

Tourette Syndrome: Identification, Barriers and Inclusive Support in Education

Introduction

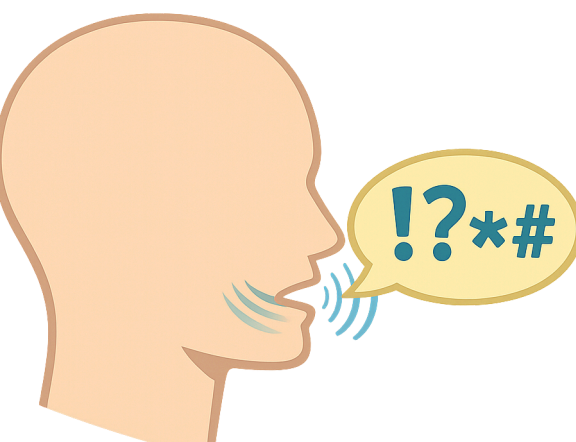
Tourette syndrome (TS) is a neurological and neurodevelopmental condition characterised by involuntary movements and vocalisations known as tics (The Brain Charity, 2022; Tourettes Action, 2026). Tics may include blinking, head movements, throat clearing or vocal sounds. Although TS is commonly described as a "disorder" in medical literature, some researchers argue this language may reinforce stigma, preferring terms such as "condition" or "syndrome" instead (Horwitz, 2017; Wiltshire, 2024; UPMC, 2025).

TS is diagnosed clinically using DSM-5 and ICD-11 criteria. Diagnosis requires multiple motor tics and at least one vocal tic persisting for over one year, beginning before the age of 18, and is not caused by substances or another condition (NHS, 2017; American Psychiatric Association, 2022). TS exists on a spectrum. Some children experience mild tics with little disruption, while others experience severe tics that affect communication, education and social participation (Kurlan, 2004; Great Ormond Street Hospital, 2019).

Approximately 1% of children worldwide are affected by TS, including around 1 in 100 children in the UK (Robertson, Eapen and Cavanna, 2009). Many children also experience co-occurring conditions such as ADHD, OCD, anxiety or autism, which may create greater barriers in education than the tics themselves (Albin, 2017; McCracken, 2017).

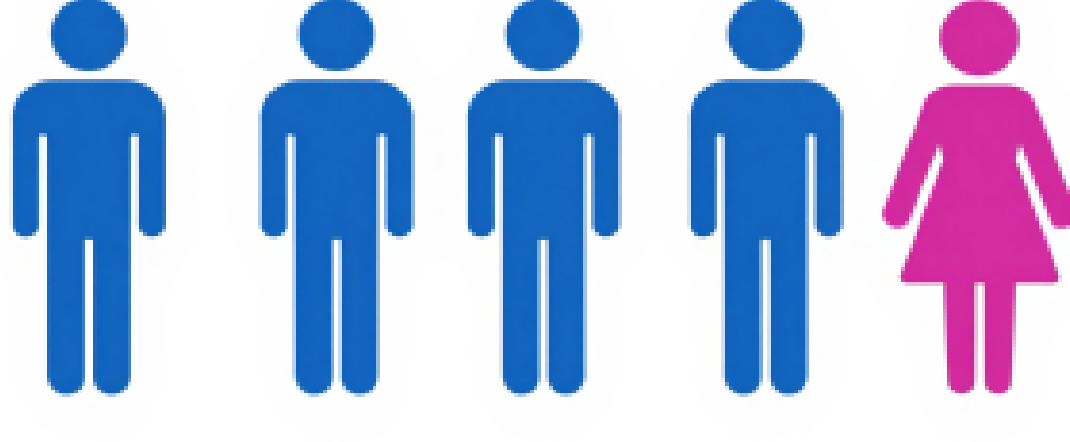
Historically, TS was misunderstood as behavioural deviance or mental illness, contributing to long-standing stigma (Tourette Association, 2010). Media representations often overemphasise coprolalia despite its rarity, reinforcing inaccurate stereotypes (Fat *et al.*, 2012; Jankovic, 2012; Kobierska *et al.*, 2014).

Myth:
Everyone with Tourette syndrome swears!



(Source: Copilot, 2026)

Fact:
3-4 boys to 1 girl have Tourette Syndrome



(Source: Copilot, 2026)

Identification and Diagnosis

There is no single blood test or brain scan to confirm TS; therefore, diagnosis relies on clinical assessment and observation. The diagnostic process often begins when caregivers or teachers notice repetitive movements, sounds or social difficulties (Tourettes Action, 2010). Assessment commonly includes developmental history, observation of tics, family interviews, school reports and paediatric or neurological assessment.

Symptoms usually emerge between the ages of 3 and 9 years (CDC, 2024; NHS, 2025). Tics may fluctuate in severity and are often worsened by stress or anxiety. Additional assessments may also be used to identify co-occurring conditions such as OCD or PANDAS (True, 2021; Murgia *et al.*, 2026).

Research shows boys are diagnosed with TS three to four times more frequently than girls (Rizzo *et al.*, 2012; Albin, 2017). However, girls may present differently, internalise distress or mask symptoms, increasing the risk of delayed diagnosis or misdiagnosis (Gagnon *et al.*, 2024; Jaffe, 2025). Historically, neurodevelopmental research has primarily focused on boys, which may lead diagnostic systems to reflect male presentations more strongly than female experiences (Garcia-Delgar *et al.*, 2022; Baizabal-Carvallo and Jankovic, 2023).

Barriers to Support

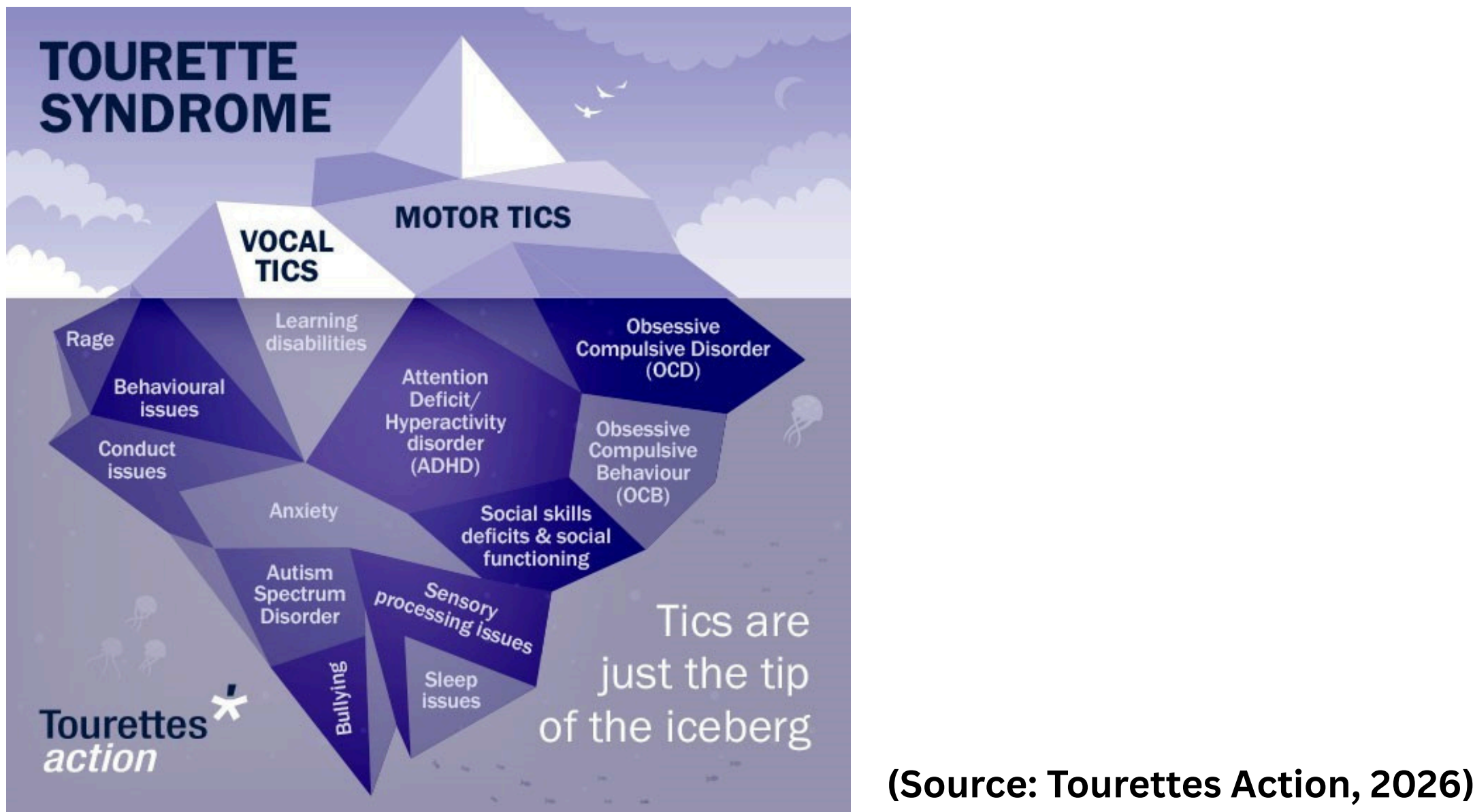
Many barriers prevent children with TS from receiving a timely diagnosis and support. One major issue is fragmented healthcare systems, where families are often referred between medical and mental health services, particularly when co-occurring conditions are present (Marino *et al.*, 2023; ACAMH, 2024).

In the UK, assessment waiting times may range from over one to three years, creating unequal access to support depending on location (Babbage and Groom, 2024; Tourettes Action, 2026). Delayed diagnosis can increase anxiety, exhaustion and educational difficulties for both children and families (Hedstrom *et al.*, 2026).

Stigma is another significant barrier. Fear of judgment and misunderstanding may discourage families from seeking support, contributing to underdiagnosis, particularly among girls and minority ethnic children (Scahill, Specht and Page, 2014). Children with TS may experience bullying, social isolation and low self-esteem, especially when tics are misunderstood as disruptive or attention-seeking behaviour (Kale, 2021; Müller-Vahl *et al.*, 2022).

A lack of awareness among teachers and professionals can also create challenges. Research increasingly suggests that children with TS may experience greater harm from inflexible environments and misunderstanding than from the tics themselves (O’Hare *et al.*, 2015; Pring *et al.*, 2025).

Fig.1 Co-occurring conditions: Just the Tip of the Iceberg!



Medical, Social and Neurodiversity

Different disability models provide contrasting explanations for the experiences of children with TS. The medical model focuses on diagnosis, treatment and symptom management. From this perspective, TS is viewed as a neurological condition requiring clinical intervention and support (Zaks, 2024).

In contrast, the social model argues that disability is also created by environmental barriers such as stigma, exclusion and inflexible systems (Sample, 2024). For example, classrooms that discourage movement or punish tics may increase distress and exclusion.

The neurodiversity perspective extends this argument by viewing neurological differences as part of natural human diversity rather than solely as deficits (Pring *et al.*, 2025). However, this perspective should be balanced carefully because some children experience painful or highly impairing tics (Eapen, Cavanna and Robertson, 2016).

Together, these perspectives suggest that children's experiences are shaped not only by neurological differences but also by how society responds to them.

Support Strategy

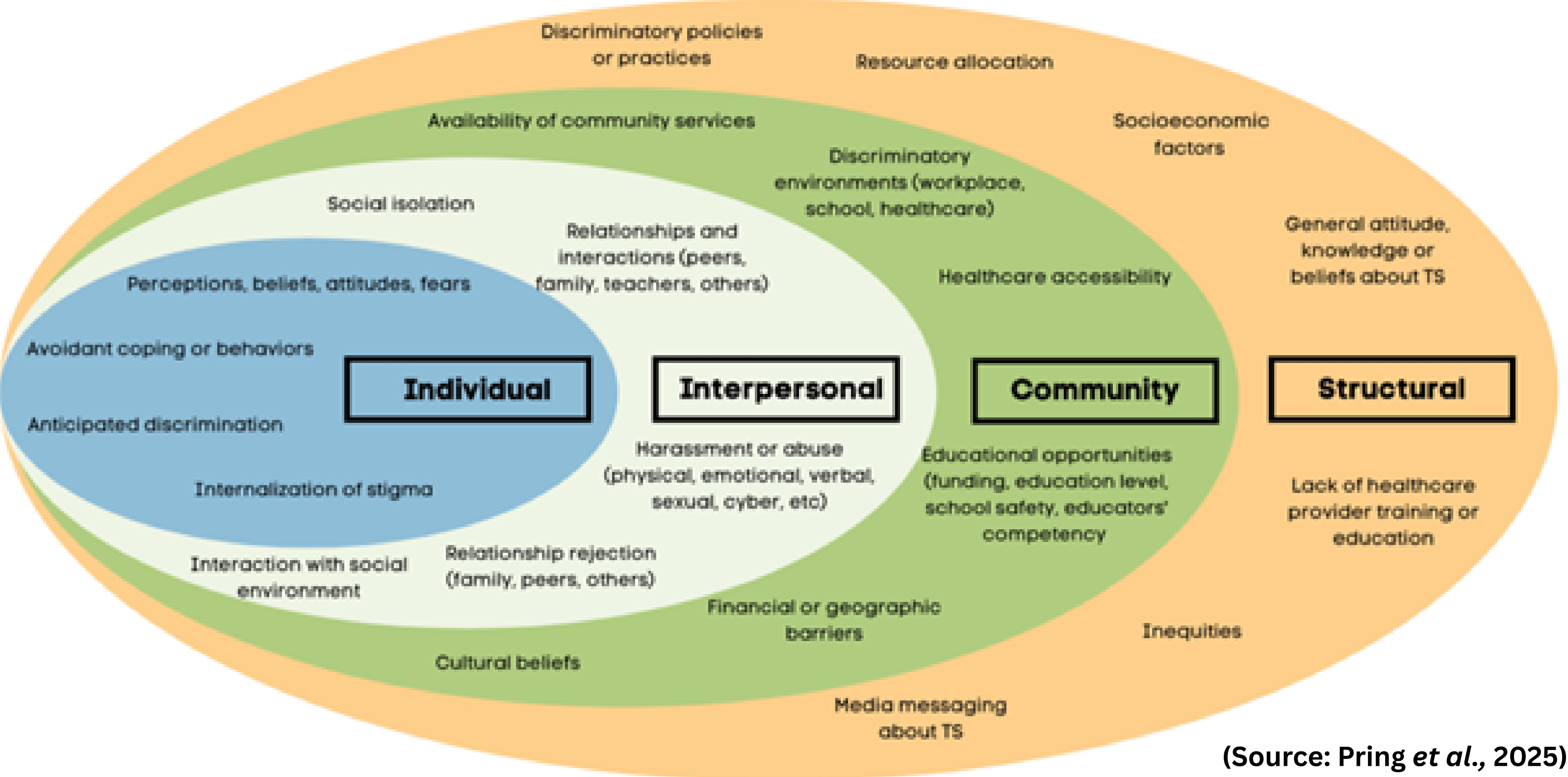
Research identifies inclusive classroom accommodations as one of the most effective support strategies for children with TS (Welter, 2021; CDC, 2026). Effective approaches focus on reducing barriers rather than punishing differences.

- Effective accommodations may include:
- movement breaks
 - reduced pressure to suppress tics
 - flexible seating
 - access to quiet spaces
 - peer awareness strategies

These approaches can reduce anxiety, physical discomfort and social isolation. Support should always be individualised because TS affects children differently. Bronfenbrenner's Ecological Systems Theory (1986) highlights the importance of collaboration between families, schools and professionals.

However, inclusive practices can be difficult to implement due to limited resources, lack of training and staff pressures (Garcia-Melgar *et al.*, 2022; Nelis, Pedaste and Šuman, 2023). Although policies such as the UNCRPD (United Nations, 2006) and the ALN Code for Wales (2021) promote inclusion, research suggests that inclusive policies do not always result in inclusive practice.

Fig.2 Social–ecological model of stigmatisation in Tourette syndrome



Conclusion

In conclusion, Tourette syndrome is a neurological condition characterised by involuntary motor and vocal tics, yet many difficulties experienced by children are intensified by stigma, misunderstanding and inflexible educational systems.

The medical model highlights the importance of diagnosis and treatment, while the social model and neurodiversity perspectives emphasise acceptance, inclusion and reducing environmental barriers. Together, these perspectives suggest that children with TS are often disabled not only by their neurological differences but also by societal attitudes and inaccessible systems.

Ultimately, effective support requires collaboration between families, educators and healthcare professionals alongside inclusive classroom accommodations that promote participation and reduce stigma.