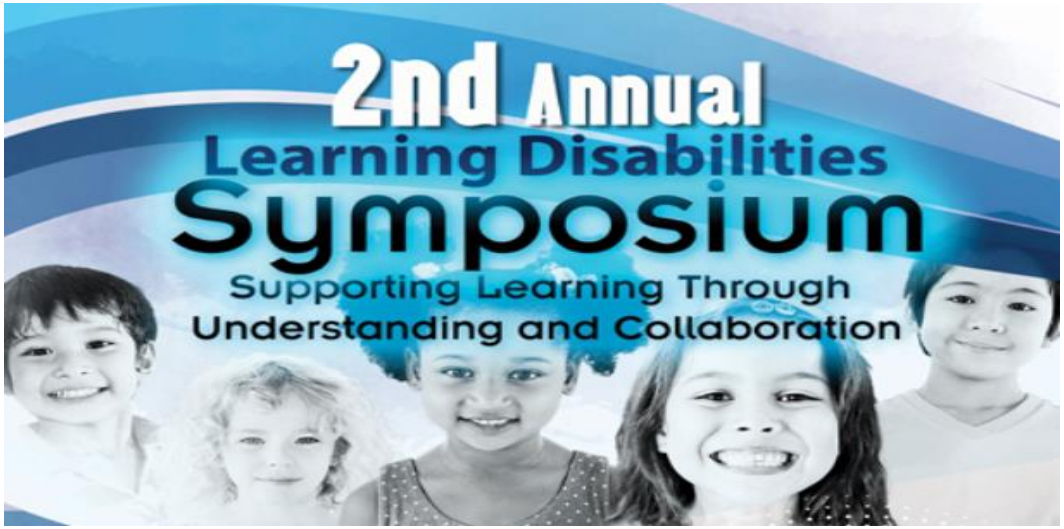
Anxiety and Learning Disabilities: Co-Morbidity of Learning Disabilities and Mental Health

Dr. Anthony Folino, Ph.D., C.Psych



Note: Please do not disseminate the contents of this presentation without the explicit consent and authorization of Anthony Folino.

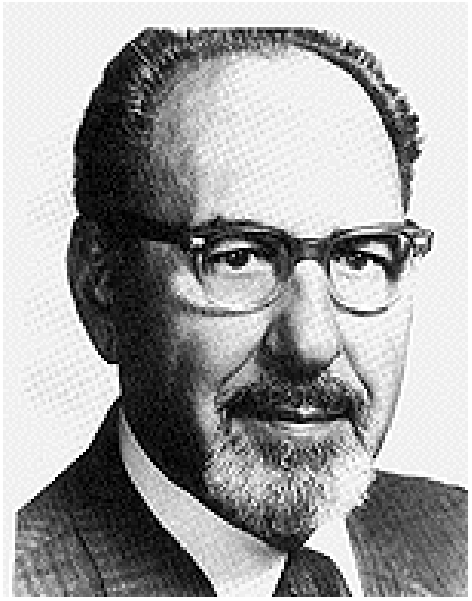
Note: To ensure effective implementation of the knowledge and strategies discussed in this presentation, it is recommended that parents and school teams consult with the Psychology Service staff member assigned to the child's school.

History of Learning Disabilities

Key Considerations

History of Learning Disabilities

- April 6, 1963
  - *"Exploration Into the Problems of The Perceptually Handicapped Child"*



Dr. Samuel Kirk

"Behavioural Diagnosis and Remediation of ***Learning Disabilities***"

Credited for coining the term Learning Disability

"Father of Special Education"

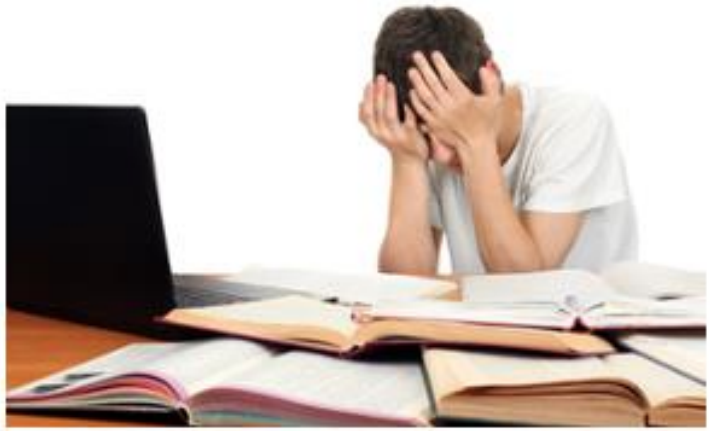

Legislation
Theories
Diagnostic Procedures
Learning Disabilities
Educational Practices
Remediation
Research


journey


Mental Health and
Learning Disabilities

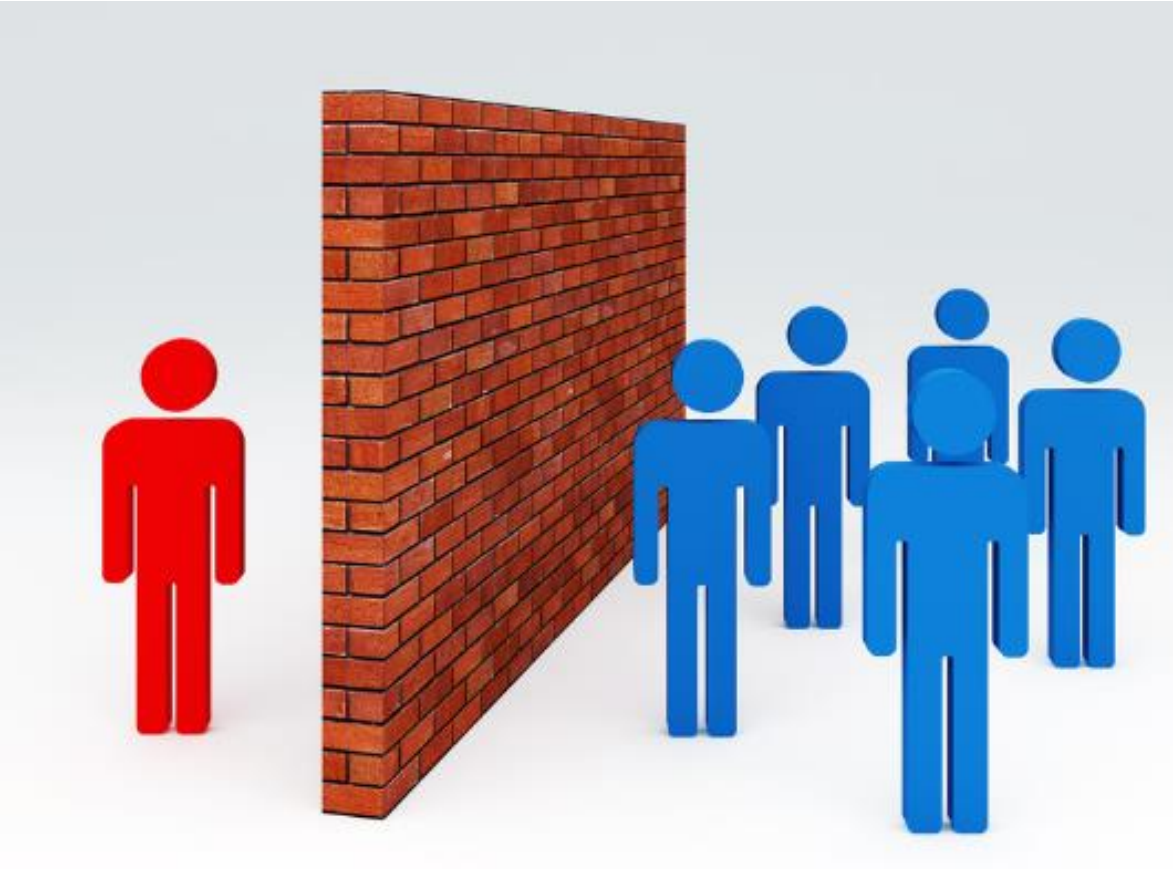
Youth Mental Health – Facts

- Prevalence: 10-20% of Canadian youth are affected by a mental illness or disorder (CAMH).
- Mental illness can be treated very effectively (CMHA)
- Early identification and early intervention typically yield best outcomes.



In Canada, only **1 out of 5** children who need mental health services receives them (Kids Mental Health Info).

Barriers to Mental Health Supports and Services



- Limited Financial Resources

Health, 2014, 6, 684-690
Published Online March 2014 in SciRes. http://www.scirp.org/journal/health
http://dx.doi.org/10.4236/health.2014.68089

Scientific Research

Why Can't Canada Spend More on Mental Health?

Steve Lurie[1,2]

[1]Canadian Mental Health Association, Toronto Branch, Toronto, Canada
[2]Factor-Inwentash Faculty of Social Work University of Toronto, Toronto, Canada
Email: slurie@cmha-toronto.net

Received 28 January 2014; revised 2 March 2014; accepted 10 March 2014

- Between 2004 and 2011:
  - Ontario government invested :
    - $220 million in mental health care
    - $18.5 billion in health care

Per Capita Spending in Health Care
$1361

Per Capita Spending in Mental Health Care
$16.45

Ontario youth with mental illness waiting months for help, auditor general finds

By Andrew Russell
National Online Journalist, Breaking News Global News

Comments 7 | Facebook 655 | Twitter | Email | Print | ...

We are failing young Canadians on mental health

Canada's two-tier youth mental health system cannot be allowed to continue.

Canada Needs Comprehensive Child Mental Health Strategies

Posted: 01/13/2017 8:31 am EST | Updated: 01/13/2017 8:32 am EST

Canada's Mental Health Services Are Leaving Too Many Behind

Posted: 10/18/2016 12:03 pm EDT | Updated: 10/18/2016 12:03 pm EDT

- Stigma
  - Canadian Youth Mental Health and Illness Survey (1996)
    - 63% of youth point to stigma as the most likely reason to not seek help

- Navigating Services
  - Parents for Children's Mental Health: Family Input Survey (2013)
    - 76% of families surveyed indicated it was "extremely difficult" to know where to find help in Ontario.

Prevalence Rates of Learning Disabilities

- Estimates suggest that between 5 and 10% of Canadians have a learning disability *(LDAO)*.

Learning Disabilities and Comorbidity

- Individuals with a LD are at increased risk for co-morbid (or co-occurring) disorders.
  - *Neurodevelopmental Disorders*
    - ADHD
    - Communication Disorders
    - Developmental Coordination Disorders
    - Autism
  - *Mental Health Disorders*
    - Anxiety
    - Depression
    - Bipolar Disorder

Learning Disability and Mental Health

Research studies examining differences between:

Student with a
Learning Disability

Typically Developing
Student

Negative Peer Relationships

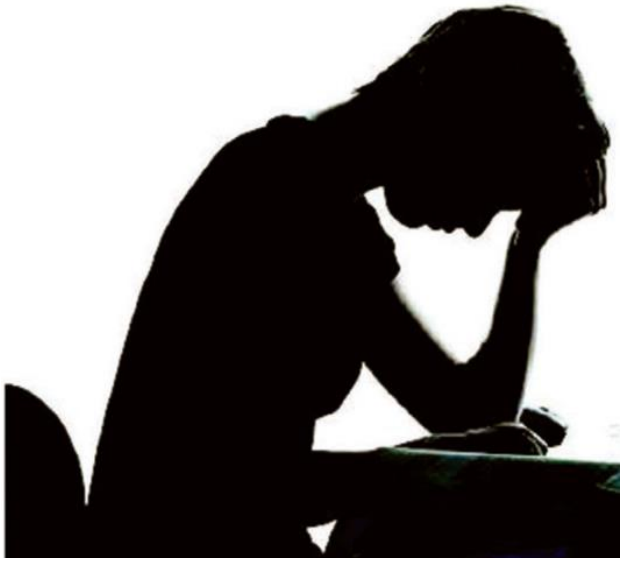
Teasing

Feelings of Exclusion

Bullying

Anger

Poor Self-Concept



Reduced Confidence

Low Self-Esteem

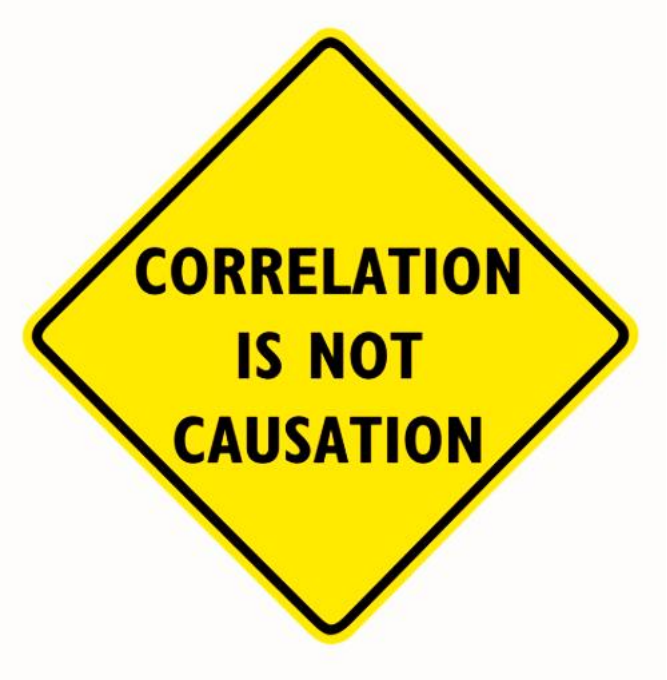
Somatic Complaints

Student with a Learning Disability

Perceived Intelligence

Reduced Academic Success

Behavioral Difficulties



RISK
FACTOR

Negative Peer Relationships

Teasing

Feelings of Exclusion

Bullying

Anger

Poor Self-Concept

Reduced Confidence

Low Self-Esteem

Somatic Complaints

Student with a Learning Disability

Mental Wellness

Perceived Intelligence

Reduced Academic Success

Behavioral Difficulties


Anxiety
&
Learning Disabilities

Learning Disabilities and Anxiety Disorder

Margari *et al. BMC Neurology* 2013, **13**:198
http://www.biomedcentral.com/1471-2377/13/198

RESEARCH ARTICLE Open Access

Neuropsychopathological comorbidities in learning disorders

Lucia Margari*, Maura Buttiglione, Francesco Craig, Arcangelo Cristella, Concetta de Giambattista, Emilia Matera, Francesca Operto and Marta Simone

Sample:

- 448 patients aged 7 to 16 years of age with a diagnosis of a learning disability

Key Findings:

- Anxiety disorder was found in 28.8% of the sample

Learning Disabilities and Anxiety Symptoms

HAMMILL INSTITUTE ON DISABILITIES

Journal of Learning Disabilities
44(1) 3–17

DOI: 10.1177/0022219409359939
http://journaloflearningdisabilities
.sagepub.com
SAGE

Learning Disabilities and Anxiety: A Meta-Analysis

Jason M. Nelson[1] and Hannah Harwood[2]

Abstract

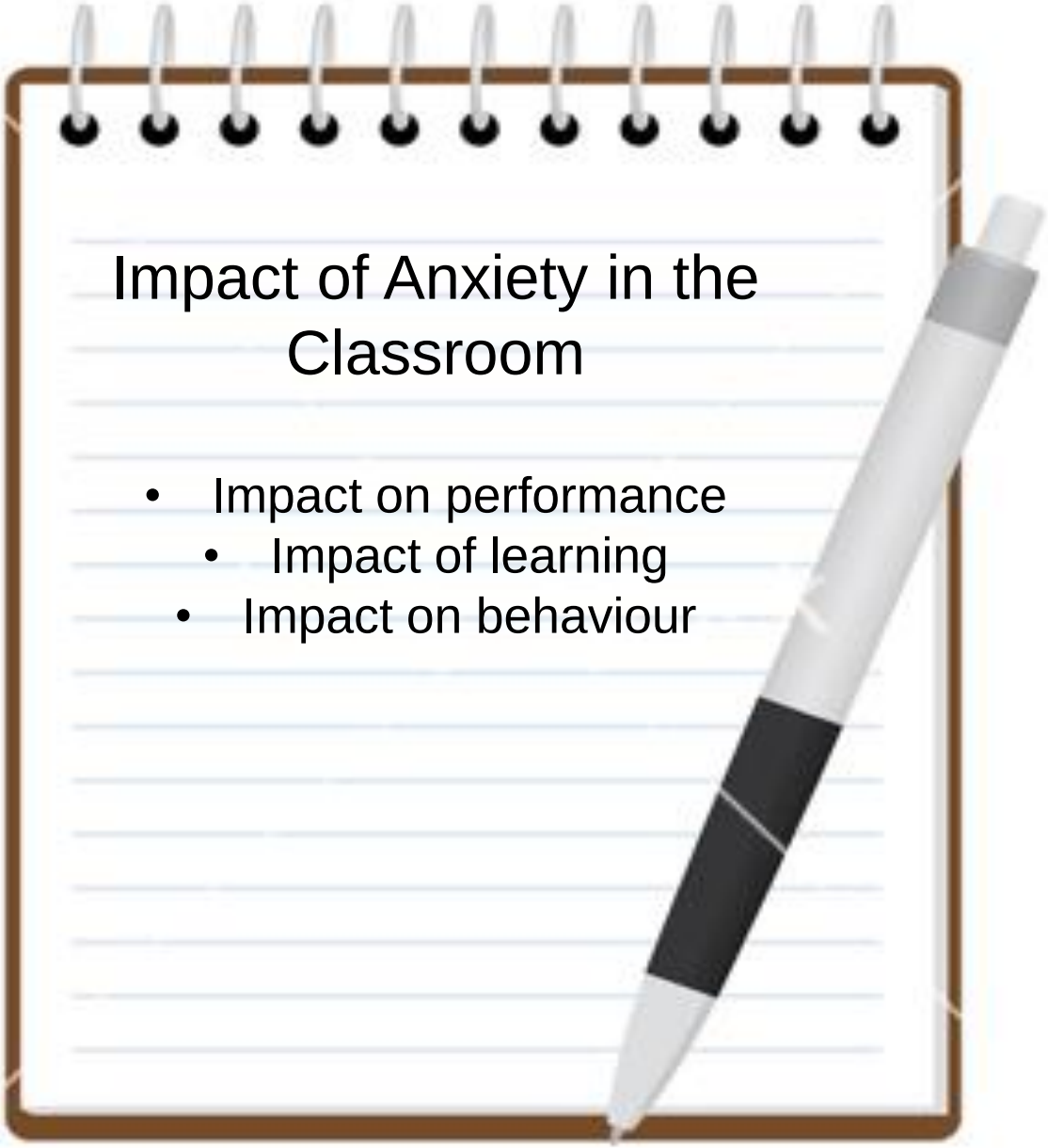
This article presents the results of a meta-analysis of the empirical literature on anxious symptomatology among school-aged students with learning disabilities (LD) in comparison to their non-LD peers. Fifty-eight studies met inclusion criteria. Results indicate that students with LD had higher mean scores on measures of anxiety than did non-LD students. The overall effect size was statistically significant and medium in magnitude ($d = .61$) although substantial heterogeneity of results was found. Moderator effects were examined for informant type, gender, grade, publication status, and identification source. Informant type (i.e., self-, parent, or teacher report) explained a significant amount of variability in the sample of studies, and identification source (i.e., school identified or special school and clinic/hospital identified) approached statistical significance. Implications for assessment and intervention are discussed.

Study Design:

- Meta-analysis - 58 studies examining the relationship between anxious symptomatology among school-aged students with LD and non-LD.

Key Findings:

- Approximately 70% of students with a LD experience higher anxious symptomatology than do non-LD students.

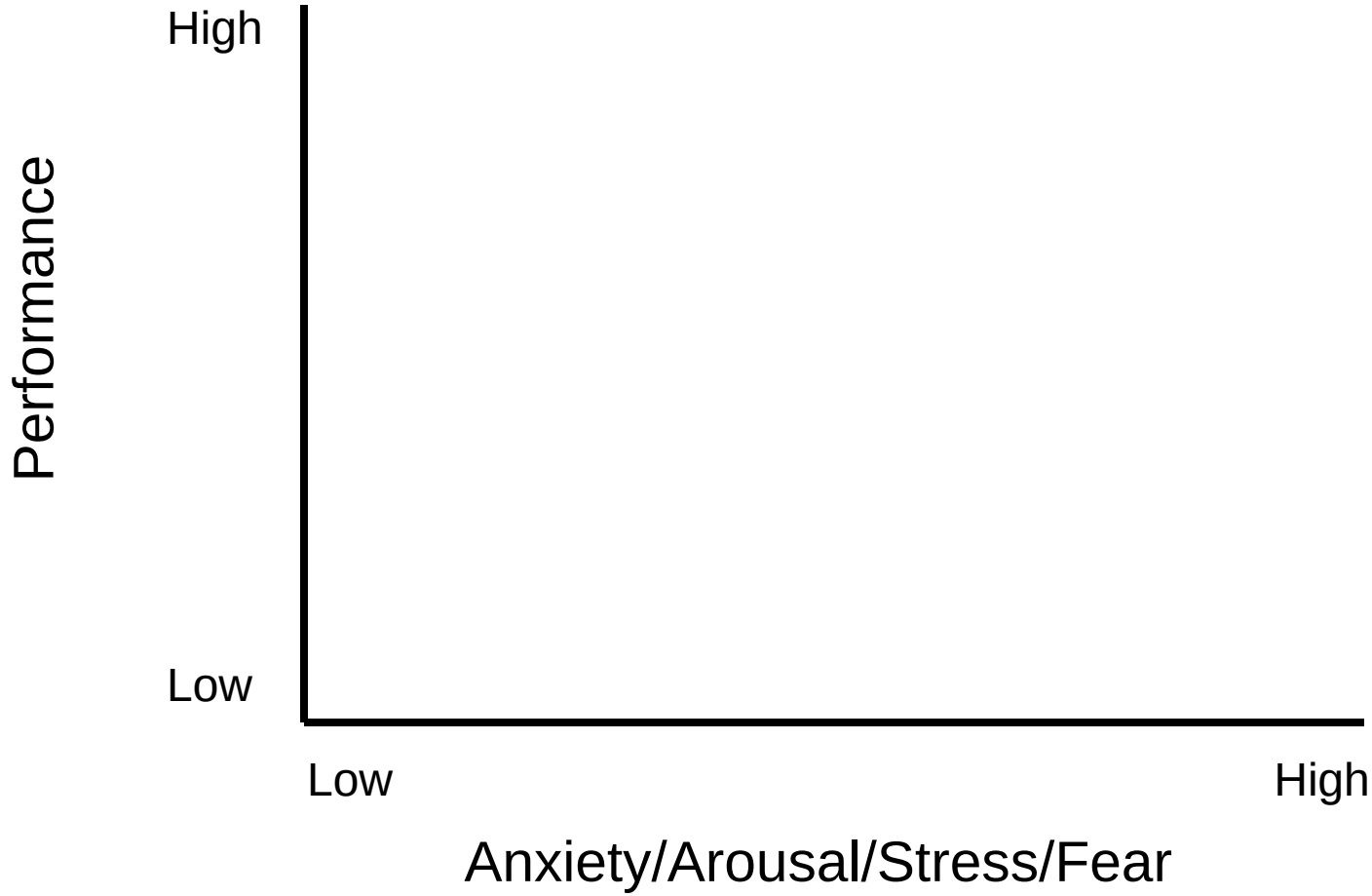


Impact of Anxiety in the Classroom

- Impact on performance
- Impact of learning
- Impact on behaviour

Does Anxiety Impact Performance?

Yerkes- Dodson Law – 1908 (Inverted U Theory of performance)



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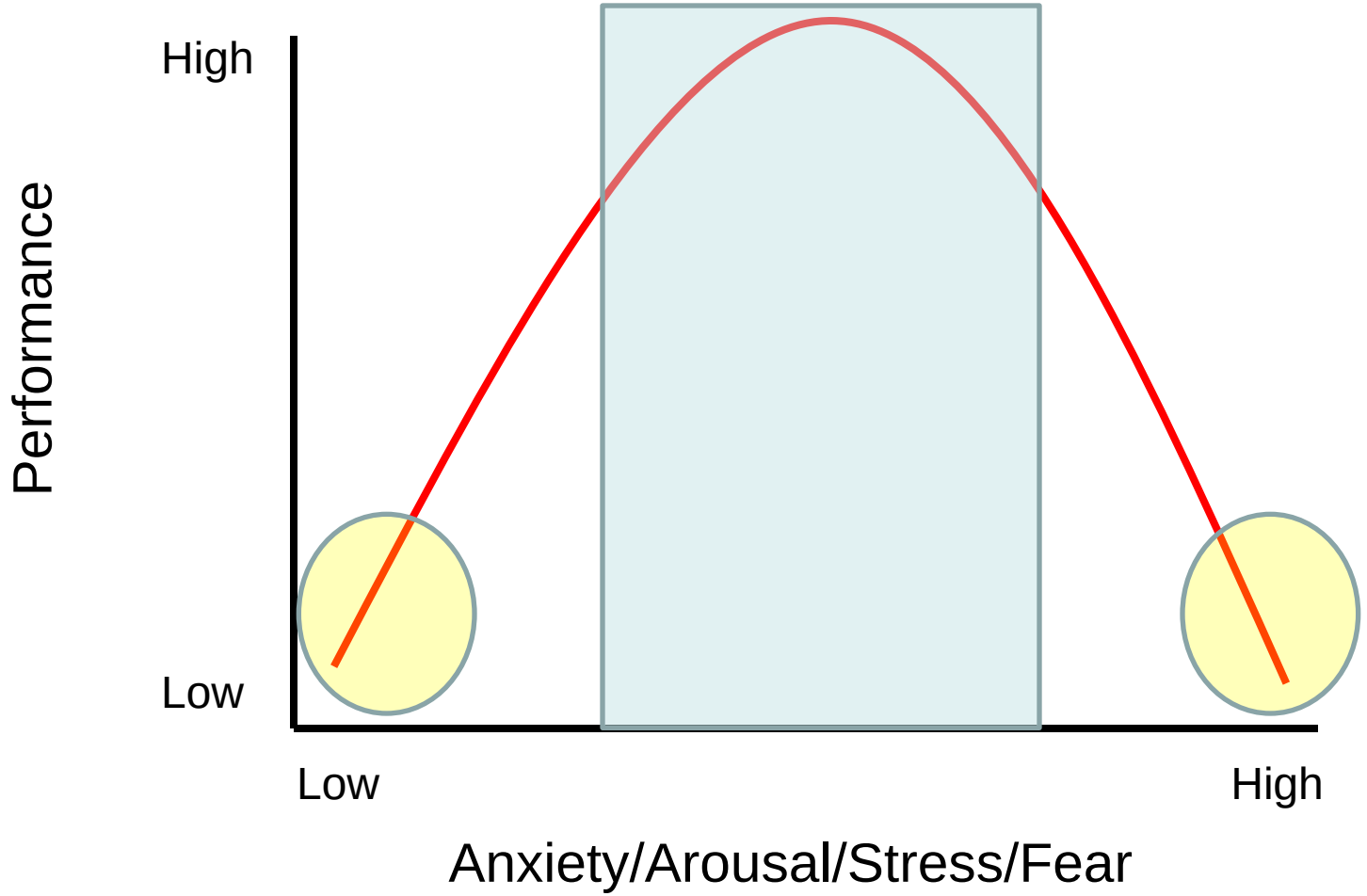
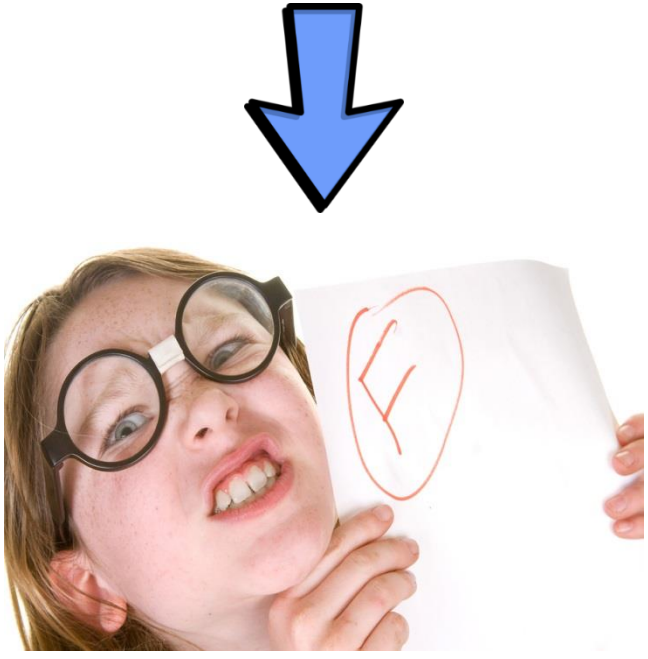
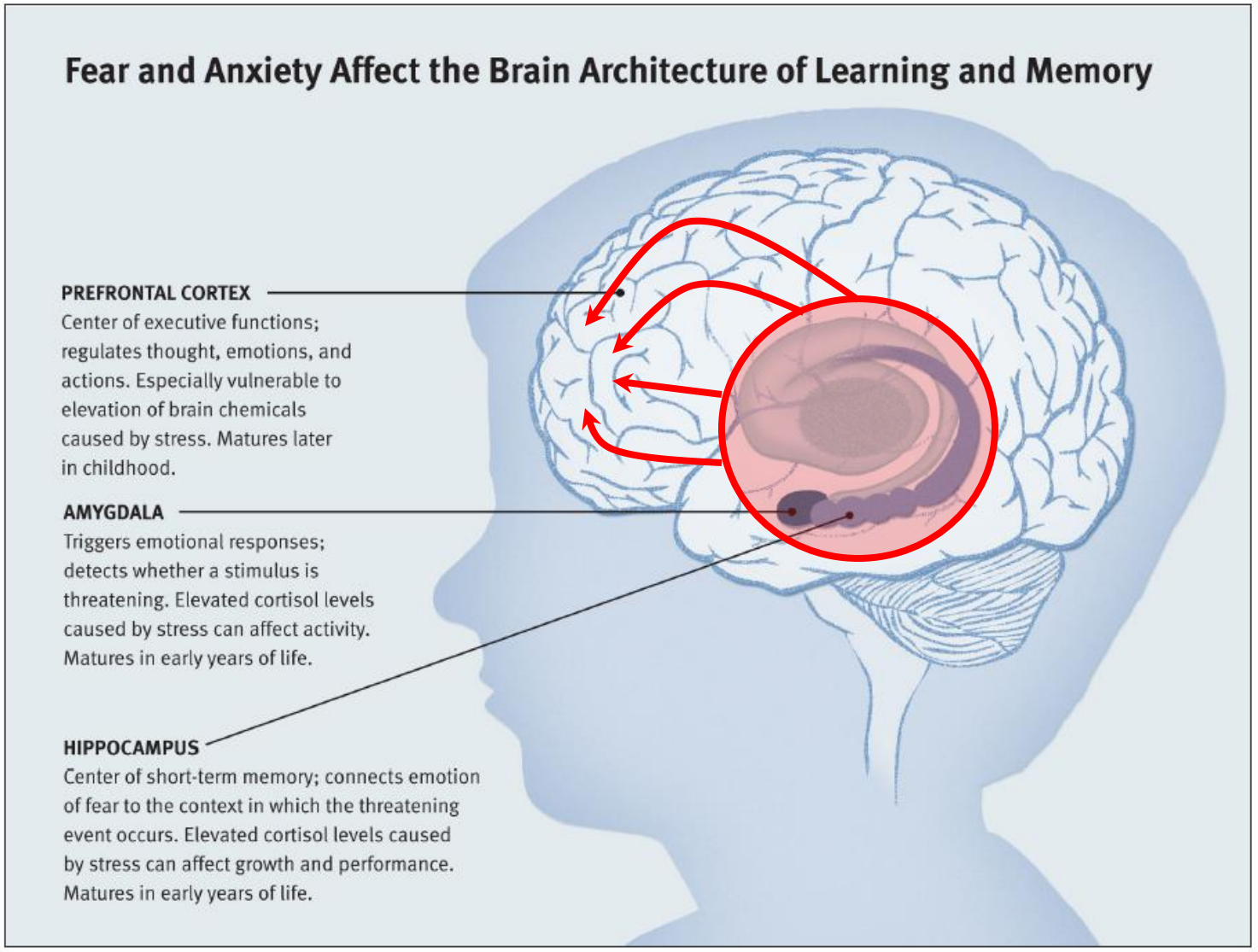


Does Anxiety Impact Learning?

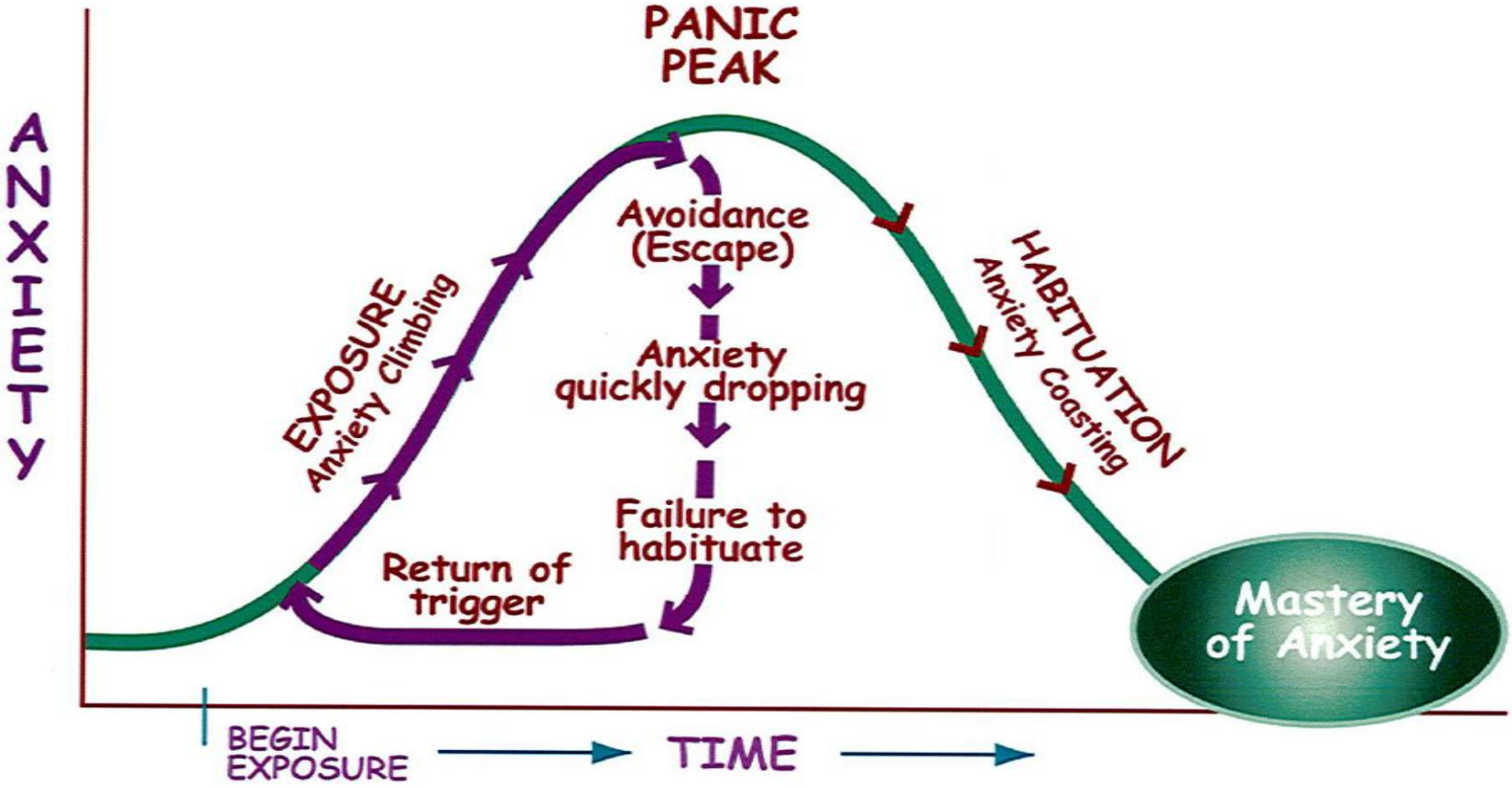
- **Studies have shown that anxiety impacts learning by:**
  - Disrupting attention, focus, and concentration
  - Disrupting efficient information processing
  - Increasing feelings of frustration and discouragement
  - Gaps in learning due to higher levels of absenteeism
  - Students not being able to engage because of somatic complaints (e.g., headaches, stomach aches, etc.)





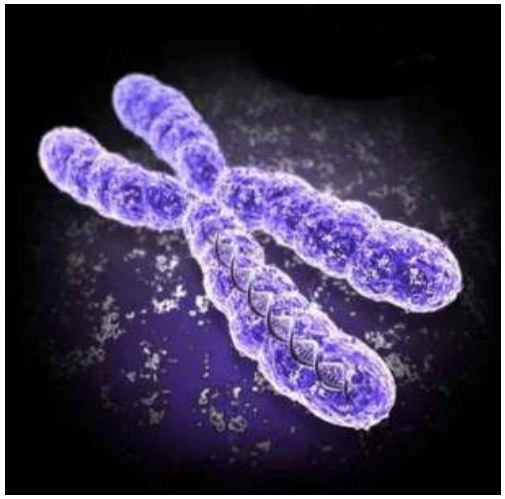
Source: Persistent Fear and Anxiety Can Affect Young Children's Learning and Development: Center on the Developing Child – Harvard University (www.developingchild.net)

Does Anxiety Impact Behaviour?

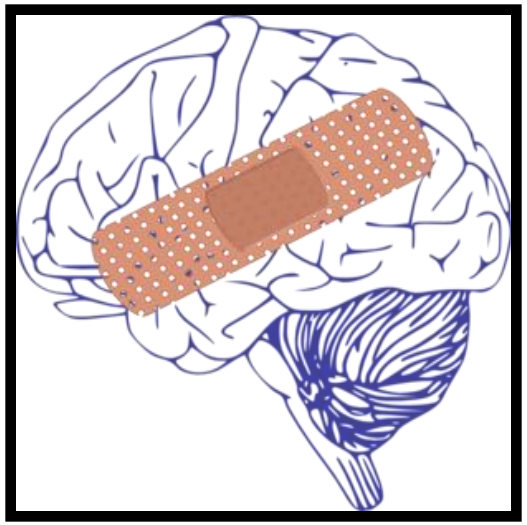


(Wagner & Jutton, 2004)


Anxiety



Etiology of Anxiety



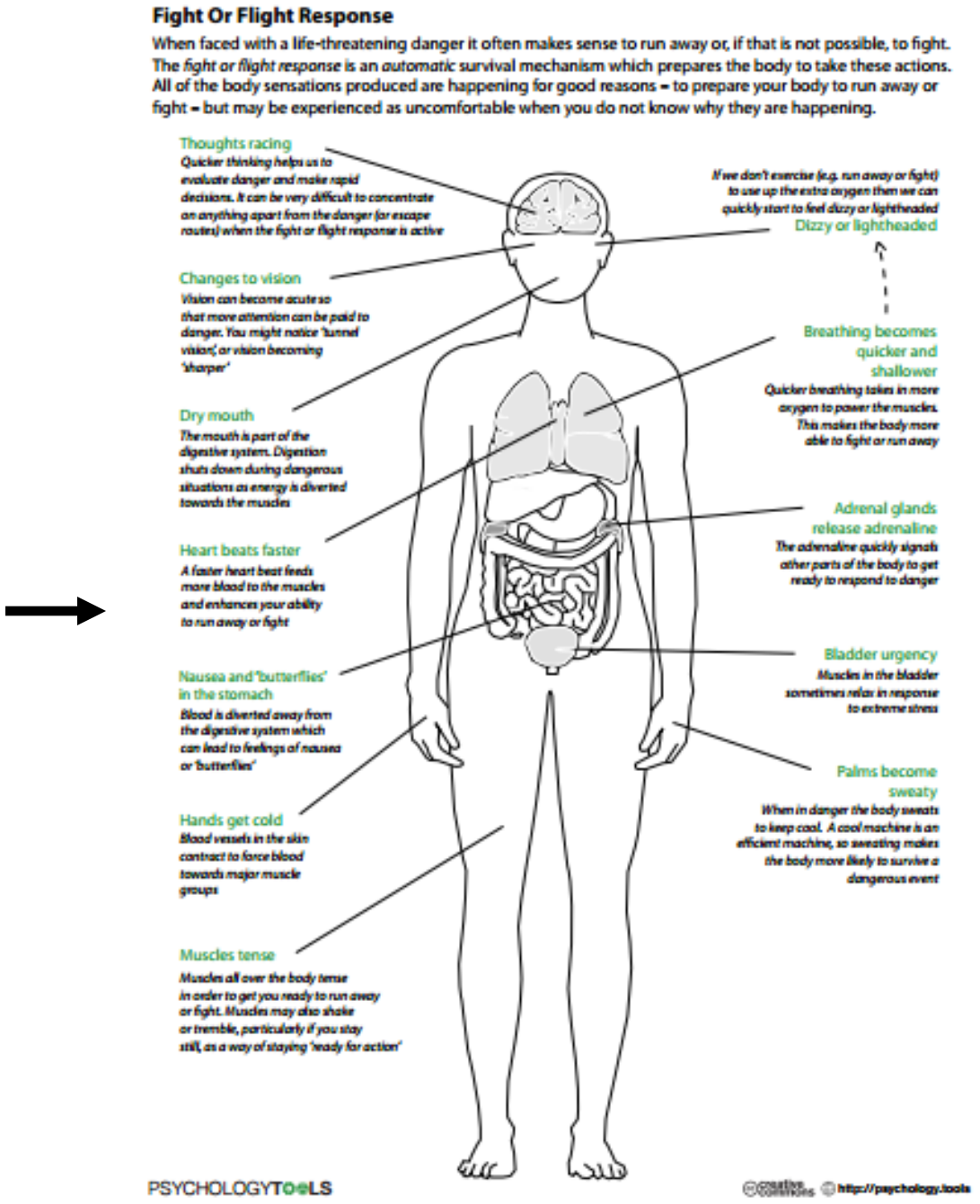
Prevalence Rates

- *Clinical Levels:*
  - Approximately 6% of school aged children have “clinical” levels of anxiety *(Canadian Mental Health Association).*
- *Non-Clinical Levels:*
  - 1 in 3 Ontario students reported high levels of stress and worry over the past few weeks *(Gr. 7-12; 2011 CAMH)*

Key Issues

- Anxiety, fear, and worry are normal body reactions.
- Anxiety is a **“biological warning”** system that enables us to anticipate and avoid harm and failure.
- Appropriate levels of anxiety is key for our survival and safety.
  - “Fight” or “flight” response

- Fight or Flight



- Anxiety can help:
  - people deal with potentially threatening situations
  - study harder for an exam
  - perform better in sports

- Anxiety Disorders:
  - The brain and the body is acting as if there is an immediate and major threat even if one does not exist.
- Individuals with anxiety tend to:
  - **OVERESTIMATE** risk, danger, and threat
  - **UNDERESTIMATE** coping abilities.

Unhelpful Thinking Styles

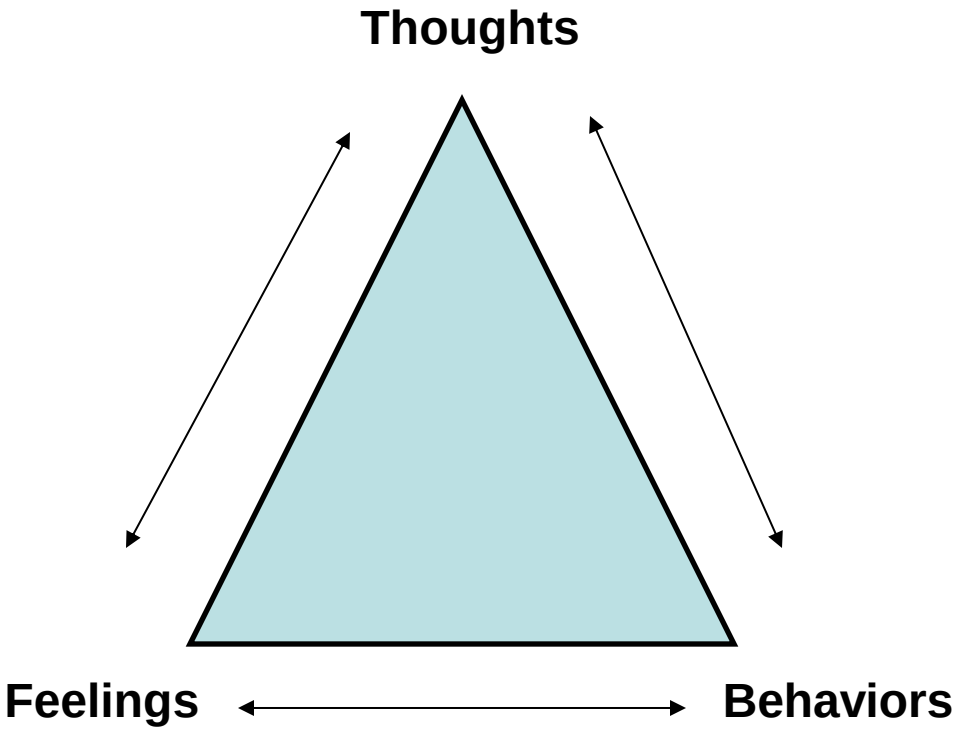
Faulty Thoughts

Illogical Thoughts

Irrational Thoughts

Catastrophic Thoughts

Components of Anxiety



Unhelpful **Thinking Styles**

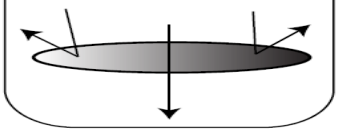
All or nothing thinking

Sometimes called 'black and white thinking'

If I'm not perfect I have failed

Either I do it right or not at all

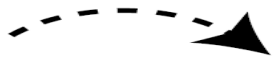
Mental filter



Only paying attention to certain types of evidence.

Noticing our failures but not seeing our successes

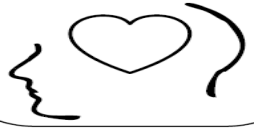
Jumping to conclusions



There are two key types of jumping to conclusions:

- **Mind reading** (imagining we know what others are thinking)
- **Fortune telling** (predicting the future)

Emotional reasoning



Assuming that because we feel a certain way what we think must be true.

I feel embarrassed so I must be an idiot

Labelling

Assigning labels to oursleves or other people

I'm a loser
I'm completely useless
They're such an idiot

Over-generalising

*"**everything** is **always** rubbish"*

*"**nothing** good **ever** happens"*

Seeing a pattern based upon a single event, or being overly broad in the conclusions we draw

Disqualifying the positive

Discounting the good things that have happened or that you have done for some reason or another

That doesn't count

Magnification (catastrophising) & minimisation

Blowing things out of proportion (catastrophising), or inappropriately shrinking something to make it seem less important

should / must

Using critical words like 'should', 'must', or 'ought' can make us feel guilty, or like we have already failed

If we apply 'shoulds' to other people the result is often frustration

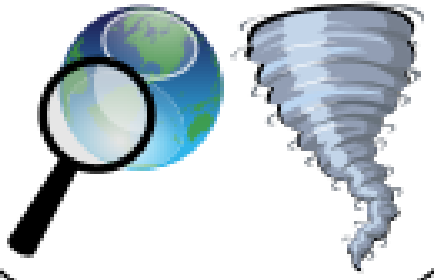
Personalisation

"this is my fault"

Blaming yourself or taking responsibility for something that wasn't completely your fault. Conversely, blaming other people for something that was your fault.

Source: PSYCHOLOGYTOOLS.ORG

Magnification (catastrophising) & minimisation



Blowing things out of proportion (catastrophising), or inappropriately shrinking something to make it seem less important

Catastrophizing

"Typical" Non-Anxious Individual	"Typical" Anxious Individual
Average windy day	**Storm that will cause trees to crash into my house and badly hurt me**
Just a tiny spider	**Poisonous tarantula that can kill**
Typical acne	**Disgusting rash that will cause everyone to stare at me and judge me**

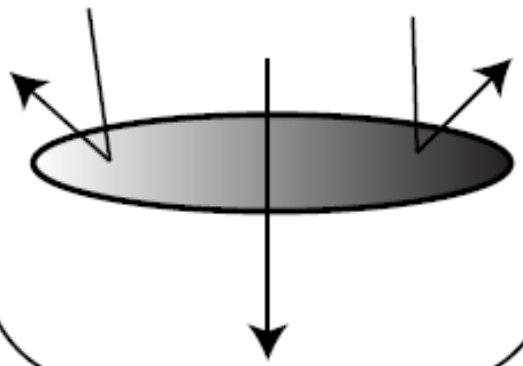
Jumping to conclusions

$2 + 2 = 5$

There are two key types of jumping to conclusions:

- **Mind reading** (imagining we know what others are thinking)
- **Fortune telling** (predicting the future)

Mental filter



Only paying attention to certain types of evidence.

Noticing our failures but not seeing our successes

Irrational Thoughts

Disproportionate Thoughts

Illogical Thoughts

Catastrophic Thoughts

If we can address the errors in thinking, we can have a significant impact of anxiety

Cognitive Behavioural Therapy

- Cognitive Techniques
  - *Thinking*
    - Strategies to change faulty thoughts to more realistic ones
- Behavioural Techniques
  - *Actions*
    - Strategies to support graduated exposure to anxiety inducing situations
- Physiological Techniques
  - *Feelings*
    - Strategies to facilitate greater levels of relaxation and calmness

Help Students Change “Faulty” Thoughts to “Realistic” Thoughts

How to identify faulty thoughts

- Simple guiding question:
  - "What is the *worst case scenario* if…….?"

- Using the "so what" questioning technique
  - Identify first thought; after each thought, we put the word "so what" ...
    - "I'm not a very good speaker"……***so what?***
    - "I might make a mistake"…….***so what?***
    - "I will look like I don't know what I'm doing"…….***so what?***
    - "The audience will think I don't know anything in this area"
    - "The audience will think I don't know anything at all"
    - "They will tell other people about how I don't know anything"
    - "More people will know about my lack of skills and knowledge"
    - "I will develop a poor reputation of being incompetent"
    - "Important people will also find out about my incompetence"
    - "I won't be able to get a job"
    - "I'll be a failure "

- Test (faulty) thoughts by examining available evidence and experiences:
- Discussing:
  - What happens to other people in similar situations?
  - Most likely thing to happen?
  - What happened when I worried before?
  - How many times has my “worst case scenario” actually come true?
  - Etc.
- Do research to find the “hard facts”

BOSS BACK THOSE WORRIED THOUGHTS!!!!

Case Example:

Test Taking Anxiety

Thoughts

"I **always** fail tests **miserably and** because I fail **all the time** I will **never** get into university"

Feelings

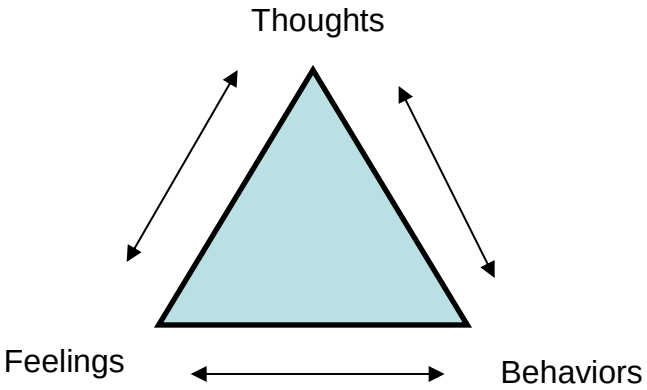
•Helpless

•Hopeless

• Sad

•Unmotivated

•**Anxious**



Behaviours

•Avoid taking tests

•Unable to complete tests

•Faking illnesses & skipping class

•Arguing with teachers and unable to concentrate in class because overly worried about upcoming tests

The Fearmometer

10. Out of control! Ballistic!
9. Can't handle it.
8. Really tough.
7. Pretty tough.
6. Getting tough.
5. Not too good.
4. Starting to bother.
3. Just a little uneasy.
2. A little twinge.
1. Piece of cake!

Unhelpful Thoughts

"I **always** fail tests **miserably and** because I fail **all the time** I will **never** get into university"

Irrational Thought

"I always fail"

Reality

Student had not failed a test all year

Catastrophizing Thought

"…fail tests miserably"

Reality

Overall Average on tests = 78%

"Worst Case Scenarios"

•What's the worst that would happen if you failed a test?

•What's the worst that would happen if you don't get into university?

Thoughts (Realistic)

• “When I study appropriately, I rarely fail tests”

•“I got an 85% on my last test, so I should do fine on this one”

•“The consequences of failing the occasional test are actually not that bad”

↓

Feelings

•Optimistic & Hopeful

• Motivated

•Sense of mastery

•**LESS ANXIOUS**

↓

Behaviours

•Fewer “avoidant” and “escape” behaviours

•More “available” for learning (e.g., greater class participation)

The Fearmometer

10. Out of control! Ballistic!
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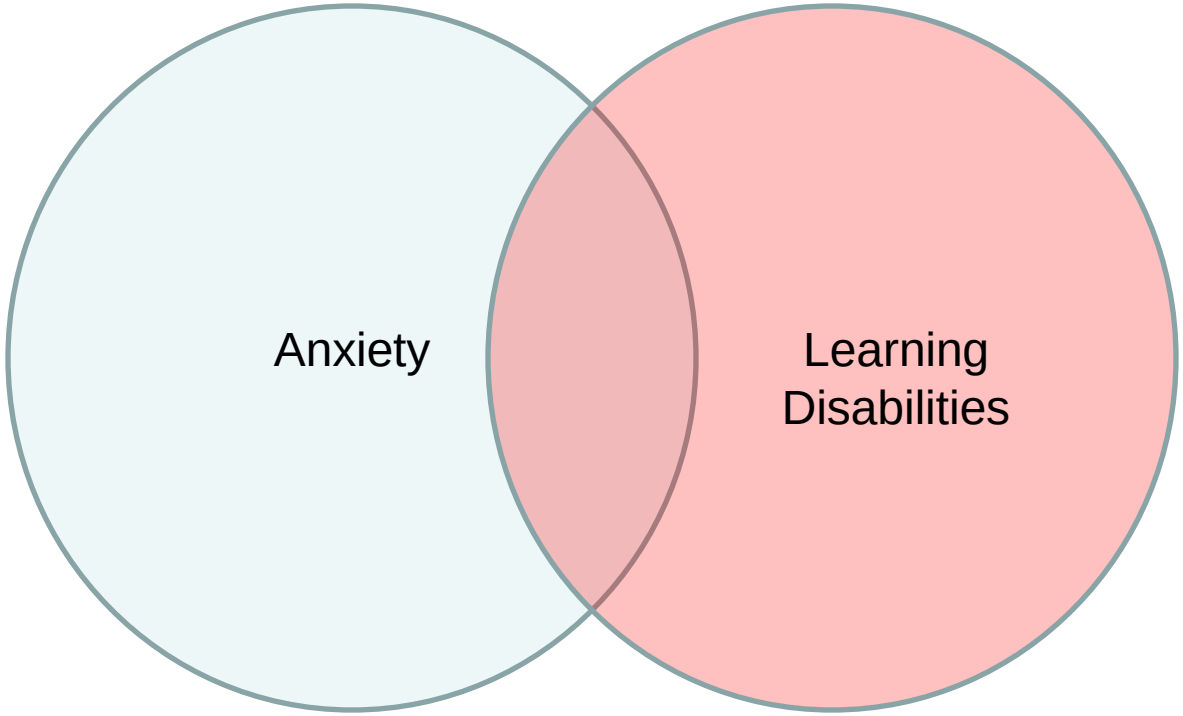

Anxiety
Learning
Disabilities

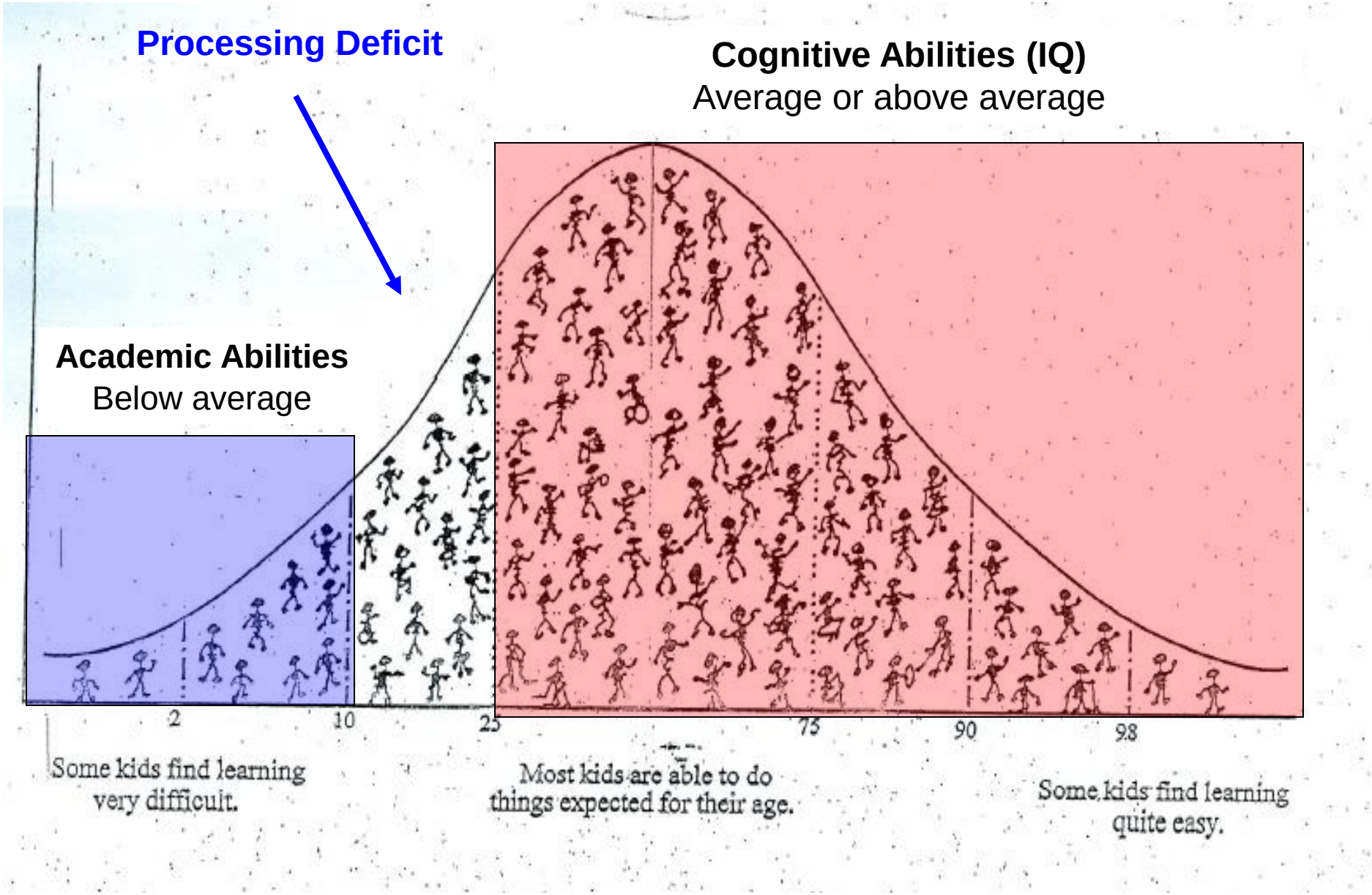
Learning Disabilities

- Significant difference between a student's overall cognitive abilities (IQ) and their academic achievement.

WIAT®-III

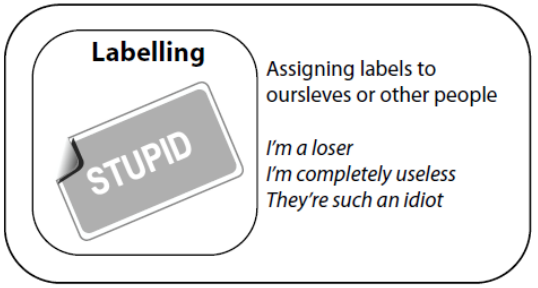
WJ® III

Learning Disability Profile



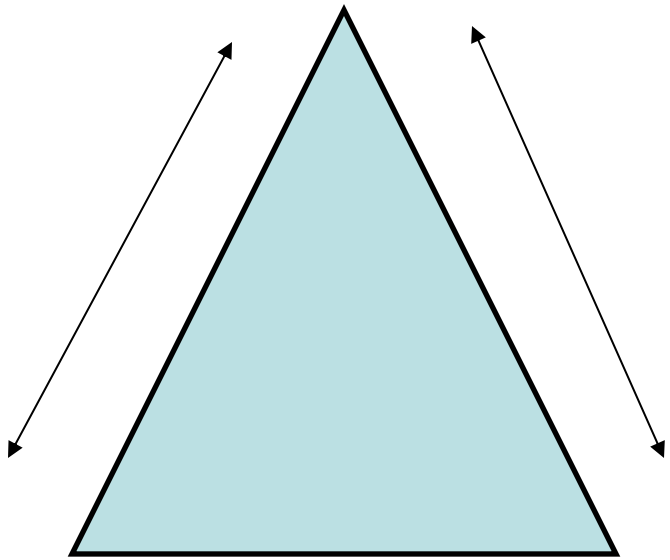
Cognitive Distortions and Learning Disabilities

- Faulty thoughts are a major contributor to the hardships experienced by students with a learning disability.



“I’m so STUPID!”

Thoughts



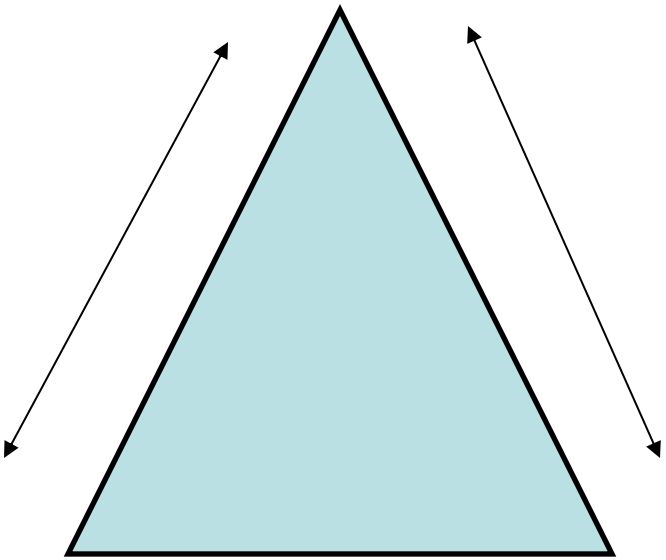
Feelings ⟷ **Behaviors**

- Overwhelmed
- Ashamed
- Purposeless
- Unsuccessful
- Frustrated
- Dejected
- Etc..

- Avoidance
- Escape
- Withdrawal
- Disruptiveness
- Class Clown
- Procrastination
- Oppositional
- Etc..

“What’s the use, I ALWAYS get EVERYTHING WRONG!!”

Thoughts



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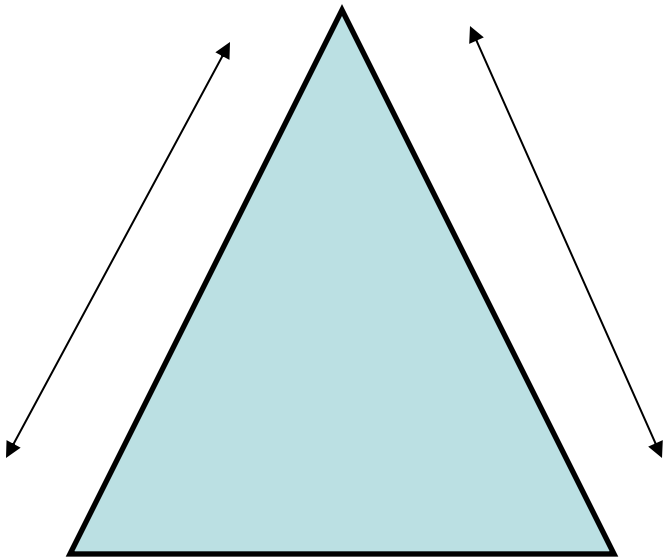
“This will take FOREVER!!!”

Thoughts



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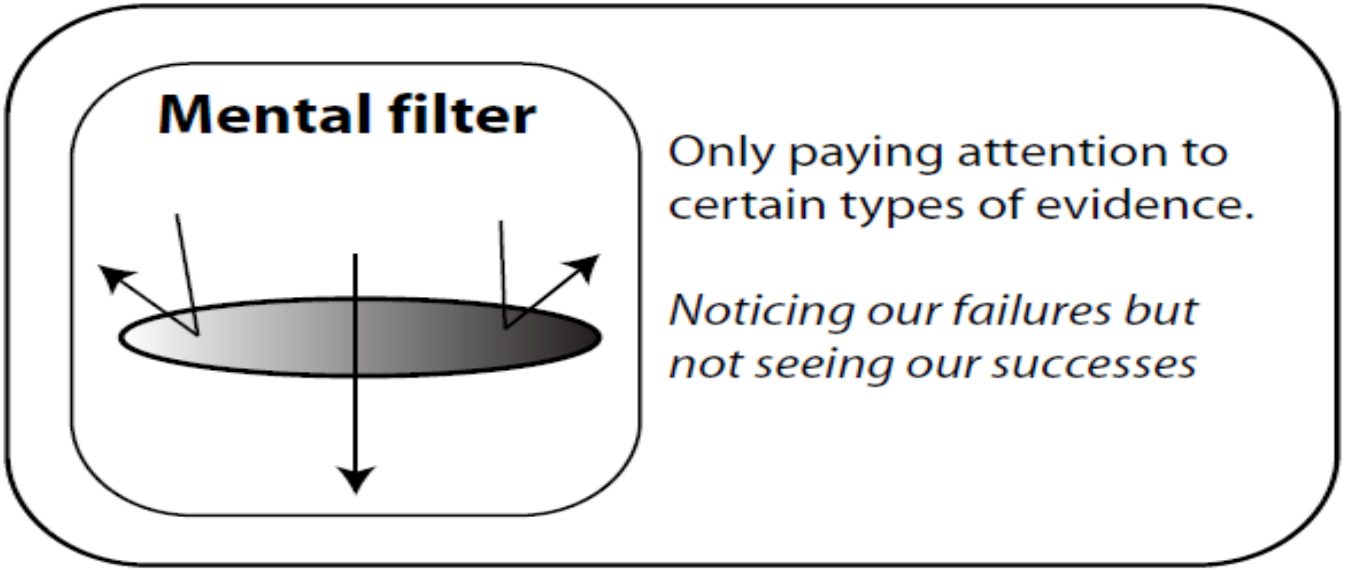
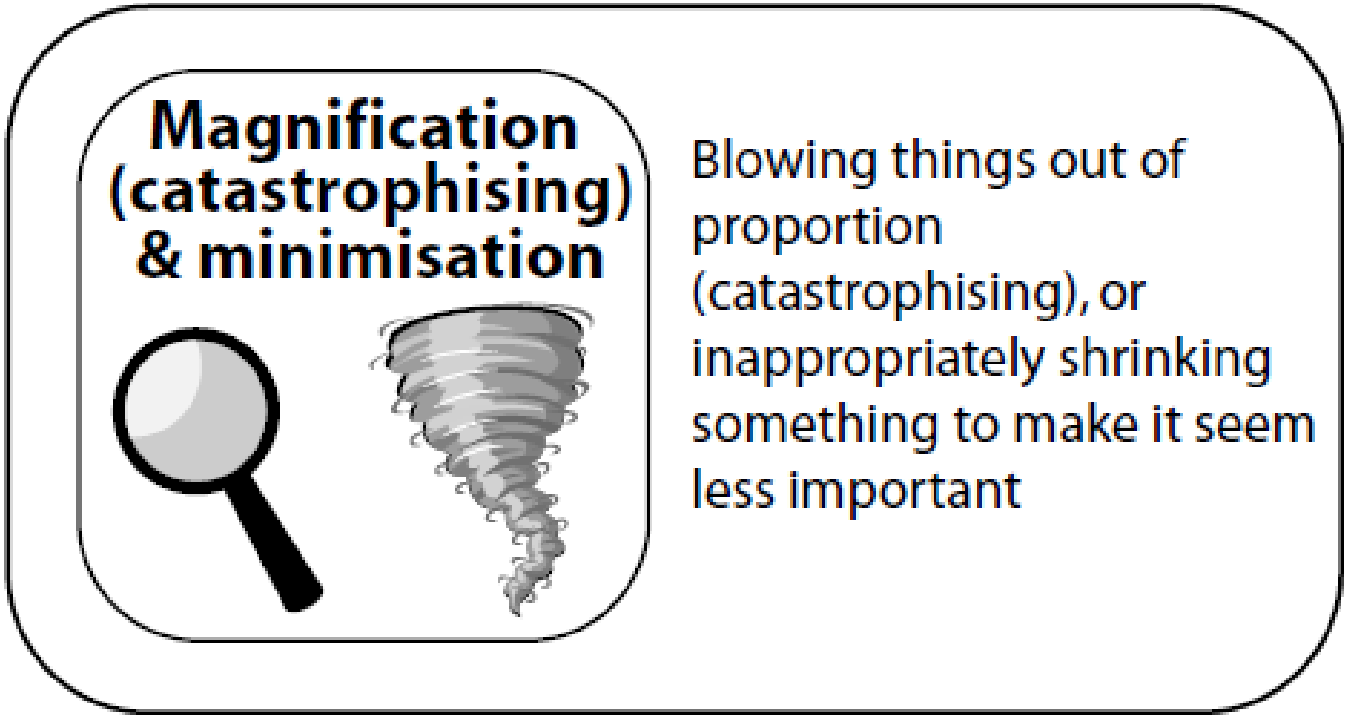
- Etc..

Thinking Errors and Learning Disabilities

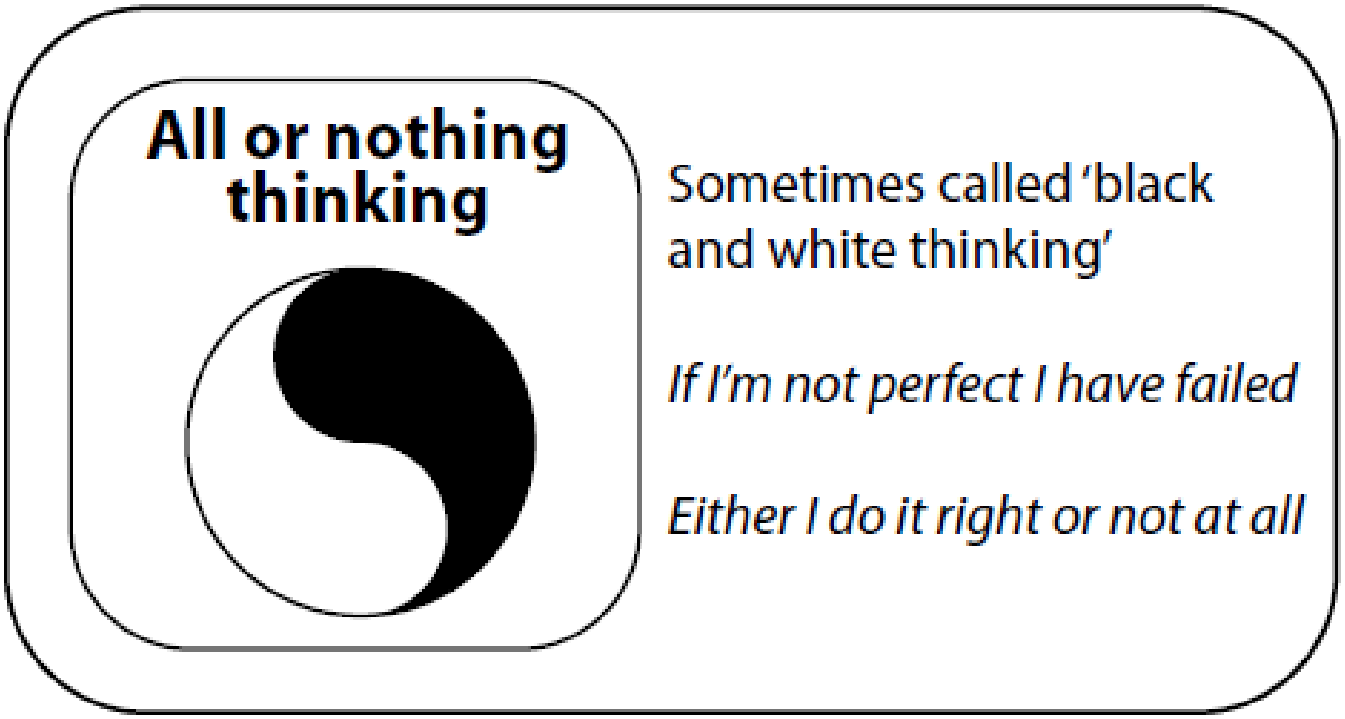


- Tendency for students with a learning disability to focus on their deficits.

- Tendency for students with a learning disability to overlook, disregard, downplay, or reject positive aspects about themselves or school.

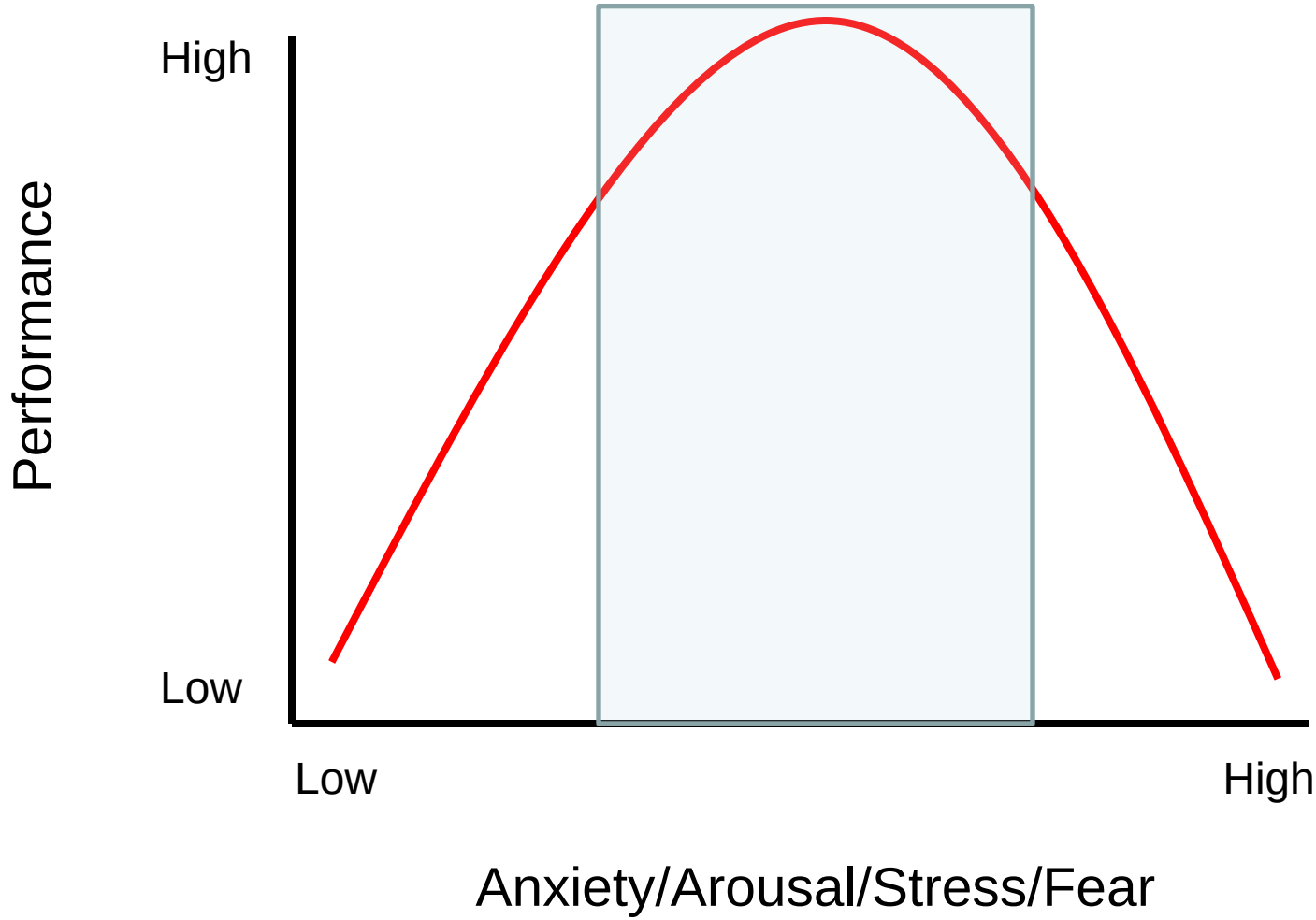


- Tendency for students with a learning disability to view mistakes as catastrophic instead of a normal part of the learning process and as opportunities to learn how to do things differently.



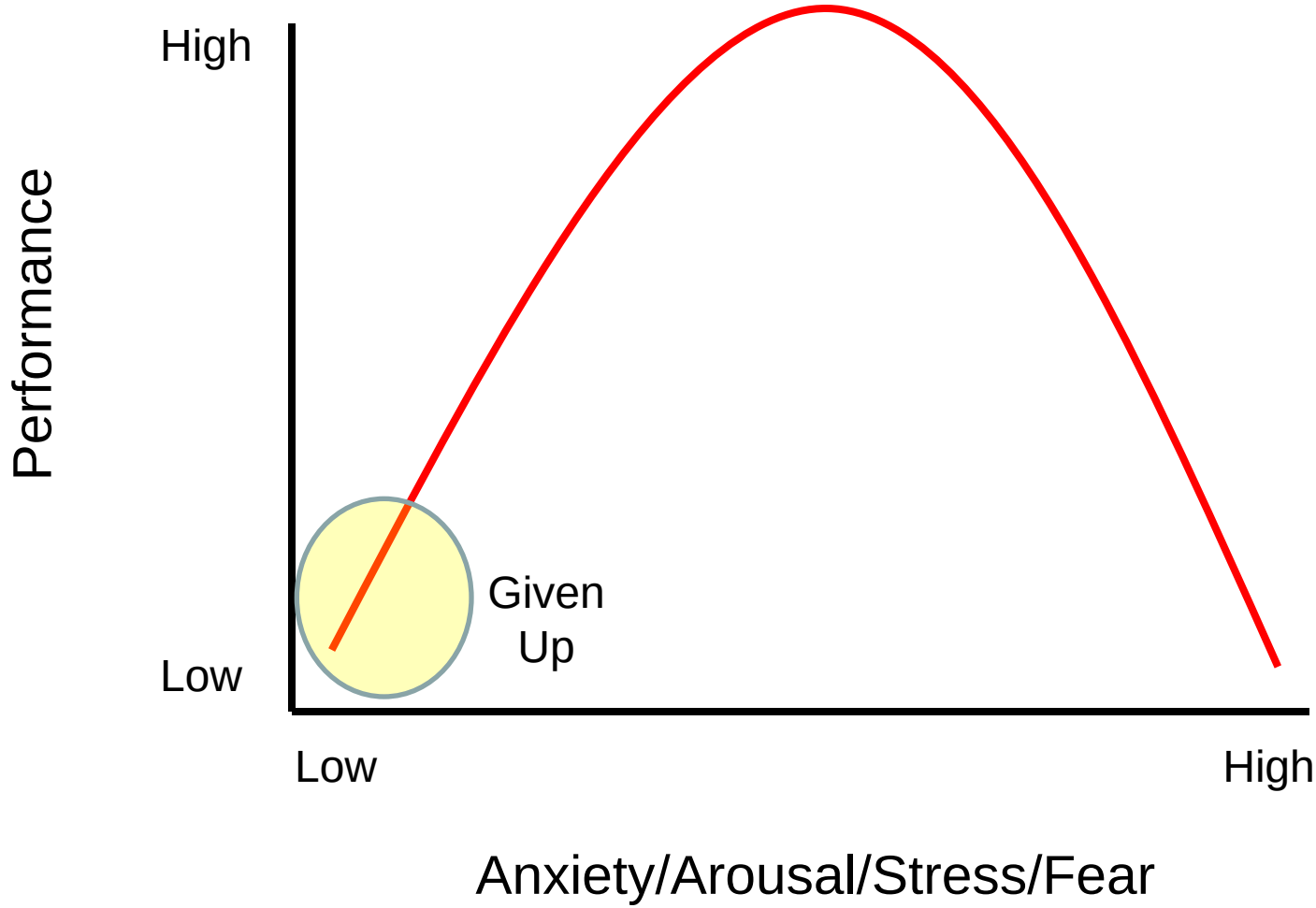
- Tendency for students with a learning disability to focus on "output" instead off "effort" or needing to do things "perfectly" or "not at all".

Why MUST we Address Unhelpful Thinking Styles?



Why MUST we Address Unhelpful Thinking Styles?

Yerkes- Dodson Law – 1908 (Inverted U Theory of performance)



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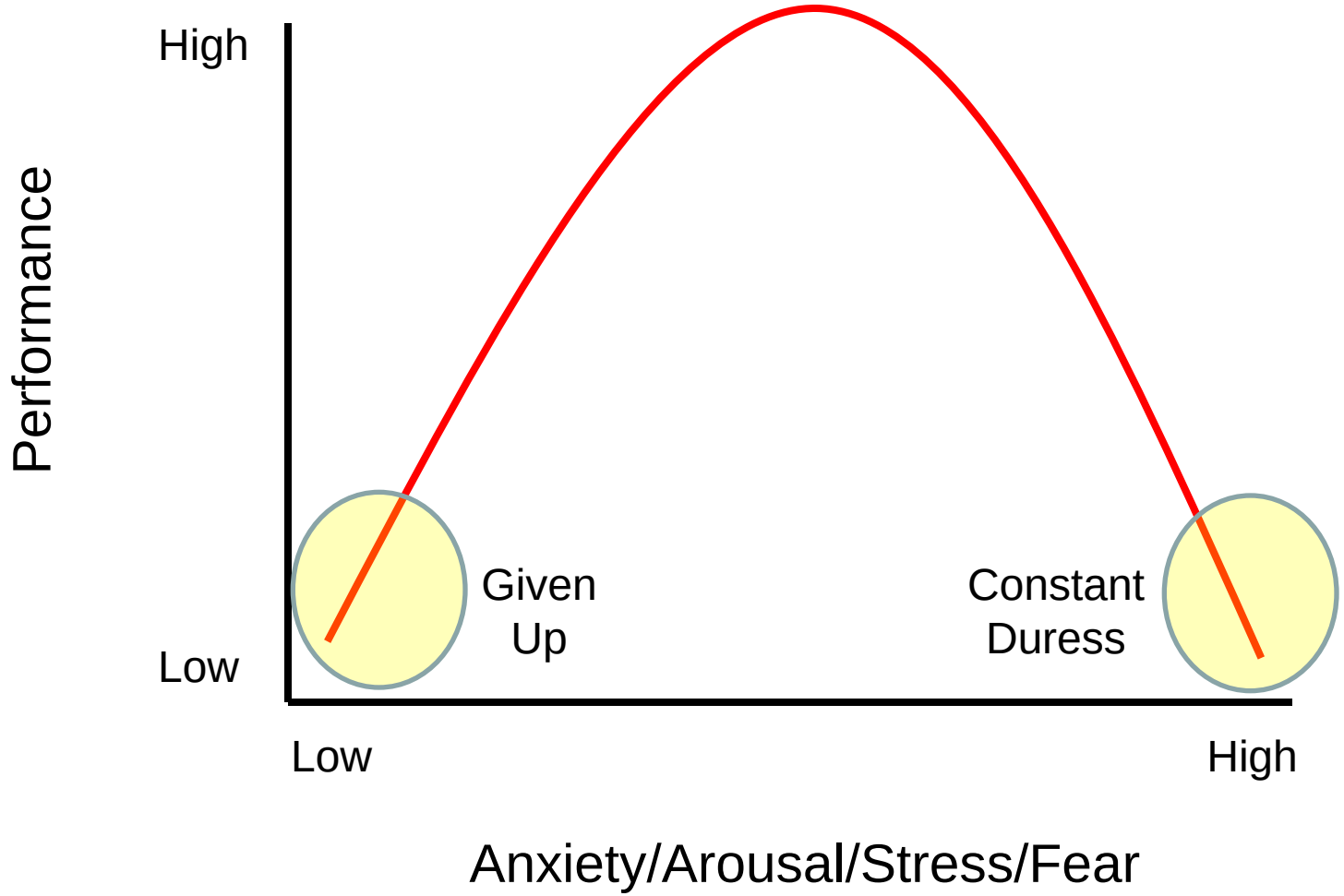
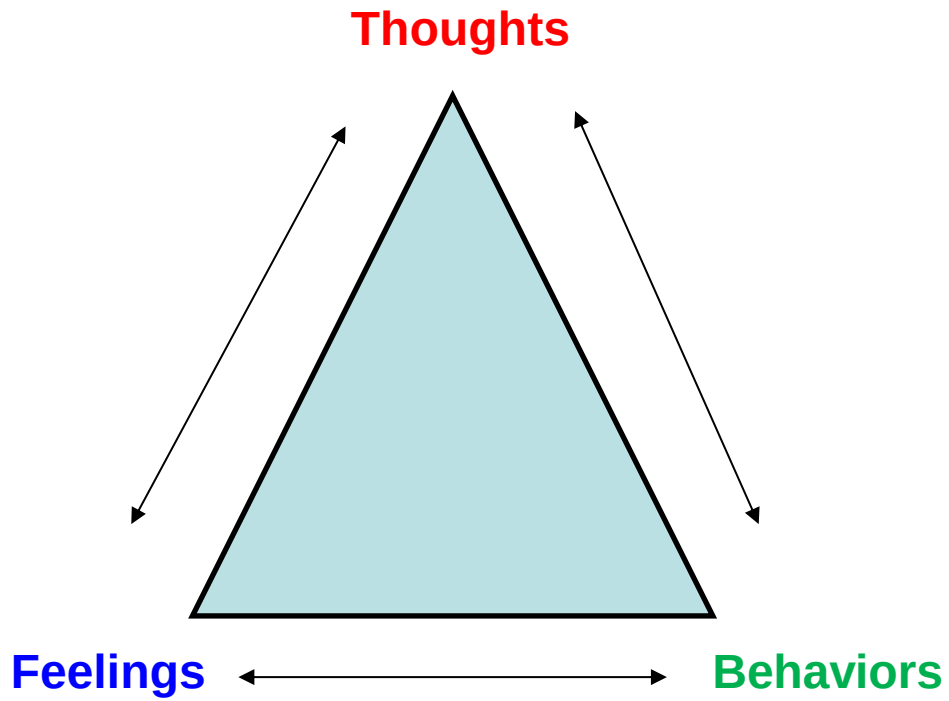


What Do We Do?

- Identify faulty thoughts and *sensitively* but directly challenge them by examining all available *evidence*!



Faulty Thought	Evidence to Explore	Realistic Thought
• "I'm so stupid"	• Demystifying LDs. • Review assessment findings and highlight strengths (e.g., 55th % ile on IQ). • Comments on report cards.	• "I may not be the smartest person in the universe, but I'm not the dullest." • "I scored better than half the kids my age who took this same test"
• "Im the only one in my class who doesn't understand this"	• Discussion with teacher about general student struggles. • Encourage student to check in with classmates about how much they know about certain topics (secondary students).	• "Learning new things can be tough for lots of people" • "Several of my friends are also struggling, so I'm not alone"
• "Everything about school sucks"	• Explore aspects of school that the student enjoys and excels at (e.g., sports teams, clubs, recess, gym class, music class, drama, lunch time, etc.)	• "Some parts of school are great, some parts of school are not so great" • "I actually like more parts of school than I dislike"

Faulty Thought	Evidence to Explore	Realistic Thought
• "This will take forever"	• Do one question with the student and time how long it takes to complete; multiply by the number of questions	• "This will only take 20 minutes"
• "I can't be successful if I have this disability"	• Successful people with learning disabilities	• "Many influential people have learning disabilities"

Daniel Radcliffe (Dyspraxia)

Jamie Oliver (Dyslexia)

Whoopi Goldberg (Dyslexia)

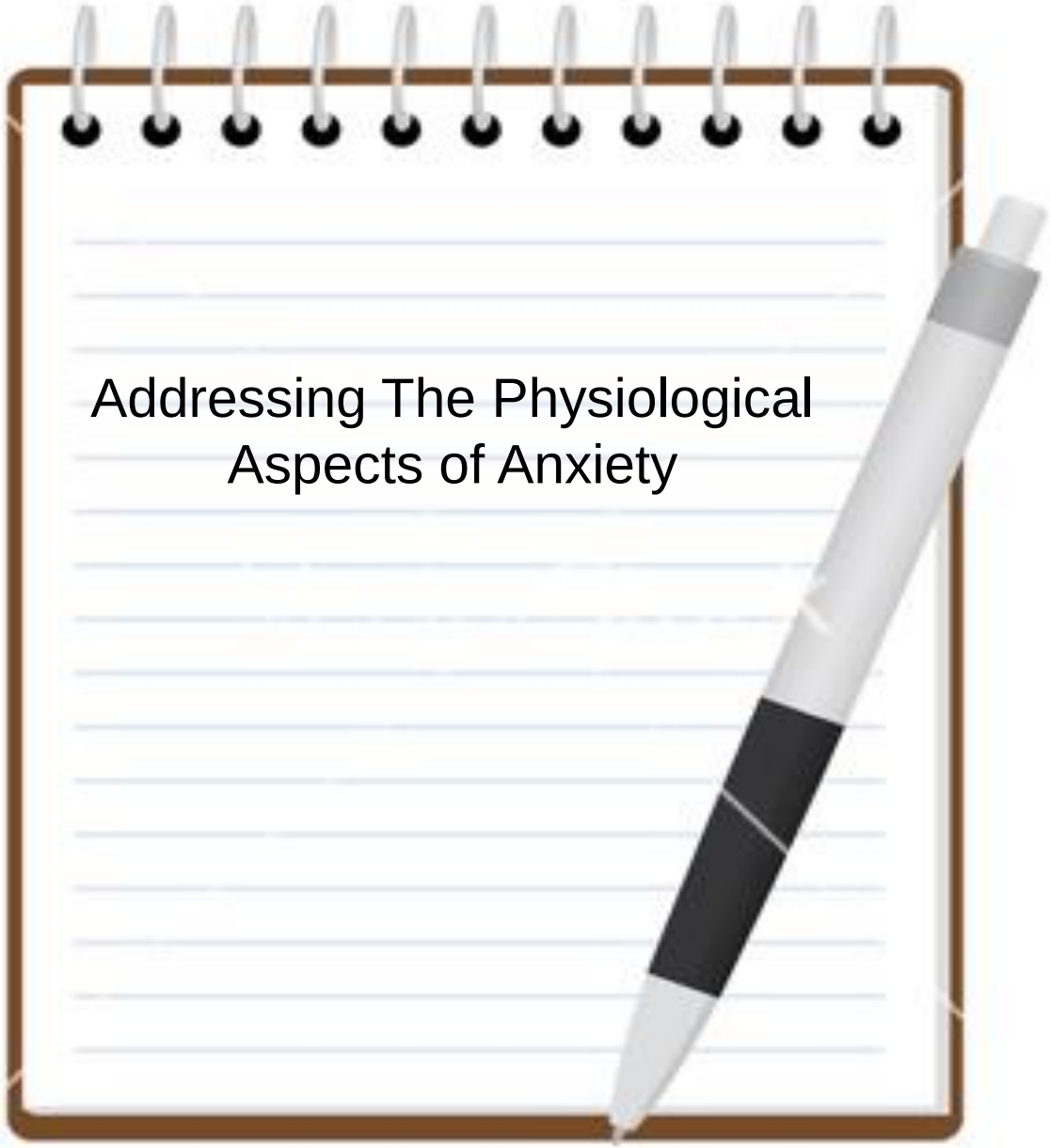
Anderson Cooper (Dyslexia)

elberg (Dyslexia)

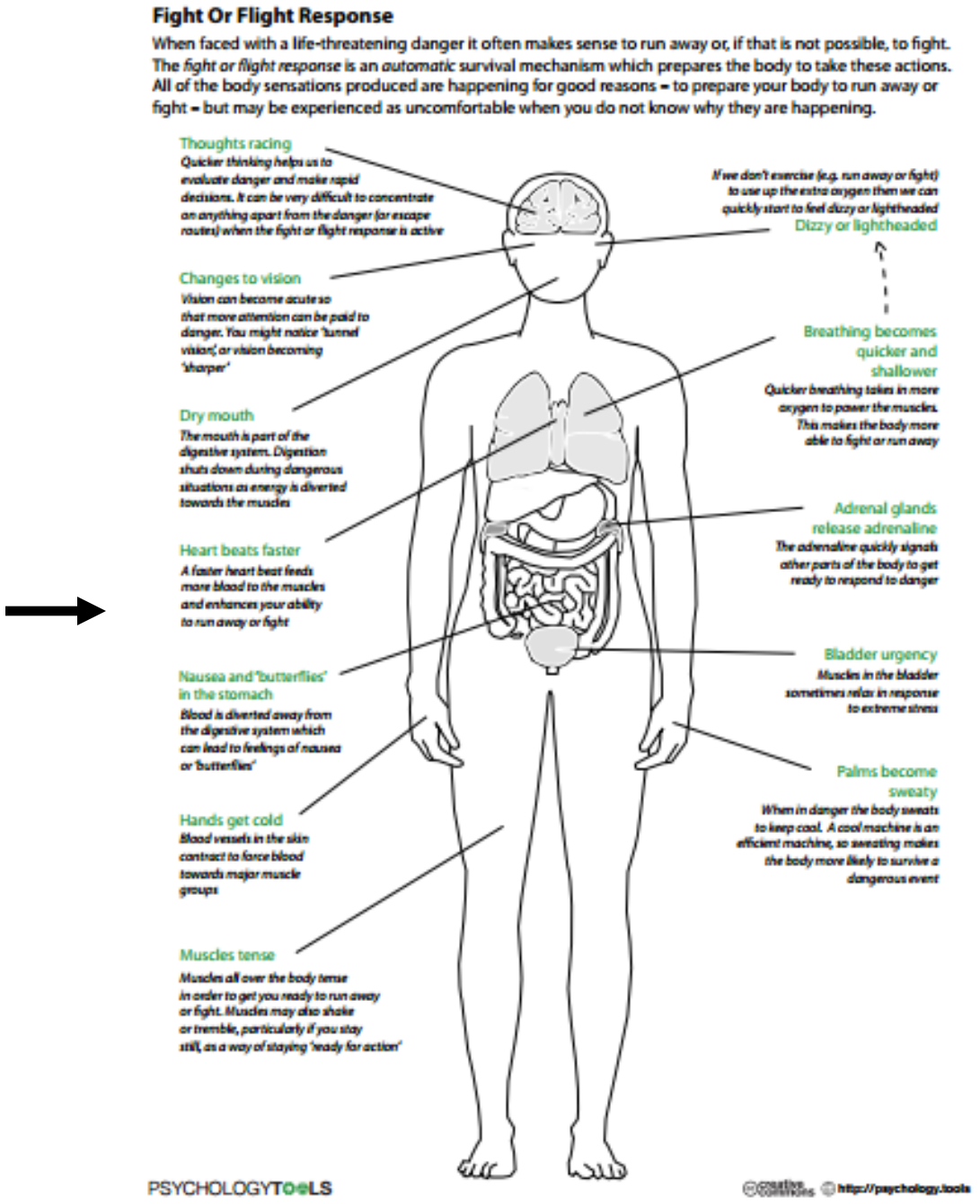
Source: http://www.special-education-degree.net/25-famous-people-with-learning-disorders/

Underestimate Coping Abilties

- Talk to students about the accommodations they are entitled to:
  - Technology
  - Extra time
  - Preferential seating
  - Quiet space
  - Calculators
  - Etc.


Addressing The Physiological
Aspects of Anxiety

- Fight or Flight



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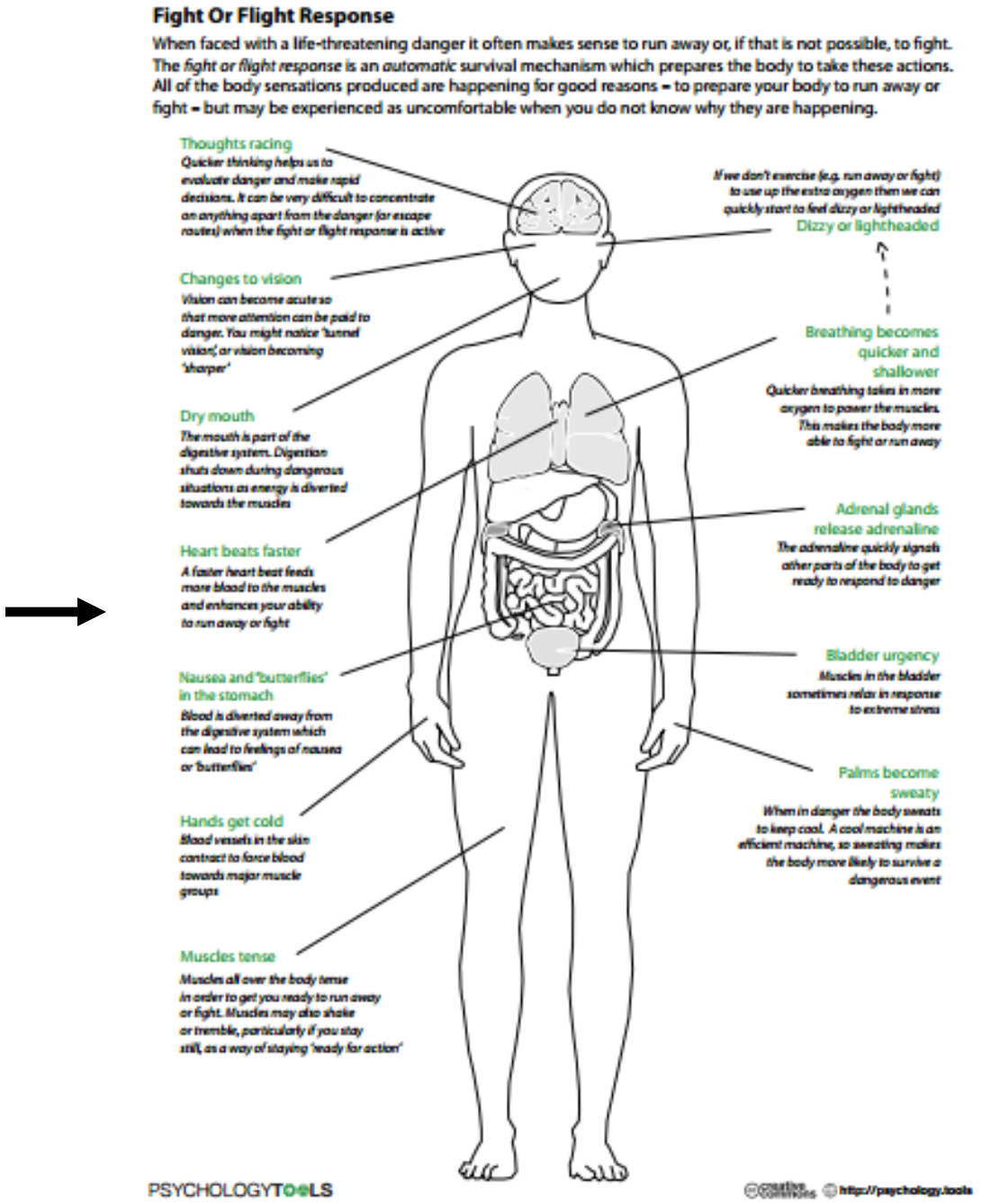

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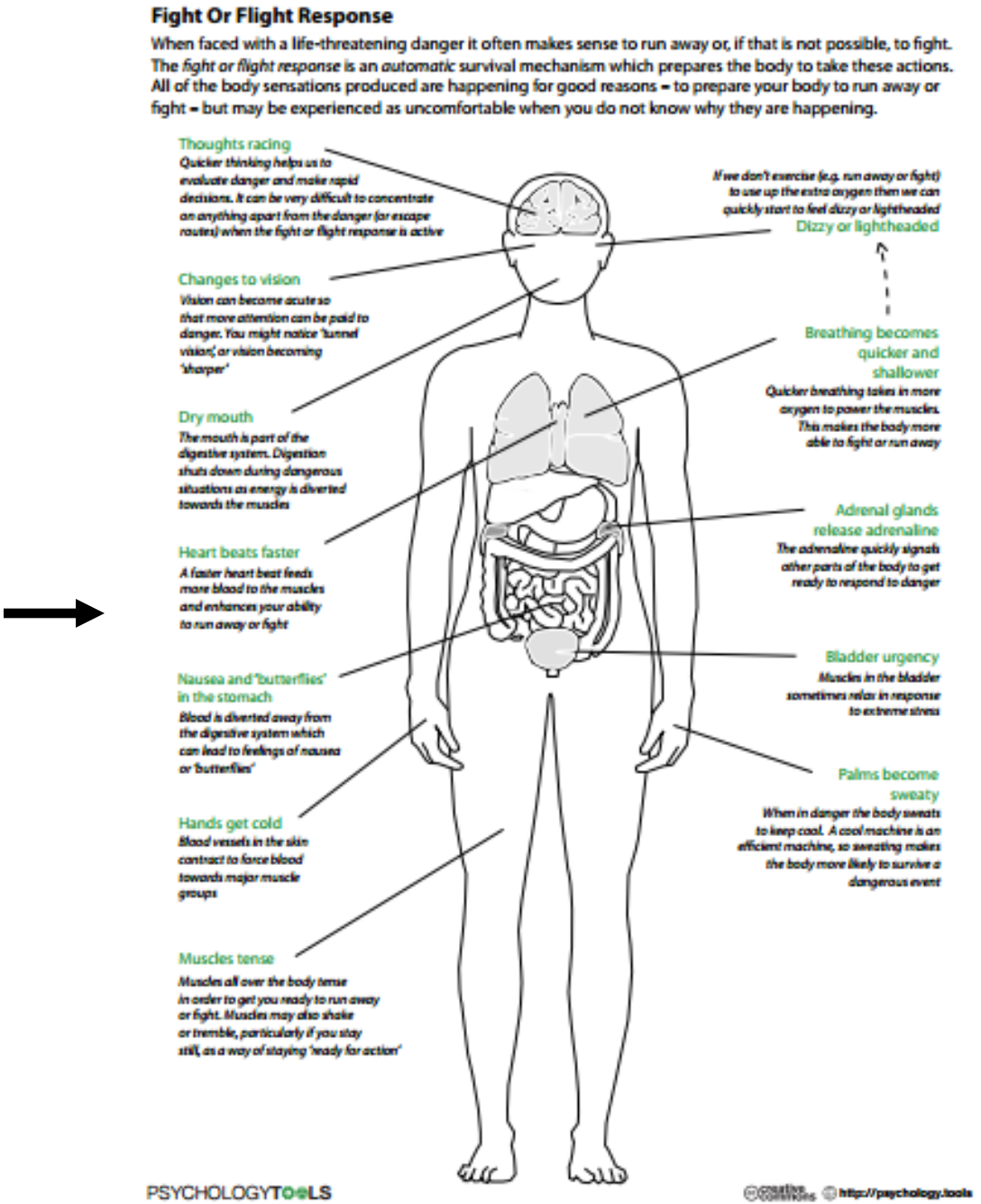
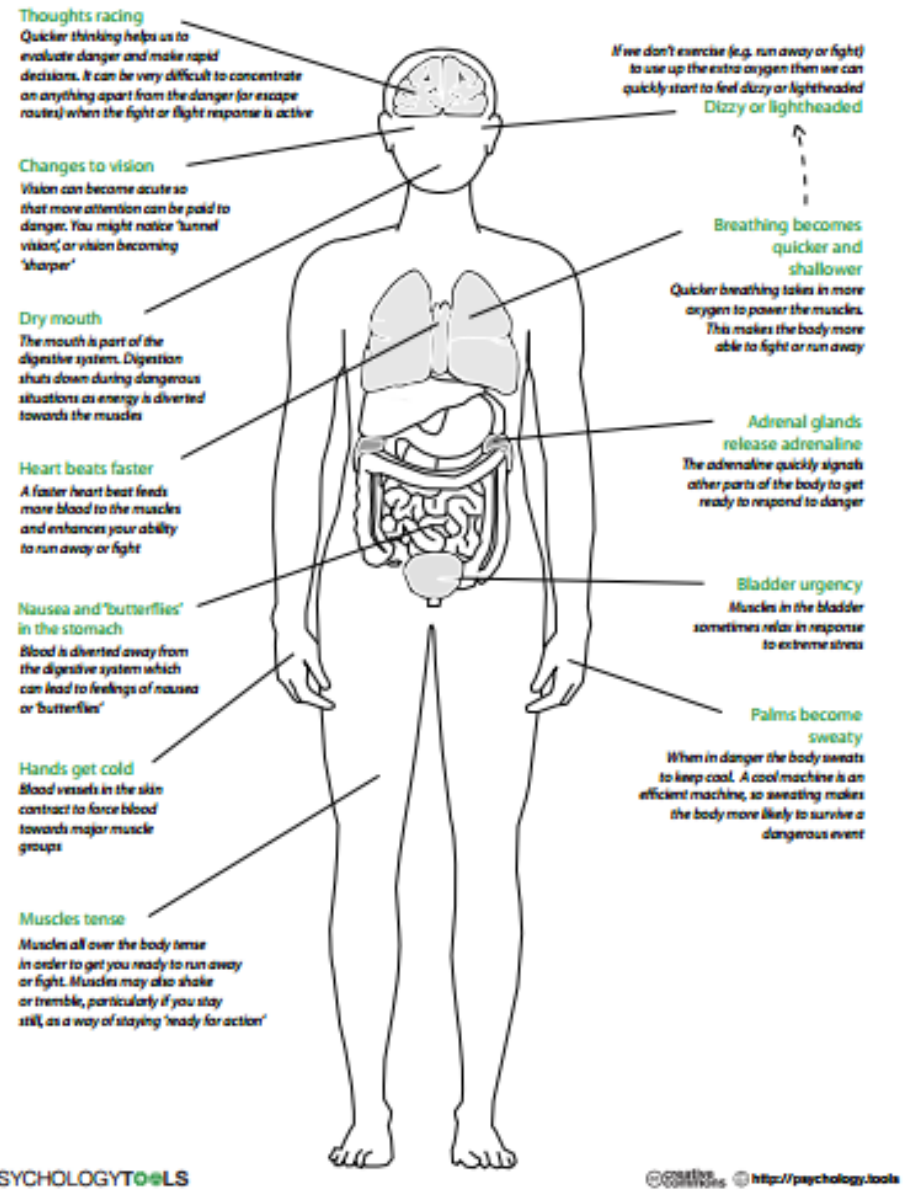


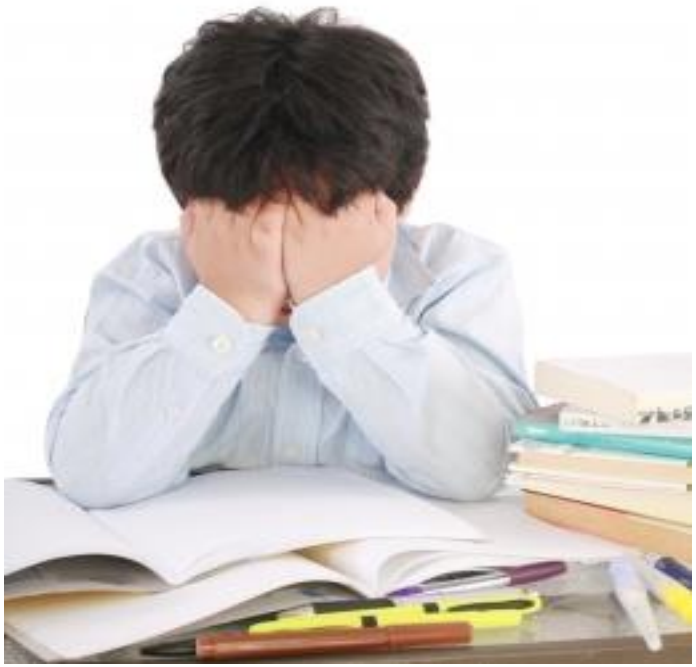
- Fight or Flight

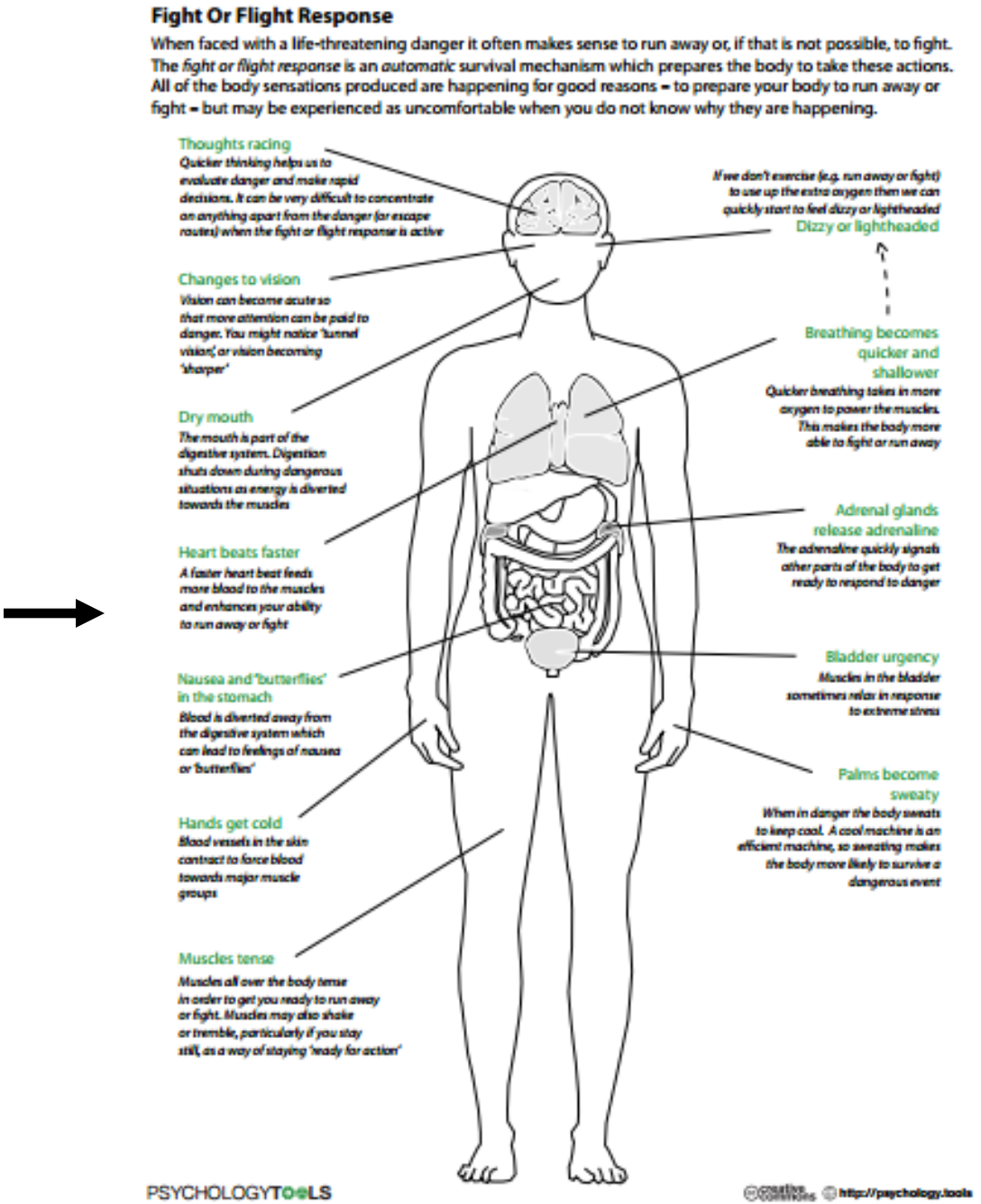
Fight Or Flight Response

When faced with a life-threatening danger it often makes sense to run away or, if that is not possible, to fight. The *fight or flight response* is an *automatic* survival mechanism which prepares the body to take these actions. All of the body sensations produced are happening for good reasons – to prepare your body to run away or fight – but may be experienced as uncomfortable when you do not know why they are happening.



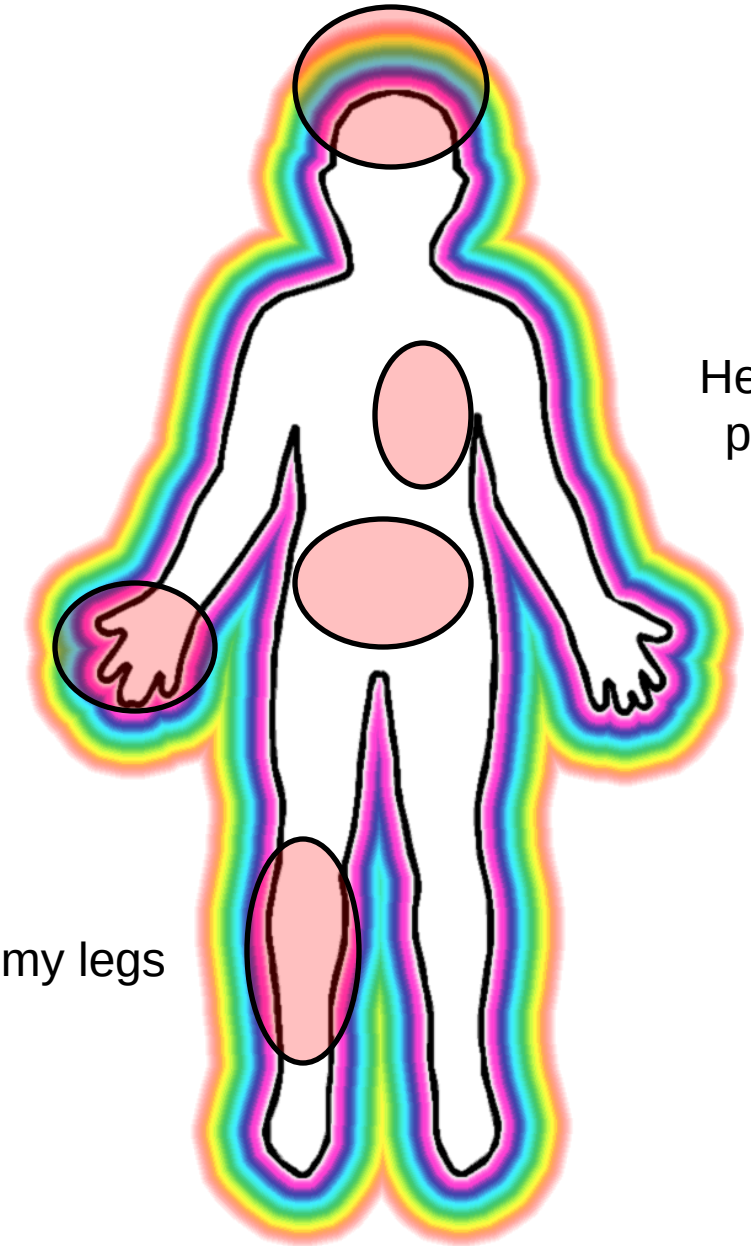
- Fight or Flight





- Talk to student about how their bodies physiologically respond to anxiety.

Extremely worried thoughts



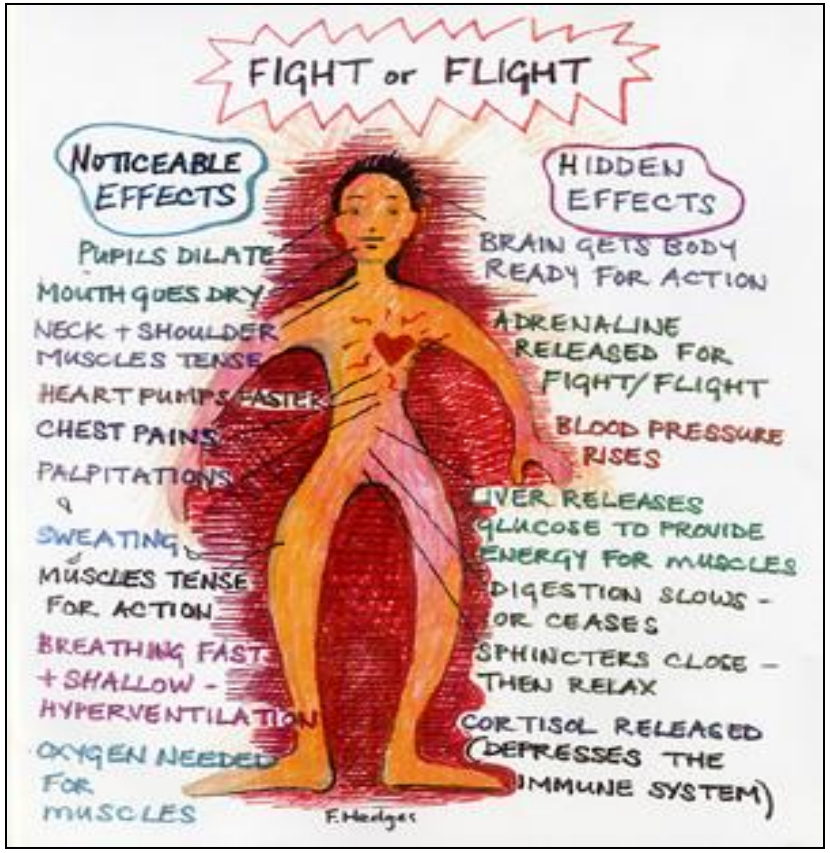
Heart starts pounding

Sweaty palms

Start feeling nauseas

Constant need to twitch my legs

Relaxation Therapy



Deep Breathing Exercises

Progressive Muscle Relaxation

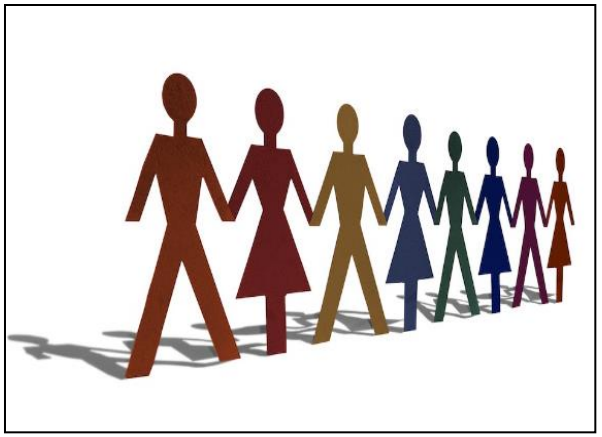
Mindfulness Exercises

Imagery

Physiologically **impossible** to be anxious and relaxed at the SAME time!

Summary

- Focus on resiliency by giving students the right tools for success!
  - Understanding the complex relationship between learning disabilities and mental health.
    - Minimize risk and maximize protective factors.
- It takes a village
  - Use multidisciplinary teams and agencies



Resources

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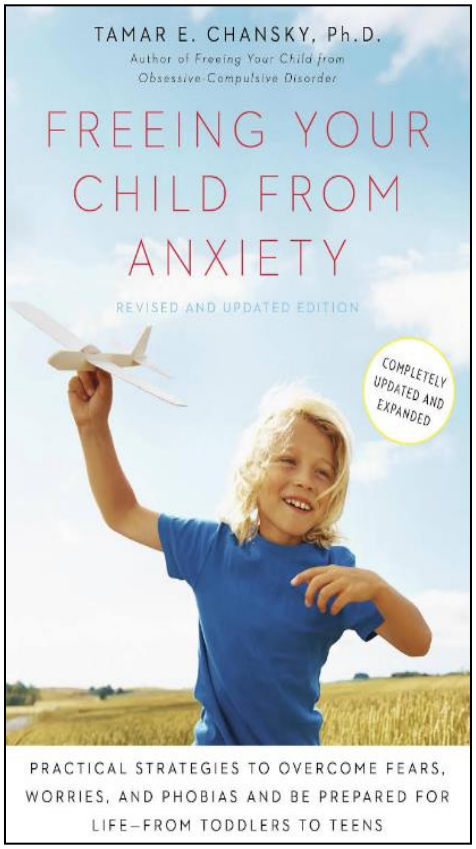
Resources. Results. Relief.

www.anxietyBC.com

http://www.worrywisekids.org/



Thank You!