

Integrating neurodiversity in the Dojang

By Joseph Dolman

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About the Authors

Joseph Dolman:

Currently studying childhood and youth studies BA (honours) at The Open University, he has ambitions of achieving a doctorate in inclusive educational practices. He has been passionate about special educational needs (SEN) for a long time, learning from his own educational experience in mainstream schooling, his mother (Vanessa Dolman), his time learning and now teaching at Burbage Taekwon-Do Academy, and now his studies. Currently part of the teaching team, he teaches the Saturday beginner class and helps in most classes throughout the week.

Vanessa Dolman:

Vanessa Dolman has spent over 20 years working with SEN children and fighting for better educational inclusion and practices in the mainstream education system. Through her own children, extended family, and the countless other children she has worked with she has build up a wealth of knowledge, experience, and qualifications as follows; Early years SENCo (special educational needs coordinator), early years professional status, Level 3 supporting children with dyslexia, level 3 supporting language and communication (3-5 years), youth mental health first aid officer, safeguarding children officer along with many more.

What is Neurodiversity?

- Neurodiversity is a term used to describe the natural variation of the human brain in all people and describes the idea that people experience and interact with the world around them in many different ways.
- The term is most commonly used to refer to neurological and developmental conditions such as autism spectrum disorder (ASD) and attention deficit hyperactivity disorder (ADHD).
- It is important to understand that being neurodiverse isn't a 'problem' that needs to be solved but is simply part of who we are as a species that can be a great strength with the correct support.
- 1 in 7 people are believed to be neurodiverse, that's around 15%, but not all are diagnosed therefore it is important to look out for the signs.
- A diagnosis can take years and it can be delayed further by masking at school and resistance from parents, just because there isn't a diagnosis doesn't mean there isn't diversity.
- Studies have shown that neurodiversity is extremely common in sports especially at the athlete level with high level athletes being five times more likely to be neurodiverse. For example, Michael Phelps (the most decorated Olympian of all time) was diagnosed with ADHD at 9.
- There is a growing movement to be more inclusive in all sports including martial arts and taekwon-do through programs like Mr Ben Evens International Inclusive Taekwon-do Association which is gaining worldwide recognition and members.



Exploring common neurodiverse conditions:

Autistic spectrum disorder (ASD)

People with ASD understand and interpret the world differently, especially others behaviours, they might struggle to understand expressions, voice tones and body language. People with ASD can also struggle to regulate themselves- this can lead to difficulties sitting or standing still or similar. ASD can also make sensory input overwhelming- lights, equipment (pads, etc.), temperature, noise, uniform, etc. This can make it more difficult to participate in activities that have high sensory input. Along with this eye contact can be difficult, just because someone is not looking at you does not mean they are not listening and engaging. It is also important to consider that this can change from day to day, just because they could do it yesterday does not mean they can today. Always remember ASD is a spectrum, an individual might present some traits and not others, equally different traits might have a larger impact on them, each person should be viewed independently, one size does not fit all.

Attention deficit hyperactivity disorder (ADHD)

People with ADHD can be easily distracted and find it difficult to focus on certain activities, if the individual does not find the topic or activity interesting, they will struggle to maintain focus on the task. Like ASD people with ADHD can find it difficult to stay still, constant restlessness is common in ADHD and ASD. Another common difficulty related to ADHD is time management, arriving on time, understanding the concept of time and managing the time they have can be difficult. Often breaking down larger periods of time into small intervals is useful for managing this (e.g. An hour is 4-15 minutes). Along with this a common trait if ADHD is forgetfulness, especially when attention keeping is difficult. This could be short term, from the time it takes to explain a task to doing it the instructions could easily be forgotten, or it could be long term. This also links to struggling to understand instructions on the first try regardless of how well they are explained, it is not because they were not paying attention or the instructions were not clear enough.

Rejection sensitivity dysphoria (RSD)

RSD is not as commonly known as ADHD and ASD but often goes hand in hand with them. RSD is intense and overwhelming emotional or even physical pain caused by perceived or real criticism or rejection. Someone with RSD could receive a standing ovation after a speech but if they notice one person not clapping that will be all they can focus on. This isn't a need to be perfect but rather a worry that they have made a mistake. RSD also causes rejection anxiety, if you asked someone with RSD to speak to them at the end of a class they will automatically assume they have done something wrong and that will be all they can focus on. RSD is commonly linked to ASD, ADHD and other forms of anxiety. People with RSD can often present as perfectionists and socially withdraw to avoid failure and rejection.

Pathological demand avoidance disorder (PDA)

PDA is an anxiety-driven need to avoid everyday demands and control situations, commonly characterised by a deep need to control situations and extreme resistance to demands and daily tasks. These can be presented in many different and more subtle ways, a person with PDA might not directly refuse to perform a task but might use social strategies to avoid them, like charm, distractions and social manipulation to avoid performing these tasks. It is important to understand that this isn't a conscious choice but rather an involuntary impulse stemming from the nervous system perceiving these demands as threats to its autonomy. This can be caused by any demand, external (from another person) or even internal (from the body such as hunger, fatigue or other bodily functions). This is often linked to ASD but not all people with ASD have PDA and just like ASD and ADHD it is a spectrum with varying needs and challenges that can change day to day.



Dyslexia

Dyslexia is a neurological condition that effects information processing and phonological awareness. It is important to note that this isn't a sign of intelligence even though it can cause significant challenges in education. Dyslexia causes difficulties in many areas such as working memory, spelling and reading. A person with dyslexia might struggle with similar looking and sounding letters and words often getting them muddled up or misusing them e.g. pacific and specific being used incorrectly in speech or b and d being mixed up. Contrary to popular belief, dyslexia is not just limited to reading and writing but also extends to mathematics, memory, time keeping and motor skills. Poor hand eye coordination is common along with knowing left and rights. Due to struggling in these areas people with dyslexia might use avoidance tactics to avoid tasks they might 'embarrass' themselves in, they might avoid reading out loud, reciting theory from memory or answering questions. It is important not to pressure these people as this can lead to withdrawal and embarrassment, it doesn't mean they don't know the answer.

Dyscalculia

Dyscalculia is a learning difficulty specific to mathematics. Someone with dyscalculia might struggle with memorising numbers (such as important dates), adding up, remembering sequences (such as pattern movements or drill sequences), and other mathematic skills. People with dyscalculia often use the same tactics as dyslexic individuals to avoid tasks for the same reason.

Dyspraxia

Dyspraxia is a lifelong neurodevelopmental condition that effects physical motor skills such as coordination, balance and spatial awareness. This has no link to intelligence. Often presenting as 'clumsy', people with dyspraxia can struggle with both fine motor skills, such as writing and gross motor skills, such as hand eye coordination and other sports tasks. It is important to be aware of this as it requires more patience and strategies to allow people with dyspraxia to participate in sports. Recent studies have shown that sports activities have great benefits to people with dyspraxia in managing their condition and a supporting environment within sports is vital for this. Patience, understanding and positive support is key, remember smaller victories mean a lot and should be celebrated.

How to support neurodiversity in the dojang

Supporting Neurodiverse individuals:

Whilst there are many strategies specific to certain conditions, there are also a lot of strategies that overlap multiple conditions. These are listed below before outlining condition specific strategies.

- An extremely high number of neurodiverse individuals will have a very difficult life, especially surrounding school. Lack of support often lead to individuals having very low confidence and self-esteem. This is important to remember and consider, **DO NOT single these people out**. Allow them to enjoy the class at their own pace, don't force answers out of them or make them demonstrate, it doesn't help.
- Another common result of difficult experiences is a lack of trust for adults in general. This often leads to children especially being unable to trust and talk to adults no matter how much you try. This isn't a reflection on you. Often, you'll find these children will be able to trust family members, friends or a select few adults. Small steps in supporting and making them feel safe can help reverse this but it is a long process.
- Emotional breakdowns are common. On the surface it can seem like these are caused by little to nothing, but often it is a build-up of things throughout the day (look at the bucket model) and often the individual won't know themselves why. It is important to respect and accept this. Listen to the individual. Never say 'you do know why' if they say they don't know, they don't, show them you are listening and value their thoughts and opinions. **Not doing something today is not a failure or a step back**, there are other days.
- The most important thing is respecting the individual and their needs, make them feel heard and respected. This will help build confidence and shape the dojang as a safe space where they can be themselves, feel supported, and safe.



Supporting ASD:

There are many factors to consider when supporting someone with ASD and each individual will vary and require different support, there is no single answer and the most important thing is to be adaptable, willing to learn, and willing to change. Below are some areas to consider, and be aware of, these will act as a good starting point;

- Many people with ASD struggle with eye contact, remember that just because someone isn't looking at you doesn't mean they aren't listening. In fact, forcing them to look at you will have the opposite effect as all their focus is being used to maintain eye contact, meaning they won't be able to listen properly. **They are not being disrespectful.**
- Sometimes people with ASD can come across as rude in the way they talk, saying things as they are, and not understanding social cues and emotional nuances is common. Talking at rather than with others and talking about themselves and their interests is also common. Try to remember they are trying, try to allow them to talk about their interests and lives, it makes them feel included and can go a long way in building confidence and trust.
- Dealing with restlessness can be difficult in an ordinary class, try to allow fidgeting that doesn't disturb the class, remember that like eye contact, asking someone who struggles to stay still to stay still will take all their effort meaning they can't concentrate on the class.
- Outline the plan for the class at the start and inform them of any changes throughout the class, try to give a rough timeframe for each activity. This allows them to plan in their head and know what is coming next. This reduces anxiety.
- A large part of supporting ASD is supporting the sensory needs, as this is such a large topic it will be explored later on in its own section, from page 14 onwards.



Supporting ADHD:

Taekwon-do and sports is a great activity for people with ADHD and current class structure is well suited for ADHD, but there are still important things to consider. A lot of these strategies can also be applied to ASD as there is large overlap between the two. Remember patience and understanding is key.

- An important thing to consider is where the distractions in the room are, try to position individuals with ADHD away from these areas like windows, mirrors and doors. This will help them focus on the task at hand. (remember not to do this in a negative way, avoid pointing out why you are moving them as this will make them feel bad and singled out)
- Provide shorter tasks so they don't lose focus. Tasks that go on for long periods of time could lead to loss of focus.
- Keep them engaged with interactive learning, group work and whole class discussions that involve everyone are great for retaining engagement.
- Outline the plan for the class, this reduces anxiety about what is next allowing for better focus on the task at hand.
- Allow for breaks if needed.
- Try not to get frustrated if they forget instruction, this is common in ADHD and doesn't mean they weren't listening. Try and explain again in a different way, demonstrate for a visual aid or explain on a 1 to 1 level instead. Be patient.
- Break larger tasks, like learning a new pattern, into smaller sections, this helps maintain focus.
- Try and avoid labelling difficulties as misbehaviour, children with ADHD and ASD most likely get told this all day at school by people that don't understand them, try and break this cycle and provide them with a safe, supportive environment. This alone will help massively.



Supporting RSD:

Supporting individuals with RSD can be difficult, remember it is a biological process that they can't just 'get on with' or 'get over'. It is also important to consider that RSD is common with ADHD and ASD but might not have been noticed or diagnosed before, look out for the signs and try and support them regardless of a diagnosis or not.

- Try to avoid negative criticism, rather frame criticism in a positive way, 'this is difficult, let's look at it together', 'that's really good, now let's try changing this'. This removes the idea that they failed and therefore removing the stress.
- Try to avoid class wide criticism, whilst for most children this isn't an issue, for someone with RSD they will assume they are the one doing it wrong and that will be all they can think about.
- Avoid deadlines, this exasperates the idea of failure if they cannot meet them.
- Avoid asking to speak to them at the end of the class, this will create a spiralling thought of what could they have done wrong. Instead, don't say anything, just talk to them at the end.
- Validate their feelings in the case of a shutdown or overload, avoid phrases like 'it's not a big deal', instead use phrases like 'I can see why that would be hard'
- There are many strategic theories to support RSD, if a person is known to have RSD or you suspect RSD to a level you cannot handle with basic strategies look more into these.



Supporting PDA:

Supporting PDA requires a large focus on reducing anxiety, creating a trusting relationship and minimising direct requests. This can be difficult and it is highly recommended that a one to one is in place. In the dojang this could be a helper or a parent depending on the circumstances.

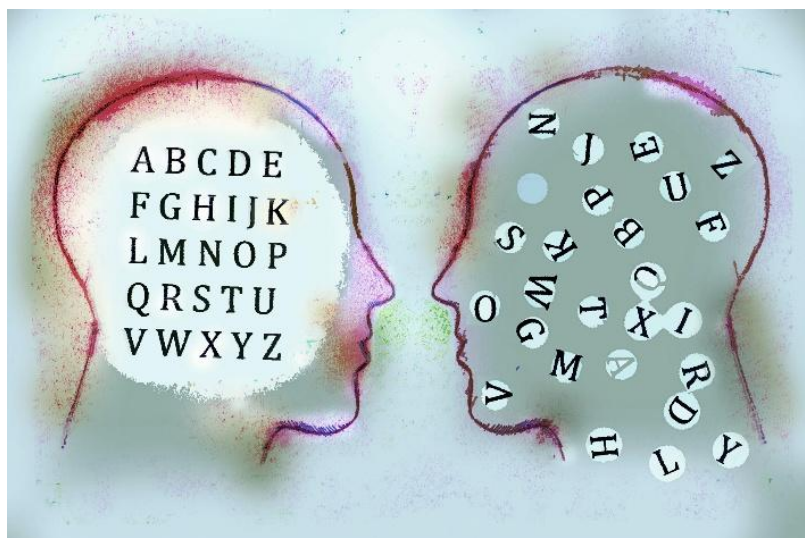
- Offer choice rather than direct instruction, offer them the choice of two tasks, this gives the individual a sense of autonomy and avoids anxiety.
- If only one task can be offered, try and suggest rather than instruct. 'Perhaps we could do this' 'I wonder if you could kick this pad'. This changes the instruction from a demand to a conversation with choice.
- Try not to battle the person constantly, this won't achieve anything except building resentment and distrust.
- Try and build a positive relationship built on trust first. Flexibility, humour and a personal touch are key for this, this can help reduce the stress on the individual when a demand is made by you.
- Always remember this is a biological effect that can cause physical pain, do not dismiss it and be honest as to whether or not their needs can be met.



Supporting dyslexia:

Many people overlook dyslexia in sports as its seen purely as a school based condition, but it can have significant effects in sports, especially taekwon-do. You may not be told a child has dyslexia or a child might not be diagnosed, Leicestershire County council no longer diagnose for dyslexia meaning any child who has a diagnosis would have had to have gone private. This doesn't mean a diagnosis wouldn't be highly beneficial to the child to understand themselves and get support outside the school and in the future. This is why it's vital to understand dyslexia and look out for the signs and support them.

- Do not put them on the spot, the answer might not come out, and this will make them feel embarrassed and knock their confidence.
- Second languages can be particularly difficult, be more patient with learning Korean, it doesn't mean they won't learn it, but it might take longer.
- Similar sounding words are easily mixed up such as jireugi (punch) and taerigi (strike).
- Lefts and rights are commonly mixed up, to negate this try using other ways of determining side like 'towards reception'.
- When learning theory try and find ways to remember things rather than just relying on memory, don't expect a word for word recall for a pattern meaning, rather be happy with a version with all the correct information told in their own way. Equally don't criticize this as incorrect as this will make them feel like they will never get it even though they did.
- Accept if they don't know something, even if they did yesterday.
- It's also important to remember that dyslexia can cause a lot of stress at school, this could lead to the child being very dysregulated or tired from a bad day at school, this is always important to keep in mind.



Supporting Dyscalculia:

Dyscalculia is often overlooked, not always diagnosed or lumped in with dyslexia and forgotten about. It is important to look for the signs. You can support dyscalculia very much in the same way as dyslexia but there are other factors to consider as well in the context of taekwon-do.

- Someone with dyscalculia will struggle with remembering dates. It is important to recognise this and support this especially in pattern meanings. Also remember similar dates will be easily mixed up.
- Remembering the number of movements in a pattern could also be an area of difficulty especially on recall. Allow more time to recall the number and understand if they get them mixed up.
- Remembering numbers of exercises might also be an area of difficulty, be patient and remind them if they forget, try to avoid saying 'you should have remembered when I told you earlier'.

Supporting Dyspraxia:

There are many studies showing the benefits of sports for dyspraxia, therefore it is important to be aware and supportive of individuals with dyspraxia in the dojang.

- The main thing with supporting dyspraxia is patience and avoiding belittling someone for struggling with something you might consider easy.
- Focus on individual progress rather than comparing to others.
- Allow more time for them to get their body into place, this could mean slower movements and techniques.
- Focus on getting them involved in a fun way, focus on basic movements, drills and exercises rather than complicated things.
- Give alternative, easier tasks for difficult tasks, allow for a more one to one support and aid them in completing the task.
- Celebrate the little achievements as these can mean a lot to them.

Supporting sensory needs in the dojang

Sensory needs are extremely varied and are specific to the individual. Everyone has sensory needs, sensory likes and dislikes, but these needs are vital for neurodiverse individuals. Often sensory needs are the most important and most misunderstood factor for supporting a neurodiverse individual, especially for someone with ASD. There is no 'one size fits all' approach to sensory needs therefore adaptability, awareness, and understanding are the most powerful tools when supporting someone's sensory needs.

Each different sense has a different level of impact on each person, for one person sight might be the most impactful, whereas for another it might be touch. It is also important to understand that a neurodiverse brain can't just 'shut off' or ignore a sensory input like you might be able to, this is why it's vital to support sensory needs. A good resource to help you understand the impact of sensory input for neurodiverse people is the Bucket and Taps booklet by Vanessa Dolman that is attached at the end. In the next section we will explore each sense individually and how to support it.

Visual/ sight:

The sense of sight is exactly what it sounds like, it is everything you can see. It's important not to think of this as just objects, but what makes up the objects, the colours, visual textures and the patterns. Many neurodiverse people don't see the larger object first but rather the smaller details, so these are just as important. It is also important to consider factors such as light and colour when considering the sense of sight. Remember to ask the individual what they like and dislike.

- Certain lights can be problematic, control over the light in the dojang is a good start, this can be done by shutting the blinds to eliminate the changing light of outside, then if any other light sources are identified as problematic, they can be dulled or turned off where possible.
- Another common source of problems is bright colours, the best colours to use are pastel colours where possible, or ones that aren't too bright.
- Try to keep notice boards and display boards tidy and not too crowded, a busy display can cause problems.
- Certain visuals can be positive though, a light moving in a particular pattern or way, like on a speaker or a sensory light can be a positive thing. Try to look out for these and have them available for children.

Auditory/ sound:

The Auditory sense is everything we can hear. It is vital to understand that this isn't just a case of volume. Whilst volume can play a factor, many neurodiverse people love loud noises if it's the correct noise. When considering sound think of everything that could make a noise, someone hitting a pad, the noise the floor makes, the bags being hit or swinging, and people talking both in the dojang and reception. Also consider sounds your brain might have shut out, like the noise of fans, heaters or even the lights and clocks.

- Many neurodiverse people will use a form of ear defenders to help regulate this sense. It is very important to understand these aren't the same as industrial ear defenders as they only dull sharp and hard sounds. And so, they can be worn safely at all times because the person can hear just as well with them on. **Let them wear them as much as they need.** Try to avoid asking them if they want to take them off as this inadvertently puts pressure on them to do so.
- Ear defenders don't work for everyone due to their own sensory impact (the feeling of them on their head) so some people might choose ear buds instead (in ear). If these are sensory ones, they will share the same properties as the ear defenders so can safely be worn at all times.
- Ask the individual about their needs, try to eliminate or reduce any sounds they don't like. It's important not to dismiss a sound just because you think it's not that noticeable.
- Remember whilst volume can be an issue it isn't always.



Tactile/ touch:

The tactile sense encapsulates everything we touch and can feel. This isn't just texture but also pressure and temperature. This is a big area that can affect someone's ability to participate in taekwon-do and all its aspects, so requires a lot of attention and consideration. This is also an area that is commonly overlooked as the neurotypical brain does a very good job of blocking out this sense, which is something a neurodiverse person can't do. For example, if you had a label on your clothing that was uncomfortable it might be unpleasant for a while but eventually your brain would ignore or block it out, but for a neurodiverse individual this isn't possible, that sensation will stay just as intense and just as unpleasant until it is removed. This is why we must be very aware and understanding of sensory needs.

- A common difficulty to consider is the feel of the dobok, these are very heavy and made of a different fabric to most clothes and could be an area of discomfort. Allow people to wear other clothing underneath, suggest trying different dobok fabrics (ie. Daedos new lightweight ones) or allow them not to wear a dobok if that's what they need.
- Consider the sensory impact of sparring equipment. The pads can be very heavy, tight, hot and sweaty, which can be a lot to cope with for some people. Try to establish which area of the pads are an issue and try to solve that problem. If it's the tightness or the fabric suggest trying different brands as some fit differently (in my experience top ten are looser and utilise a softer fabric and Daedo are the lightest). If a solution can't be found, then allow them not to wear them, even if this means they can't spar
- Consider the sensory impact of holding a pad, the feel of the stap and it moving around, the pad on the body and the feeling of it being hit.
- Also consider the feel of the mats, whilst most people will like this it could potentially be an area that could cause issue, most likely from a texture point of view. To allow for this in certain circumstances allow the wearing of grip socks or similar.

Vestibular/ balance and movement:

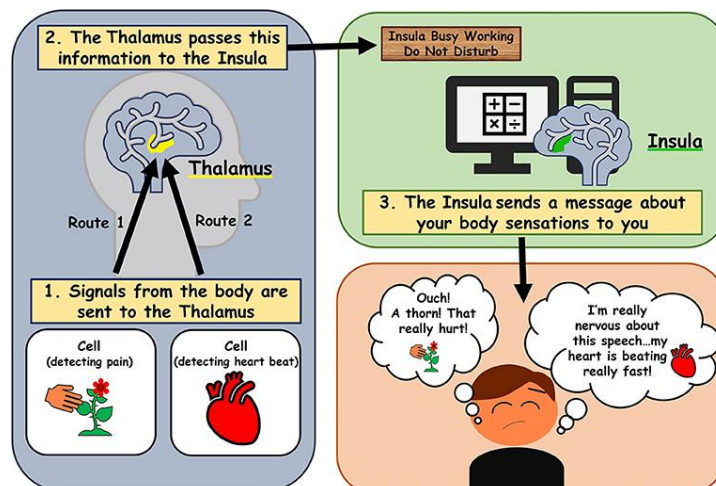
The vestibular sense isn't as well known as the others but is just as important, this sense is the feeling of moving and balancing. This sense can be responsible for restlessness, unusual movement, or wanting to be upside down and similar. Whilst this doesn't have a huge effect in the dojang it is still important to consider when looking at certain behaviours.

- This sense can lead to restlessness as the brain craves constant movement, try to allow restlessness that doesn't disturb the class.
- This sense can also cause discomfort with fast movements, this is important to consider as a lot of movements in taekwon-do are fast. If it is clear someone struggles with this consider it could be because of the feeling of it rather than a lack of effort. Remember discussing with the individual (in private) could help both you and them understand this.

Interoception/ internal signals:

This is also a lesser known sense but can have a significant impact on neurodiverse people. Encompassing all communication between the brain and the body it is responsible for feelings like hunger, thirst, heartrate and the need to use the bathroom. Whilst this impact in the dojang is small there are some areas to consider.

- This sense can lead to people coming training hungry or dehydrated as it is common for these needs to go unnoticed until they are at an extreme level. This is important to consider as this can affect the wellbeing of individuals when doing heavy exercise.
- Sometimes this sense can lead to the feeling of needing to go the toilet being noticed much earlier or later, this could lead to more frequent bathroom visits or not going until its urgent, try to be aware of this.



Proprioception/ body awareness:

This is the sense of where the body is in a space and the control and feel of the joints and muscles. This can have a very large effect on people training in martial arts and needs to be considered thoroughly when teaching a neurodiverse individual.

- This sense can lead to people doing movements you might consider unusual or even painful, such as slamming their knees into the floor or sitting with their legs in unusual angles and positions. This is sensory seeking, they like the feeling of there joints and muscles in these positions. If what they are doing is safe allow it but if it is doing their body harm that comes first.
- This sense can also lead to people struggling with the feeling of their muscles being strained. This could lead to a perceived laziness. Try and be aware of this and talk to the individual to understand their needs and be supportive of this.
- This can also lead to issues with placing their body in positions if they have difficulties controlling this sense, be aware of this and patient with them. Remember they are trying their best.

Smell:

Although very little can be done about the way the dojang smells it is a factor to consider. With a heightened sensitivity to smell it's important to think about the different smells in the dojang, the pads, the heaters, any cleaning chemicals and even the other equipment.

- Think about how the pads smell, some might smell different than others so if you can see a change in behaviour when someone is holding a particular pad or if they want one of the newer pads consider the way it smells might be an issue.
- When the heaters are turned off after being used, they let of a smell. If you notice someone reacting to this, be aware of it and try and move them away
- Be aware that certain cleaning chemicals can have a very strong smell. If someone appears to be reacting to this move them away from the area it is being used in.
- Also be aware that everything has a smell, just because you don't notice it doesn't mean its not there and not a problem for someone else. For example, metal is a common one that people don't realise has a strong smell that can be a problem for neurodiverse people. Never dismiss someone's sensory experiences.

Buckets and Taps

Introduction

The following pages are the result of conversations with my autistic adult son, as we discussed sensory processing, the impact it has on wellbeing, and ways to manage sensory input to feel better. We found that the analogy of ‘taps’ filling or emptying a ‘bucket’ that represents emotional wellbeing to be the best way to explain it, you might prefer a different way, but hopefully the booklet will help you to think it through and find ways to help.

The booklet starts by explaining the concept of a bucket representing feelings (often used in relation to a ‘stress bucket’), it then moves on to how taps can fill or empty the bucket to impact on those feelings in a simplified way. Lastly, there is more information about the different taps that fill and empty the bucket. There is lots of information about the sensory taps as these are important for autistic people, which is very different to neurotypical people for whom they have little impact.

Everyone has times when they feel overwhelmed, angry, or anxious. Everyone feels their senses, and can have things that they find uncomfortable from a sensory view point. Everyone has social situations that they enjoy or don’t enjoy. However, what’s important to know is that for autistic people their senses and social situations have a massive impact on their wellbeing, it’s so much more than neurotypical people experience, so the feeling of overwhelm can be much greater and more frequent without understanding and support.

At the end of the booklet there’s further information for adults, with some handy tips that can help.

This booklet is still working progress and there is more to come in the future.

Chapter One: Your Bucket

How you feel (relaxed, calm, angry, anxious, stressed etc) is the result of everything that you are experiencing in that moment, and how the different things that you are experiencing make you feel. The things that you experience include:

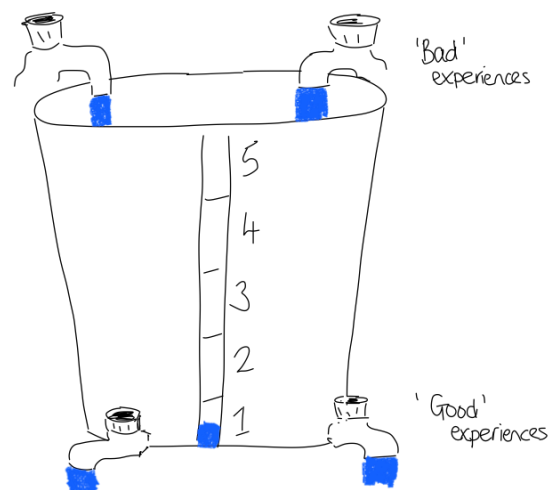
Sensory - how the environment you are in, or the activity that you are doing, affects your body senses (lots more about these later!).

Social interactions - spending time with people around you, talking to them and doing things together.

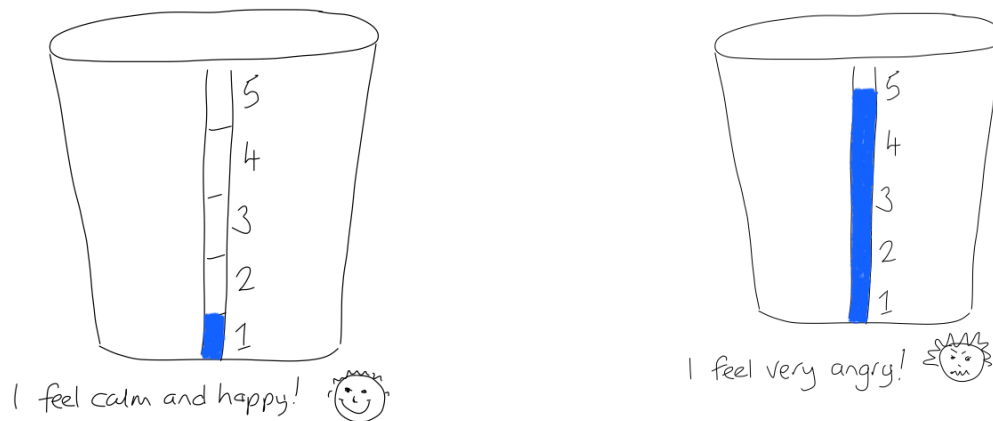
Routines - knowing what is going to happen when, such as knowing that it's dinner time soon, or that the next lesson is maths.

Activities - what you are doing, such as drawing, writing, watching tv, or playing. This will include your 'special interests' which are the things you really enjoy.

You experience lots of things all at once all of the time. Some things are good, positive, enjoyable, or relaxing experiences for you, and other things are bad, negative, unpleasant, annoying, or horrible experiences for you. To keep things simple we're just going to call them 'good' and 'bad' (which is nothing to do with behaviour!). How 'bad' or 'good' things are is individual to you, other people can feel differently about the same experience. Because you are experiencing lots of things at the same time, how you feel is a result (or balance) of how much 'good' you are feeling compared to how much 'bad'.



It can be helpful to think of how you feel as a bucket - a bucket with a bit of water in is happy, relaxed, and calm, you feel very good, and a full bucket is upset, angry or anxious, you feel very bad. Sometimes the bucket gets too full and it overflows, in a big upset or an angry outburst of emotion (which people often call a 'meltdown'). Giving the levels of the bucket numbers can be a helpful way to understand and explain how your emotions are.



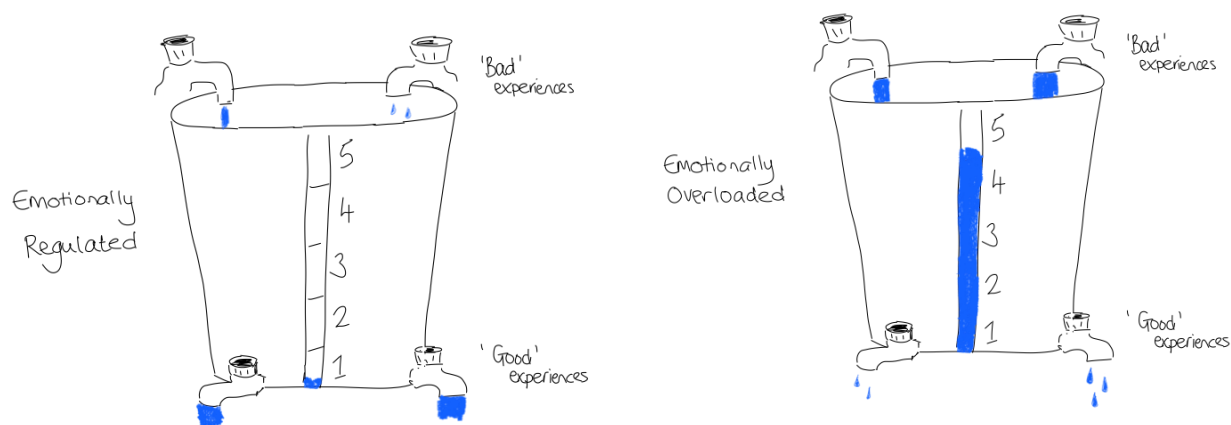
[I've simplified this with a smiling and angry face just for the picture, remember, how you feel at the different levels is individual to you. You can find different versions of the 'five point scale' on the internet that might help you].

To understand how what you are experiencing effects your feelings it can be helpful to think about the experiences as taps that fill and empty the bucket. Things that you experience as 'bad' are taps that fill the bucket, and things that you experience as 'good' are taps that empty the bucket. What's in the bucket is therefore a balance of the two types of taps.

Taps aren't only on or off, they turn between a low flow (slow and small) and a high flow (fast and big). You can think of a low flow as 1, and a high flow as 5. Some experiences turn the tap to 1, some to 5, and others to other numbers in between!



If the taps filling your bucket are flowing faster than the taps emptying your bucket then your bucket will get full. Sometimes the bucket can fill up quickly, and sometimes it can take a while to fill up. When your bucket is getting quite full then some people call this 'emotionally overloaded', and it will feel very bad for you. If, however, the taps emptying your bucket are flowing the same or faster than those filling the bucket, then your bucket will be empty or low, which some people call 'emotionally regulated', and you will feel calm and happy.



[In reality there's lots of taps, I've only drawn two good and two bad taps to keep it simple!]

For some people being emotionally overloaded makes them angry and they might shout, say unkind things, throw things, or hit people. For other people they feel very sad, they don't want to be near to people, they cry, or they don't talk to anyone and go very quiet. How you feel when you are emotionally overloaded is individual to you, and it can be helpful to think about what this is like so that you and other people can recognise it, and then you can do something to get your 'good' taps turned to a faster flow to regulate your bucket, or you can do something to turn your 'bad' taps to a slower rate or off.

There is a bucket level sheet you can fill in if you want to.

The importance of emotional regulation

When you are emotionally overloaded you cannot concentrate on learning, playing, or doing the things that you enjoy, and you don't feel good. It can also be difficult to eat or sleep well if you are overloaded. This is why it is important to think about what fills up your bucket, and what empties it, then you can try to avoid things that fill up your bucket too fast, and make sure you can do things that empty your bucket regularly.

Remember, lots of taps will be running at the same time.

It's very important to be aware that your bucket is filling and emptying all of the time, you don't start with a new bucket when you're in a different place. You could think of this as carrying the bucket with you wherever you go. This means that if your bucket is nearly full before you get to school because you had a difficult morning then it won't take much for it to overflow. Likewise, if your bucket is nearly full at the end of the school day then it won't take much to overflow when you get home. It would be helpful to do something to empty your bucket at these times.

Planning ahead

Sometimes you need to do things that will fill up your bucket fast, an example is that for some people this is brushing their teeth, but their teeth will go bad if they don't so they have to do it. By understanding your bucket and taps you can plan and make sure



that you have done things to empty the bucket before and after to avoid becoming emotionally overloaded.

Bottling up

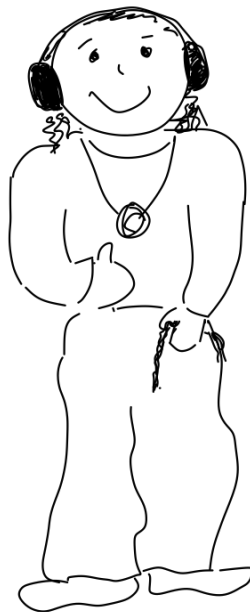
If you ignore your bucket, and try to pretend that you feel ok when you are not, this is called 'bottling up'. This doesn't empty your emotions bucket, it just keeps filling, and at some point your emotion bucket will overflow which isn't nice for you, so try to be honest with yourself and those around you (maybe share this book with them so they understand), then you can regulate your bucket and be happier.



Masking

Sometimes people don't use their 'good' taps, or they don't do something to slow down their 'bad' taps, because they want to fit in with other people. They think that they should be the same as everyone else, and they should do what everyone else does, so that other people will like them and be happy with what they do. This is called 'masking', people 'mask' to fit in with other people around them.

'Masking' really isn't good for you, and it takes a lot of effort, so not only are you letting your bucket fill up because you're not using your taps to regulate, you also turn on another 'bad' tap called masking. This is really important, so there's more about this later.



Taps

So now it's time to think about the taps, remember that what makes an experience 'good' or 'bad' for you is completely individual to you, and other people might feel differently about the same thing. How fast or slow your tap flows in response to an experience is also completely individual to you.

Chapter Two: Sensory Taps

Our senses are designed to let us know what is happening around us and to us, they are there to keep us safe and healthy, so are important. However, senses work differently for autistic and neurotypical people, they provide more information to autistic people all of the time, which can be overwhelming.

We are going to think about sensory taps, sensory taps are really important for autistic people. For neurotypical people their sensory taps don't have much influence on their bucket (they rarely turn above a 2), they may find some things to be a bit annoying (like an itchy woollen jumper!), but it's only annoying, it doesn't fill up the bucket much. For autistic people the sensory taps have a very big influence on the bucket (they are usually turned above 2 and are often a 4 or 5), and without ways to control them they would cause the bucket to fill up or overflow.

For neurotypical people their brain will turn down a particular sensory tap for a while if it thinks that the sensory response isn't important, but for autistic people their brain doesn't do that, the tap just keeps filling up the bucket. An example of this is a label in clothes, neurotypical people might notice the label when they first put the clothing on and it feels uncomfortable, but then their brain decides that this feeling isn't important and turns that tap down, so the person doesn't find the label uncomfortable anymore, and their bucket is regulated. Autistic people notice the label and find it uncomfortable, and their brain doesn't turn off the tap, the tap keeps flowing and they stay aware of the label being uncomfortable. The experience of the label keeps filling the bucket and may cause emotional overload, and they fling the clothes across the room in anger!

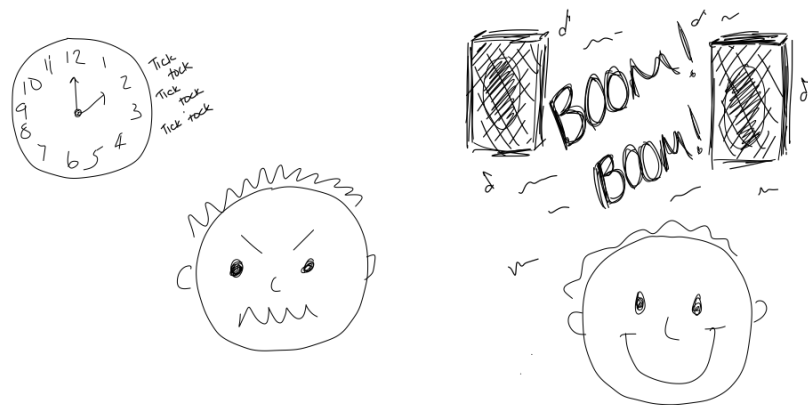


You can't teach your brain to ignore sensory things (lots of grown ups say "just ignore it", or "you'll get used to it") it's just the way your brain works. Remember, trying to ignore your feelings isn't good for you, the bucket is still filling up and it will overflow at some point!

There are eight different senses, some senses will have a bigger influence on your bucket than

others, and again this is different for everyone. All senses will be working all of the time, so for each sense there is always be a 'good' or 'bad' tap flowing. It can be helpful to understand your senses and the influence they have on your 'good' and 'bad' taps so that you can regulate your bucket. So we are going to look at each sense in turn.

Lots of people think that 'more' of a sensory input is worse than 'less' of a sensory input. Sometimes this can be true, but it isn't always. For example, people often think that loud noise will be a bad sensory experience, but for some people a quiet ticking clock can be a very bad sensory experience, and they actually like a loud noise! This is why it's important to think about how your senses work for you.



What controls the flow of the tap?

It's worth being aware that usually the strongest input happening for each individual sense that you are experiencing in that moment will be the only number that the tap is turned to, it's this thing that gets your most attention. You also won't be aware of any 'good' experiences from that sense if there is a 'bad' experience at the same time which is a bigger number.

Using the example of the ticking clock, if that turns the 'bad' sound tap to 5 then you won't notice the fridge noise that's a 'bad' 2 (they don't add up to 7 either). When the clock is ticking then that gets all of your attention so you won't notice the birds singing which is a 'good' sound tap 3. The 'good' tap for sound will be off because the 'bad' tap for sound is a higher number. The only tap working for the sound sense is the 'bad' tap turned to 5.

Your most important senses

Usually, there are some senses that have a bigger influence on your bucket than the other senses, for those senses the taps are turned higher by many things, so fill or empty your bucket more and faster.

For some people the visual sense has a big influence, a bright light of a lamp instantly turns the 'bad' tap to 5, and twinkling fairy lights turns the 'good' tap to 5, a cluttered room turns the 'bad' tap to 4, and a tidy room turns the 'good' tap to 5. For other people though the visual sense only has a small influence, the bright lamp just turns the 'bad' tap to 2, and twinkling fairy lights only turn the 'good' tap to 2, the cluttered room turns the 'good' tap to 2, and the tidy room turns the 'bad' tap to 2.

Working out which are your important senses is really helpful, when you know what these senses are then you can make sure that what these senses experience is 'just right'. Controlling these important senses is the best way to keep your bucket regulated (maybe you can think of them as your 'golden taps'?).

Sensory detective!

At the end of this book there are some blank tables, numbered 1 to 5, for both 'good' and 'bad' experiences. You can write down different things, activities, or places with the right number tap flow for you. You might want to fill in one of these for each sense. You might prefer to complete these for your whole sensory experience in different situations because you usually have lots of senses all getting experiences at the same time. You might prefer to do a bit of both, it's up to you!

Sight

This is everything that you see, it includes:

The objects you see

How light or dark it is

What colour the light is

How bright the light is

What colours you see

How many colours you see

Examples are:

A room being cluttered compared to a room which is tidy.

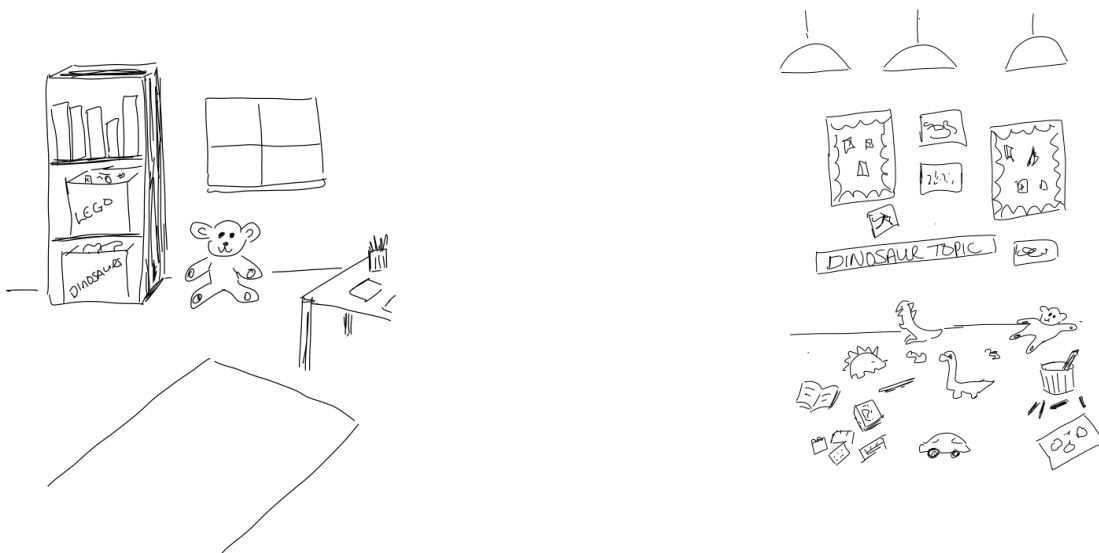
Lots of pictures on the wall compared to no pictures on the wall.

Natural light through a window compared to the light you switch on.

People sitting still compared to people moving around.

Pastel colours compared to bright colours.

Remember, everyone is different, some people like having lots to look at so like clutter, but other people like less to look at so like tidy!



Smell

We smell lots of different things, and you may notice smells that other people don't. You will have smells that you like and smells that you don't. Again, it doesn't have to be a strong smell that you do or don't like. Smells come from things such as:

Perfume.

Cleaning products.

Soaps and shampoo.

Food and drinks.

People's bodies.

What things are made of can smell, such as wood, plastic, or metal.



Sound (Auditory)

This is everything that you hear. Sound is actually quite complicated, it's not just loud or quiet, there's different tones and pitch involved (something to research if you're interested to know more!). Not everyone can hear all sounds, children hear more sounds than adults, and people with sensitive hearing hear sounds that other people can't, such as electricity.

For some people the volume of sounds is unpleasant, for others it's the pitch of the sound, and for others it is that there's too many noises all at once (or those things might be good!). Some people who are sensitive to sound like to listen to 'good' sounds loud enough to drown out the 'bad' sounds, or they may like to wear ear defenders so that they can't hear the 'bad' sounds anymore.

Sound comes from things such as:

Machines (including the fridge, washing machine, Hoover).

People, not just when they're talking, but also breathing, coughing, sneezing etc.

You hear sounds from inside your head while you are eating.

Animals, such as singing birds, buzzing flies, and dogs barking.

Running water, taps, toilets flushing.

Television, phone or tablet.

Electricity.

Traffic.

Music.

Some lights.



Taste

We taste by putting things in our mouths, or licking things. Taste is usually described as sweet, sour, bitter, spicy etc. Although the texture of food could be described as a touch sense, the texture of food is important too, so it's probably helpful to think about the texture of food as part of the taste taps. Smell has a significant input to how things taste too, it can make you like or dislike certain foods.

Some people only like to eat one kind of food at a time, but other people like to combine foods. For some people it is important that different foods don't touch each other so that they don't change the taste.



Things that aren't food also have a taste, this includes metal, wood, rocks, and plastic. Some people like to lick non food things, or put non food things in their mouths. Some people don't like to use cutlery made of metal, and other people like to lick things made of metal.

Touch

The sense of touch comes from things coming in to contact with your skin, this is everywhere on your body, not just your hands. We feel temperature, from cold to hot, and textures such as rough, smooth, soft, hard, silky and fluffy. The shape of what we touch can also be important.

Touch sense comes from things such as:

Clothes and shoes (a very important one!)

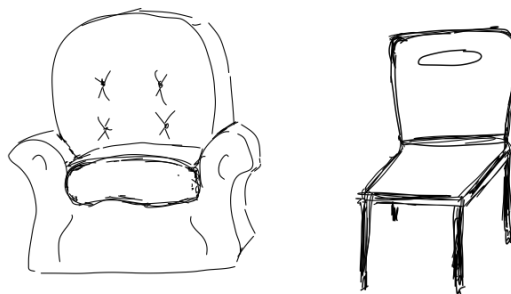
Things we touch with our hands.

Things we hold.

What we walk on, for example hard concrete or soft carpet.

What we sit on, such as a soft armchair or a hard desk chair.

People touching us, from a gentle tap to a hard bump.



Balance (Vestibular)

This sense lets us know if we are upside down, even if our eyes are closed! It's about knowing 'which way is up'. If you close your eyes and touch your toes you know you are upside down! It also lets you know if you are spinning, or if you are high off the ground.

Here's some examples of how this sense effects people:

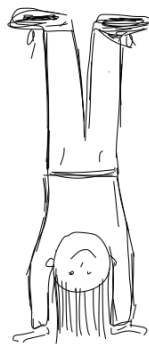
Some people love to hang upside down, but other people really hate it.

Some people love to spin around or run in circles, but other people don't.

Some people like to swing on swings, but other people don't.

Some people like to rock in a chair or tip it slightly, but other people like the chair to be firmly on the ground.

Some people like to keep moving, but other people like to be still.



Body Awareness (Proprioception)

This sense lets you be aware of where the different parts of your body are, this is how we can position ourself to sit on a chair behind us, lift our legs to climb stairs, or reach and grab things, even when we can't see them. Try putting your hands behind you back, then touch your fingers together - you know where your hands and fingers are even though you can't see them because of this sense.

Here's some examples of how this sense effects people:

Some people like to walk on tiptoes to avoid this sense, but other people like to jump and stomp to get more!

Some people don't like blankets, but other people love a heavy blanket on them.

Some people bite the ends of their fingers to feel this sense more.

Some people wear tight clothes and shoes to get more of this sense, but other people wear baggy clothes to reduce it.

Some people like to push their legs against the wall, or hang from monkey bars. Some people like tight hugs, and other people hate hugs.

Internal senses

This sense tells you if you are hungry, if you need the toilet, if you are tired, if you are hurt or unwell, or if you are too hot or too cold. For some people this sense is very sensitive, if they are just a bit hungry it turns the tap to 5, but other people don't really notice that they are hungry and forget to eat!

Chapter Three: More Taps

It's not just your senses that affect your emotions (although they are very important) what you are doing, and who you are doing it with, also affects your emotions. Like your senses, these have 'good' taps and 'bad' taps, so understanding these taps is also important to keep your bucket regulated.

Social Taps

Social taps are about our interactions with other people, and how these interactions feel. Social interactions can happen with just one other person or lots of people. Here are some examples of social taps:

Talking to people we know well, or talking to people we don't know.

Family parties, or friends parties.

Watching tv with our family.

Playing a game with clear rules, or playing a game with no rules.

Completing a task with a group in your class.

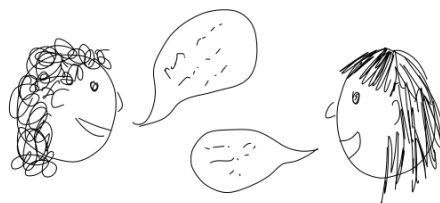
Being told what to do when, or choosing what you want to do.

Going shopping.

Being on your own, or being with friends.

Talking about your favourite thing, or listening to someone talk about something boring!

Playing with other children, or playing by yourself



Routine & Plans Taps

We have routines in our day for most days, such as getting dressed, having breakfast, then going to school. At school we have routines too, such as lesson topics, when PE is, lunch time and break times. Some people like a routine, it keeps their 'good' routine tap flowing, but if the routine is changed without warning the 'bad' routine tap gets turned on fast! Other people don't mind if they have a routine or not!

Plans are what is going to happen in the future, this can be things like a planned trip to the cinema with your family. Some people like to know what plans are a long time before they are going to happen, this keeps the 'good' plans tap flowing, but if they find out just before they happen then the 'bad' plans tap is turned high. Another thing that can turn the 'bad' plans tap high is if plans change. Remember that everyone is different, some people don't mind what the plans are or if they change.

Mon	Tue	Wed	Thu	Fri	Sat	Sun
School	School	School	School	School	Swim	
Park	Bowling	Cinema	Soft play			Swim
School	School	School	School	School	Party	

It can be helpful to know how important routines and plans are for you, then grown ups can give you lots of notice if routines or plans are going to change if that's important for you.

Activity Taps & Special Interest Taps

These taps relate to what you are doing, such as reading, watching tv, playing on your iPad, or drawing. They also relate to what you are doing at school, such as maths, literacy, or topics. Like everything else we've thought about, these will have taps that will be 'good' or 'bad' for you, so it can be helpful to think about them.

Often we have a very important activity tap, this is your 'special interest' tap. Your special interest is something that you really love doing or thinking about, when you are spending time doing this the 'good' tap will be flowing very fast, helping your bucket to be empty or low. This is why it is an important tap because it can help you to be regulated when other 'bad' taps are high. Usually, people with a special interest know lots about it, and love to talk to people about it too. Do you have a special interest?

Anticipation Taps

Sometimes, when you know that something is going to happen you think about what it might be like, you usually think about how it made you feel when you experienced it before. This can be a 'good' or a 'bad' experience. For example, if you know that you are going bowling with your family tomorrow, you think about the noise of the music, people, and bowling balls rolling, the bright lights of the alleys and flashing lights of the slot machines, the feel of the bowling shoes and chairs, and the car journey there.

If you don't like these things then your 'bad' tap will be turned high, and your bucket is filling before you've even left home. If, however, you really like trips to bowling then your 'good' tap will be turned high, and your bucket will be emptying, thinking of going bowling would be a good way to empty your bucket.

Masking tap

We have already thought about masking, but as it's so important we're going to learn a bit more now. Masking is when you don't do things to slow down your 'bad' taps, or you don't do things to increase your 'good' taps because you want to fit in, to please others, or you don't want to seem different. Although neurotypical people adjust their behaviour to fit in with the people around them at times this is not the same as autistic masking, which is usually constant and takes a lot of effort.

An example is sitting on the carpet at school, the floor is hard, the carpet is itchy, and there's people too close who keep touching and bumping you, lots of 'bad' taps are flowing fast. But because everyone else sits on the carpet and you don't want to be different by sitting on a chair, and it makes the teacher happy if you are sitting on the carpet, you don't say or do anything. People think you are happy because you make yourself look happy, but your bucket is filling up fast (and you can't concentrate on what the teacher is saying).

Other examples of 'masking' includes not using fidget toys or other sensory calming resources because other people don't, wearing clothes that are fashionable (or a school uniform) even though they are really uncomfortable, going to places that you find unpleasant because your friends do, and holding conversations and making eye contact even though that's very uncomfortable. They are all ways to try to fit in with other people because you don't want to seem different. However, 'masking' really isn't good for you,

your emotion bucket will be filling up fast, and masking can even turn another ‘bad’ tap on for some people, it takes a lot of effort to pretend to be happy when you’re not, and it can be exhausting. ‘Masking’ only has a ‘bad’ tap, there’s nothing ‘good’ about masking!

Sometimes grown-ups can encourage masking without meaning to, for example when they say “you did really well when you sat on the carpet, I’m proud of you”, or “I knew you’d be ok at the party, we all had a great time”, but they don’t know how difficult it was for you.

How you feel is more important than what other people think, and you may find that people don’t mind if you are different to them, or they might be more like you than you think and they are masking too!

Chapter Four: What about you?

Now it's time to think about you, and how the things that you experience effect your 'good' and 'bad' taps. Knowing this is an important way to keep your bucket regulated. Remember, there's no right or wrong for this, everyone is different, and how you feel is the most important thing.

Fill in the 'good' taps and 'bad' taps using the sheets. You will probably have to add to this, or change things slightly, as you become more aware of what is around you and how it affects your different taps. It's probably best to start with the things that you do or experience often, here's a few ideas:

Having a shower or a bath, cleaning your teeth, and brushing your hair.

Different types of clothes and shoes.

Think about different foods and drinks.

Playtime at school, sitting at a desk, carpet time, assembly, PE, music lesson, maths, English, and topic. Writing (including holding the pencil).

Playing with other children.

What movement do you like or dislike?

Smells and sounds you experience often.

TV or tablet time.

Drawing and colouring.

Playdough, sensory toys.

	Good taps		Bad taps
5	Mood lights Loud music	5	Sunshine through the window Tick-tock clock
4	Crunchy crisps Fizzy drinks Pjamas	4	Cheese Swings People near me
3	Tidy room Feeling warm Jumping	3	Hoover noise Being tickled Tight clothes
2	Hearing rain Loose clothes	2	Lamp light Being upside down
1	wearing fluffy socks	1	Hearing people eat Wearing shoes

Can you work out which are your most important senses?

What helps you to empty your bucket?

Chapter Five: Ideas to help

Now that you've worked out what fills and empties your bucket you can make a plan to try to keep it regulated. This is probably best done with the help of an adult.

Remember that many taps will be filling and emptying your bucket at any time. Your bucket can take a long time to fill up, or a long time to empty, or it may happen fast! Many people aren't aware of this, and this is why grown ups can be confused as to why you seem to be ok sometimes and not at other times when you are doing the same thing, they aren't aware of how full or empty your bucket was before you started, or what other taps are filling your bucket.

Let's use the example of sitting on the carpet at school again. If your bucket was empty before you sat on the carpet it might be a long time before the bucket will get full, even though the 'bad' taps are flowing. However, if your bucket was half full before you sat on the carpet then there is less time before the bucket gets full. If it's already full you can't sit on the carpet at all! The teacher doesn't understand why you can sit on the carpet sometimes but not at other times because they don't know how full your bucket was. Sitting on the carpet isn't the same every time too, sometimes you might smell or hear something that turns on more taps so the bucket fills quicker.

Remove or Reduce 'Bad' Taps

Look at the things that are high for your 'bad' taps, can you avoid these things? Can you reduce how you experience them? For example wearing ear defenders to reduce noise.

Turn on Your 'Good' Taps

Look at the things that are high for your 'good' taps, can you do or experience these things more or more often? This might be taking a sensory break to take part in sensory activities that increase the flow of 'good' sensory taps. It could be spending time doing an activity you like. A movement break may also help.

More examples to follow!