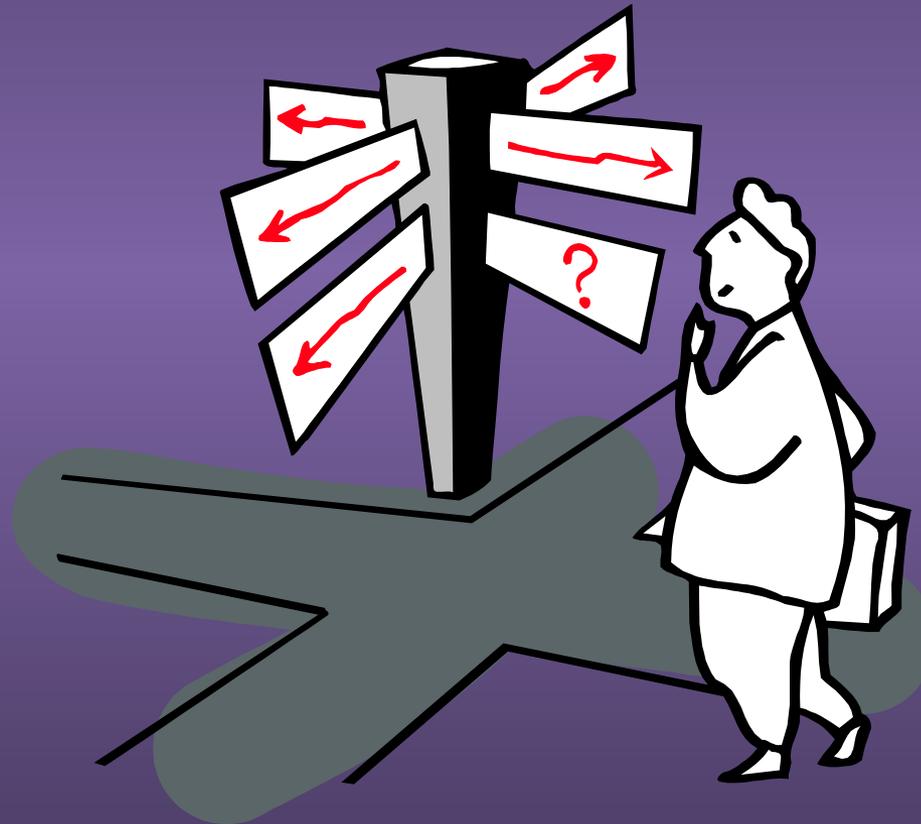


# Anxiety, Stress & Effective Living

## on the Autism Spectrum

-Ava Ruth Baker



# Session Outline

- **What are stress & anxiety?**
- **Fight / flight response**
- **Executive function issues, stress & AS**
- **Management & Prevention (emphasis on self-help)**
  - **General principles & range of options**
  - **Strategies for calming**
  - **Mind / Body approaches**
  - **Exposure anxiety**
  - **Cognitive Therapy**
- **Concluding ideas: Beyond ‘tools’**
- **Further reading & references**

# Terminology

**‘Autistic’ / ‘autism’ / ‘AS’ (autism spectrum)**

= (person) anywhere on autism spectrum including Asperger’s, PDD etc

**‘NT’ (neurotypical) / ‘NS’ (non-spectrum)**

= (person) not on autism spectrum

# What are stress & anxiety?

- **Anxiety:**

**‘a condition of excessive uneasiness or agitation’**

- **Stress:**

**a condition of strain ‘when the demands imposed on you from the outside world outweigh your ability to cope with those demands’ (1)**

**→ become strained, overwhelmed, anxious**

(1)Evans et al 2005; Gregson & Looker 1997

# What are stress & anxiety?

- **Universal human experience: healthy & necessary**
- **Part of body's fight / flight response (stress response)**
- **needed to activate us to**
  - **respond to threats**
  - **be focused, efficient, perform at our best**
  - **be motivated & 'inspired'**
- **This activated state can be experienced as either**
  - **positive** when excited, inspired, *mastering* challenges
  - or
  - **negative** when pressured, anxious, *overwhelmed by* challenges

# Autonomic nervous system

- **Involuntary: runs automatically (mostly subconsciously)**
- **two opposing parts:**
  - **Sympathetic nervous system (SNS)** = ‘accelerator’ → mobilizes for fight / flight, via adrenaline
  - **Parasympathetic nervous system (PNS)** = ‘brake’ → conserves energy, helps digestion, healing, immune system etc
- **Both SNS & PNS always active to some extent: whichever is dominant, dampens down the other**

# Normal stress response (fight-flight response)

## Trigger / perceived threat

→ SNS / 'accelerator' system set off → activates

- **Feeling:** anxiety
- **Thinking:** shutdown of higher brain processes; 'catastrophic' thinking (focus on survival)
- **Body:** prepared for action (via adrenaline)

✂ → Fight / Flight / Freeze

## Threat over

→ PNS / 'brake' system → recovery (incl. breathing, digestion, metabolism)

# Vicious cycle of escalating anxiety



# Chronic anxiety

- either prolonged threat
  - or difficulty switching to PNS when threat gone
- state of ‘sympathetic overdrive’
- adverse effect on health (PNS mediates ‘healing’ etc.)
  - specific anxiety → state of free-floating anxiety

?common in autism

# Executive function (EF) and processing issues in AS

May underlie most / all AS-NT differences?

In AS, may play a big part in

- causes of stress
- stress response

Individuals differ in EF & processing issues

The various EFs (next list) are inter-connected

# Executive function (EF) and processing issues in AS

- **Alertness, attention & concentration**
- **(Working) memory**
- **Initiation** (without prompts) of
  - action
  - response to cues (internal & external)
  - attention-shifting / transition
- **Planning, sequencing, organizing, time-management, prioritizing**
- **Flexibility** (thinking of alternatives, adapting to new etc)
- **Inhibition & impulse control**
- **Regulation of emotions**
- **Self-awareness & self-monitoring**

# Executive function (EF) and processing issues in AS

- multitasking
  - awareness of options, evaluating, decision-making, problem-solving, communication etc.
- **EFs affect most aspects of daily life** (?exc. planned practised routine)

**Processing issues** include handling of

- sensory data
- what we eat & breathe
- own thoughts, emotions & body signals
- other peoples' verbal & nonverbal signals / emissions including emotions

**Issues with these cause stress, affect how we handle stress  
& are further impaired by stress (→ vicious cycle)**

# Stress & anxiety in 21<sup>st</sup> century

Everyday stressors =

- social (dynamics of sophisticated vs. survival society)
  - work (ditto)
  - maintaining car & house
  - daily living (meals, hygiene, clothes, money)
  - information & advice (from people, media, ads)
  - messages (phone, text, mail, email) to send, sort, answer
  - ‘healthy lifestyle’!?
- involve transport, shopping, planning & prioritizing, managing time & space, decision-making, communicating, etc.

# Stress & anxiety in 21<sup>st</sup> century

Daily life demands

**‘Multitasking of  
Multiple  
Multitask  
Tasks’**

# Stress & anxiety in 21<sup>st</sup> century

## Stress & autism

- executive function & processing issues
- lack info needed
- ?security based on routine & structure not the ‘socially based security’ of NTs
- unfair expectations, judgments & misunderstanding

Stress = ‘strain ‘when the demands imposed from the outside world outweigh your ability to cope with those demands’ (1)

- overload & stress coping with modern world
- strong drive to find order in the chaos

(1)Evans et al 2005; Gregson & Looker 1997

# Stress & anxiety in 21<sup>st</sup> century

## Fight-flight response

- effective for threats animals & human hunter-gatherers faced → needed immediate decisive action
- ?not for most stressors of modern human society
  - risk of chronic stress

# When is anxiety a problem?

- **goes on too long** (after threat gone / constant chronic anxiety)
- **too intense** (compared to likelihood of harm)
- **inappropriate** (in relation to family, societal & cultural expectations:  
so for us = ‘autistic norms’?)
- **impairs performance or enjoyment** (daily life, work, social, hobbies)
- **causes avoidance** (of things we’d really like to do)
- **causes symptoms beyond ‘normal stress response’**  
(e.g. obsessions, compulsions, flashbacks, delusions, hallucinations)

# Management & Prevention: Summary

- **General principles**
  - Recognize role of AS in anxiety → stop brow-beating self
  - Name it ('my quirky gearbox' / 'caudate nucleus' etc)
  - Identify triggers → avoid / minimize / anticipate
  - Range of specific strategies → individualise
  - Plan (A+B+... )
  - Practise
  - Supports (esp. concrete)
  - Attitude (to life, challenges etc)
- **Immediate actions to manage / avert acute anxiety**
  - **'S.C.A.R.E.D.'** <sup>(1)</sup>
  - **bodily needs** (eat, drink, temperature, toilet, sleep)
  - **environment** (sensory & social)
  - **'missing information'**
- **Long-term therapies etc to master / prevent chronic anxiety**

(1) Deborah Lipsky and Will Richards (2009)

# ‘S.C.A.R.E.D.’ (1)

- Safe
- Calm
- Affirmation
- Routine /Ritual / Repetition
- Empathy
- Develop a plan

(1) Deborah Lipsky and Will Richards (2009)

# Strategies ('tools') for Calming

- **Physical & sensory tools / 'sensory diet'**
- **Special interest: distraction / 'fusion'**
- **'Belly' (diaphragmatic) breathing**
- **Mind / Body tools**
- **Thinking tools**
- **'Social' (AS style) tools**
- **Writing**
- **Prompts**
- **Routine / rituals / repetition**

# Strategies ('tools') for Calming

**Physical tools** → quick release of tension; utilise adrenaline built up; help feel integrated, capable & brave

- **strenuous exercise**
- **punch bag**
- **'creative destruction'**: e.g. items for recycling
- **'chores'** e.g. chopping firewood, mowing lawns
- **subtle** e.g. stress ball

# Strategies ('tools') for Calming

- **Sensory 'tools'**
  - alone in dark
  - 'stim toys'
  - pressure / weight (tight clothing or sleep bag, heavy backpack, squeeze machine)
  - 'brushing'
  - water
  - nature
  - music / other calming sounds

# 'Sensory diet'

**'optimum sensorimotor input a person needs to feel alert, exert effortless control, & perform at peak' <sup>(1)</sup>**

## **Can use to help**

- calm in acute stress
- switch from 'chronic stress' mode
- by using regularly (effects last 2-8hrs)
  - cope with future stress / overload
  - function better in daily life

(1) Willbarger (1995), Heller (2002)

# 'Sensory diet'

- **Individualise (ideally with help of O.T.) by noting own**
  - fluctuations in alertness through day
  - responses to sensory & motor stuff (what's helpful/ disturbing/)
  - preferences: what's enjoyable & fits in daily routine
- **Or choose activities generally effective:**
  - deep pressure
  - proprioceptive
  - vestibular
  - activities combining modalities e.g. heavy work, trampoline, martial arts, horseriding, dance, backpacking

# Mind / Body Approaches

from ancient & modern, East & West, e.g.

- Yoga
- Meditation
- Martial arts
- Breathing & relaxation techniques
- Biofeedback
- Autogenic training
- Sports psychology

**‘The use of ritual to increase personal effectiveness is an ancient human practice ... seen in all cultures.’**

- -George T. Lynn 2004

# Mind / Body Approaches

- ✂ → centred & calm - but strong & confident
- can be activated when brain shutdown
- best if train automatic reactions in several modalities

**e.g. dealing with frustrating situation:**

- **Kinesthetic:** correct breathing, walk away, pace
- **Visual:** visualize self walking away
- **Auditory:** subvocalise 'Walk it off, walk it off' as move away

# Autogenic Training

- = simple set of mental exercises based on ‘westernized rediscovery of the of the basic principles of eastern meditation’ <sup>(1)</sup>
- **voluntary control of ‘involuntary’ nervous system → uncouple from stress by switching dominance SNS → PNS**
- **Key elements**
  - uses auditory, visual & kinesthetic
  - attention inwards → state of passive concentration / detachment
  - physiological ‘mantras’ replace religious ones
  - brief → can practise & use any time any place!
- **Powerful (e.g. for health issues – but self-treatment dangerous!)**
- (1) Malcom Carruthers 1982

# Strategies ('tools') for Calming

- **'Thinking tools'**
  - CBT / DBT exercises (see later)
  - **Consider alternative** perspectives & solutions
  - **Design a project** e.g. to understand / solve / prevent the upsetting situation for future
  - **Analyze contributing factors** (own systems: executive functions, daily rhythms etc)
    - ✂ → write down
    - ✂ → assign (?add visual /practical props) e.g.
      - 'decision time'
      - 'worry time'
      - 'difficult phone call time'

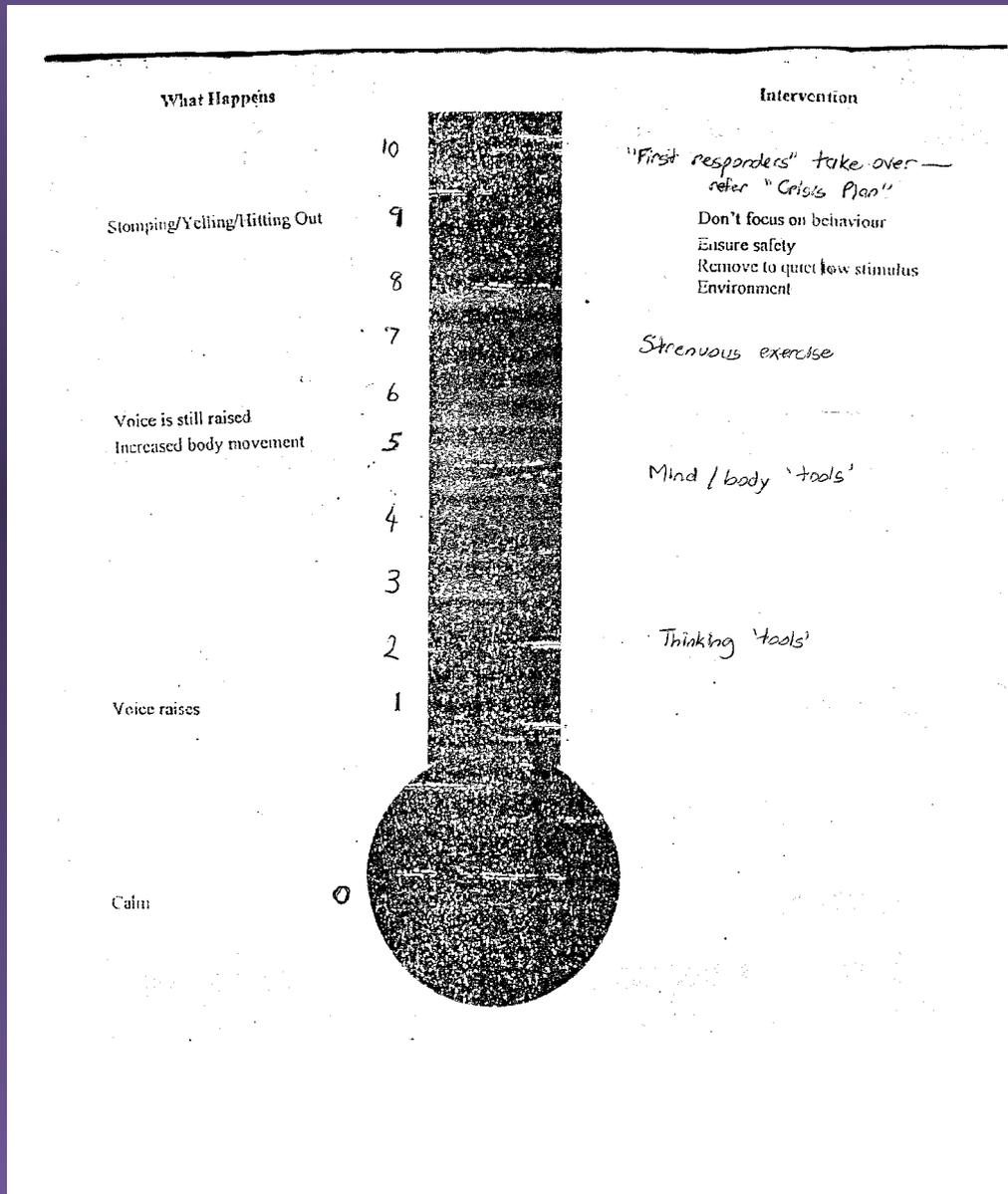
# Strategies ('tools') for Calming

- **'Social tools' (AS style!)**
  - **solitude**
  - **pet**
  - **'structured' equivalents of NT social networks**
    - AS support group
    - 'board of directors'
    - 'executive secretary'
    - mentor
    - counselor or life coach

# Strategies ('tools') for Calming

- **Physical & sensory tools / 'sensory diet'**
  - **Special interest**
  - **'Belly' breathing**
  - **Mind / Body tools**
  - **Thinking tools**
  - **'Social' (AS style) tools**
  - **Writing**
  - **Prompts**
  - **Routine / rituals / repetition**
- ✂ → **write these on a 'stress barometer'** (shows best tool for each level of anxiety)
- ✂ → **keep a 'comfort kit' handy**

# 'Stress barometer'



# 'Treatment / therapy'

**Most of these need a 'therapist' & adaptations for AS:**

- **'Biomedical'**
  - Diet: gluten syndrome, hypoglycaemia, food allergies, etc
  - Natural medicines / supplements e.g. B6, Omega 3
  - Medications
- **Art / music / drama based therapies**
- **Vast range of therapies & strategies for underlying issues**
- **Approaches for specific types of anxiety**
  - Meltdowns
  - OCD (ref. 'Brain Lock')
  - Exposure anxiety (ref. Donna Williams)
  - Phobias
- **DBT (dialectical behavioral therapy)**
- **Cognitive therapy**
  - CBT
  - 'meta cognitive therapy'

# **‘Exposure anxiety’** (ref. Donna Williams)

**= Chronic persistent fight-flight state triggered by**

- others’ attempts to communicate / share
- even own self-awareness & self-expression  
(own existence too ‘in-your-own-face’)

**→ compulsive involuntary avoidance, diversion & retaliation** (self-protection from loss of control & ‘invasion’)

- **worsens if not carefully dealt with**
- **‘like shyness / self-consciousness multiplied by 50’**

# **‘Indirectly-confrontational’ approach for ‘exposure anxiety’**

- **Model** (do things as though for own benefit)
- **Talk through objects** as though addressing self  
**Focus on object or issue**, not the person you’re trying to indirectly address
- **Use noninvasive body-language and voice**
- **Observe from periphery** (like fly on the wall)
- **Use characterizations**
- **Play ‘hard to get’**
- **Leave the person wanting more** (by how you walk off / avoid / divert)
- **Art / music / drama therapy**

# Cognitive Therapy

- **Goal: ‘learning to manage your anxiety, instead of anxiety controlling you’**
- **by monitoring, challenging & changing your thoughts  
(‘cognitive restructuring’)**
- **entails specific strategies, practice & work, not just  
‘change your thoughts’ or ‘think positively’**

# Some theory behind cognitive therapy

Human tendency to have negative automatic thoughts “NATs”  
(limited / illogical / unhelpful thinking)

## Early in life

- ‘core beliefs’ & ‘early maladaptive schemas’ (EMS)
- ✂ → help organize our worldview to make sense to us e.g.
  - ‘I’m worthless’
  - ‘People can’t be trusted’

New info is filtered such that schema stays intact

→ further reinforces inaccurate views about world & self

In anxiety: ‘NATs’ / ‘cognitive distortions’ play big role

✂ → in CBT: examine & challenge ‘NATs’

# Recognising 'NATs'

- **negative, fearful, self-depreciating**
- **unhelpful**
- **usually unrealistic** (but may seem reasonable at the time!)
- **usually a distortion of reality** (but occasionally true & realistic)
- 
- **usually short & specific:** few key words / image not sentences
- **are 'just there':** often immediately after a trigger, not summoned up, not coming from logical series of steps
- **recurring themes** (exact words may differ); other people with same emotional issue have similar themes

# Challenging 'NATs'

(limited / unhelpful thinking)

- **WHAT IS THE EVIDENCE?**
- **WHAT IS THE LIKELIHOOD OF THAT HAPPENING?**
- **WHAT ARE THE ALTERNATIVES?**
- **HOW HELPFUL IS IT TO THINK IN THIS WAY?**
- **HOW MUCH WOULD IT REALLY MATTER?**  
(questions for each group in next 5 slides)

# Challenging 'NATs'

(limited / unhelpful thinking)

## WHAT IS THE EVIDENCE?

- What makes you think ... would happen?
- What would others think in this situation?
- Could you be jumping to conclusions with poor evidence?
- What evidence do you have to the contrary?
- Are you confusing a thought with a fact?

# Challenging 'NATs'

(limited / unhelpful thinking)

## WHAT'S THE LIKELIHOOD OF THAT HAPPENING?

- Is it probable? Or just possible?
- What is the most realistic outcome?

# Challenging 'NATs'

(limited / unhelpful thinking)

## WHAT ARE THE ALTERNATIVES?

- You might be right but let's look at the other probabilities
- How else could you interpret this situation?
- Think of as many alternatives as possible: which is likely to be correct?
- Are you assuming your view is the only one possible?
- Are you mind reading or predicting the future?

# **Challenging 'NATs'**

(limited / unhelpful thinking)

## **HOW HELPFUL IS IT TO THINK IN THIS WAY?**

- **Is this thought stopping you from achieving your goals?**
- **What are the advantages & disadvantages of this thinking?**
- **What would you tell a friend in the same situation?**
- **Are you asking questions that have no answers?**

# **Challenging 'NATs'**

(limited / unhelpful thinking)

## **HOW MUCH WOULD IT REALLY MATTER?**

- **What is the worst think that could happen?**
- **What is the best that could happen?**
- **Would it really affect the rest of your life?**
- **Is it going to matter in 6 months? 10 years?**

# Changing 'NATs'

(limited / unhelpful thinking)

- **examine & challenge 'NATs'**
- **replace 'NATs' with 'positive counters'**  
(realistic thoughts)
- **specific technique not wishful thinking or 'just 'think positive'**

# Replacing 'NATs' with realistic thinking (‘Positive counters’)

‘Positive counters’ work best if you develop as many as possible for each NAT, & if each is

- Concise
- In your own words not those of therapist etc
- Stated in assertive intense manner
- Believable statement of reality – not wishful thinking or denial
- Directly opposite to NAT

# Replacing 'NATs' with realistic thinking (‘Positive counters’)

For example:

- NAT: ‘ Not getting that job proves I’m such a failure. I’ll never get a job or have anything go right for me.’
- Wishful thinking: ‘Who cares! I didn’t want the job anyway!’
- Realistic thinking (‘positive counters’): ‘I’m disappointed I didn’t get that job, but
  - ‘I’ll get over it and cope; I can use (specify) strategy’
  - ‘I can look for another job’
  - ‘Most people apply for a number of jobs before they’re successful.’  
etc.

# Replacing 'NATs' with realistic thinking (‘Positive counters’)

- Note down ‘NATS’ that pop up when anxious
- After anxious situation’s over, challenge NATs & replace with ‘realistic counters’
- Use these realistic counters in future anxious situations (?written prompts)
- Practice trains realistic thinking to take charge in anxious situation

# Most useful 'tools' in AS?

- Cognitive?
- Individualised 'sensory diet'
- Mind/body approaches
- Diaphragmatic breathing
- 'Meltdown' plan
- 'Beyond tools' esp. 'flow' state

# Concluding ideas: Beyond 'tools'

- **Reframe self** as brave pioneer forging a life in a strange world
  - **Reframe anxiety** as opportunity for self-development
  - **Focus on 'now'**
    - fewer things to worry about
    - engaging positively in present flows into better future
  - **Accept 'unpredictability is predictable'** (chaos theory!)
- **Find order by embracing / enduring chaos & reflecting upon it later**

= **Qualities highly valued in Buddhism & other spiritual approaches**

- **Acceptance**
- **Detachment** (incl. expectations, intrusive thoughts etc.)
- **Mindfulness**

# Concluding ideas: Beyond 'tools'

**'We "Aspies" are inherently good at achieving a flow state. Yet, we are also inherently anxious. This seems contradictory until you realize life - outside of our special interests - does not always make it easy for us to achieve the flow state. However, once we do achieve flow, it's very difficult to distract us.'**

# Concluding ideas: Beyond 'tools'

**'The bad news is that we *have* to work on it  
the rest of our lives ...  
and the good news is that we *get* to work on it  
the rest of our lives'**

- Dave Spicer, 1998

# Further reading

- ***Asperger's syndrome & anxiety: A guide to successful stress management*** by Nick Dubin (Jessica Kingsley Publishers 2009)
- ***Managing meltdowns: Using the S.C.A.R.E.D. Calming technique with children and adults with autism*** by Deborah Lipsky and Will Richards (Jessica Kingsley Publishers 2009)
- ***Mind/body techniques for Asperger's syndrome: The way of the pathfinder*** by Ron Rubio (Jessica Kingsley Publishers, 2008)
- ***Self-Awareness in Living with Asperger Syndrome*** by Dave Spicer 1998 <http://www.bellsouthpwp.net/d/s/dspicer/>
- ***Asperger's syndrome and mindfulness: Taking refuge in the Buddha*** by Chris Mitchell (Jessica Kingsley Publishers, 2009)
- ***Asperger's syndrome and alcohol: Drinking to cope?*** by Matthew Tinsley & Sarah Hendrikx (Jessica Kingsley Publishers, 2008)
- ***The jumbled jigsaw: An insider's approach to the treatment of autistic spectrum 'fruit salads'*** by Donna Williams (Jessica Kingsley Publishers, 2006) see chapter 7 '*Invisible cages: Anxiety issues*'
- ***Brain Lock: Free yourself from obsessive-compulsive behavior. A four-step self-treatment method to change your brain chemistry*** by Jeffrey M. Schwartz, MD (Regan Books, 1996)
- ***Too loud too bright too fast too tight: What to do if you are sensory defensive in an overstimulating world*** by Sharon Heller (HarperCollins, 2002)

# Other References

- ***Genius! Nurturing the spirit of the wild, odd, and oppositional child*** by George T. Lynn with Joanne Barrie Lynn (Jessica Kingsley Publishers, 2004)
- ***Use of dialectical behavioral therapy (DBT) with Asperger Syndrome*** by Karen O'Brien. Paper presented at Autism NZ Inc Conference 'A different way of thinking' 3 Sept 2006
- ***Train the mind to calm itself: How autogenic training can help patients*** by Dr. Malcolm Carruthers (Centre for Autogenic Training, 1982).