Dyslexia in Higher Education:

Anxiety and Coping Skills

The Research Questions I Wanted to Know

- Is there a difference in the prevalence of anxiety between dyslexic and non-dyslexic students?

- How do students with dyslexia cope cognitively and emotionally within the academic environment?

The Sample Was The Largest in the UK Ever Used for a Study of this Kind

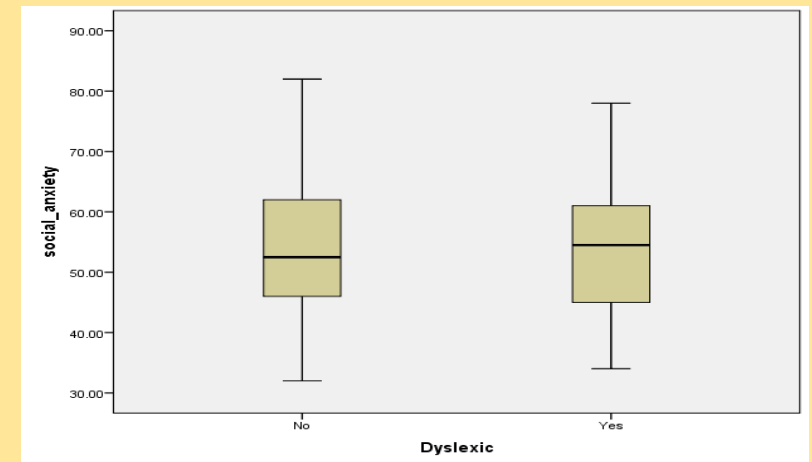|	Dyslexic	Non-Dyslexic	Total
Number of people who completed the survey	102	72	174
Number of females	75	57	132
Number of males	26	15	41
Number aged between 18-24	49	48	97
Number aged between 25-34	43	13	56
Number aged between 35-44	4	5	9
Number aged between 45-54	6	3	9
Number aged between 55-64	0	2	2
Number aged over 65+	0	1	1
Number of people who had opened the survey, but had not fully completed it			24

Dyslexic Students Had Higher Levels of Academic Anxiety

- Academic Anxiety
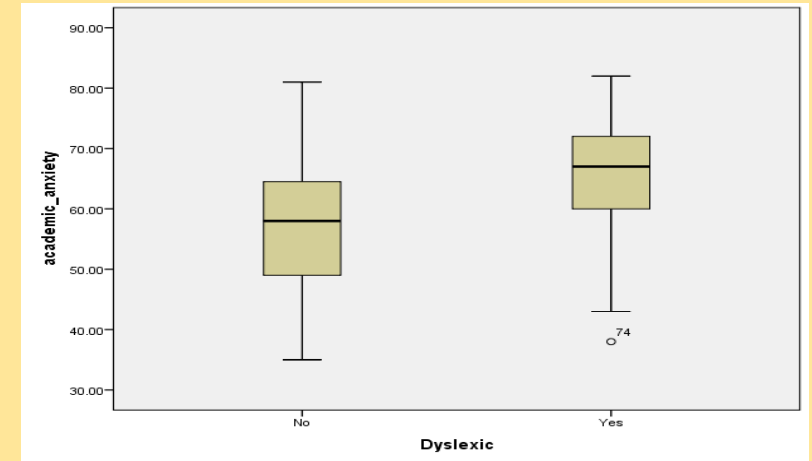
- Social Anxiety

11 items scored significantly higher levels of anxiety than non-dyslexic

- 'I feel my literature skills may let me down in exams'

- 'I spend longer on my work than most people'

- 'I feel anxious when reading aloud in front of my class'

- 'When about to enter an exam, I feel ill / shaky'

- 'I feel a failure academically in comparison to my peers'

- 'I feel overly anxious when I have exams'

- 'I get angry with myself for taking so long over one piece of work'

- 'I get frustrated when faced with a lot of reading'

- 'I am often brought to tears when I think about my academic abilities'

- 'My work suffers if I am under pressure, and I work better if I have plenty of time'

The Theories That Explain Why These Levels of Anxiety Exist

- Ohman's (1993) Information Processing Model of Anxiety

- Hadwin, Brogan, and Stevenson's (2005) Processing Efficiency Theory

Ohman's (1993) Information Processing Model of Anxiety

- Based on re-activation of negative emotion stored in memory

- Memories of distressing experiences during school years

Hadwin, et al., (2005) Processing Efficiency Theory

- Anxiety and worry impedes academic performance

- The cyclical effect of anxiety.

'As soon as something is stressful, or I'm worrying about something, it (dyslexia) will start to manifest much more defiantly. Whereas normally I can just bubble along, stress starts to impact, and it just affects retaining, processing information, relevance of information, writing information, processing, in just every way that dyslexia would affect me, it just seems to get ten times worse. Then I panic about that, and then it gets worse. So, it's being much more consciously aware, which is something that I am learning about at the moment'

The Implications of This for Higher Education

- An integrated, joined-up approach

- Exams - unfair disadvantage

- More creativity with modes of assessment

The Implications for Teaching Staff

- Greater understanding of dyslexia

- Compulsory professional development sessions

- Uniformity of standards

Implications for Dyslexia Tutors

- Help to identify triggers for anxiety and negative emotion

- Help student manage the negative emotion

- Discuss emerging potential triggers for distress

Types of Coping used to Overcome Cognitive Weaknesses

- Application of Specific Cognitive Techniques

- Use of Specialist Technology

- Multisensory Ways of Learning

- Doing Practical Things

- Alleviating Scotopic Sensitivity

- Use of Favourite Materials

Examples of How These Strategies

Can Be Taught In Support Sessions

How A Dyslexic Learner Experiences Reading

A firned who has dylesixa dcsrbieed to me how she eerpcexenis rdaeing. She *can* read, but it taeks a lot of creatnnoitocn, and the ltrtees smees to "jump aruond".

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MakeAGIF.com

An Example of Multisensory Reading

- A useful definition for understanding adult dyslexia and types of problems encountered with study skills is provided by the British Dyslexia Association (BDA). This describes dyslexia as a condition that is 'likely to be present at birth :-) and to be lifelong in its effects. _____> It is characterised by :- difficulties with phonological processing, rapid naming, working memory, processing speed, and the automatic development of skills that may not match up to an individual's cognitive abilities' (BDA, 2007).

How they Can Be Used To Support Reading

- Specific Cognitive Techniques

- PASS strategy (preview, ask and answer, summarise, synthesise)
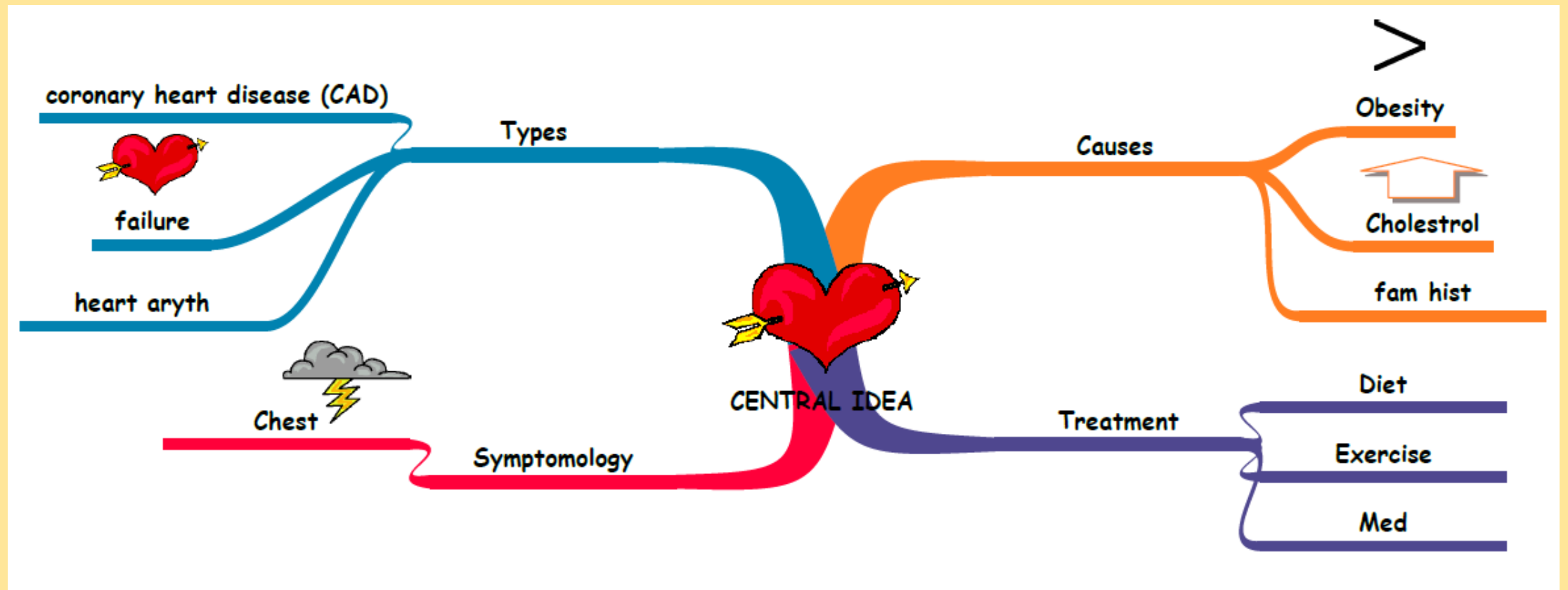
- Using selectivity

- Use of Specialist Technology

- Read and Write literacy support software

- Speech to text software, Dragon Naturally Speaking

- Multisensory Ways of Learning

- Auditory-Visual Combination

- Mind maps

- Doing Practical Things

- Using a ruler

- Print out papers

- Alleviating Scotopic Sensitivity

- Colorimetry test

- Using coloured overlays

- Changing the colour background on screens

- Use of Favourite Materials

- Making learning fun

Types of Emotional Coping Used

- Avoidant Strategies

- Getting Stressed, Worried and Crying

- Panicking and Freezing

- Seeking Comfort

- Exercise and Healthy Things

- Mental Resilience, Persistence and Determination

Theories to Help Us Understand Type of Coping Used by Students

- Skinner et al.'s (2003) coping framework

  - Problem solving

  - Seeking support

  - Cognitive restructuring

  - Emotion regulation

  - Negotiation

Example of Coping Through Problem Solving

- Devising Own Cognitive Techniques

  'Me being a person who likes to solve problems or find a way to solve things, I looked up and I found a few courses that they were giving on how to write an academic paper, and that was quite useful. I just tried to find all the resources that my university offered'.

Example of How These Strategies Can Be Developed in Support Sessions

- How would they tackle it

- Techniques To Supplement Their Methods

Example of Coping Through Seeking Support

- Parents, Spouses, Peers and Professionals

- Obtaining Instrumental Help, Advice, Comfort and Contact

- Mixture Problem Focused and Emotion-Focused

Example of How These Strategies Can Be Developed in Support Sessions

- Ascertaining Student Support Network

- Helping with Communications to Right People

- Mixture of Study Tutor and Mentor / Coach

Example of Coping Through Cognitive Restructuring:

- A More Emotional Approach to Coping

- Positive Thinking for Minimisation of Distress

- Students Spoke About the Advantages of Their Dyslexia

- Cognitive Restructuring to Embrace their Dyslexia Diagnosis

  'The advantage (of dyslexia) is that I have a brilliant imagination and I get lots of ideas. I see things differently than maybe a lot of other people. That can be genius at times. I can walk on the street and start laughing because I have so many things bouncing in my head and sometimes, I see things, not because I'm hallucinating, but I just see things and it's quite lively'.

Inner Critic Template

Problem Situation	
Inner critic says	
Evidence for this	
Evidence against this	
Balanced view	
Future strategy	

Example of Coping Through Emotion Regulation

- An Attempt to Minimise Emotional Distress

- Emotional Expression Used as Cathartic Release

  'I cry myself to sleep, and then the next day, I'll be fine. It's just an emotional release, like just get rid of it all and then just start again the next day'.

Example of How These Strategies Can Be Developed in Support Sessions

- Breathing Exercises

- Mindfulness

- Allowing Student to Vent and Channelling It

Anxiety Triggers Template

Recognise your stress

What situations trigger stress for you?

When you have too much work to do? ☐
When things don't go the way you want? ☐
When you give yourself unachievable goals? ☐
Other? _____ ☐

What thoughts do you have in these situations?

I'm never going to get this done ☐
I'm not good enough ☐
No one understands what I feel ☐
Other? _____ ☐

What emotions do you have?

Feel anxious ☐
Feel depressed ☐
Feel irritable, tearful or moody easily ☐
Other? _____ ☐

What physical signs do you have?

Have headaches ☐
Feel shaky inside ☐
Lie awake at night and worry ☐
Other? _____ ☐

Example of Coping Through Negotiation:

- Attempts to Work out a Compromise

- Negotiating Own Learning Strengths

- Devising Approaches to Navigate Academia

- Negotiations Through Reducing Demands

Example of How These Strategies Can Be Developed in Support Sessions

- Developing Metacognition

- Awareness of Strengths / Areas of Development

- Developing Negotiation Communication Skills

Why It Is Important to Build Confidence of People with Dyslexia

- Maggie Aderin-Pocock. Astronomer and space scientist, co-producer of the long running TV programme 'The Sky at Night' with Chris Lintott.

- Orlando Bloom. ...

- Richard Branson. ...

- Tom Cruise. ...

- Leonardo da Vinci. ...

- Walt Disney. ...

- Jim Carrey. ...

- Albert Einstein

Strengths Often Found in those with Dyslexia:

- Wonderfully Imaginative

- Strong Visual Memory

- Excellent Puzzle-Solving Skills

- Brilliant Visual Spatial Reasoning

- Great at Connecting with Others
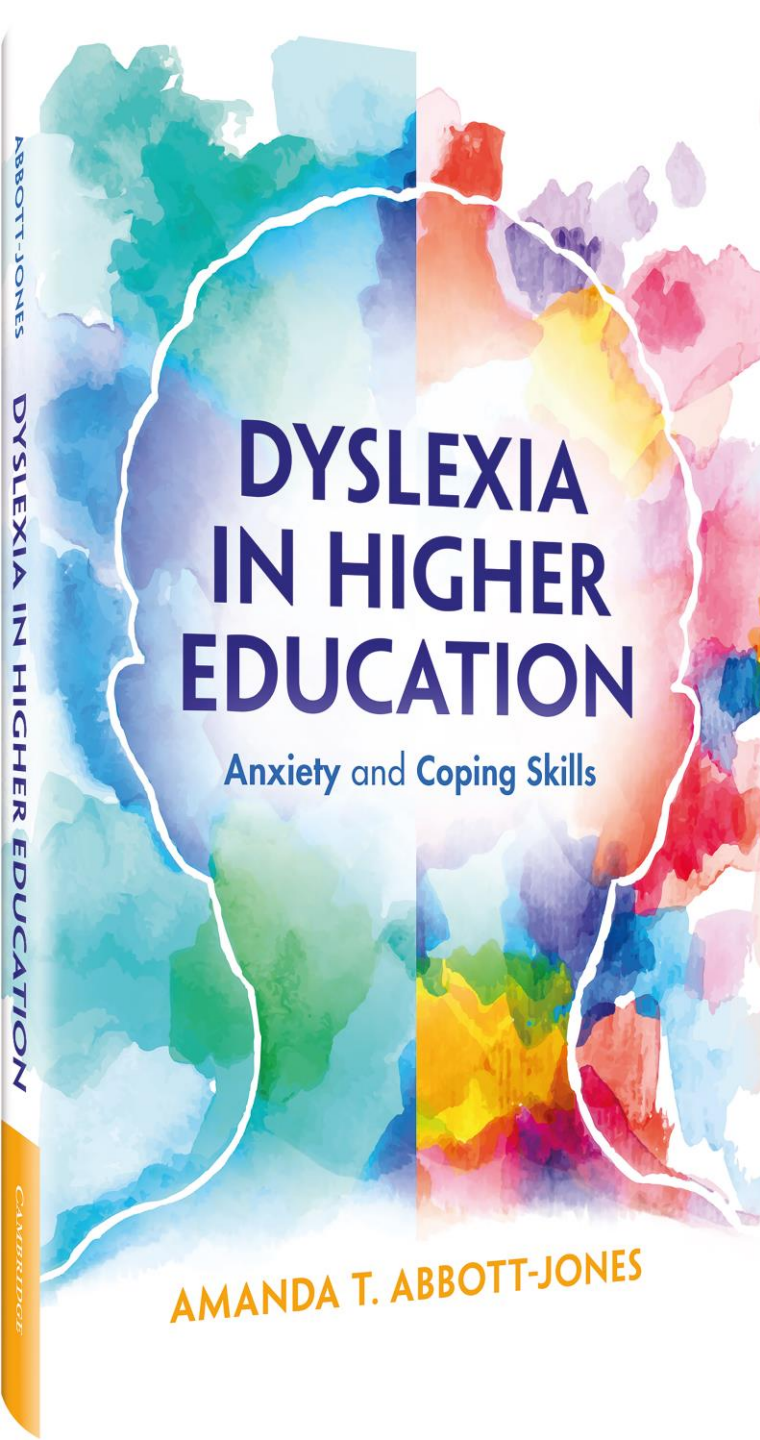
Thank You for Listening

Any Questions?