Notes to accompany the PowerPoint Slides for the E-learning module for parent-carers: Self-Regulation and Autism

 Before you start:

- Please note that the PowerPoint which accompanies these notes has been divided into Part 1 and Part 2.
- Remember once a particular part of the Self-Regulation and Autism PPT is open, to then open it up it in **Slide Show View**.
- You will need to have a copy of these notes open (preferably a hard copy version), in order to navigate your way through the slides.
- You may also want to consider doing parts of this training with your partner and/or a friend.
- You are welcome to pop an e-mail to sarahs_karma@yahoo.co.uk at any stage should you need clarity on anything or have a specific question you would like to ask.

PART 1

Slide 2: Module outline

This is an outline of the content that will be covered over the course of this module:

- Develop and Promote Self-Awareness
- Understanding Self-Regulation
- The 5 Domains of Self-Regulation
- Self-Regulation: Element of Emotional Intelligence
- Self-Regulation in Context
- The Thinking Brain versus the Survival Brain
- Self-Regulation and Autism
- Dysregulation
- Suggestions for Parent-Carers

Slide 3: 'Awareness is like the sun'

 **Reflection**:

- If you were a poet, how would you describe awareness?

Slides 4 and 5: Self-Awareness - Activity

This slide offers you a fun, non-threatening introduction to begin thinking about how well you know yourself.

 **Activity**:

Answer each of the 3 questions presented on this slide. Whatever comes to mind in response to each question, jot it down on a piece of paper. Try not to think too hard.

Slide 5: This slide provides a reflection on each answer you gave to the questions above.

 **Reflection**:

- What struck you as interesting to how you view yourself?
- In what way do you agree/disagree with how others view you?
- How do you feel your view of life fits with how you are feeling about things right now?

Slide 6: 'For me self-awareness is the key'

On this slide are the words of Julia Daunt, a PDAer, who expresses very articulately how her own development of self-awareness has helped her make better sense of her life.

 **Reflection**:

- On a scale of 1 – 10; 1 being no self-awareness at all and 10 being highly self-aware, where would you curremtly rate yourself?
- What do you think you could do to improve your level of self-awareness?

Slide 7: Self-Awareness . . .

Self-awareness involves our capacity to monitor our stress, thoughts, emotions and beliefs. It is important because it's a major mechanism influencing our personal development.

Self-awareness requires self-examination in order to become more aware of your strengths and weaknesses regarding your well-being. Be aware, though, that an honest, non-judgmental self-analysis isn't easy. We tend to berate ourselves for our failings or fantasize about how great we are, when neither is necessarily the case. We all have a unique mix of "good" and "bad" traits, but we are largely unaware of them. In order to self-reflect objectively, we need to quiet our minds and open our hearts, forgiving ourselves for our imperfections and offering ourselves kudos where we deserve them.

As you might imagine, there are many benefits to practicing self-awareness:

- It can make us more proactive, boost our acceptance, and encourage positive self-development
- Self-awareness allows us to see things from the perspective of others, practice self-control, work creatively and productively, and experience pride in ourselves and our work as well as boast our self-esteem
- It leads to better decision-making
- It can make us better at our jobs, better communicators in the workplace, and enhance our self-confidence and personal as well as job-related wellbeing

The benefits listed above are reason enough to work on improving our self-awareness, but this list is by no means exhaustive. Self-awareness has the potential to enhance virtually every experience you have, as it's a tool and a practice that can be used anywhere, anytime, to ground yourself in the moment, realistically evaluate yourself and the situation, and help you make good choices.

 **Activity**:

Should you wish, you can access a **Well-Being Quiz** on the website below, in order to start your journey of become better aware of your strengths and weaknesses regarding your own well-being.
https://www.berkeleywellbeing.com/well-being-survey.html

Slides 8 and 9: Self-Awareness Activity

 **Reflection**:

- **Slide 8**: Read the scenario
- As someone who is proficiently self-aware, how do you think Luis could address this situation with Monique i.e. what could he say and do?
- **Slide 9**: This slide describes how Luis dealt with the situation.
- What are your thoughts about how he responded?

Essentially, this scenario exemplifies what self-awareness can look like, and what it can do for you when you tap into it. Without self-awareness Luis would have potentially continued in an unsatisfying relationship or broken things off with Monique.

Slide 10: Cultivate your Self-Awareness

 **Activity**:

Select one or two of the ways you feel would best suit you and try them out as a means of growing your self-awareness. Try to encourage a family member to embark on this journey with you.

Slide 11: Meet Harley and Lao

Click on the YouTube link provided on the slide to watch the video**, 'Who stole the cookie?'** This is a humorous video of a woman confronting her two Labradors (siblings) trying to ascertain which of the two stole the cookie off the kitchen counter.

If you are wondering what happened AFTER Harley snitched, watch this YouTube video link below to find out; you may be surprised!
https://www.youtube.com/watch?v=5gCz7XfvHaM

The above videos essentially highlights difficulty in the 'delay of gratification' and can help us appreciate the distinction between self-control and self-regulation. The former is about inhibiting impulses; the latter is about identifying and reducing the cause/s of those impulses.

Myth: Self-regulation is just another term for self-control
Essentially these are two completely different concepts and that rely on two completely different parts of the brain. Self-control is about the effort to resist an impulse. Self-regulation is about understanding; understanding the significance of an impulse; why these things happen.

When one goes automatically into that self-control mode it shuts down that understanding; that reflective process. Self-regulation makes self-control unnecessary by reducing the effort in effortful control.

Self-regulation does not involve the inhibiting of impulses but, rather, being able to deal effectively and efficiently with stressors – for example, noise, light, and movement, or frightening experiences during infancy and childhood – that can result in a chronic state of energy-depletion

Dr Stuart Shanker (D.Phil), research professor of philosophy and psychology

Slide 12: Self-Regulation – an analogy to help understand self-regulation . . .

We can visualise the ability to self-regulate a bit like how we experience driving a car.

If we aim to maintain a constant rate of acceleration, say 30 mph, then we will need to adjust the pressure that we apply to the accelerator to allow for changes to the road, incline and wind. Furthermore driving requires constant changes depending on traffic conditions and speed zones etc. When we learn to drive a car, learning to accelerate, apply the brakes and change gears smoothly takes time and practice.

This is quite similar to learning to self-regulate. Some individuals are always pushing too hard on the accelerator, while others jump between gears quickly and some are slow to accelerate. We all need to master the ability to find the optimum speed or level of arousal. This ability to regulate the level of arousal underlies the capacity to self-regulate.

Reflection:

- What was it like for you learning to ride a bicycle and/or later driving a car?
- Can you see how well the analogy of driving a car, fits with the concept of keeping ourselves optimally regulated?

Slide 13: What is Self-Regulation?

Why don't we as adults always do exactly what we feel like doing, when we feel like doing it? This is a question that you might have heard from your children at one time or another, and it perfectly encapsulates what baffles them about adults.

As adults, we pretty much have free rein to do whatever we want, whenever we want. So, why do we show up for work? Why don't we eat cake for breakfast?

Perhaps the better question is, how do we keep ourselves from shirking work when we don't want to go? How do we refrain from eating cake for breakfast and eating healthy, less-delicious food instead? The answer is *self-regulation.* It's a vital skill, but it's also something many of us do without much thought.

 **Reflection**:

- Think of a time when you can consciously remember making use of your capacity to regulate your thoughts, feelings and/or behaviour?
- Describe how what happened in response to your ability to effectively regulate what you were thinking, feeling and/or the action you took, impacted on the situation above.

Slides 14: Domains of Self-Regulation

This slide will give you a glimpse of the five-domain model of Self-Reg first explored in **Calm, Alert, and Learning** (Shanker, 2013). This framework involves the management of stress and tension across five domains: biological, emotion, cognitive, social, and prosocial.

This slide looks at self-regulation through an exploration of five domains:

1. The Biological Domain
2. The Emotion Domain
3. The Cognitive Domain
4. The Social Domain
5. The Prosocial Domain

The five domains are linked and there are connections between and among them.

Biological: Biological (or physiological) self-regulation refers to the ability to manage responses that are governed by the nervous system and affect level of energy or stage of arousal, on a continuum from sleep or drowsiness, through being calmly focused and alert, to being overstimulated or flooded.

Self-regulation in this domain can be described as the ability to attain, maintain and change one's level of energy to match the demands of a task or situation. Responses that affect level of energy vary widely from person to person and from situation to situation.

For example, some individuals may be overwhelmed by a level of sensory input, be it auditory, visual, or related to touch or the proximity of others that would not disturb most other people. Some of us may be extremely sensitive to noise (e.g., buzzers or bells); others may find it difficult to sit for longer than a few minutes. Behaviours such as humming or chewing things, fidgeting (e.g., tapping, jiggling), or constantly moving may indicate that an individual is trying to remain or become calm, alert, and focused i.e. the individual is attempting to self-regulate.

Emotional: "Emotional self-regulation" refers to the ability to monitor and modify intense emotional responses, feelings, and moods. For example, individuals self-regulate when they are able to recover from feelings of embarrassment, disappointment, hurt, anger, or frustration and carry on with confidence and a positive disposition.

Cognitive: "Cognitive self-regulation" refers to the ability to monitor and modify behaviour related to mental processes such as memory, attention, the acquisition and retention of information, and problem solving. For example, individuals self-regulate when they are able to focus, sustain, and then switch their attention; sequence their thoughts; and ignore distractions.

Social: "Social self-regulation" refers to the ability to recognize, understand, assess, and act on social cues i.e. to engage in and sustain social interactions. For example, individuals demonstrate social self-regulation when they respond appropriately to cues communicated through facial expression or tone of voice and when they engage cooperatively with others.

Prosocial self-regulation refers to the ability to empathize with others and to demonstrate behaviours that lead *toward* positive social activities including making friends and helping others. Prosocial self-regulation involves an ability to self-regulate in the above four domains. For example, an individual who attends to another person who has fallen and hurt himself demonstrates *cognitive* self-regulation (in recognizing the urgency of, and shifting attention to, an external event); *biological* and *emotional* self-regulation (in remaining calm enough to attend to the hurt person); and *social* self-regulation (in recognizing and understanding that someone needs help and comfort), in addition *prosocial* self-regulation (in acting on feelings of empathy and the desire to help a someone else).

Slide 15: Self-Regulation & the Arousal Continuum

Arousal can be considered a state of the nervous system describing how alert one feels. In order to attend, concentrate, and perform tasks in a manner suitable to the situational demands, one's nervous system must be in an optimal state of arousal for that particular task. Self-regulation is the ability to attain, maintain, and change arousal appropriately for a task or situation. Most individuals self-regulate their arousal levels throughout the day, with no conscious thought or effort.

In the morning when we wake up, we are able to move from a low arousal state (sleep) to an optimal level so we are able to focus on the day's activities. And when the day is done, we are then able to move back down to a low arousal state in order to fall asleep.

Arousal levels can mildly fluctuate throughout the day in response to various sensory events e.g. a car honking on the freeway or burning a hand on a hot pan may momentarily startle you, eating too much for lunch may produce a brief food coma, but most individuals are usually able to self-regulate so that their arousal stays within an optimal zone.

Some individuals, however, are unable to self-regulate their arousal level and may 1) have low arousal throughout the day e.g. cannot seem to get going; are lethargic, slow, usually sedentary, 2) have high arousal throughout the day e.g. seem unable to calm down, hyperactive, seemingly minor incidents result in major meltdown; fight or flight response, become overwhelmed and freeze or shutdown, or 3) have large fluctuations throughout the day ranging from very low to very high arousal.

As parent-cares it is helpful to understand the different states of energy that impact the way our Autistic family member regulates their emotions, behaviour and attention e.g. being drowsy or hyper alert. Dr Stuart Shanker describes these states through what is called the Arousal States Continuum. The optimal state lies in the middle of the continuum – Calmly Focused and Alert.

When our Autistic adult child finds him/herself in this optimal state, he/she is then open and receptive to integrate new information from the various experiences he/she encounters throughout the day.

The stages of arousal are: asleep, drowsy, hypo alert, calmly focused and alert, hyper alert and flooded. Individuals need to be able to find the appropriate level of arousal for the situation they are experiencing.

Reflection:

- How would you generally describe your Autistic adult child's arousal level: low, high or fluctuating?
- Should your Autistic family member be hyper alert (highly aroused) or hypo alert (experiencing low levels of arousal), what activitiy or practice generally supports him/her to return to an optimal state of arousal in which he/she is calm, focused and alert?

Slide 17: Self-Regulation & Cognitive Components

When individuals have opportunities to develop executive functions and self-regulation skills, everyone and society experience lifelong benefits. These skills are crucial for learning and development. They also enable positive behaviour and allow us to make healthy choices for ourselves and our families.

Executive functions and self-regulation skills depend on three types of brain functions: working memory, cognitive (mental) flexibility, and inhibition (self-control). These functions are highly interrelated, and the successful application of executive function skills requires them to operate in coordination with each other.

- **Working memory** governs our ability to retain and manipulate distinct pieces of information over short periods of time.
- **Cognitive flexibility** helps us to sustain or shift attention in response to different demands or to apply different rules in different settings.
- **Inhibition** enables us to set priorities and resist impulsive actions or responses.

We are not born with these skill. We are however born with the potential to develop them. Some of us may need more support than others to develop these skills.

Growth-promoting environments can provide our Autistic family members with the 'scaffolding' that helps to support their practice of these executive function skills. This is best done by establishing routines, modelling social behaviour, and creating and maintaining a supportive, reliable relationship with them.

It is also important for them to exercise these developing skills through activities that foster creative engagement and social connection; that supports them to cope with stress, involves opportunities to practice, and over time, increases capacity to direct their own actions with decreasing parent-carer support.

Reflection:

- What clues does your Autistic adult child's observable behaviour indicate to you that he/she struggles with one or all three: working memory, cognitive flexibilty and/or inhibition of the above executive functions?
- What scaffolding do/have you put in place to support the develeopment of this/these skill/s?

Slide 17: Self-Regulation: An element of Emotional Intelligence

Emotional Intelligence is one's capacity to perceive, process and regulate emotional information accurately and effectively, both within oneself and in others and to use this information to guide one's thinking and actions and to influence those of others.

Reflection:

- Do you recognize the emotions you are currently feeling?
- Can you manage those feelings without allowing them to swamp you?
- How do you motivate yourself to get jobs done?
- How are you able to sense the emotions of others and respond effectively?

This slide looks specifically at the five categories of emotional intelligence (EI/EQ). They include:

Self-awareness: the ability to recognize and understand one's own emotions and their impact on others. Self-awareness is the first step toward introspective self-evaluation and enables one to identify behavioural and emotional aspects of our psychological makeup which we can then target for change.

Emotional self-awareness is also about recognizing what motivates you and, in turn, what brings you fulfilment.

- **Self-regulation**: the ability to manage one's negative or disruptive emotions, and to adapt to changes in different circumstances. Those who are skilled in self-regulation excel in managing conflict, adapt well to change and are more likely to take responsibility.
- **Motivation**: the ability to self-motivate, with a focus on achieving internal or self-gratification as opposed to external praise or reward. Individuals who are able to motivate themselves in this way have a tendency to be more committed and goal focused.
- **Empathy**: the ability to recognize and understand how others are feeling and consider those feelings before responding in social situations. Empathy also allows an individual to understand the dynamics that influence relationships, both personal and in the workplace.
- **Social skills**: the ability to manage the emotions of others through emotional understanding and using this to build rapport and connect with people through skills such as active listening, verbal and nonverbal communication.

Emotional intelligence has been shown to play a meaningful role in academic success, mental and physical health, as well as attainment in professional domains; the research findings suggest that people with higher Emotional Intelligence generally perform better in life than those with lower Emotional Intelligence.

Slide 19: Self-Regulation in Context

This slide provides a model of self-regulation enactment i.e. a graphic representation of the range of factors that influence whether and how well an individual may self-regulate in any given situation.

The most internal factor influencing an individual's capacity for self-regulation is comprised of his/her biology, genetics, and temperament, which contribute to individual differences in self-regulation. Within the context of this module our focus is on the neurodevelopmental condition of Autism. The next major influence depicted is

the self-regulation skills that the individual has developed over time.

Next is the individual's motivation to self-regulate, which can be derived from either external sources (i.e. by offering rewards and/or consequences – imposed or natural) or internal goals and values (i.e. intrinsic motivation).

Caregiver support (provided by parent-carers, health care workers and/or mentors) is the next layer in the model, which serves to strengthen the individual's self-regulation skills and also buffer them from adverse experiences in the larger environment.

The environmental context, including the demands or stressors placed on the individual as well as the external resources available, also have a significant influence on one's ability to self-regulate.

It should be noted that, although the concentric circles begin with those factors that are most internal and extend outward to those that are most external, each of these factors may interact with and influence the others. For example, environmental factors may influence an individual's biology by shaping brain circuitry, and biology or temperament may influence how a parent-carer interacts with their Autistic adult child.

Reflection:

- Reflect on your particular situation and make a list of those environmental factors that you feel could be negatively affecting your Autistic adult child's capacity to self-regulate effectively?
- In what ways are you supporting the development of your Autistic adult child's self-regulation skills?

Slide 19: Anyone can become angry

Reflection:

- How do you feel about getting angry; about yourself when you get angry?
- Read the quote by Aristotle, what do you understand about being angry in the right way?

Slide 20: The nervous system and its connection to our capacity to self-regulate

The nervous system has two main parts: The central nervous system which is made up of the brain and spinal cord and the peripheral nervous system which is made up of nerves that branch off from the spinal cord and extend to all parts of the body.

It can be helpful to think of our nervous system as a rosebush. We do not view rosebushes as stagnant. We do not look at them as lacking potential. We know they are transformative. Their growth is sometimes unpredictable. While we only see the external parts of the stems and branches (outward behaviour and expression of emotions), there is a strong connection made between the bush and its foundation through the many roots that have developed over time i.e. between how we see an individual behave and what is going on at the level of the nervous system.

This concept can be correlated to our nervous system: Like a rosebush, our nervous system is not static. Like roots, new connections are made and strengthened based on our relationship with the surrounding environment. Change and growth are always possible. Our nerves are like roots that can grow and make new pathways.

A rosebush also illustrates the subsystems as a working unit, processing the information in the environment. If too little stimulation is presented, the sensory receptors will not react and will neglect to send the message. In such situations, information is not relayed to the brain. Underwater a rosebush will not flourish.

A person deprived of the necessary sensory stimulation, desired by their body, may lack appropriate interaction and engagement with others. The resultant behaviour may be an attempt to acquire what is felt is missing. The opposite occurs in the presence of too much stimulation. Our sensory systems may become over-aroused. A rosebush receiving too much water wilts and will lack vigour. A person receiving too much stimulation may also be unable to participate with others and their environment. Instead, their attention is focused on attempting to block out or avoid overstimulation. For humans, input to our bodies must be 'just right.'

Self-regulation is very much connected to our nervous systems.

Activity:

This activity is a guided journey to further develop your self-awareness in an effort to start thinking about the how to ensure the input your body receives and needs is 'just right'.

This is an activity you would need to do with your partner or a friend. You will need the following materials for this activity: crayons, colored pencils, drawing paper. You will then need to ask your partner/friend to read the following script after which you will be asked to produce a drawing.

Script: 'In just a few seconds, I would like for you to close your eyes. I would first like you to focus your awareness on your breathing. Take in a slow breath and place your awareness on the path of your breath. Now close your eyes. Follow the path of your breath for a few seconds. When you inhale, be sure to take in as much air as you would like. When you exhale, blow out all of your air. There is nothing to think about, just follow the path of your breath. (Pause).

Now, I would like you to shift your attention to your right arm… feel it getting heavier and heavier. Feel the heaviness go all the way down your arm… notice your fingertips. Notice how incredibly sensitive they are. They may even feel tingly or larger than usual. (Pause). Now, notice your left arm. Feel it getting heavier and heavier (Pause).

If your attention drifts to your thoughts, that's normal. Just notice that you have drifted and place your awareness back to your body. (Pause). Now, focus on your right leg. Feel it getting heavier and heavier. Feel the heaviness all the way down to your foot. Now, notice your left leg and notice that it too is getting heavier and heavier. If your attention drifts, just bring it back to your body. (Pause).

(Slow Pace). Now, I would like for you to shift your attention from your body to your imagination. Imagine that you are a rosebush. (Pause). Picture yourself being a rosebush. As you picture yourself being a rosebush, what do you see? How large are you? Do you have flowers? If so, what kind of flowers? Do you have leaves? (Pause). Thorns? Roots? (Pause). Where are you planted? (Pause). Are you in a yard? A park? In the city? The country? (Pause). In your imagination, look around you, what else do you see? Are you alone? Are there other flowers? Trees? Animals? Birds?

What is it like being a rosebush? How does it feel? As you imagine yourself as a rosebush, notice what it's like. (Pause).

In a few seconds, I would like you to open your eyes and draw a picture of yourself as a rosebush. Now very slowly, (pause) open your eyes.

You may begin drawing your rosebush.

Reflection:

- How did you feel about the activity (the whole experience)?
- What feelings came up for you while you were drawing your rosebush?
- Did you like what you drew?
- Do you wish it could be different?
- What did you find difficult about drawing your rosebush?
- What did you learn about yourself from drawing your rosebush?
- What did the thorns represent to you? What did the roses represent to you? What did the roots represent in your life? (What else is around you? Where were you planted? What significance does that have?)
- How does this drawing represent your life currently?
- What will you take away from this activity?

Slide 21: The Triune Brain

In the 1960s, American neuroscientist Paul MacLean formulated the 'Triune Brain' model, which is based on the division of the human brain into three distinct regions. MacLean's model suggests the human brain is organized into a hierarchy, which itself is based on an evolutionary view of brain development. The three regions are as follows:

- Reptilian or Primal Brain (Basal Ganglia)
- Paleomammalian or Emotional Brain (Limbic System)
- Neomammalian or Rational Brain (Neocortex)

According to MacLean, the hierarchical organization of the human brain represents the gradual acquisition of the brain structures through evolution.

This slide shows a graphic representation of the triune (meaning 3 in 1) brain concept. It depicts how our brain was developed evolutionary over time, with each section building on the others giving us more and more functioning capacity over time.

At the back of our head, at the base of our skull, is the **reptilian brain** and this part of our brain controls all our unconscious survival functions. It controls our stress response, but it also controls all those involuntary functions of our body. It controls our circulation, breathing, digestion, sleep and sex drive.

The middle of the brain, the mammalian **(mid-) brain** controls our emotions and memory. One can think of these two evolutionary, older structures as the **survival brain**. What happens in the survival brain is not something we can be consciously aware of. It communicates by turning on hormones and by producing emotions and stress arousal so that we can be aware of it effects on our emotions and the physical sensations in our bodies.

The evolutionary newest part of the brain is referred to as the **thinking brain**, the **neocortex** that wraps around and is in contact with the other, older structures. The neocortex is responsible for our decision making, our ability to connect with others, language, rational though, self-awareness and we are able to be aware of what is going on in the thinking brain. We know it is active when we hear that little voice in our head, that running commentary that is telling us, thinking and judging our experience.

Many of us identify with our thinking brain, but is our survival brain that turns stress on and turns stress off. Interestingly though, awareness does not belong to either the thinking or the survival brain. Awareness is bigger than both of these and extends beyond both of these, which is why we can train ourselves to pay attention to what is going on in our thinking brain, be aware of our thoughts or what is going on in our survival brain by observing the sensations or emotions in our body.

When an individual is distressed, it is hard to use one's executive functioning skills because the strong emotions take over. However learning to manage and monitor emotions allows individuals to re-engage their executive functioning skills, which in turn creates opportunities to recognize our strong feelings and use appropriate strategies to calm down.

It is therefore important to remember that **self-regulation** is based primarily on brain development and maintaining connection between the thinking and survival brain.

Slide 22: The Thinking Brain vs The Survival Brain

Prolonged distress degrades the functioning of the thinking brain. The greater the stress levels the more the survival brain learns and remembers.

This slide helps us to beginning thinking about the difference in the functions of the thinking and survival brain. The thinking brain is responsible for the thinking, slow functions. These are deliberate, conscious, cognitive responses to our experience and it includes things like paying attention, keeping focused, concentrating remembering things consciously through explicit memory, and making decisions. The thinking brain also controls willpower. The reason this is added is because as the thinking brain gets degraded by stress, we often cannot access will power, which is one of the reasons why we will sometimes give into cravings and rely on habits that are not to our best advantage because we are stressed and don't have the willpower to override that.

The thinking brain works best at moderate levels of stress arousal. That is one of the reason caffeine is so popular. Caffeine helps get us to that moderate place, helps us focus and pay attention, but the thinking brain gets degraded when we experience prolonged, chronic stress as well as very high levels stress.

The thinking brain can go completely offline when we are facing extremely high stress levels. However the survival brain has a different relationship with stress because it actually controls stress. So the survival brain's

main functions is of neuroception, the unconscious threat appraisal that is going on all the time. The survival brain is constantly scanning our inner and outer environment and checking to see whether there is any threat and if a threat is perceived, the survival brain will turn on stress arousal.

In addition, the survival brain also controls recovery; to turn stress arousal off. This will only happen when the survival brain's neuroception says things are safe and stable. So we will not turn stress off if our survival brain is still assessing things as challenging and threatening right now. The survival brain controls all those survival functions highlighted on the previous slide and it also controls implicit memory. Implicit memory is like the storehouse of all the prior moments of neuroception through our entire life and unlike the thinking brain, the survival brain is storing and consolidating the most implicit memories at the highest level of stress.

So when the thinking brain might be degraded or offline that is when the survival brain is learning and remembering the most. The survival brain is able to generalize from these stored memories, turning on default programming on how we move through the world and the thinking brain has no idea why this is happening because it wasn't fully there; it only consolidates explicit memory. This is why it can be so hard for us to heal from distress or understand why particular things happened because our survival brain is moving through the world with these implicit memories that we might not be consciously aware of.

Slide 23: The Hand Model of the Brain

Referring two previous slides, it is important to keep in mind how learning to regulate behaviour is closely linked to how the brain processes, the physiological changes and emotions we experience.

Dan Siegal's Hand Model of the brain is a very helpful visual support to help with this understanding.

Raise your hand and fold your thumb into your palm. Now fold your fingers over your thumb. This provides a useful/portable/always accessible hand model of the brain. With this model your fingernails represent the area that would be just behind your face and the back of your hand is where the back of the head would be.

With your hand held in the position, watch the video by Dan Siegel, to get a better understanding of this portable, very accessible way of explaining what happens to us neurologically when the survival brain perceives threat.

- The link on this slide will give you access to the YouTube video, **'Dr. Dan Siegel's Hand Model of the Brain'**.

Slide 24: The Importance of Self-Regulation

Self-regulation is linked to how well we were able to manage many tasks. Self-regulation skills have important benefits for learning, attainment at school, success at work and in maintaining positive relationships. These skills can be developed and improved with the appropriate teaching, modelling, coaching and support.

As these skills develop we are more able to manage difficult and stressful events that occur as part of life. This helps to decrease the ongoing impact of stress that can contribute to mental health difficulties. As we learn to self-regulate, skills such as concentrating, sharing and taking turns also develop. This enables us to move from depending solely on others to begin to manage better by ourselves. All of us, at some stage will struggle to manage our feelings and behaviours, particularly when we are tired, hungry or facing new experiences.

Being able to successfully self-regulate improves mental health and opportunities to socially engage with others; ultimately improving the overall quality of life.

Over the past decade there has been an explosion of research on self-regulation in regards to a broad range of mental and physical problems. These problems are not caused by difficulties in self-regulation. They all have their own unique biological and environmental factors. However difficulties with self-regulation are a factor in the development of mental health problems and self-regulation can be a predictive factor. Problems with self-regulation during an individual's early development can be a risk factor for the development of developmental conditions.

Reflection:

Consider whether your Autistic family member has difficulties self-regulating and how this impacts

his/her quality of life.

Slide 25: Optimal Self-Regulation

Dr. Stuart Shanker identifies the following as six critical elements required for optimal self-regulation:

- when one is feeling calmly focused and alert, the ability *to know* that one is calm and alert
- when one is stressed, the ability to recognize what is causing that stress
- the ability to recognize stressors both within oneself and in the outside environment
- the desire to deal with those stressors
- the ability to develop strategies for dealing with those stressors
- the ability to recover efficiently and effectively from dealing with those stressors

Reflection:

What rating, on a scale of 1 -10 would you give your Autistic adult family member for each of the above critical elements required for optimal self-regulation? 1 is equivalent to no capacity and 10 optimal capacity.

Slide 26: Understanding Self-Regulation Development

Self-regulation serves as the **foundation for lifelong functioning** across a wide range of domains, from mental health and emotional wellbeing to academic achievement, physical health, and socioeconomic success. It has also proven responsive to intervention, making it a powerful target for change.

Self-regulation is defined from an applied perspective as the act of **managing cognition and emotion** to enable goal-directed actions such as organizing behaviour, controlling impulses, and solving problems constructively.

Self-regulation enactment is **influenced by a combination of individual and external factors** including biology, skills, motivation, caregiver support, and environmental context. These factors interact with one another to support self-regulation and create opportunities for intervention.

Self-regulation **can be strengthened and taught** like literacy, with focused attention, support, and practice opportunities provided across contexts. Skills that are not developed early on can be acquired later, with multiple opportunities for intervention.

Development of self-regulation is **dependent on co-regulation** provided by parents or other caregiving adults through warm and responsive interactions in which support, coaching, and modelling are provided to facilitate an individual's ability to understand, express, and modulate thoughts, feelings, and behaviour.

Self-regulation can be disrupted by **prolonged or pronounced stress** and adversity including poverty and trauma experiences. Although manageable stress may build coping skills, stress that overwhelms an individual's skills or support can create toxic effects that negatively impact development and produce long-term changes in neurobiology.

Self-regulation **develops over an extended period** from birth through young adulthood (and beyond). There are two clear developmental periods where self-regulation skills increase dramatically due to underlying neurobiological changes– early childhood and adolescence – suggesting particular opportunities for intervention.

Slide 27: Self-Regulation and Autism

Difficulties with self-regulation are more common among individuals with neurodevelopmental conditions. Conditions like Learning Disabilities and Attention-Deficit/ Hyperactivity Disorder (ADHD) and Autism impact brain development. For example, development of the prefrontal cortex part of the brain in children with ADHD and Autism develops more slowly - as much as 30% or more - than in children without ADHD and/or Autism. This means that a 10-year-old child with ADHD and/or Autism may have the self-regulation skills like a typically developing (neurotypical) 7 year old.

Individuals with LD, ADHD and/or Autism require patience and support as they often struggle with self-regulation, sensory, language, processing and executive functioning. Our Autistic adult family members can benefit from instruction, guidance, practice, and loving support to learn how to cope and adapt to their environment successfully.

 Click on the speaker icon on the slide to listen a voice note from a young Autistic adult to his mother.

What, if anything, strikes you as particularly interesting on how he shares his experience of losing his mobile phone while out running?

Slide 28: What needs to be considered in our efforts to foster the development of self-regulation

A positive nurturing relationship: your role as a parent-carer in supporting your Autistic adult child
All behavior is communication: a common misperception when presented with distressed and challenging behavior is that identifying a strong enough motivator will ensure the individual behaves. This essentially is a behavioural response, which fails to identify what is the underlying driver of the observed behaviour.
All learning is developmental i.e. some individuals may not have a very well developed theory of mind i.e. there is a distinct difference between their developmental level and their chronological (actual) age
Dependence → Co-dependence → independence: All individuals need to experience dependence in the early stage of their development, followed by the learning phase of the co-dependence, which for many of us can to differing degrees, span an entire life time, before we can move on towards becoming fully independent.
Mind-mindedness: Part of the process of developing independence requires parent-carers to be mind-minded. This is an approach that recognizes the independent thoughts and feelings of others. Parent-carers need to assume that their Autistic adult child's behaviour is meaningful, and tune into their child's emotions, desires, and interests. Doing this well, enables parent-carers to accurately read their child's communicative cues, and *talk with them about the world of the mind.* Doing so has been shown to predict sensitive and responsive parent-carer behaviour towards their children, regardless of age, as well as the forging of positive relationships with parent-carers and supporting the further development of their Autistic adult child's social skills, and capacity to self-regulate.
Trauma informed lens: shifts the focus from viewing distress as deliberately bad behaviour, 'What is wrong with you?' to 'What has happened to you? What have you experienced that has provoked this response in you?'

 **Reflection**:

What would you consider adding to the list of things worthy of consideration to further support the development of your Autistic adult child's capacity to regulate his/her behaviour?

Slide 29: Self-Regulation and Autism

This slide has a renowned quote from Haim Ginott who was a clinical psychologist, child therapist, parent educator, and author whose work has had a substantial impact on the way adults relate to their children.

Ginott's books were popular for many years and were translated into thirty languages. Rather than accuse, cajole, or correct parents in his parenting groups, he showed compassion for their struggle even as he encouraged them to listen with understanding and empathy to their children.

At the heart of Ginott's method is the recognition that denying feelings makes them more intense and confused. By contrast, the acknowledgment of feelings allows people to heal and consequently become better problem solvers.

Ginott once wrote of a twelve-year-old girl who was tense and tearful when her cousin left after spending the summer with her. Ginott recommended that parents acknowledge their children's feelings in situations like this with responses such as "You miss her already" and "The house must seem kind of empty to you without Susie around."
Ginott's continuing impact is underscored in the influential book by John Gottman on raising emotionally intelligent children: "Ginott's theories had never been proven using empirically sound, scientific methods. But …I can provide the first quantifiable evidence to suggest that Ginott's ideas were essentially correct. **Empathy not only matters; it is the foundation of effective parenting.**"

 **Reflection**:

- How do you feel about Ginott's view of parent-carer's role as the 'decisive element at home'?
- How would you describe the 'climate' in your home?
- How do you think your 'personal approach' impacts on the climate' in your home?

- What would you like to do more of, less of and stop doing all together, to build a positive, inclusive and meaningful home 'climate'?

Side 30: Emotional Regulation – A social process

Click on the link provided on the slide to watch the webinar presented Dr Carla Mazefsky, a clinical psychologist specializing in Autism Spectrum Disorders (ASD) and an Associate Professor of Psychiatry at the University of Pittsburgh School of Medicine. Dr. Mazefsky was the 2012 recipient of the Ritvo/Slifka Award for Innovation in Autism Research from the International Society for Autism Research.

Her program of research is focused on emotional dysregulation in ASD, including the identification of underlying neural mechanisms, the conceptualization, treatment, and assessment of problems with emotional control, and co-occurring depression and anxiety.

Emotion Dysregulation may be thought of as the inability to manage the intensity and duration of negative emotions such as fear, sadness, or anger. If you are struggling with emotion regulation, an upsetting situation will bring about strongly felt emotions that are difficult to recover from.

Side 31: Emotional Regulation – A social process

Dysregulation: Occurs when stress levels are so high that various systems for thinking and metabolic recovery are compromised. The signs of dysregulation can show up in our physical well-being, behaviour, mood and attention level.

Whatever an individual is actively doing demands fuel, and the size of that cost will vary according to the activity, the situation, and most importantly, the individual. In other words, two people might have to expend very different amounts of energy – be at very different points on the arousal continuum – in order to engage in the same activity. The problem is not that some people have less of a natural self-control reserve, however, but that some people have to work much harder than others to perform the same tasks, and it is this expenditure that so seriously depletes their capacity to meet subsequent challenges**.**

Side 32: Never

Reflection:

If you were feeling extraordinarily distressed; your thinking brain offline, how do you think you'd respond to someone who said, 'Oh come on. Just calm down won't you!'

Side 33: Spoon Theory

Christine Miserandino was the first person to write about 'Spoon Theory', in 2003.
Her original article can be found by clicking on the link below:
https://butyoudontlooksick.com/articles/written-by-christine/the-spoon-theory/

On the slide is a link you can click on to access Anne Memmott, an Autistic Autism Professional's blog entitled; '**Autism, Shutdowns and Spoon Theory'**.

Reflection:

- What activity in your role of a parent-carer for your Autistic adult child, 'costs' you the greatest number of your 12 spoons (units of energy) every day?
- How does this your Autistic adult child uses his/her 12 spoons (units of energy) on an average day?
- What usually happens on an occasion your Autistic son/daughter has used up all 12 of his/her spoons (units of energy) before the day has come to an end?

Side 34: Creating an Energy Bank Account

Click on the link provided on the slide to read about Maja Toudal's '**Energy Accounting Activity for Autism**'. Maja Toudal has a diagnosis of Autism. She explains what 'energy accounting' is and how to use it. Essentially it is a tool that she created when she was studying to help relieve depression, the amount of meltdowns and anxiety attacks that she had to deal with.

Activity:

So, in energy accounting, what you do, is you structure your daily activities to make sure you don't go above your stress threshold; that you don't go above that point that your energy levels are depleted and you can no longer cope. It's very much about making sure you do things that give you energy, as well as, of course, doing the things you have to do in order to get through each day.

It is therefore important to ensure that there are activities that give you back energy, or that allow you to relax; they are the ones that are going to make sure that you can cope in the long term. First off, you have to find what your energy threshold is and then create a 'toolbox' of activities and strategies that replace depleted energy; to be able to manage your energy account and know when it goes into overdraft. And then of course, it's about knowing how much energy certain activities take and other activities give so that you can manage your energy input-output balance, sort of like a bank account.

Create an Energy Bank Account

- Together, you and your Autistic family member can make a list of things that sap his/her energy and things that are revitalising.
- Give each activity a numerical value
- Whenever a withdrawal is made, a deposit HAS to be made too, to top up the bank account
- Failure to do so results in the bank account running into overdraft

Engaging in this activity and checking the bank balance daily, will greatly reduce the potential for meltdowns to occur.

PART 2

Side 2: The 5-Steps of Self-Reg

The practice of Dr Stuart Shanker's Self-Reg is a process for enhancing self-regulation by understanding and dealing with stress i.e. it helps people understand and respond to others and themselves by considering self-regulation across 5 interrelated domains: biological, emotion, cognitive, social and prosocial by using Shanker's 5-steps to Self-Reg:

1. Reframe the behaviour
2. Recognise the stressors across the 5 domains
3. Reduce the stress
4. Reflect: enhance stress awareness
5. Respond: develop personalised strategies to promote resilience and restoration

Sides 3 - 5: Reframing the Behaviour

How can we tell if an individual is over-stressed?

For parent-carers there are a number of signs of when their Autistic adult child is being overloaded by stress. Some of the key ones are when he/she:

- Has a lot of trouble paying attention, or even responding when spoken to
- Has a lot of trouble doing the simplest things
- Is very crabby when he/she wakes up in the morning, or never seems to be happy during the day
- Argues a lot, or seems to want to oppose your requests, however reasonable these might be
- Gets angry a lot, or too angry, or resorts to hurtful words or even violence
- Is highly impulsive and easily distracted
- Has a great deal of trouble tolerating frustration
- It is difficult for him/her to: sit still, go to bed, think through even the simplest of problems, get along with other family members, have any positive interests, turn off the TV or stop playing video games

Slides 4 and 5 are parts of an infographic that presents a set of techniques for reframing common obstacles in child-parent relationships; favouring constructive methods for stress reduction, meeting needs as well as modelling and teaching skills.

 **Reflection**:

- Describe what you observe in your Autistic adult child when you sense he/she is becoming increasingly stressed?
- Describe a time you were able to see your son/daughter differently and in the process of doing so were able to see a different individual.
- What do you think made it possible for you to see your son/daughter differently on this particular occasion?

Slide 6: Recognize Stressors

This next section will introduce the different kinds of stressors that may occur within each of the 5 different domains: biological, emotion, cognitive, social and prosocial and how to think about becoming better at detecting the various stressors as they may manifest in your Autistic adult child.

Slide 7: The Stress Equation

The stress equation is an idea used to help a person understand their stress by breaking it down into smaller conceptual parts. Whenever there is a stressor; it could be something in the environment around us; a busy supermarket, Covid-19, unpaid bills and/or something inside of us; racing thoughts, physical injury, recovering after surgery, depression.

Whichever it is, if the survival brain perceives a threat (this is the second part of the equation; neuroception) if it perceives that stressor as threatening or challenging it is going to turn stress on. Stress in itself, is nothing more than the physical and cognitive activation in the mind and of the body so that we can respond to that threat or challenge (real or perceived) to ensure our survival.

The reason stress has been depicted in this way i.e. as an equation is because the thinking brain needs to understand that if there is a stressor which the survival brain perceives as a threatening and challenging, you cannot, not experience stress. It is a neurological done deal. If the stress is novel, new to you, if it is unpredictable, uncontrollable or if it is threatening to your ego, to your identity or to your physical survival, all of those characteristics of stressors make the survival brain perceive a new threat and it will turn on even more stress arousal. Unless we are turning stress off; over time we are making it harder and harder for our mind and body to recover and that can lead to the narrowing of your window of tolerance to stress i.e. your capacity to cope.

Slide 8: Behaviour is Communication

This concept is dealt with significantly in the e-learning module entitled, '**All Behaviour is Communication'** and can be accessed on the PASDA website via the link below:
https://www.pasda.org.uk/index.php/document/e-learning-module-for-parent-carers-all-behaviour-is-communication/

The key message to take away from this slide is that as parent-carers we need to make every effort to reframe 'problematic' behaviour as stress behaviour; detect potential stressors and whenever possible reduce them; we need to be able to look beyond the 'tip of the iceberg' (the observable behaviour we respond to) and dive deeper below the surface of the water to explore what is driving the behaviour we see.

Slide 9: The Domains of Self-Regulation

These are the essential components necessary to holistically understand, and to integrate understanding, about why a person may be acting the way they are and how we can help them to achieve their potential. Enhancing an individual's self-regulation in all five domains lays the foundation for long-term mental and physical wellbeing.

This Framework provides an organizational structure for thinking about self-regulation with considerable flexibility and adaptability for application. So let's look a little closer at each of the five domains of the Self-Reg Framework. These five domains—biological, emotion, cognitive, social, prosocial—are linked and interconnected.

The key attributes of each domain:

Biological

- Physical health
- The ability to recoup energy after difficult experiences

Emotional

- The ability to modulate strong emotions
- Emotional resiliency

Cognitive

- The ability to focus, and switch focus, as required
- The ability to consider perspectives other than one's own
- The ability to develop self-awareness

Social

- The ability to understand one's as well as other's feelings and intentions
- The ability to be an effective communicator

Prosocial

- The ability to help regulate others and to co-regulate with others
- Empathy

Click on the click link provided on this slide to have a look at examples of potential stressors in each of the 5 domains. You can use these examples to help stimulate thought about the types of stressors that may be using energy in yourself and/or in your Autistic family member throughout the day.

Slide 10: The Domains of Self-Regulation – Continued

Over the past two decades, scientists have made a number of important discoveries in regards to stress:

1. While some stress is highly motivating, too much stress can have a long-term negative effect.
2. Too many individuals are dealing with too many stressors in their lives today.
3. We need to develop a much better understanding of the nature of these stressors and how to reduce them.
4. Individuals need to learn how to identify for themselves when they are becoming agitated and what they can do to return to being calm and focused.

So what exactly are these stressors? We all know that everyone is under a lot of pressure today and there is a lot of uncertainty in our lives. Scientists have been developing a much broader understanding of stress: of the sorts of things that activate the sympathetic nervous system, and just as important, the sorts of things that help an individual's recovery.

As already stated on the previous slide the five primary sources of stress in our lives today are:

1. Biological
2. Emotional
3. Cognitive
4. Social
5. Prosocial

Each of these levels influences and is influenced by all the others. So when supporting your Autistic adult child build on and improve his/her self-regulation it is helpful to be mindful that we are looking at all five domains, and not simply one or two. For a lot of Autistic people, too much noise or visual stimulation or strong smells can be a stressor. For some others, too much junk food or sugar can be a stressor and insufficient sleep or exercise or just engaging with other people is a huge stressor. Many Autistic people struggle with strong negative emotions, like fear, anger, shame or sadness. Some Autistic people find certain kinds of cognitive demands very draining. A great many also experience group activities stressful. And finally, some can find it very challenging to have to deal with other people's feelings or needs.

Activity:

Click on the link provided on the slide in order to access the '**My 5-Step Self-Reg Profile'.** You can

print out a copy and complete it by:

- Listing some behaviours you have observed in your Autistic family member that you feel made have been viewed by others as inappropriate and/or bad
- For each of those behaviours, reframe them. "I think this was/is stress behaviour and here is how I know…"

Slide 11: Action Calendar: Self-Care September

This slide is a reminder that 'You cannot pour from an empty cup' and you need to make time to take care of yourself. This 'Self-Care September' calendar can be used to help you start thinking about what small acts of self-care you can put in place each day.

You can access a PDF copy of the above calendar to print out, by clinking on the web link provided on the slide.

Slide 12: Reduce Stressors

Reflection:

This section starts the process of thinking about how you can reduce stressors for your Austic family member. Think about what you already are doing/have in place to reduce the stressors you are aware of.

Slide 13: We are hardwired to connect with others

The most important message to take away from this slide is that regardless of our neurology 'we are all wired to connect with others'. However what that looks like for one individual may be something completely different for another.

As parent-carers we then need to get to really know our Autistic family member and build a relationship that is positive and warm; that creates the sense of real safety. In addition we need to be patient and constructive in the ways in which we engage. Lastly we need to ensure that we are available and 'show up' by being present when together. The Maori word for Autism; **Takiwātanga**, sums it up beautifully. It means **in his/her own time and space**.

Slide 14: Self-Regulation and Co-Regulation

Click on the YouTube link provided on the slide to watch the video, '**Co-Regulation from birth to adulthood'.**

How can caring adults use co-regulation to support self-regulation development?
The answer is by using the three overlapping strategies of building a warm responsive relationship, structuring the environment, and coaching self-regulation skills.

Watch the above video to learn about the continuous process of co-regulation from birth through to adulthood.

Slide 15: Calming Together

Even as adults, in times of crisis, often the experience of big emotions can only be managed with the support and soothing presence of a significant other.

Regardless, a parent-carer's warmth, responsiveness and sensitivity can support self-regulation development and may buffer the effects of adverse experiences. Effective co-regulation by a supportive parent-carer will promote self-efficacy and allow Autistic adults to feel secure enough to practice new skills and learn from mistakes.

There are three broad categories of support that parent-carers can provide that will help develop foundational self-regulatory skills and expand these skills to meet increasingly complex regulatory needs:

Provide a **warm, responsive relationship** by displaying care and affection; recognizing and responding to cues that signal needs and wants; and providing caring support in times of stress.
Parent-carers can build strong relationships with an individual by communicating, through words and actions, their interest in the person's world, respect for the person as an individual, and commitment to caring for the

person no matter what (i.e. unconditional positive regard).

Structure the environment to make self-regulation manageable, providing a buffer against environmental stressors. This means creating an environment that is physically and emotionally safe for the individual. Consistent, predictable routines and expectations likewise promote a sense of security by providing clear goals for behaviour regulation.

Teach and coach self-regulation skills through modelling, instruction and opportunities for practice prompts for skill enactment, and reinforcement of each step towards successful use of skills. Like a coach on a sports team, parent-carers should first teach skills, and then provide needed supports or scaffolding for self-regulation enactment in the moment.

Slide 16: Parent-Carer Soul Work

What about parent-carer self-regulation? The first thing for parent-carers to focus on is their own capacity for self-regulation.
To be able to co-regulate successfully, parent-carers will need to:
Pay attention to their own feelings and reactions during stressful interactions with their Autistic adult child.
Pay attention to their own thoughts and beliefs about the behaviours of others.
Use strategies to self-calm and respond effectively and compassionately. Parent-carers greatly benefit when they take a moment for some deep breaths or self-talk. When able to respond calmly; it helps to keep feelings from escalating and also models regulation skills.

Self-regulation during a stressful interaction is no easy task, particularly when there are multiple activities and stressors vying for a parent-carer's mental and emotional resources. Parent-carers may need support, practice, and coaching from friends/family or professionals to build their own coping and calm-down skills, which in turn will aid them in promoting these skills for their Autistic adult child.

Reflection:

What do you already have in place/are doing to take care of yourself?

Slide 17: Reflect – Enhance Stress Awareness

This next section looks at ways you could reflect on in order to become more aware of your own stress as well as that of your Autistic Family member.

Slide 18: Mindfulness

Mindfulness is the state of being in and fully attending to the experiences of the present moment. In self-regulation, mindfulness is about looking non-judgmentally at not only our own mind, but also the mind of another and the feeling of calmness that comes from attending to and experiencing another person's calmness.

Click on the speaker icon on this slide to experience a body scan mindfulness exercise. This exercise asks you to systematically focus your attention on different parts of your body, from your feet to the muscles in your face. It is designed to help you develop a mindful awareness of your bodily sensations, and to relieve tension wherever it is found.

Reflection:

- How would you describe your overall experience of this mindfulness exercise?
- How would you compare how you felt before and then after completing this exercise?
- What in particular, can you attribute this difference in how you now feel (i.e. having completed the body scan mindfulness)?

Slide 19: Connecting the dots . . .

This slide highlights the importance of interoception. Some individuals may not be well enough tuned in to their body cues to be able to accurately interpret what they feel. Without being able to feel and interpret our body sensations, the harder it is to clearly identify our emotions; hence impacting our capacity to self-regulate.

Slide 20: 'Listening to your body'

What does this concept, 'listen to your body' even mean; why is it important and how do we do it? Essentially it means having interoceptive awareness; an awareness we all have. However it is an awareness that is not easy for everyone and our sensitivity varies depending on different factors.

It is possible to improve our interoceptive awareness.

Mindfulness, being present as well as awareness are the first steps to reconnect to your body's wisdom. Become curious. Awareness is information and the more we grow in our body awareness, the more we see, feel truth and respond to our nervous system.

Reflection:

- What bodily sensations do you experience i.e. what clues does your body give that you are anxious?
- Where in your body do you experience these sensations?

Slide 21: 'If you think of your body as a musical instrument'

A body scan is a guided tour of the body, pausing in silence to hold attention on each body part in turn. Participants explore the physical sensations of skin against clothing, muscle, bones, tendons, organs and blood pulsing in veins. They are encouraged to keep looking even deeper toward sensations that might normally go under the radar, such as moisture, dryness, temperature, itching, and body processes like digestion and elimination.

Some, but not all respond to the cue, "feel the body from the inside out" by making contact with even more subtle sensations of prickling, tingling, vibrating, buzzing, or humming of "life force energy". In the body scan practice; all sensations are welcome visitors and objects to be held with kindness and curiosity.

Of course in the beginning nobody makes it very far along their journey from head to toe without running into some resistance or distraction along the way. A benign sensation of the thigh making contact with the ground could spontaneously trigger a stream of judgments about the body part- wishing it were smaller, stronger or more shapely.

Participants report thoughts that spiral unconsciously into planning a new workout routine, ridding the pantry of junk food and planning a trip to Bali next year to show off the future new thighs. By the time awareness catches up with the wandering thoughts and moves back to the body, the guidance of the body scan might have already moved all the way up to the shoulders! With practice, participants are able to start making the distinction between thoughts and emotions about their body and the actual direct experience of body sensations.

Another common challenge people face in the body scan is with falling asleep. Imagine lying on the floor after a long day for an extended period, while being guided by a soothing voice. It's a perfect recipe for a nap! Participants who regularly snooze through half their body scan often report feeling like some sort of failure. One way to work with this is to simply accept that the sleepiness is here right now and to celebrate the moments we can be present to the body.

Another option is to open the eyes during the body scan or choose a posture that invites more wakefulness such as sitting with an erect spine. But one thing is for sure, you won't cultivate Interoceptive Awareness by reading about it!

Click on the link provided on the slide to watch the Youtube video and have a go at the meditation practice presented by **Pete Kirchmer**, Mindfulness Based Health Coach. It will help you start you journey of interoceptive awareness (body wisdom) cultivation, which with practice will help to improve your health, enhance your daily performance and decrease your stress.

Slide 22: Keeping the dots connected . . .

Once your Autistic adult family member is able to accurately identify his/her bodily sensations and where in the body they are experienced, the next step in developing interoceptive awareness is the capacity to connect these sensations with the appropriate emotions.

Slide 23: Labelling Emotions

The good news about our feelings: Feelings provide essential information about our reactions to situations. They are often our best clue to the meaning of our current experience.

The not so good news about our feelings: Feelings are very complex. At any given moment we may experience multiple, contradictory emotions. For example we can feel happy and scared at the same time, or frustrated and hopeful.

'Hard' emotions tend to cover up our 'soft' emotions: Let's say you're really stressed out about your Autistic adult's capacity to sustain his new job, and you could really use some reassurance from your husband that you are supporting your son in the best way you know how (in other words, you need a hug). But instead of saying you need a hug, you say with strong irritation in your voice: "You're never affectionate with me."

So you've expressed anger and criticized your husband's behaviour, which is probably not going to get you the hug you need. Expressing negative secondary emotions like anger, resentment, criticism and coldness often tend to push people away.

Slide 24: The development of personalized strategies to promote resilience and restoration

This next section explores ways in which parent-carers can promote resilience in their Autistic family members as well as constructively engage in restorative practices when things become heightened and result in meltdown.

Slide 25: Responding – The challenge is how to do so constructively?

Responding constructively refers to a parent-carer's willingness to represent their Autistic adult child's likely thoughts and feelings. This is what is referred to as parent-carer mind-mindedness.

Mind-minded parenting is an approach that recognizes the independent thoughts and feelings of others; namely your Autistic adult child. Parents assume their children's behaviour is meaningful, and tune into their children's emotions, desires and interests. Parent-carers are then able to accurately read their children's communicative cues, and talk with them about the world of the mind.

Therefore Mind-mindedness, sensitivity (appropriately and consistently responding to cues and signals) and scaffolding (offering developmentally appropriate strategies for problem solving) are the three parenting behaviours which go hand in hand. A parent who can read their child's cues and signals, respond appropriately, and who are well aware of their child's mental processing when interacting with him/her will be better equipped to provide the kind of environment that supports autonomy and perspective taking. This seems to be the stuff of which strong self-regulation skills are made.

Slide 26: Potential Calming Strategies

This next section offers a variety of strategies that potentially could support both you and your Autistic adult child when needing to calm down.

Slides 27 - 29: Surviving Intense Emotions – Stop, Drop, Stay

We all have them sometimes: those emotions that just feel, well, like they're too much. Whether its anger, anxiety, fear or sadness, these emotions can feel overwhelming and even life-threatening. When we're in the throes of such powerful emotions, we often feel like we'll never get away from them, we can't control them, and that they'll drown us. Afterward, we may feel an 'emotional hangover' and wonder where emotions that strong even came from within us.

 Click on the link provided on the slide to read about the **Stop, Drop and Stay method**.

 **Activity:**

The next time you are in a situation in which you are struggling to survive the intensity of what you are feeling, try implementing this Stop, Drop and Stay method. Overtime you will discover that you are better able to cope with powerful emotions that disrupt your life and significant relationships.

Slide 30: Wheel of Emotions

In her book *Emotional Agility*, Dr Susan David says that many of us struggle to acknowledge our emotions. This is because we have a narrow vocabulary for expressing emotions.

Finding the right words to express your emotions is important. Can you guess how many emotions a human can experience? It's around 34,000.

With so many emotions, how can one navigate the turbulent waters of feelings, without getting lost? The answer: **an emotion wheel**.

Through years of studying emotions, American psychologist **Dr Robert Plutchik** proposed that there are eight primary emotions that serve as the foundation for all others: joy, sadness, acceptance, disgust, fear, anger, surprise and anticipation. So while it's hard to understand all 34,000 distinct emotions, we can learn how to identify the primary emotions and act accordingly. The Wheel of Emotions is especially useful for moments of intense feeling and when the mind cannot remain objective as it operates from an impulsive "fight or flight" response.

The beauty of this tool is in its ability to simplify complex concepts. Understanding is a crucial step to solving any dilemma. When the question concerns our emotions that we process on a subconscious level, it can be hard to first identify and then be able to verbalise our needs. This is why the tool is so useful. It enables the user to visualise their emotions, and understand which combinations of emotions created a particular outcome.

Examining a wheel of emotions you will notice the "deeper" you get on the wheel, the more **intense the emotional response.** You will also notice that there are four main characteristics of this model of emotions:

1. Primary Colours

The eight primary emotions are arranged in the middle circle, and they are each denoted by a single colour.

2. Opposite Emotions

Each of the primary emotions has a polar opposite. This is visible in the arrangement of each emotion:

- Joy is the opposite of sadness
- Disgust is the opposite of trust
- Fear is the opposite of anger
- Anticipation is the opposite of trust

3. Intensity of Emotions

As we move towards the centre of the wheel, emotions become more forceful. This is reflected in the colours of the wheel as well. The darker the shade of a particular emotion, the more intense it is. This is why there are many shades of the same emotions. Anger is an annoyance at its lowest level, and at its highest level, it becomes a rage. Disgust can become loathing just as quickly as trust can become admiration. This is when we see the emergence of emotions like vigilance, ecstasy, terror, amazement and grief.

4. Combinations of Emotions

The outermost circle represents secondary emotions. They are a mix of two primary emotions. For example, the emotions, joy and anticipation become optimism and joy with trust becomes love. This results in the development of complex emotions like submission, awe, aggression, contempt, disapproval and remorse.

Click on the link provided on this slide to access a PDF copy of the Wheel of Emotions which you can print and use as a tool to support your Autistic adult child find the right words to express his/her emotions.

Slide 31: The Zones of Regulation

Click on the link provided on the slide to read the article**, 'A framework designed to foster self-regulation and emotional control'** on The Zones of Regulation website**.**

The Zones is a systemic approach to support the development of self-regulation by categorizing the different ways we feel and the states alertness we experience into four concrete colour zones. The Zones framework provides a way to teach an individual how to become more aware of and independent in managing their emotions and impulses as well as their sensory needs and improve

their ability to problem solve.

Slide 32: The Zones of Regulation – continued

The Zones of Regulation help people visually and verbally self-identify how they are in the moment, given their states of alertness and emotions, into:

- **Blue** zone: describes a low state of alertness e.g. when you are sad, tired or bored
- **Green** zone: describes a regulated state of alertness e.g. when you are calm, focused, happy or content
- **Yellow** zone: describes a heightened state of alertness e.g. when you are experiencing stress, some loss of control, excitement or silliness
- **Red** zone: describes an extremely heightened state of alertness e.g. when you are experiencing anger, rage, panic, terror or elation.

One zone is not better than another.
All are OK.
Everyone one moves between zones throughout any given day.
There are many factors which impact in which zone one is in and how long it takes to move from one zone to another.

 **Reflection**:

- What Zone are you currently in?
- How would you describe your level of alertness and how you are feeling right now?

Slide 33: Practice using the Zones

Complete the activity on this slide and be mindful of the importance of being able to connect with what you experience inside your body, before you are able to accurately name what you are feeling using the appropriate vocabulary.

Slide 64: The Zones at Home

Click on the link below to watch the video, '**Zones of Regulation: Activity Check-in at Home via Social Thinking**': https://www.youtube.com/watch?v=l07xlKoNYEE

Leah Kuypers (author of Zones of Regulation) and her family created a short video to help families at home put together their own Zones of Regulation Check-In. Handouts mentioned in the video are available via Zones of Regulation: www.zonesofregulation.com or through Social Thinking's website along with other home lessons and activities.

 **Activity:**

These are things you need to consider if you are thinking about actively engaging with the Zones of Regulation with your family in your home:

1. Put the poster up – there needs to be a poster up in the house that is clearly visible and accessible to every family member
2. It is important everyone appreciates that all the Zones are OK; that all of us experience moving through all the Zones, multiple times every day.
   Highlight although we would all like to be in the 'Green' Zone as much as possible, for some of us it is possible to do what needs to be while in the 'Yellow' Zone for example.
   Talk about anxiety and how a certain amount of anxiety is a positive thing i.e. it helps to ensure we are prepared and able to do our best.
3. Encouraging family members to begin engaging with the Zones:
   - Highlight how energy levels may change as you move from one Zone to another and connect this with the appropriate feelings.
   - Encourage each member of the family to check in with which Zone they are currently in at breakfast and then again in the evening. Be mindful of commenting in a way that could be perceived as one Zone is better than the other and/or singling out a family member in the 'Red' or 'Blue' Zones in particular. It might just be a good idea for each family

member to have a sticker/magnet they feel best represents them to move from one Zone to another as they see fit.

4. As the parent-carer, give the Zone poster a regular cursory glance and make a note of which family members you feel you might need to check in with privately a little latter.
5. Scenarios activity: use scenarios from your family experience and discuss with the family members which Zones the individual/s involved were in and how they might have been feeling at the time.
6. Lastly decide with your family when and how you will use the Zones to check in with each other e.g. first thing in the morning, after lunch and just before heading off to bed for example.
7. Be mindful of modelling how to use the Zones to share how you are feeling and reflect in a mind-minded way at appropriate times how you think particular family members could be feeling. Even if you get it wrong, as long as there is the sense you are curious (i.e. a questioning tone to your voice) and are wondering, the family member concerned is more likely to feel comfortable about correcting you, should you get it wrong.

 Click on the link provided on the slide to read the article, '**All the Zones are OK! Tips for managing the Zones you're in'** by Leah Kuypers.

'Feelings are innate; they make us human and are part of the fabric of life. Our feelings are windows into the thoughts and perspectives we hold toward a situation, a person or an event. Rather than offering support in the form of telling others not to feel this way or that, we can help people manage the feelings they are experiencing in an adaptive and prosocial way.

I created The Zones of Regulation (The Zones) to help us do just that: support people in managing all the feelings they experience, without passing judgment on what people are feeling or how they are behaving.'

Slide 35: Label emotions and match to appropriate Zones

This is an activity you can do for yourself, but should you be thinking about using the Zones of Regulation as a tool to support your whole family to start to talk about feelings and develop a common language around which to do this then I suggest you do this activity together.

 **Activity:**

You can access the following website for facial pictures displaying a range of different emotions: https://depositphotos.com/stock-photos/range-of-emotions.html

Give each family member a handful of pictures depicting various emotions and encourage them to match their pictures to the appropriate Zone.

Spend some time looking at and discussing one another's matching up choices.

Slide 36: Mirror Neurons

 Click on the link below to read the article, **'Mirror neurons: The most powerful learning tool'** by Andrea García Cerdán: **https://blog.cognifit.com/mirror-neurons/**

Mirror neurons. Imitation has always been a powerful learning tool. The human brain is enabled with different mechanisms that allow us to imitate actions. Babies are capable of reproducing facial expressions, and as adults, we imitate basic behaviour.

Laughter can be spread, we can cry while watching a sad movie… It seems like we have the capacity to feel what others feel, empathize with them and understand their feelings. What happens in the brain for this to happen? The answer is mirror neurons.

In this article, we will explain everything you need to know about mirror neurons. What are they? How do they intervene in education and empathy? Why is emotion contagious?

This is why parent-carers have to make the effort to control their emotions; avoid parent-carer burnout in order to use mirror neurons as an asset.

Show happiness and optimism and that way you will transmit that to your children. Control and avoid negative emotions. We all have bad days, but as parent-carers we have to try our best to ensure this doesn't reflect on our children. However, the tricky part is that this doesn't mean our children should repress these emotions.

As a parent-carer be sure to detect what emotion your children are feeling and help them learn to identify and manage them accordingly.

Scientists have studied the mirror neurons in Autistic people. They have found that the system in some Autistic people has a developmental delay, where the activity is slower, weaker and less activated than in others. Nonetheless, the activity increases with age.

Mirror neurons allow us to literally feel what others are feeling and "live" their emotions. Mirror neurons are based on empathy.

Click on the link provided on the slide to watch the video, '**Epic toe stub'.**

- What did you become aware of was happening to you as you watched the woman in the video stub her toe?
- Can you describe another such occasion when you could literally experience/feel something that you were observing someone else do/experience?

Slides 37 and 38: De-escalating Techniques

Click on the goodparentingbrighterchildren.com links on both slides 37 and 38 to read about a number of helpful practices you could consider for yourself and your family. Many of these techniques have helped to de-escalate distress.

The additional link provided on **Slide 38** (positivepsychology.com) provides access to a helpful handout to remind you of the tools at your disposal to aid you in regulating emotions. The handout lists four skills that you can apply to improve your emotion own regulation as well as that of family members. It provides suggestions on how you could implement these skills.

Slide 39: The Lazy 8 Breathing Technique

The link below provides '**8 Breathing Exercises to Try When You Feel Anxious'.**
https://www.healthline.com/health/breathing-exercises-for-anxiety

If you feel breathless due to anxiety, there are breathing techniques you can try to alleviate symptoms and start feeling better. This article looks at 8 Breathing Exercises you can do at any point during your day or build into your daily routine.

This link: https://www.headspace.com/meditation/breathing-exercises will help you in '**Choosing the breathing exercise that's right for you**.

For hundreds of years, Buddhists, yoga practitioners and eastern healers have believed that the breath is the foundation of our life force and energy which is why many meditation practices and yoga classes include a strong focus on deep breathing techniques. When training in Buddhist meditation, we are taught the importance of having correct posture, breathing properly, and preparing the mind.

Today, studies show that breathing exercises can actually improve cognitive function, encourage positive thought processes and reduce symptoms of anxiety.

Activity:

The link provided on the slide gives you access to a PDF copy of the Lazy 8 Breathing template which you can print out.

Slide 40: Grounding Techniques

The reason grounding work and the science behind it . . .

When we start to think about something stressful, our amygdala, a section of the brain located in the temporal lobe, goes into action. The amygdala, simply put, is the part of our brain that is responsible for our emotional

responses, especially fear. It is great for preparing for emergency events, but sometimes it kicks in to action and detects a threat where there really isn't any.

Here is a typical process; we have a negative thought about a situation (remember a thought doesn't necessarily mean it is real), our amygdala says "Emergency! Emergency!" and initiates changes in our body such as increased muscle tension, rapid heartbeat and faster breathing. The amygdala then interprets these body changes as further evidence that something is actually wrong which of course further activates it and creates a vicious cycle where you become more and more anxious and physically and emotionally overwhelmed.

Thankfully, we can use grounding techniques to break out of this vicious cycle. By re-focusing on your body and what you're physically feeling, you get out of your head and divert your mind away from anxious or stressful thoughts and into the moment.

 Click on the link provided on the slide to access the article, '**Simple Grounding Techniques For Calming Down Quickly**' by Dr Sarah Allen

In this article she describe seven different grounding techniques. Practice them when you are slightly stressed or anxious so they will become familiar and then you will be able to launch into the technique that works best for you next time you are feeling stressed, overwhelmed or stuck in an anxiety attack. Try to encourage your family to participate so they too can benefit from these techniques.

Slide 41: What Zone are you in now?

 **Activity:**

At this stage in the module, take the opportunity to think about which Zone you are in just now.

If you are working with your partner and/or friend, use this as an opportunity to check in with one another.

An example of how you could do this and the language you could use: 'I'm in the Yellow Zone right now because I am excited, but also a bit nervous about putting some of what I have learnt in this module into practice!'

Indicate which Zone matches how you are currently feeling and think about what this means in terms of your level of alertness and the emotion/s you are feeling.

Slide 42: Visualize a Safe Place

 Click on the YouTube link provided on the slide to watch '**Grounding Activity for Anxiety #7: Creating a Safe Place**'.

Grounding Activities are an essential skill for managing anxiety, stress and improving mental health. Visualizing a Safe place can be an essential technique for grounding the body and mind. When stress, anxiety or panic seem to be taking over, we can actually trigger our nervous system to respond by calming the body and mind through 'perceived safety'.

By bringing to mind your safe space; your favourite environment or your comfort zone you can actually reverse the stress response. This is an essential coping skill for managing anxiety and panic.

 **Reflection**:

- Are you aware of feeling stressed out even when nothing's the matter?
- What sorts of things leave you feeling tense, anxious or panicky?

Our amazing brain has the ability to imagine danger in a way that triggers that fight, flight, freeze response, even when we're safe. But we can counteract that "danger" response by bringing to mind a safe place.