The background is a light gray with a fine, repeating geometric pattern. It is decorated with various abstract shapes: a small red dot in the top left, a blue ring, a white circle with a red triangle behind it in the top center, a large orange circle on the right, a green circle below it, a red circle and a purple circle in the lower right, and several triangles in shades of gray, purple, orange, and black. A thin black line forms a large 'V' shape on the left side.

Misdiagnosis, Mental Health, and Masking

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Selectively
Mute

Background
Hoverer

Collector

Well
Behaved

'Child
Me'

Sensitive

Anxious



The Research

Autistic girls show more **INTERNALISING** problems whilst autistic boys have more external behaviour problems.

- **Kopp & Gillberg (1992)** – Female Phenotype Theory – autistic girls appear different to autistic boys
- **Wilson et al (2016)** – Less repetitive and restricted behaviours in girls
- **May, Cornish, & Rinehart (2014)** – More challenging behavioural problems and hyperactivity in boys with more social anxiety in girls
- **Hiller, Young, & Weber (2014)** – Autistic children with no issue adjusting behaviour for the situation were nine times more likely to be a girl
- **Rabbitte, Prendeville, & Kinsella (2017)** – Girls were passive in the school setting


The Research

Autistic girls need to have **MORE** behavioural problems to have a diagnosis.

Dworzynski, Ronald, Bolton & Happé (2012)

- How different are girls and boys above and below the diagnostic threshold for autism?
- Compared 10-12 year olds diagnosed with autism with those who failed to meet diagnostic criteria but who scored high on a trait measure of ASC
- 'In the absence of intellectual or behavioural problems, girls are less likely than boys to meet diagnostic criteria for ASC' – both girls and boys had equally high autistic traits!

The Research



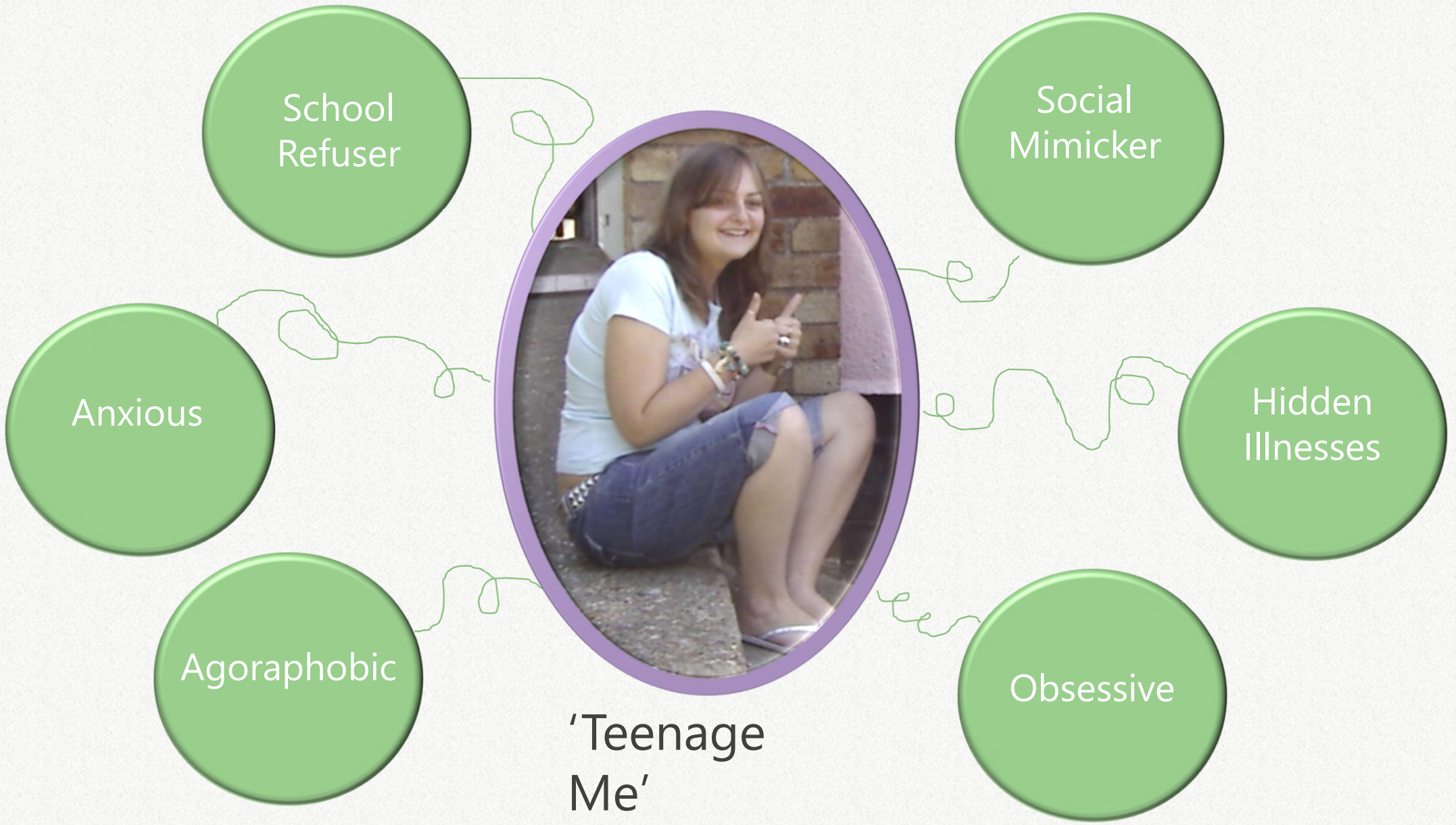
Autistic girls are on the periphery of their friendship groups, close enough to seem like they're **FITTING IN.**

Dean, Harwood, & Kasari (2017)

- Boys tended to play organised games and autistic boys tended to play alone
- Girls tended to spend more time in 'joint engage'. Autistic girls stayed in close proximity to friendship groups, weaving in and out of activities, masking social challenges and remaining close to the 'action'

Sedgewick, Hill, Yates, Pickering, & Pellicano (2016)

- Autistic girls have similar social motivation and friendship as non-autistic girls. Autistic boys did not



The Research



Autistic women have shown masking and compensating behaviours, which **CAMOUFLAGE** their autistic traits

- **Lai et al (2017)** – Autistic women have higher operationalised camouflaging scores than autistic males i.e. there is a greater discrepancy in their self-reported autistic traits and their observable social skills
- **Hull et al (2017)** – Autistic women camouflage to hide and 'fit in', these women used masking and compensation to camouflage
- **Hull et al (2019)** – Developed the Camouflaging Scale to measure – autistic women scored higher than autistic men

<https://www.youtube.com/watch?v=VzWorS8CdBM> (1.30min – 7.30min)

The Research

Compensating may be encouraged in females more than males, due to **GENDER SOCIALISATION DIFFERENCES**

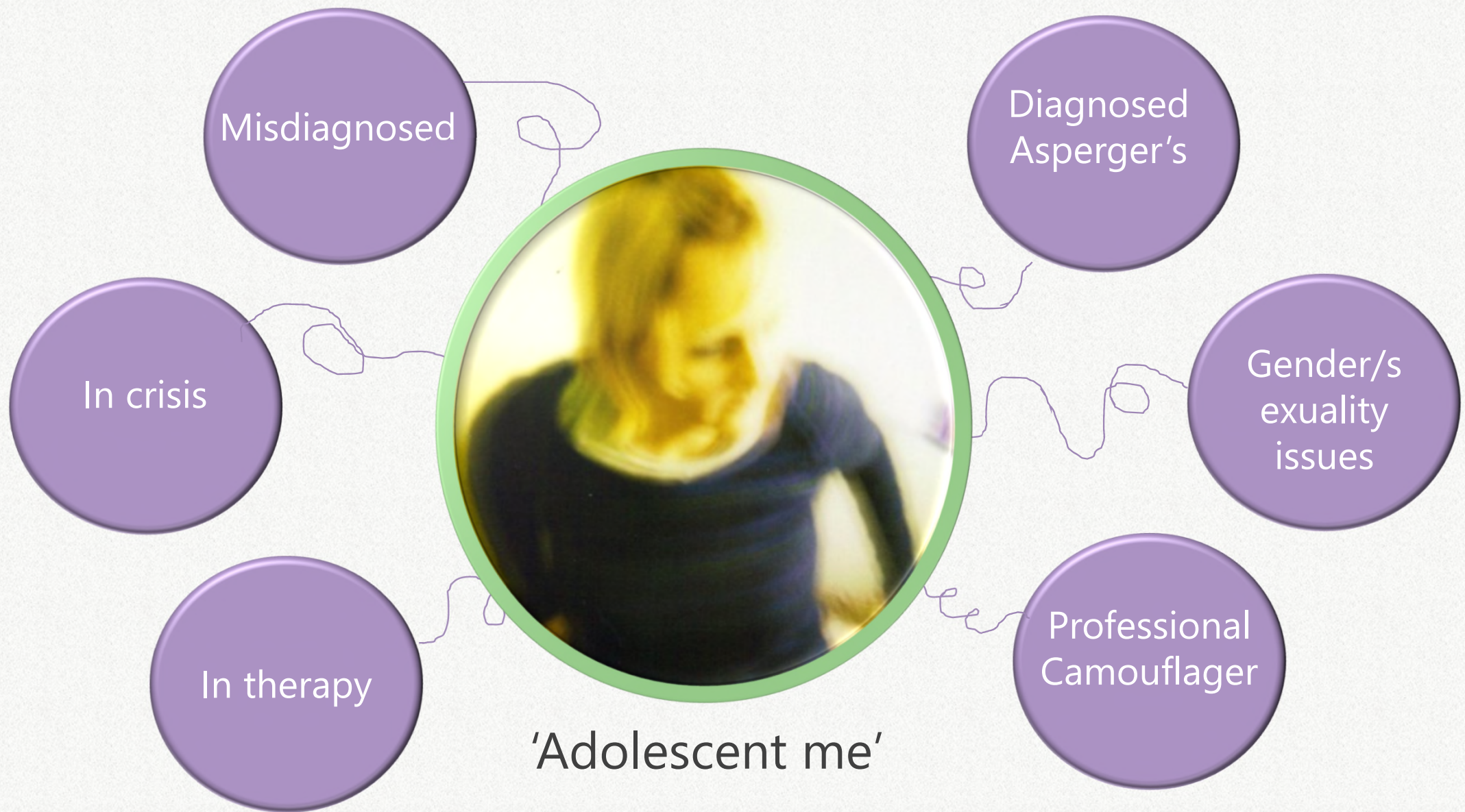
- **Tierney, Burns, and Kilbey (2016)** – Adolescent girls reported a strong desire to make friends, although often initiated by parents
 - Friends who nurtured and developed social skills
 - Friendship helped by strong innate empathy and observation skills. Socialising like a jigsaw puzzle – developing social code
 - Acting and imitation common
- **Dean, Harwood, & Kasari (2017)**
 - Female social landscape is ideal for autistic girls to camouflage their difficulties and 'fit in'
- **Parents consistently report** their daughters have more 'severe' autistic traits than the parents of sons, even when there are no differences in trait severity. More social behaviours expected from girls

The Research

Compensating may partially
be due to **SEX-**
DISTINCTIVE cognitive
strategies

Livingstone, Colvert, Bolton, & Happe (2018) -

- High compensators despite poor theory of mind autistic people have higher verbal IQ, better executive functioning (EF) and greater self-reported anxiety.
- Other studies also link EF to compensating and it has been found to be more advanced in autistic girls. EF improves impulse control, focus shifting, multi-tasking etc.



The Research

Females are often
diagnosed with autism in
LATE adolescence and early
adulthood

- **Ehlers and Gillberg (1993)** - When possible and suspected ASC cases are included in gender ratio research, more autistic women appear (males:females = 2.3:1)
- **Begeer et al (2013)** – Autistic women and girls took longer to be diagnosed after first concerns than autistic men and boys
- **Baldwin & Costley (2015)** – Mean average age of diagnosis was 25 for autistic women, and 58% did not receive a diagnosis of ASC until after 18 years of age
- **Bancroft, Batten, Lambert, & Madders (2012)** - Only one fifth of girls were diagnosed before the age of 11, compared to over half of boys

The Research

Because autistic girls don't 'look' the same as autistic boys, clinicians will often **MISDIAGNOSE** autism as a mental illness, or focus on co-morbid mental health conditions

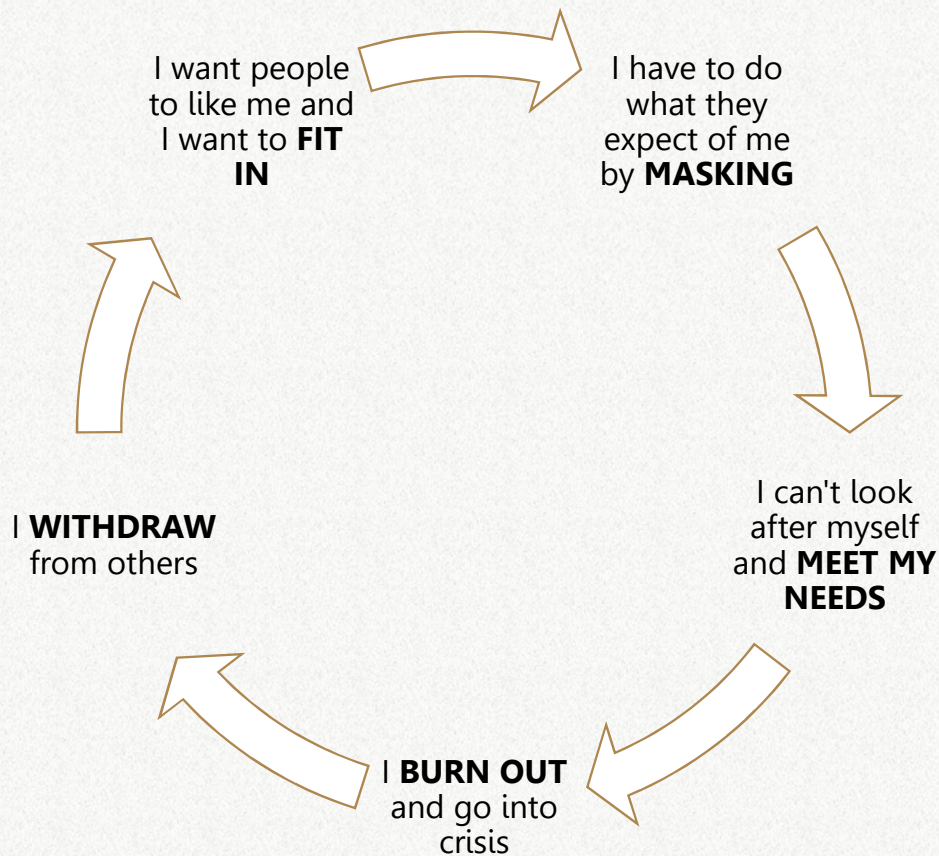
- **Bargiela, Steward, & Mandy (2016)** - Autistic women discussed how pre-diagnosis their concerns were often dismissed by their GPs, some reported misdiagnosis "You go to your doctor...and you get diagnosed with multiple personality disorder which is completely opposite to what you are."
- **Bancroft, Batten, Lambert & Madders (2012)** – Autistic women are more likely to be misdiagnosed (42% with another condition compared to 30% of males)
- **Rabbitte, Prendeville, & Kinsella (2017)** – Potential for misdiagnosis. Parents reported that both they and professionals misinterpreted their daughters as having mental health conditions

The Research

There are often
**CONSEQUENCES TO
CAMOUFLAGING**, which
increase mental health
problems

- **Tierney, Burns, and Kilbey (2016)** - Despite masking adolescent girls felt unhappy and anxious in social situations – had to mask true feelings because they feared losing friendships if these were unveiled. Severe repercussions and many had self-harmed to cope
- **Livingstone, Colvert, Bolton, & Happe (2018)** - Uses up valuable resources and ends in exhaustion
- **Affective disorders** were found to be among the main referral reason of ASC diagnosed late in life (Geurts and Jansen 2012). The observed rates of 57–62 % individuals with depressive symptoms and 29–38 % of cases with symptom severity reaching clinical significance
- **More likely to lead to later diagnosis** – Go through life with a lack of support and misunderstanding

The Future: Masking



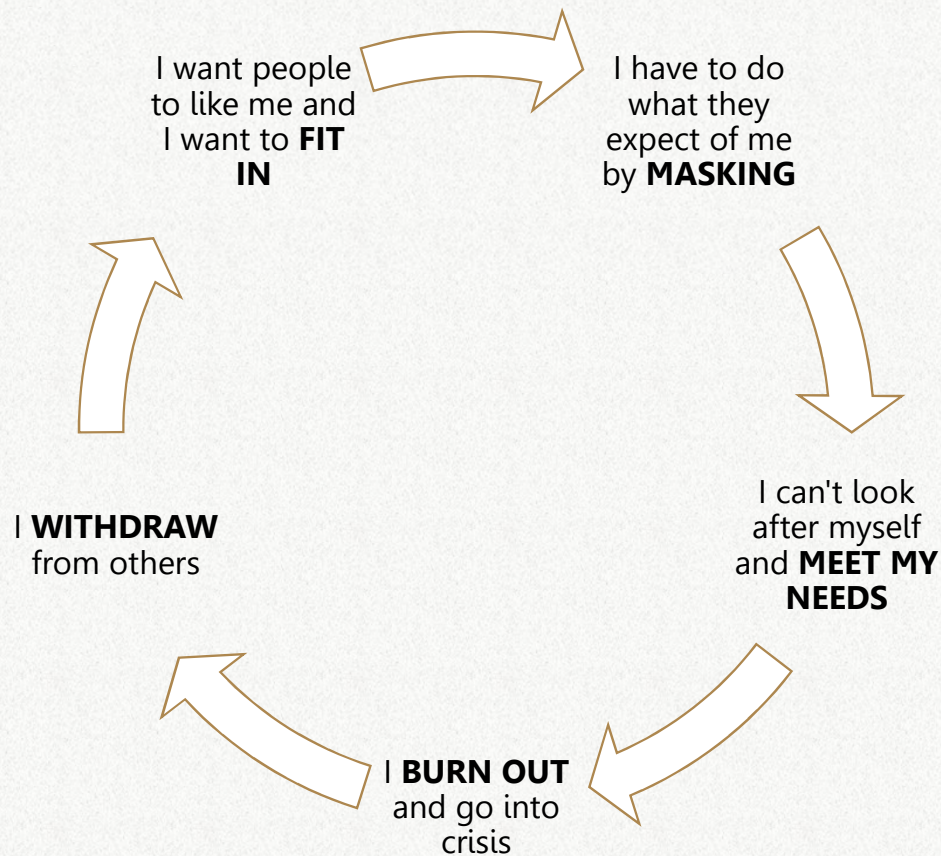
Livingston & Happe (2017)

- Transdiagnostic framework – ‘compensation represents the processes responsible for an observed mismatch between behaviour and underlying cognition in autism.’ - This explains why some individuals experience core autistic traits all their lives but are able to present as ‘neurotypical’
- Three hypothetical features of compensation to define ‘compensation’ as one umbrella term in order to identify at-risk individuals, those with a different autism phenotype, and late diagnosis
 - Compensation may be shallow or deep
 - Compensation is modulated by the environment
 - Compensation may come at a cost

My Research

- Can we use how ‘neurotypical’ peers rate the social behaviour of autistic people in short video clips to quantitatively measure masking behaviours?

The Future: Mental Health



What we still don't know:

- If masking does directly affect mental health
- How much being undiagnosed affects mental health
- How therapies can best support autistic people with co-morbid mental health conditions

My Research

- Do autistic women have more mental illness diagnoses prior to diagnosis compared to after - could this represent misdiagnosis prior to receiving diagnosis?
- What are the differences in mental health diagnoses between potentially undiagnosed autistic women and diagnosed autistic women?

The Future: Gender



Fine (2011) – The idea that just because a trait seen more commonly in one gender is also seen more ‘extremely’ in an autistic person, it does not make it an ‘extreme male trait’ or ‘extreme female trait’. For example, an extremely tall woman does not have ‘extreme male tallness’, she most likely has a medical condition resulting in her height. This is different to the reason why men are generally taller than women.

Dangers of gendering autism:

- Leads to research ignoring autistic people who identify as transgender, non-binary, and gender fluid
- Leads to autistic people being boxed in
- Leads to late diagnosis in autistic females who don’t demonstrate typical male autistic traits
- Leads to isolation of autistic males diagnosed late who have masked and camouflaged
- Leads to more research gendering autism, which fails to understand autism as a ‘whole’

<https://www.youtube.com/watch?v=VzWorS8CdBM> (22.17min – end)