreat to the countryside away from people and noise, you might be a sensory avoider. You may also fall

into more than one sensory pattern which could also change depending on the context and situation you are in and how you are feeling at that moment.

As described by Dunn in her book 'Living Sensationally' (2009) understanding sensory patterns can be a useful tool to help everyone (autistic or not) to ensure their environment is as satisfying and productive as possible. The design team therefore proposes that a person's sensory pattern can help make informed decisions on how to adapt a workspace for that person or enhance understanding of how this can be done.

To enable autistic adults with limited speech and additional learning disabilities to take part in exploring their sensory patterns, the design team adapted 'the sensory pattern questionnaire', from 'Living Sensationally' (Dunn, 2009), from a tick box list of questions to a simplified card based activity.



Sensory Avoider: Avoids sensory stimulation and try to minimise sensory input



Sensory Seeker: Seeks sensory stimulation and wants more sensory input



Sensory Bystander: Passive to sensory stimulation and may need more sensory input



Sensory Sensitive: Sensitive to sensory stimulation and tries to manage sensory input

Workplace Activity Box

Activity 3: Mapping sensory patterns

Sensory Pattern Activity

The activity involves 69 colour-coded cards and a mapping board that takes the participant through six steps to identify their sensory pattern. Once the participants have completed the activity and identified their sensory pattern, there is a set of four cards, illustrated to match a sensory pattern with an ideal workplace design (see pages 36-37). The cards are not prescriptive but a provocation to trigger discussion amongst the participants and to compare and contrast what an ideal workplace might be for them.

The sensory pattern activity encourages managers, autistic employees and co-workers to take part on an individual or group-based setting. The aim of the activity is to:

1. Generate discussion around our sensory experience with the workplace.
2. Encourage participants to identify whether their sensory pattern compliments their current workplace setting.
3. To understand another person's sensory pattern and explore how a workplace can be adapted to be more helpful for everyone.

Trialling the Sensory Pattern Activity

The design team facilitated three trials involving four autistic adults, two social interpreters, a support worker and five designers. The aim of each trial was to understand the participant's experience of doing the activity, their thoughts and ideas provoked during the activity. The benefits of understanding sensory patterns and how they can be applied to workplace design.

Results

Each trial evolved into a rich discussion about a person's sensory experiences, when commonalities and differences were identified. On some occasions the participants did not necessarily agree with the results of the questionnaire or identify with their sensory pattern, provoking discussion about why and which sensory pattern they felt they related to. The workshop also highlighted how a participants sensory pattern changes depending on how they feel and the context and environment that they are in.

"Sensory Sensitive – that's definitely me, the thing about having a blind down. I would often sit in the dark with my laptop and even during the day I will close the curtains. I might have the desk lamp with the light behind me, but I don't like having the ceiling light on and I am very conscious of noises."

Autistic participant

"It says I avoid sensory stuff, which I do. Most of it I agree with completely, I do like things that are closed off with solid walls. Also it says I am a bystander too and I fit some of those things as well – open shelving so I can see everything, I may forget things in my daily routine and my clothes may look crooked or twisted."

Autistic participant

"I had a fluorescent light above my desk and what annoyed me was people coming in and switching the light on, so constantly this flickering thing above my head would be going on."

Autistic participant

"Employers think there's a space for a desk, without thinking about what it would be like working there. Businesses do make adjustments but, to be honest, it is usually based on aesthetics not about other senses."

Social interpreter



Trialling the sensory pattern activity

Workplace Activity Box

Activity 3: Mapping sensory patterns



Sensory Bystander

1. May get very focused on their work
2. Does not always notice what's going on around them
3. May need to take notes to remember important information
4. Their name may need to be called several times to get their attention
5. Is not affected by changes to schedules or routines
6. Enjoys working with lots of people
7. Enjoys working in a noisy and bustling environment
8. Likes to have art and pictures on the wall
9. May easily overlook sensory information which others may find distracting by i.e. high pitched sounds
10. Prefers open shelving so belongings are easier to notice
11. Can work in a busy area with people moving past

Sensory Sensitive

1. Detail orientated and good at planning
2. Can find sensory information distracting i.e. sounds, movement
3. Workspace located away from the flow of people to minimise sound and movement
4. Workspace with uninterrupted wall space
5. Prefers to have controllable and focused lighting
6. Prefers to have their own work materials
7. Work materials are well organised and may be colour coded to help organisation
8. Prefers to work in a quiet space but close to activity to manage the amount of sensory input
9. Workspace with clean and sparse lines to reduce distraction
10. May need advanced warning of changes



Sensory Avider

1. Likes routine and order
2. Follows rules and always meets deadlines
3. Prefers to communicate via email
4. May restrict email time as find it too distracting
5. Likes their work to be structured with a clear schedule and deadline
6. May prefer to work alone
7. Keeps windows and blinds down to reduce distractions
8. Workspace is tidy and sparsely decorated
9. Work materials are filed in an orderly manner
10. May use sound dampening headphones
11. Prefers isolated and remote spaces away from people and activity
12. Likes to have controllable and focused lighting



Sensory Seeker

1. May wear strong perfume and/or cologne
2. Likes teamwork and interacting with people
3. May enjoy doodling
4. Enjoys working in a busy and noisy environment
5. Likes to have lots of art and pictures on the wall
6. Keeps work materials out instead of filing them away
7. Workspace positioned in areas with lots of activity
8. Likes to have flowers and plants in their workspace
9. Enjoys an open-plan workspace
10. Likes a brightly lit workspace with lots of windows
11. Likes their workspace to be decorated with bright colour schemes, different patterns and textures
12. Prefers a flexible work schedule
13. Likes to move around
14. Enjoys working on multiple projects at the same time

eBay Workshop



eBay is one of the most popular ways to buy and sell goods and services on the internet. It is a website where individuals and businesses can buy or sell new or second-hand items, from books and clothes to cars and holidays. To participate in eBay it requires range of skills from taking photographs, using the computer, managing accounts and liaising with customers, therefore, this project explored how eBay could be integrated into Kingwood and act as a transitional workspace that matches the skills, interests and preferences of the autistic people they support.

Co-Creation Workshop

The design team facilitated co-creation workshops which invited support staff to explore the opportunities, challenges and practicalities of integrating eBay into Kingwood. The design team identified seven different activity opportunities within the process of eBay and to visualise this developed an eBay map, which split eBay into seven eBay departments; product, photography, upload, finance, admin, postage and packaging, public relations.

To identify which activities on eBay match the interests and skills of the



autistic people across the spectrum, a map was given to each participant which also contained clear descriptions of the different activities involved within each department. The map generated rich discussion and a useful visual tool that enabled the support staff to match the person they support's skills and interests with specific eBay activities.

eBay Booklet – Interview

The eBay map was also made into a small booklet which was sent out to all the people that kingwood support. Each booklet illustrated clearly each of the seven eBay departments and

invited participants to identify which eBay departments they were most interested in and circle activities that they would like to take part in. The design team also visited Lucy who expressed an interest in taking part in the photography department as Lucy has a particular interest in film and photography.

eBay Workshops at Kingwood

The Kingwood Trust is now set up on eBay! eBay workshops are currently being held every two weeks at The Kingwood Trust where support staff and people with autism work together and learn about the process of selling various products.

The workshops have triggered a lot of interest and participation from the people Kingwood support, who are successfully selling DVD's. The workshop space is curated and split into seven eBay stations, each offers a range of activities that use different skills to enable everyone across the autism spectrum to get involved.



Staff Meeting

"We have people who are very good on computers and would be able to help the product department if they had some support. There would be individuals who would be happy to do the labelling and packaging and take it to the post office. Pictures and uploading I know a couple of people who would be happy to do that."

Workshop participant



Conclusion

Previous projects with The Kingwood Trust have focused on varying contexts of the home environment. This project took a different direction, stepping outside the comfort of a person's home and into the workplace.

An important distinction between the home and work is that we have much more control over our home environment and are able to personalise our homes according to our individual interests and needs. For example we can close the curtains if the sun is too bright, turn the radio down if it gets too loud and turn the heating up if we feel too cold, equally we have more control over who comes and goes.

In contrast, the workplace can be far more unpredictable, we often have to negotiate, navigate and share the space with other people whose sensory preferences and means of comfort may be different. Therefore, an important aspect of this project was to explore the physical and also the social infrastructure of the workplace.

Whilst there is support and guidance available to help organisations and managers to support autistic people in the workplace and *vica versa*, this project identified that much of this

advice is generic and that there is a lack of practical support that enables managers and autistic employees to work together.

Building upon this, the project took a less generalised and more personalised approach that worked directly with autistic people. It sought ways to enable them to advocate their needs and enable managers to understand what workplace satisfaction means to their employees.

In addition to involving autistic adults this research also included the views of support staff, job coaches and social interpreters. Together we looked at the challenges autistic people experience when applying, attaining and sustaining work.

The research took a mixed methods approach, which involved informal interviews, focus groups and co-creation workshops, where six key insights were identified:

1. Social and sensory challenges
2. Lack of empathy and understanding
3. Promote self advocacy
4. Personalised approach
5. Reasonable adjustments,
6. Neurodiversity.

A major finding from the research was the sensory and social challenges experienced by autistic people, and the lack of visible support.

Based upon the insights and ideas generated from the research, the design team developed a workplace activity box. The activity box contains three activities that invite managers, supervisors and employees to understand more about themselves and their peers within different workplace settings. The activities helped to identify differences but also commonalities whether autistic or otherwise.

The *People & Things* set of cards focuses on the social and physical infrastructure of the workplace. The cards are compiled by autistic people to create a wish list of their social and physical requirements of the workplace.

The communication tool called *Disc-it* focuses momentarily and helps to mediate communication between co-workers and empower them to take control over their preferred level of participation throughout the working day.

Lastly, the mapping sensory pattern activity focuses internally and builds upon the Adult / Adolescent sensory profile questionnaire (Brown and Dunn, 2002), which invites a person to explore their own sensory pattern and that of others, and how this may influence the design and layout of their workspace.

People with autism are often misunderstood and face judgmental attitudes based on misinformed assumptions and stereotypes, such as – autistic people lack empathy. This lack of public awareness and understanding has a direct impact that leads to discrimination and isolation, resulting in many autistic people feeling excluded from everyday society. The workplace activities mentioned above aim to build empathy between managers and employees (autistic or otherwise) by challenging these misleading stereotypes and increase understanding of neurodiversity within the work sector.

The diverse nature of autism as a spectrum condition makes it impossible to create a generic set of workplace guidelines. This is not therefore a 'how to' publication; instead it seeks to share experiences

and approaches in the interests of reaching out to managers, supervisors and employee's (autistic or otherwise).

This publication, in tandem with the workplace activity box, provides a practical set of support tools that brings everyone together and encourages a personalised collaborative approach to support a neurodiverse workplace that breaks away from a one-size fits all policy, where instead, everyone's needs and abilities are valued.

This project aims to encourage everyone to reflect and question their own views and perspectives to the point where different ways of thinking, seeing, doing and behaving in the workplace are embraced, accepted and celebrated.

This publication ends with a quote from one of the workshop participant's that sums up what an inclusive workspace is really all about:

"It is about highlighting the commonality instead of widening the gap between autistic and non autistic people."

Workshop participant

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Publications in the Series

Milton, E. M. D. (2012). The ontological status of autism: The 'double empathy problem'. *Disability and Society*, 1 (5), p.2

Müller, E., Schuler, A., Burton BA., et al. (2003), Meeting the vocational support needs of individuals with Asperger syndrome and other autism spectrum disabilities. *Journal of Vocational Rehabilitation* 18: pp163–175

Redman, S. et al. (2009). Don't Write Me Off. London: The National Autistic Society

Schaller, J., Yang, N. (2005). Competitive employment for people with autism: correlates of successful closure in competitive and supported employment. *Rehabilitation and Counselling Bulletin*, 49, pp.4-16

Thompson, J. (2014). Autism at Work, Autistic responses to exclusion and marginalisation at work. MSC Occupational Psychology thesis



Picture-it: A digital tool to support living with autism

Katie Gaudion (2014)

A novel research project to develop a digital tool to capture and celebrate best practice in supporting adults with autism.



Exploring Sensory Preferences: Living environments for adults with autism

Andrew Brand and Katie Gaudion (2012) A designed approach is described to help adults with autism express their preferences.



Designing Everyday Activities: Living environments for adults with autism

Katie Gaudion (2013)

This research investigates the challenges and opportunities in tasks and related objects for adults with autism.



Ready Steady Make: A guide to making sensory props

Andrew Brand and Katie Gaudion (2012)

A quick reference guide to making six sensory props that can be created in minutes.



Green Spaces: Exploring outdoor environments for adults with autism

Katie Gaudion and Chris McGinley (2012)

Green Spaces relates how design can create beneficial green spaces for adults with autism.



Living in the Community: Housing design for adults with autism

Andrew Brand (2010)

A study that explores how design could improve living environments for adults with autism.

- PDF versions of these publications can be downloaded from <http://tinyurl.com/hyrv5vj>
- Sensory Preference Cards can be purchased from: <http://www.kingwood.org.uk/shop/>

Author, Illustrator, Acknowledgements

Author

Dr Katie Gaudion is a freelance design consultant and Senior Research Associate at the Helen Hamlyn Centre for Design. Katie's design work celebrates neurodiversity. In a long-term partnership with the autism charity The Kingwood Trust, her research explores how design can improve living environments for autistic adults across the spectrum. Katie has worked within a range of contexts, for example; supported living; workplace; gardens; built environment; sensory environments and medium secure hospital ward environments.

Katie is also the first research associate to have completed a PhD by practice at the Helen Hamlyn Centre for Design. The PhD, entitled 'A Designer's Approach: Exploring how autistic adults with additional learning disabilities experience their home environment', (<http://researchonline.rca.ac.uk/1692/>) reflected upon a non-autistic designer's approach to working with autistic adults to investigate their relationship with the physical environment.

An important aspect of Katie's work is to explore new and creative ways to collaborate with autistic people to ensure they are at the centre of the design process. During her PhD Katie created a framework that supports a more positive and personalised design approach termed 'the Triad of Strengths'. The framework supports the idea that by understanding a person's sensory preferences, interests and action capabilities, an important palette of ingredients is created that can inform the design of environments, products and services that enhance positive experiences for that person,

Illustrator

Ben Connors is an artist who often collaborates with others to explore their voice, perspective or story through illustration and comics. He has a particular interest in autism and has worked with Tate Galleries, the National Autistic Society and CRAE in developing awareness and supporting materials. He successfully ran a clubnight for people with and without autism and continues to work within Learning Disability culture and the music industry. He has produced work for the Barbican centre, Serious and the Roundhouse to name a few. www.benconnors.co.uk

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Building Empathy: Autism and the Workplace

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**THE HELEN HAMLYN
CENTRE FOR DESIGN**

A decorative border runs along the top and left edges of the page. It features a repeating pattern of white geometric shapes, including triangles, squares, and lines, set against a dark background.

Building Empathy describes a novel design approach that explored the social and sensory challenges experienced by autistic people in the workplace. The design team worked directly with autistic people and sought ways to enable them to advocate their needs and for manager's and co-workers to understand what workplace satisfaction means to them.

This publication, in tandem with the Workplace Activity Box, provides a practical set of support tools that bring together and encourage a personalised collaborative approach to assist a neurodiverse workplace that breaks away from a one-size fits all policy, where instead, everyone's needs and abilities are valued. It is the sixth in a series of publications describing a pioneering collaboration in design for autism between The Kingwood Trust and the Helen Hamlyn Centre for Design at the Royal College of Art.