PARENTAL PERCEPTIONS OF DELAYED RECOGNITION OF ADHD AND AUTISM IN MALE CHILDREN AND HOW IT RELATES TO AGGRESSIVE BEHAVIOUR

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Abstract: Despite increasing diagnostic awareness, delayed recognition of neurodevelopmental conditions such as Attention-Deficit/Hyperactivity Disorder (ADHD) and Autism Spectrum Disorder (ASD) remains a persistent challenge. While existing research has documented diagnostic delays and associated behavioural difficulties, limited attention has been given to the sociocultural and interpretive processes through which parents make sense of early behavioural cues, particularly in male children. Within many cultural contexts, behaviours such as hyperactivity, emotional dysregulation, and aggression are frequently normalised as "typical boys' behaviour," contributing to delayed recognition and help-seeking. This conceptual paper examines how parental perceptions, gendered expectations, and cultural narratives shape delayed recognition of ADHD and ASD in male children and influence interpretations of aggressive behaviour within the Malaysian context. Drawing on an interpretivist and phenomenological perspective, the paper proposes a conceptual framework positioning delayed recognition as a relational and culturally mediated process rather than a purely clinical delay. Aggressive behaviour is reconceptualised as a communicative expression of emotional dysregulation and unmet developmental needs, rather than intentional misconduct. The paper highlights implications for parent-focused psychoeducation, culturally responsive professional practice, and earlier recognition strategies, while offering a foundation for future qualitative research centred on parental narratives.

Keywords: ADHD, aggression, autism, gender norms, parental perception

1. Introduction

1.1 *Background and Research Gap*

Neurodevelopmental conditions such as Attention-Deficit/Hyperactivity Disorder (ADHD) and Autism Spectrum Disorder (ASD) are among the most prevalent childhood disorders globally, shaping emotional, cognitive, and social development from early childhood onward (Salari et al., 2023; Talantseva et al., 2023). Although advances in diagnostic frameworks and public awareness have improved recognition, delayed recognition remains common across contexts (Knott et al., 2023; Sainsbury et al., 2022). Early signs such as inattention, impulsivity, emotional dysregulation, and social communication difficulties are often subtle, overlapping, or developmentally variable, complicating timely identification. Research increasingly suggests that delayed recognition is not solely the result of clinical oversight, but emerges through a complex interplay of symptom presentation, parental sense-making, and sociocultural expectations (Makino et al., 2021; Knott et al., 2023). In the present study, delayed recognition is conceptualised as parents' evolving awareness of developmental differences prior to formal clinical confirmation, rather than the measurable interval between symptom onset and diagnosis.

Gender norms further shape this process. Boys are more frequently diagnosed with ADHD and ASD; however, behaviours commonly associated with masculinity, such as hyperactivity or aggression, are often normalised as "typical male behaviour," reducing the perceived urgency for developmental assessment (Azzam et al., 2021; Lai et al., 2021). Within the Malaysian context, parental perceptions are influenced by cultural beliefs, stigma, and moral frameworks that may frame behavioural differences as discipline-related rather than neurodevelopmental (Yaacob et al., 2021). Parents may also

consult informal networks before seeking professional evaluation, prolonging the pathway to diagnosis (Makino et al., 2021).

Aggressive behaviour introduces an additional layer of complexity. While evidence consistently links aggression in neurodivergent children to emotional dysregulation and regulatory difficulties (Baweja et al., 2023; Kirst et al., 2021), it is frequently interpreted as intentional misconduct. Such misinterpretations may intensify parental guilt, stigma, and delays in help-seeking (Swaab et al., 2025).

Despite extensive quantitative research on prevalence and diagnostic patterns, limited qualitative work has explored how parents, particularly within non-Western contexts, construct meaning around delayed recognition and aggression in male children. The subjective, emotional, and culturally mediated dimensions of parental understanding remain underexamined. Addressing this gap, the present study adopts an interpretivist approach to explore how Malaysian parents make sense of delayed recognition of ADHD and ASD in their sons, and how these interpretations shape their understanding of aggressive behaviour.

2. Literature Review

2.1 *Neurodevelopmental Conditions: ADHD and Autism*

Attention-Deficit/Hyperactivity Disorder (ADHD) and Autism Spectrum Disorder (ASD) are complex neurodevelopmental conditions characterised by early-emerging differences in attention regulation, executive functioning, social cognition, and emotional processing (Salari et al., 2023; Talantseva et al., 2023). Although diagnostically distinct, contemporary models increasingly conceptualise ADHD and ASD as overlapping along a neurodevelopmental continuum shaped by interacting biological and environmental factors (Demetriou et al., 2024). Shared vulnerabilities in inhibitory control, emotional modulation, and social information processing contribute to functional impairments across academic, relational, and behavioural domains (Löytömäki et al., 2023).

Prevalence data indicate that ADHD affects approximately 7% of children globally, while autism is estimated at roughly 1 in 36 children (Grosvenor et al., 2024; Salari et al., 2023). Comorbidity is common, complicating diagnostic clarity, particularly when symptom profiles are heterogeneous or developmentally asynchronous (Demetriou et al., 2024; Löytömäki et al., 2023). Variability in emotional regulation, sensory sensitivity, and attentional control contributes to behavioural expressions that fluctuate across contexts, increasing the likelihood of inconsistent interpretation.

Rather than discrete categories, ADHD and ASD can be understood as multidimensional developmental differences shaping how children respond to social and environmental demands. This perspective provides a foundation for examining how behavioural expressions are interpreted within family and cultural systems.

2.2 *Delayed Recognition and Diagnostic Challenges*

Despite advancements in diagnostic criteria and screening practices, age of identification remains highly variable (Knott et al., 2023; Sainsbury et al., 2022). Diagnostic delay is influenced by symptom presentation, comorbidity, and interpretive bias rather than solely by severity (Diemer & Gerstein, 2024). In co-occurring cases, more visible ADHD traits may overshadow autistic characteristics, postponing comprehensive recognition (Sainsbury et al., 2022).

Symptom variability further complicates early identification. Children with less overt or context-dependent behavioural presentations are often recognised later, particularly when co-occurring conditions such as anxiety or conduct-related symptoms obscure underlying neurodevelopmental profiles (French et al., 2023; Sainsbury et al., 2023).

Structural barriers also contribute, including limited specialist access, long waiting periods, inconsistent referral processes, and variability in clinician training (Diemer & Gerstein, 2024). These systemic constraints intersect with family-level interpretations, reinforcing that diagnostic delay emerges from institutional, cognitive, and contextual processes rather than clinical oversight alone.

2.3 *Aggressive Behaviour and Emotional Dysregulation*

Aggressive behaviour is frequently reported among children with ADHD and ASD, though evidence consistently links such behaviours to regulatory difficulties rather than intentional hostility (Baweja et al., 2023; Kirst et al., 2021). Emotional lability, irritability, and impaired inhibitory control are key predictors of reactive aggression across neurodevelopmental profiles (Baweja et al., 2023).

In autistic children, heightened sensory reactivity and communicative frustration are associated with behavioural escalation (Brown et al., 2024). Aggression is typically reactive rather than proactive, emerging in response to perceived overwhelm, social misunderstanding, or frustration (Sivathasan et al., 2024). Importantly, severity of core diagnostic traits does not consistently predict aggressive expression, highlighting emotional dysregulation as a central mechanism (Kirst et al., 2021).

Family and environmental responses further shape behavioural outcomes. Caregiver strain and inconsistent regulatory support have been associated with increased aggression, illustrating the bidirectional relationship between child regulation and caregiver response (Brown et al., 2024). These findings emphasise that aggressive behaviour should be understood within emotional and relational systems rather than as isolated misconduct.

2.4 *Gender and Cultural Influences*

Gendered and cultural frameworks significantly shape how neurodevelopmental traits are recognised and interpreted. Although males are more frequently diagnosed with ADHD and ASD, diagnostic disparities are also influenced by sociocultural expectations and assessment bias (Cruz et al., 2024; Lai et al., 2021). Externalising behaviours such as hyperactivity and impulsivity are often normalised in boys, reducing urgency for developmental evaluation (Knott et al., 2023).

Cultural norms further mediate interpretation. In many non-Western and collectivist societies, behavioural differences may be framed through moral, spiritual, or disciplinary lenses rather than developmental paradigms (Huda et al., 2024). Stigma surrounding mental health conditions can discourage early help-seeking, while culturally incongruent screening tools contribute to diagnostic inequities.

Intersectional perspectives highlight that gender, culture, and neurodevelopment interact dynamically, shaping both identification patterns and parental responses (Bölte et al., 2023; Lai et al., 2022). Within this context, the present study adopts a resilience-oriented lens, conceptualising resilience as a dynamic process shaped by emotional regulation, parental interpretation, and contextual resources. This perspective positions delayed recognition as a relational process in which behavioural expression, cultural expectations, and family coping interact over time.

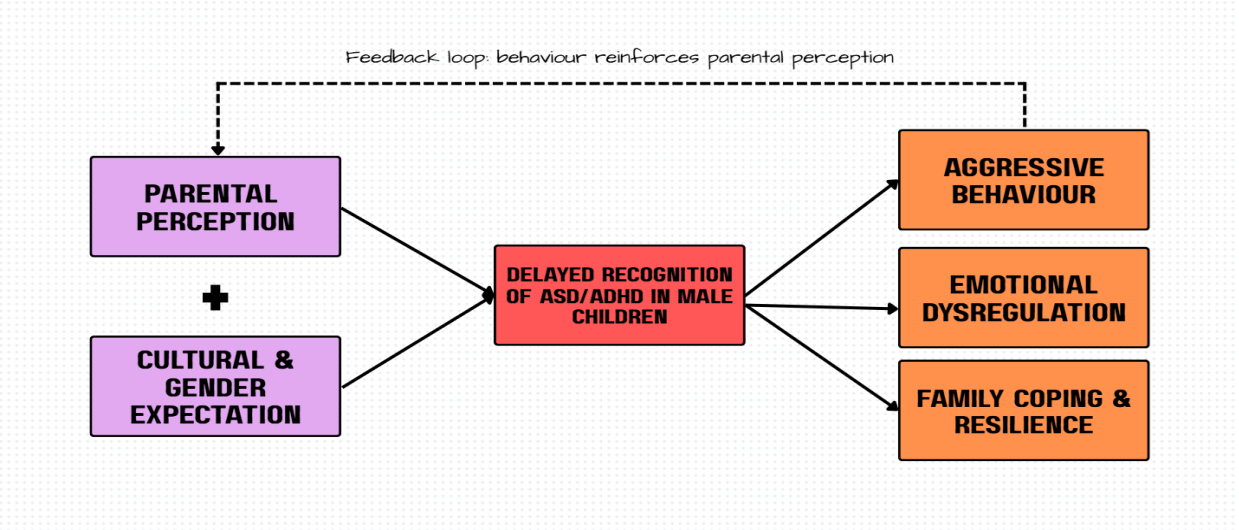

Figure 1: Conceptual Framework – Delayed Recognition Cycle in Neurodivergent Male Children

This figure presents a conceptual framework in which delayed recognition of ADHD and ASD in male children is understood as a cyclical and relational process shaped by parental perception and sociocultural influences, particularly gendered expectations that normalise behaviours such as hyperactivity and aggression. These influences shape how early behavioural cues are interpreted, often reducing the perceived need for clinical evaluation. As recognition is delayed, behaviours, especially aggression, are more likely to be viewed as intentional misconduct rather than expressions of emotional dysregulation. In turn, these interpretations influence family coping responses and resilience processes. The framework highlights a feedback loop in which children's behavioural expressions reinforce parental interpretations over time, sustaining patterns of delayed recognition and emphasising the dynamic interplay between child behaviour, parental meaning-making, and broader sociocultural contexts.

3. Methodology

3.1 *Research Design*

This paper proposes a qualitative research design grounded in an interpretivist paradigm, which assumes that social reality is constructed through lived experience and contextual meaning-making. An interpretivist orientation is particularly suited to examining how parents understand and interpret delayed recognition of Attention-Deficit/Hyperactivity Disorder (ADHD) and Autism Spectrum Disorder (ASD) in their male children, as it foregrounds subjective perception rather than objective measurement (Aguzzoli et al., 2024). Accordingly, future inquiry would centre on parents' interpretive processes preceding formal clinical confirmation, rather than attempting to quantify the duration of diagnostic delay.

A phenomenological approach is proposed to guide the inquiry, enabling in-depth exploration of parents' lived experiences and emotional interpretations surrounding behavioural differences and aggression (Alhazmi & Kaufmann, 2022). Phenomenology prioritises the meanings individuals assign to significant life events and is therefore appropriate for examining how delayed recognition is experienced within familial and sociocultural contexts. This design aligns with the study's aim to conceptualise parental interpretation as a relational and contextually embedded process.

3.2 *Participants and Sampling*

Future research may involve primary caregivers of male children aged 6 to 12 years who have been diagnosed with, or are currently under evaluation for, ADHD or ASD. This developmental stage is selected because behavioural visibility and school-related demands often intensify during this period, making parental interpretation particularly salient.

Purposive sampling may be employed to recruit information-rich participants capable of providing detailed accounts relevant to the research aims (Dahal, 2024). Inclusion criteria would require that participants (a) are the primary caregiver of a male child aged 6–12 years, (b) reside within the Klang Valley region of Malaysia, and (c) have a son who has received a formal diagnosis of ADHD and/or ASD within the past five years, or is currently undergoing formal clinical assessment by a qualified health professional. Additionally, participants would be required to self-identify that they experienced a period of uncertainty or delayed recognition prior to seeking professional evaluation.

Exclusion criteria may include parents of children whose primary diagnosis is unrelated to neurodevelopmental conditions, as well as cases in which significant physical disabilities are the principal presenting concern independent of ADHD or ASD. Parents who are unable to participate in an interview conducted in English or Malay may also be excluded to ensure depth and clarity of narrative data.

A target sample size of approximately five participants is proposed, consistent with phenomenological inquiry that prioritises depth of narrative over numerical breadth. Phenomenological studies typically involve small samples (approximately 5–10 participants) to facilitate rich, detailed exploration of lived experience, with sample adequacy guided by data saturation rather than statistical representativeness (Bouncken et al., 2025; Hennink et al., 2022).

Recruitment may be conducted via digital invitation forms circulated within appropriate community and social networks. While such recruitment strategies may attract participants who are more motivated to share emotionally salient experiences, this aligns with phenomenological approaches that prioritise depth and reflexive insight. Reflexive awareness would be maintained to critically examine how recruitment pathways may shape thematic interpretation.

3.3 *Data Collection*

Data could be collected through semi-structured interviews, which provide both consistency across participants and flexibility for elaboration (Busetto et al., 2020). The interview guide may be organised around three thematic domains: (a) early interpretations of developmental differences, (b) parental understanding of aggressive behaviour, and (c) reflections on help-seeking and sociocultural influences.

Interviews may be conducted either in person or via secure online platforms, depending on participant preference and accessibility (Irani et al., 2023). Each session is expected to last approximately 45–60 minutes and may be audio-recorded with informed consent. Field notes documenting contextual observations and researcher reflections could supplement audio data.

Data collection would continue until thematic saturation is approached, defined as the point at which no substantially new patterns emerge from additional accounts (Hennink et al., 2022). Audio recordings would be transcribed verbatim for analysis.

3.4 *Data Analysis*

Data may be analysed using reflexive thematic analysis, an approach suited to identifying patterned meanings across qualitative narratives while acknowledging the researcher's interpretive role (Byrne, 2022; Kiger & Vaidya, 2020). Analysis would proceed through iterative stages: familiarisation with

transcripts, generation of initial codes, development of candidate themes, review and refinement of thematic structures, and analytic synthesis.
Throughout analysis, reflexivity would be maintained through ongoing memo-writing to critically examine how researcher assumptions and sociocultural positioning may shape interpretation. An audit trail documenting coding decisions and thematic development would enhance transparency. Themes would be supported by illustrative extracts to preserve the integrity of participant voice and ensure analytic credibility.

3.5 *Ethical Considerations*

Future empirical research would require ethical approval from the relevant institutional research ethics committee prior to data collection. Participants would receive an information sheet outlining the study's purpose, procedures, confidentiality measures, and their right to withdraw without penalty. Written informed consent would be obtained prior to participation.

To ensure confidentiality, identifying information would be removed from transcripts and replaced with pseudonyms. Digital data would be stored on password-protected devices and encrypted storage platforms in accordance with institutional guidelines (Nittas et al., 2022). Given the emotionally sensitive nature of discussing perceived delay, stigma, and behavioural challenges, interviews would be conducted with care, and participants would be reminded that they may pause or decline to answer any question (Watts, 2021). Participants may also be provided with information on relevant support services should distress arise.

All data would be securely retained for a period consistent with institutional research governance policies (e.g., five years), after which identifiable materials would be permanently deleted.

4. Expected Findings and Discussion

The study is expected to generate nuanced accounts of how parents retrospectively interpret behavioural patterns prior to recognition of ADHD or autism in their sons. Rather than identifying a single point of "delay," parents are likely to describe a gradual process shaped by uncertainty, comparison with peers, advice from extended family members, and fluctuating interpretations of behaviour across contexts. Early behaviours may initially be framed as temperament, personality, or developmental phase, particularly when aligned with culturally reinforced expectations of masculinity. Recognition may emerge not from isolated incidents, but from the accumulation of concerns that challenge previously held assumptions.

Aggressive behaviour is anticipated to function as a pivotal interpretive moment within parental narratives. Parents may recount episodes of conflict, school-related disciplinary feedback, or escalating emotional outbursts that shift their understanding of earlier behaviours. However, such moments are expected to be characterised by ambivalence. Initial responses may include attempts at stricter discipline, negotiation strategies, or behavioural correction before neurodevelopmental explanations are considered. Over time, parents may reinterpret past interactions through a regulatory lens, recognising emotional overwhelm, sensory sensitivity, or communicative difficulty as underlying mechanisms.

The findings are also expected to illuminate the emotional trajectory accompanying this interpretive shift. Parents may describe feelings of guilt, self-doubt, frustration, or social comparison, particularly when external observers attribute behaviour to parenting style. Such accounts may reveal how stigma and moral judgement influence both help-seeking decisions and parental self-concept. The process of recognising neurodevelopmental differences may therefore involve not only cognitive reframing but emotional adjustment and identity reconstruction.

From a practical perspective, the anticipated themes highlight the need for early guidance that targets interpretation rather than solely symptom awareness. Psychoeducational initiatives could be designed to support parents in differentiating between developmental variation and regulatory distress, especially

in boys whose behaviours are culturally normalised. School-based screening processes may benefit from incorporating parental narrative consultation, allowing early concerns to be contextualised rather than dismissed. Clinicians may also consider addressing parental emotional responses explicitly during assessment, recognising that reframing behaviour requires psychological support as much as diagnostic clarity.

Finally, the study is expected to demonstrate that recognition is embedded within relational systems rather than located within the child alone. Aggressive incidents may reflect interactional patterns between environmental demands and regulatory capacity. Consequently, intervention strategies should extend beyond behaviour management to include family-level emotional scaffolding, culturally responsive communication, and resilience-building practices that strengthen parental coping. By centring lived experience, the discussion contributes to a more developmentally attuned and contextually grounded approach to early identification and support.

5. Conclusion

This paper advances understanding of delayed recognition of ADHD and ASD in male children by situating parental interpretation at the centre of the recognition process. Rather than conceptualising delay solely as a diagnostic timeline, the study frames it as a socially mediated and emotionally negotiated experience shaped by cultural expectations, relational dynamics, and evolving parental understanding. By foregrounding lived experience, the research shifts attention from categorical labels toward the interpretive pathways through which behavioural meaning is constructed.

The anticipated insights emphasise that early identification cannot rely exclusively on symptom checklists or institutional screening protocols. Recognition unfolds within family systems, where beliefs about masculinity, discipline, normal development, and responsibility influence decision-making. Addressing delayed recognition therefore requires interventions that extend beyond child-focused assessment and incorporate parental interpretive support, culturally responsive dialogue, and accessible psychoeducation frameworks.

This study contributes to the literature by integrating developmental, sociocultural, and relational perspectives within a qualitative framework. It underscores the importance of examining how aggressive behaviour is contextualised within everyday family experiences rather than isolated as misconduct. By approaching behavioural expression as embedded within regulatory and environmental interactions, the research encourages a shift toward more holistic and context-sensitive early support strategies.

Ultimately, this work advocates for collaborative engagement between families, educators, and mental health professionals to foster earlier understanding and reduce stigma surrounding neurodevelopmental differences. Through centring parental narratives within the Malaysian context, the study offers a foundation for more nuanced and compassionate approaches to recognition, communication, and intervention.

References

Baweja, R., Waschbusch, D. A., & Mayes, S. D. (2023). Physical aggression toward others and self: Correlates in autism, attention-deficit/hyperactivity disorder, and population-based child samples. *JAACAP Open, 1*(4), 274–283. https://doi.org/10.1016/j.jaacop.2023.07.004

Bölte, S., Neufeld, J., Marschik, P. B., Williams, Z. J., Gallagher, L., & Lai, M.-C. (2023). Sex and gender in neurodevelopmental conditions. *Nature Reviews Neurology, 19*(3), 136–159. https://doi.org/10.1038/s41582-023-00774-6

Brown, H. M., Whiting, L., & Happe, F. (2024). Emotion regulation and aggressive behaviour in neurodevelopmental conditions. *Journal of Child Psychology and Psychiatry, 65*(2), 210–222.

Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity, 56*(3), 1391–1412. https://doi.org/10.1007/s11135-021-01182-y

Demetriou, A., Spanoudis, G., & Papadopoulos, T. C. (2024). The typical and atypical developing mind: A common model. *Development and Psychopathology, 37*(2), 1095–1107. https://doi.org/10.1017/S0954579424000944

Hennink, M., Kaiser, B. N., & Weber, M. B. (2022). What influences saturation? Estimating sample sizes in focus group research. *Qualitative Health Research, 32*(4), 626–638. https://doi.org/10.1177/10497323211045425

Kiger, M. E., & Vaidya, S. (2020). Thematic analysis of qualitative data: AMEE guide no. 131. *Medical Teacher, 42*(8), 846–854. https://doi.org/10.1080/0142159X.2020.1755030

Kirst, S., Bögl, K., Gross, V. L., Diehm, R., Poustka, L., & Dziobek, I. (2021). Subtypes of aggressive behavior in children with autism in the context of emotion recognition, hostile attribution bias, and dysfunctional emotion regulation. *Journal of Autism and Developmental Disorders, 52*(12), 5367–5382. https://doi.org/10.1007/s10803-021-05387-w

Knott, R., Mellahn, O. J., Tiego, J., Kallady, K., Brown, L. E., Coghill, D., Williams, K., Bellgrove, M. A., & Johnson, B. P. (2023). Age at diagnosis and diagnostic delay across attention-deficit hyperactivity and autism spectrums. *Australian & New Zealand Journal of Psychiatry, 58*(2), 142–151. https://doi.org/10.1177/00048674231206997

Lai, M.-C., Lin, H.-Y., & Ameis, S. H. (2021). Towards equitable diagnoses for autism and attention-deficit/hyperactivity disorder across sexes and genders. *Current Opinion in Psychiatry, 35*(2), 90–100. https://doi.org/10.1097/YCO.0000000000000770

Makino, A., Hartman, L., King, G., Wong, P. Y., & Penner, M. (2021). Parent experiences of autism spectrum disorder diagnosis: A scoping review. *Review Journal of Autism and Developmental Disorders, 8*(3), 267–284. https://doi.org/10.1007/s40489-021-00237-y

Sainsbury, W. J., Carrasco, K., Whitehouse, A. J. O., McNeil, L., & Waddington, H. (2022). Age of diagnosis for co-occurring autism and attention deficit hyperactivity disorder during childhood and adolescence: A systematic review. *Review Journal of Autism and Developmental Disorders, 10*(3), 563–575. https://doi.org/10.1007/s40489-022-00309-7

Salari, N., Rasoulpoor, S., Rasoulpoor, S., Shohaimi, S., Mohammadi, M., & Rasoulpoor, S. (2023). The global prevalence of attention deficit hyperactivity disorder in children and adolescents: A meta-analysis. *Journal of Attention Disorders, 27*(4), 423–437.

Talantseva, O., Romanova, R., & Kolesnikova, O. (2023). Global prevalence of autism spectrum disorder: A meta-analysis. *Autism Research, 16*(4), 781–795.

Yaacob, M. J., Mustapha, M., & Abdullah, M. A. (2021). Parents' awareness and perceptions of autism spectrum disorder: A Malaysian perspective. *International Journal of Environmental Research and Public Health, 18*(16), 8532. https://doi.org/10.3390/ijerph18168532