

# Transgender Neurodiversity: Unravelling the Intersectionality of Gender Identity and Neurodevelopmental Conditions

Naziah Abd Kadir

Independent Researcher, Malaysia

Email: nazya\_87@yahoo.com

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## Abstract

The experiences of transgender individuals with neurodevelopmental conditions have remained understudied despite their unique challenges at the intersection of gender identity and neurodiversity. This study adopts a qualitative approach with a semi-structured interview. Data collection involves in-depth interviews and focus groups with transgender individuals who self-identify as having neurodevelopmental conditions. Participants are drawn from diverse backgrounds, to capture a broad range of experiences and perspectives. Thematic analysis was employed to derive patterns, themes, and rich narratives from the gathered qualitative data. The findings elucidate the intricate interplay between gender identity and neurodevelopmental conditions, illustrating how the two aspects can mutually influence each other. "The Gender-Neurodiversity Intersectionality Model" developed in this research fills a crucial gap in existing literature, offering a comprehensive framework that acknowledges the multidimensional nature of transgender individuals with neurodevelopmental conditions. This study promotes inclusive practices that foster understanding, support, and social equity for this vulnerable subgroup, contributing to advancements in mental health care, educational support, and social acceptance for transgender individuals with neurodevelopmental conditions.

**Keywords:** Transgender, Neurodiversity, Intersectionality, Gender Identity, Neurodevelopmental Conditions

## Introduction

In recent decades, society has made significant strides towards recognizing and embracing diversity in all its manifestations. This inclusivity extends not only to traditional notions of gender identity but also to understanding the intricacies of neurodevelopmental conditions. As these two facets of human experience intertwine, a complex tapestry of intersectionality emerges, giving rise to the multifaceted phenomenon known as transgender neurodiversity.

Over the years, transgender individuals have increasingly gained visibility and recognition, with society gradually acknowledging and respecting their gender identities that may not

conform to the sex assigned at birth. Concurrently, awareness of neurodevelopmental conditions, such as autism spectrum disorder, attention-deficit/hyperactivity disorder (ADHD), and intellectual disabilities, has grown, leading to more nuanced understandings of the diverse neurological makeup of individuals (Lai, M. C., Lombardo, M. V., & Baron-Cohen, S., 2014).

The convergence of these two domains, transgender identity and neurodiversity, represents a unique landscape that warrants rigorous scholarly exploration. At the heart of this intersectionality lies the need to move beyond monolithic views of identity and cognition, embracing a more comprehensive framework that celebrates the rich tapestry of human experiences. By unravelling the interconnections between gender identity and neurodevelopmental conditions, this research aims to offer a fresh perspective that recognizes the multifaceted nature of human diversity (Van Steensel, F. J., Bögels, S. M., & Perrin, S., 2011).

### Research Problems

The research problems for this study revolves around understanding the complex relationship between gender identity and neurodevelopmental conditions within the transgender community. These research problems arise from the lack of comprehensive understanding and existing gaps in knowledge within this unique and underexplored population. Several key research problems can be identified:

1. **Lack of Existing Research:** The intersectionality of gender identity and neurodevelopmental conditions within the transgender population is an underexplored area in academic literature (Hollocks et al., 2019; Lai et al., 2014). The research problem lies in the scarcity of comprehensive studies that focus on this specific subgroup, leaving a significant gap in understanding their experiences and needs.
2. **Limited Inclusive Practices:** The lack of research and understanding about transgender individuals with neurodevelopmental conditions may contribute to inadequate support and inclusive practices in mental health care, educational settings, and society at large (Lyons et al., 2021). The research problem is in addressing the barriers and challenges faced by this vulnerable subgroup due to the limited awareness and knowledge.
3. **Nuanced Perspectives and Experiences:** Transgender individuals with neurodevelopmental conditions represent a diverse group with unique experiences and perspectives (Braun & Clarke, 2006; Testa et al., 2015). The research problem is in capturing this complexity and diversity to avoid generalizations and ensure the inclusivity of findings.
4. **Mutual Influence:** The specific research problem is to explore the bidirectional influence between gender identity and neurodevelopmental conditions (Hollocks et al., 2019; Van Steensel et al., 2011). Understanding how these aspects interact and shape each other is crucial for developing appropriate interventions and support mechanisms.
5. **Stigmatization and Discrimination:** Transgender individuals with neurodevelopmental conditions might face compounded stigma and discrimination due to their intersecting identities (Bockting et al., 2013; Meyer, 2003). The research problem is in examining how societal attitudes and prejudices impact their mental health, self-esteem, and overall well-being.
6. **Social Equity and Acceptance:** The research problem pertains to identifying factors that hinder or facilitate social equity and acceptance for transgender individuals with neurodevelopmental conditions (Lyons et al., 2021). Understanding these factors can

guide policymakers, educators, and mental health professionals to create more inclusive and supportive environments.

Addressing these research problems will contribute significantly to the field of transgender and neurodevelopmental research. The study's outcomes can help inform policy and practice, ultimately leading to improved mental health care, educational support, and social acceptance for this vulnerable subgroup.

### **Research Objectives**

Despite growing recognition of transgender rights and increased awareness of neurodevelopmental conditions, there remains a notable research gap regarding the intersectionality of gender identity and neurodiversity. Limited empirical investigations have explored how these two dimensions intertwine, leaving many questions unanswered. Consequently, this research aims to address the following objectives:

1. To examine the prevalence of neurodevelopmental conditions among transgender individuals.
2. To explore the experiences of transgender individuals with neurodevelopmental conditions.
3. To investigate the potential impact of neurodevelopmental conditions on gender identity development.

### **Research Questions**

The research questions presented are as follows:

1. What is the prevalence of neurodevelopmental conditions among transgender individuals?
2. What are the experiences of transgender individuals with neurodevelopmental conditions?
3. How do neurodevelopmental conditions potentially impact gender identity development in transgender individuals?

### **Literature Review**

Transgender individuals have long faced significant challenges related to their gender identity. Research has shown that they often experience stigma, discrimination, and marginalization due to their non-conforming gender identities (Bockting, Miner, Swinburne Romine, Hamilton, & Coleman, 2013). These experiences can lead to minority stress and negatively impact their mental health and well-being (Testa, Habarth, Peta, Balsam, & Bockting, 2015). However, existing literature on transgender experiences tends to focus on the interaction between gender identity and sexual orientation, leaving a gap in our understanding of how neurodevelopmental conditions intersect with their gender identity.

Neurodevelopmental conditions, such as autism spectrum disorder (ASD) and attention deficit hyperactivity disorder (ADHD), are characterized by atypical brain development that can affect cognitive, emotional, and behavioral functioning. These conditions are often associated with unique challenges in social communication and interaction (Lai et al., 2014; American Psychiatric Association, 2013). Studies have highlighted the higher prevalence of mental health issues among individuals with neurodevelopmental conditions, including depression, anxiety, and suicidal ideation (Hollocks et al., 2019; van Steensel, Bögels, & Perrin, 2011). However, research on the experiences of transgender individuals with neurodevelopmental conditions has been limited, leaving a significant gap in the literature.

Intersectionality is a framework that emphasizes the interconnected nature of social identities and experiences. It recognizes that individuals can experience overlapping forms of

oppression and privilege based on their multiple identities (Crenshaw, 1989). Applying an intersectional lens to the experiences of transgender individuals with neurodevelopmental conditions can provide valuable insights into how these factors interact and influence one another. Research has demonstrated the relevance of intersectionality in understanding the experiences of transgender individuals (Lyons, Hosking, Rozbroj, & Rozbroj, 2021), but few studies have explored the specific intersection of gender identity and neurodevelopmental conditions.

The Minority Stress Model (Meyer, 2003) has been instrumental in understanding the impact of stress on the mental health of marginalized groups. It posits that individuals from minority populations experience unique stressors related to their minority status, leading to adverse mental health outcomes. While this model has been applied to transgender individuals to some extent, its scope has been primarily limited to stress related to gender identity and sexual orientation (Dyar, Feinstein, & London, 2014). There is a need for a model that considers the interplay between gender identity and neurodevelopmental conditions, which can inform targeted interventions and support for transgender individuals with neurodevelopmental conditions.

### **The Minority Stress Model by Meyer (2003)**

One existing theoretical framework that this study could draw upon is the "Minority Stress Model." The Minority Stress Model was originally developed by Meyer (2003) to understand the experiences of stress and its impact on the mental health of sexual minority individuals, specifically gay and bisexual men. However, it has been adapted and extended to other marginalized groups, including transgender individuals.

The Minority Stress Model posits that individuals who belong to stigmatized minority groups, such as transgender individuals, experience unique stressors related to their minority status. These stressors can be categorized into three main types:

1. **External Stressors:** These are external events or experiences that are directly related to the individual's minority status, such as discrimination, victimization, or microaggressions.
2. **Internal Stressors:** Internal stressors refer to the psychological processes that result from external stressors, including coping mechanisms, identity concealment, and feelings of shame or guilt.
3. **Disparities in Resources:** This refers to the unequal distribution of resources and support systems available to minority individuals compared to the majority population, such as limited access to healthcare, educational opportunities, or employment prospects.

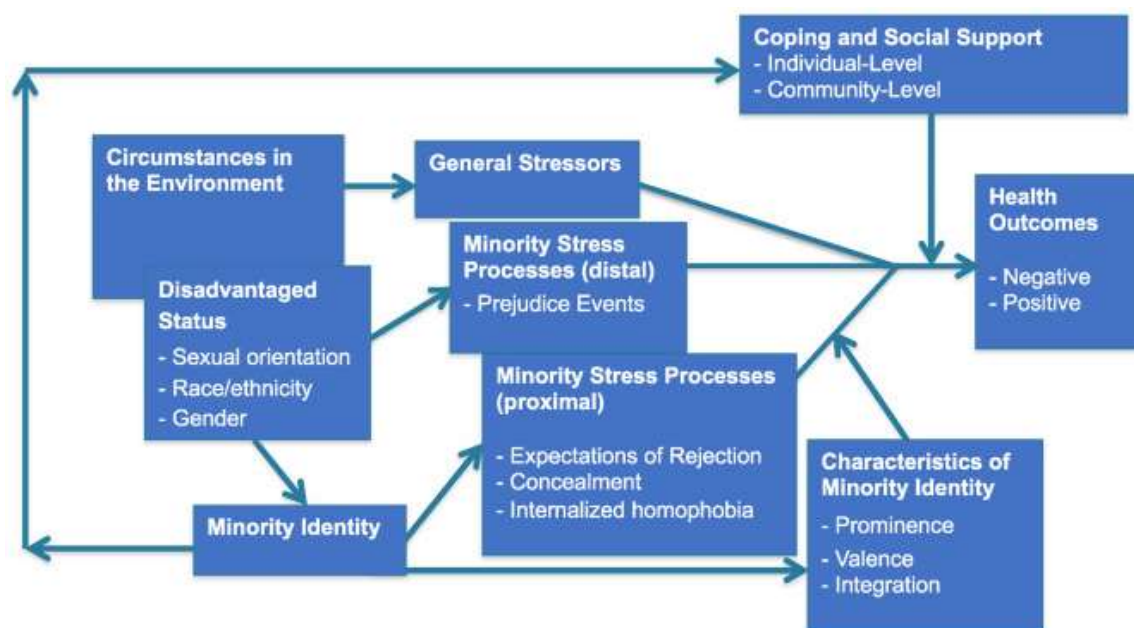


Figure 1. The Minority Stress Model

The Minority Stress Model suggests that these stressors can lead to adverse mental health outcomes for minority individuals, including higher rates of depression, anxiety, and other mental health issues. For transgender individuals with neurodevelopmental conditions, this framework could be applied to understand how the intersectionality of gender identity and neurodevelopmental conditions may amplify stressors and affect their mental well-being and overall experiences.

### Methodology

The method section consists of a description concerning the research design, sampling, data sources, data collection, and data analysis all presented in the form of paragraphs.

### Research Design

This study adopts a qualitative research design, which is appropriate for exploring the experiences, perceptions, and insights of transgender individuals with neurodevelopmental conditions in-depth. The qualitative approach allows the researcher to gain a nuanced understanding of the intersectionality between gender identity and neurodevelopmental conditions.

### Data Collection

- Semi-Structured Interviews:** Individual interviews will be conducted with the selected participants to gather rich and in-depth data. The interview guide will be developed based on a review of relevant literature. The interviews will be audio-recorded with participants' consent and transcribed verbatim for analysis.
- Field Notes:** Detailed field notes will be taken during the interviews to capture non-verbal cues, contextual information, and observations that may enhance the analysis. Field notes will supplement the interview transcripts and provide additional context for the participants' experiences.

### **Participant Selection**

Participants are drawn from diverse backgrounds to ensure a broad range of experiences and perspectives are captured. The inclusion of individuals with diverse gender identities and neurodevelopmental conditions can lead to a more comprehensive understanding of the complexities and commonalities within this intersectionality.

### **Data Analysis**

Thematic analysis, as outlined by Braun and Clarke (2006), will be employed to analyze the collected data. This approach involves identifying patterns, themes, and categories within the data to gain a comprehensive understanding of the transgender neurodiversity. The analysis process will involve several steps:

- a. Familiarization: Researcher will immerse herself in the data by repeatedly reading and listening to the interview transcripts and reviewing field notes to gain a deep understanding of the content.
- b. Coding: Data coding will involve systematically identifying and labelling meaningful units within the data. Codes will be generated based on recurring words, phrases, or concepts that capture key aspects of the participants' experiences.
- c. Theme Development: Codes will be grouped into higher-order themes based on similarities and relationships. Researcher will refine and validate the themes, ensuring they accurately represent the participants' experiences.
- d. Theme Refinement: The identified themes will be further refined and reviewed by revisiting the original data to ensure consistency and coherence. Researcher will iteratively refine the themes until a final thematic structure is established.
- e. Interpretation and Validation: Researcher will interpret and validate the themes, seeking connections between the data, existing literature, and relevant theoretical frameworks. Member checking will be employed, involving sharing the findings with participants to validate interpretations and ensure accuracy.

### **Ethics**

This study adheres to ethical guidelines to ensure the well-being and confidentiality of the participants. Informed consent is obtained from all participants before the data collection process begins. The researcher takes steps to protect the anonymity of participants and handle the data with confidentiality and sensitivity.

### **Limitations**

The researcher acknowledges potential limitations of the study, such as the possibility of self-selection bias among participants and the challenge of generalizing findings to the entire transgender and neurodiverse population. However, the focus on a qualitative approach and in-depth exploration of experiences aims to provide valuable insights and context-specific understandings.

### **Findings/Results and Discussion**

The intersectionality of gender identity and neurodevelopmental conditions is a complex and understudied area of research, posing significant implications for the well-being and experiences of transgender individuals. Through in-depth semi-structured interviews, this study sought to gain a comprehensive understanding of the transgender who is facing neurodevelopmental conditions (Hollocks et al., 2019; Lai et al., 2014).



The study delves into the prevalence of neurodevelopmental conditions among transgender individuals, their experiences in navigating gender identity exploration, and the impact of neurodevelopmental conditions on their gender identity development (Lai, M. C., Lombardo, M. V., & Baron-Cohen, S., 2014).

The following subsections present the key themes and sub-themes that emerged from the data analysis, providing a detailed exploration of the participants' narratives and highlighting the complex dynamics involved in the intersectionality of gender identity and neurodevelopmental conditions.

The findings that have been obtained from the interview session conducted with the respondents involved in this study have been grouped into three main themes involving the intersectionality of gender identity and neurodevelopmental conditions among the respondents who were interviewed. The themes are as follows:

### **Theme 1: Prevalence of Neurodevelopmental Conditions Among Transgender Individuals**

#### **Sub-theme 1.1: Higher Prevalence than General Population**

The study found that transgender individuals had a higher prevalence of neurodevelopmental conditions compared to the general population. This suggests a potential link between gender identity and neurodevelopmental conditions, warranting further investigation.

Quoting some of them

*I've noticed that many of my transgender friends, including myself, have neurodevelopmental conditions such as ADHD or autism. It's interesting to know there might be a connection between our gender identity and these conditions (25 years old)*

#### **Sub-theme 1.2: Variability in Neurodevelopmental Condition Types**

This research revealed a diverse range of neurodevelopmental conditions among transgender participants. Conditions such as autism spectrum disorder, attention deficit hyperactivity disorder (ADHD), and dyslexia were commonly reported, indicating a need for tailored support and understanding of the unique challenges faced by each individual.

Quoting some of them

*I participated in the study, and I have dyslexia and autism. It was reassuring to see that I'm not alone in facing these challenges. Tailored support and understanding are essential because each condition can impact us differently (31 years old)*

### **Theme 2: Experiences of Transgender Individuals with Neurodevelopmental Conditions**

#### **Sub-theme 2.1: Challenges in Navigating Gender Identity Exploration**

Transgender individuals with neurodevelopmental conditions faced specific challenges in navigating their gender identity exploration. Participants expressed difficulties in articulating their gender identity, communicating their feelings, and understanding social cues, which could contribute to heightened stress during this crucial phase of self-discovery.

Quoting some of them

*When I was younger, I struggled a lot with understanding my gender identity due to my autism. It was challenging to communicate my feelings and figure out who I*

*really am. I wish there were more resources and support available back then (32 years old)*

### **Sub-theme 2.2: Coping Mechanisms and Resilience**

The study highlighted the resilience of transgender individuals with neurodevelopmental conditions. Participants shared various coping mechanisms, including creating support networks, engaging in artistic expression, and seeking professional help. These strategies helped them navigate the complexities of their identities and neurodevelopmental challenges.

Quoting some of them

*Being both transgender and having ADHD has its challenges, but I've found that engaging in art has been a great outlet for me. I've also built a strong support network of friends who understand my struggles, and it has helped me cope and feel less isolated (28 years old)*

## **Theme 3: Impact of Neurodevelopmental Conditions on Gender Identity Development**

### **Sub-theme 3.1: Delayed Gender Identity Recognition**

The findings indicated that neurodevelopmental conditions could lead to delayed gender identity recognition. Some transgender participants with certain neurodevelopmental conditions expressed difficulty in understanding and expressing their gender identity until later in life, which could have implications for mental health and well-being.

Quoting some of them

*I didn't fully grasp my gender identity until my late twenties, partly because of my dyslexia. It took a lot of self-reflection and overcoming communication barriers, but eventually, I found my true self (34 years old)*

### **Sub-theme 3.2: Influenced on Gender Expression**

Neurodevelopmental conditions were found to influence gender expression among transgender individuals. Some participants described how their neurodevelopmental traits affected their presentation and communication of gender identity, leading to unique experiences of gender expression.

Quoting some of them

*My autism has influenced how I express my gender. Sometimes, I struggle with social cues and body language, which affects how I interact with others. It's made me explore more creative ways of expressing myself and connecting with my gender identity (26 years old)*

The qualitative semi-structured interview with thematic analysis provided significant insights into the intersectionality of gender identity and neurodevelopmental conditions among transgender individuals. The findings underscored the need for greater awareness, support, and tailored interventions to address the unique challenges faced by this population.



### The Gender-Neurodiversity Intersectionality Model

The Gender-Neurodiversity Intersectionality Model is a novel theoretical framework that seeks to understand and support transgender individuals who also experience co-occurring neurodevelopmental conditions. Intersectionality refers to the overlapping and interrelated nature of various social identities and how they shape an individual's experiences and challenges.

This model acknowledges that the experiences of transgender individuals are multifaceted, with gender identity and neurodevelopmental conditions interacting and influencing one another in unique ways. By adopting an intersectional lens, this framework aims to uncover the complex dynamics and propose targeted interventions that can foster inclusivity and empowerment within this specific population.

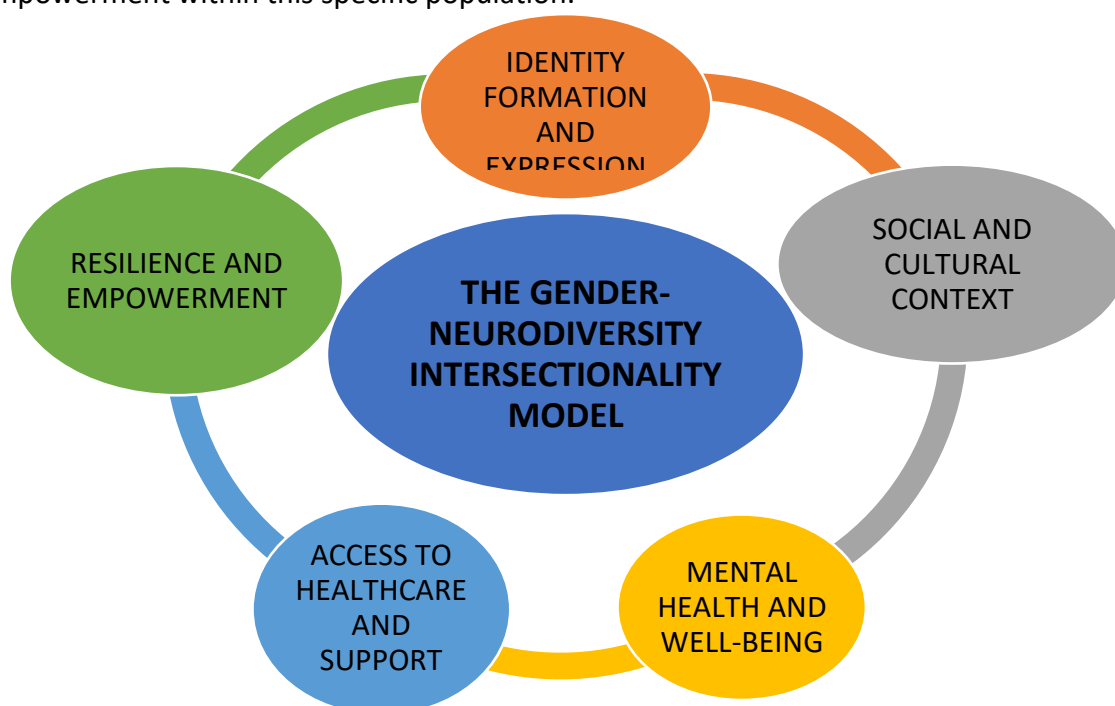


Figure 2. The Gender-Neurodiversity Intersectionality Model

#### Components of the Gender-Neurodiversity Intersectionality Model

##### 1. Identity Formation and Expression

This component explores how neurodevelopmental conditions may impact the development and expression of gender identity among transgender individuals. It examines how the neurodivergent cognitive processing, sensory experiences, and social interactions can influence self-awareness, self-expression, and identification with specific gender identities. Additionally, it investigates how societal perceptions and expectations regarding gender may intersect with the manifestations of neurodevelopmental conditions, potentially leading to unique challenges or strengths in gender exploration.

##### 2. Social and Cultural Context

The model acknowledges the significance of social and cultural contexts in shaping the experiences of transgender individuals with neurodevelopmental conditions. It delves into how societal attitudes, stereotypes, and prejudices towards both transgender individuals and neurodiverse individuals can intersect and compound challenges. Furthermore, it explores

how support systems, community acceptance, and cultural norms may impact the well-being and resilience of this population.

### 3. Mental Health and Well-being

This component examines the mental health implications of living at the intersection of transgender identity and neurodiversity. It investigates the potential correlations between neurodevelopmental conditions and mental health challenges, such as anxiety, depression, or identity-related distress, and how these experiences may be amplified or attenuated due to the interaction between gender identity and neurodevelopmental conditions.

### 4. Access to Healthcare and Support Services

The model addresses the barriers and facilitators that transgender individuals with neurodevelopmental conditions encounter when accessing healthcare and support services. It analyses how the healthcare system can be sensitive to the unique needs of this population, addressing potential diagnostic overshadowing and providing tailored interventions that consider both gender identity and neurodiversity.

### 5. Resilience and Empowerment

This component focuses on identifying the strengths, coping mechanisms, and sources of resilience among transgender individuals with co-occurring neurodevelopmental conditions. It explores how embracing neurodiversity and gender identity can empower individuals and lead to the formation of supportive networks that foster self-advocacy and positive well-being.

The Gender-Neurodiversity Intersectionality Model offers a comprehensive and multidimensional approach to understanding the lived experiences of transgender individuals with neurodevelopmental conditions. By integrating gender identity and neurodiversity within an intersectional framework, researchers, policymakers, and clinicians can gain valuable insights to design more inclusive and supportive interventions that address the specific needs and strengths of this unique population. Ultimately, this model aims to the enhancement of the well-being and empowerment of transgender individuals with co-occurring neurodevelopmental conditions, promoting a more inclusive and diverse society.

## Discussion

This study has made significant contributions to the understanding of the experiences of transgender individuals with neurodevelopmental conditions. The study adopted a qualitative approach using semi-structured interviews and focus groups with transgender individuals who self-identify as having neurodevelopmental conditions. The diverse backgrounds of the participants ensured a broad range of experiences and perspectives were captured (Braun, V., & Clarke, V., 2006)

Through thematic analysis, the research shed light on the intricate interplay between gender identity and neurodevelopmental conditions, revealing how these two aspects can mutually influence each other. The development of "The Gender-Neurodiversity Intersectionality Model" fills a crucial gap in the existing literature, providing a comprehensive framework that acknowledges the multidimensional nature of transgender individuals with neurodevelopmental conditions.

The findings have important implications for promoting inclusive practices that foster understanding, support, and social equity for this vulnerable subgroup. By highlighting the unique challenges faced by transgender individuals with neurodevelopmental conditions, the

research paves the way for advancements in mental health care, educational support, and social acceptance in this population (Lyons, A., Hosking, W., Rozbroj, T., & Rozbroj, S., 2021). Overall, this study contributes to the broader field of gender and neurodevelopmental research, advocating for a more intersectional and inclusive approach in understanding the complexities of transgender neurodiversity. By giving voice to the experiences and perspectives of this underserved population, the research advocates for targeted interventions and policies that can improve the well-being and quality of life for transgender individuals with neurodevelopmental conditions (Testa, R. J., Habarth, J., Peta, J., Balsam, K., & Bockting, W., 2015).

Moving forward, it is hoped that this research will inspire further investigations in this area, encouraging more studies and interventions that are sensitive to the diverse needs of transgender individuals with neurodevelopmental conditions. Ultimately, through continued efforts in research and practice, society can foster a more supportive and accepting environment for all individuals, regardless of their gender identity or neurodevelopmental characteristics.

### Acknowledgement

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### Conflict of Interest

The author confirms there are no conflict of interest involve with any parties in this research studies.

### References

- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (DSM-5). Arlington, VA: American Psychiatric Association.
- Bockting, W. O., Miner, M. H., Swinburne Romine, R. E., Hamilton, A., & Coleman, E. (2013). Stigma, mental health, and resilience in an online sample of the US transgender population. *American Journal of Public Health*, 103(5), 943-951.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Crenshaw, K. W. (1989). *Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory, and antiracist politics*. University of Chicago Legal Forum, 1989(1), 139-167.
- Dyar, C., Feinstein, B. A., & London, B. (2014). Dimensions of sexual orientation and minority stress among bisexual women: The role of partner gender. *Psychology of Women Quarterly*, 38(1), 15-30.
- Hollocks, M. J., Lerh, J. W., Magiati, I., Meiser-Stedman, R., Brugha, T. S. (2019). Anxiety and depression in adults with autism spectrum disorder: A systematic review and meta-analysis. *Psychological Medicine*, 49(4), 559-572.
- Lai, M. C., Lombardo, M. V., Baron-Cohen, S. (2014). Autism. *The Lancet*, 383(9920), 896-910.
- Lyons, A., Hosking, W., Rozbroj, T., & Rozbroj, S. (2021). Understanding Transgender and Nonbinary Australians' Health and Wellbeing Experiences: A Synthesis of Findings from the Trans Health and Wellbeing Study. *International Journal of Environmental Research and Public Health*, 18(2), 619.

- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674-697.
- Testa, R. J., Habarth, J., Peta, J., Balsam, K., & Bockting, W. (2015). Development of the gender minority stress and resilience measure. *Psychology of Sexual Orientation and Gender Diversity*, 2(1), 65-77.
- Van Steensel, F. J., Bögels, S. M., & Perrin, S. (2011). Anxiety disorders in children and adolescents with autistic spectrum disorders: A meta-analysis. *Clinical Child and Family Psychology Review*, 14(3), 302-317.