

ECPS5004: Individual Differences Across the Lifespan Essay

According to the American Psychiatric Association (2013, p. 50), autism spectrum disorder or ASD is identified in an individual by a series of symptoms including ‘persistent deficits’ in varying areas of social and communicative conduct as well as behavioural tendencies or actions that are often recurrent and restricted. Symptoms must also persist from an early age and cause significant disruption to the individual’s life in all its components (American Psychiatric Association, 2013, p. 50). An example of diagnostic symptoms that fall within these categories are difficulty in initiating social relations, poor eye contact and unenthusiastic attitude towards peers (Hodges et al., 2020). ASD also falls under the category of what is known as neurodevelopmental disorders which are a collection of disorders grouped together due to several factors such as prevalence during the early periods of development and simultaneous presence of specific disorders together, ranging from 20%-80% comorbidity rate (Rodríguez et al., 2021). Dramatically shifting from what was once limited in definition and thought of as a rare childhood disorder, ASD is now a condition that is widely discussed, advocated for and is researched throughout an individual’s lifespan. With that said, the defining symptoms of ASD have not been significantly modified, however, it is now seen as a ‘spectrum’ disorder with ranging severity of symptoms (Lord et al., 2018). Improvements within the landscape of autism spectrum disorder have occurred after a long history of proposed theories and incorrect perceptions towards ASD patients.

Initially, Autism was presented alongside schizophrenia by Bleuler in 1911, yet, it was through the efforts of Kanner and Asperger who were able to recognize the indicators that constitute the definition of ASD as a separate concept. Unfortunately, psychoanalysis was the prevailing influence during this period of time which caused the belief that autism resulted from unconscious factors, laying the foundation for the infamous ‘Refrigerator Mothers’ hypothesis (O’Reilly et al., 2019). This hypothesis concluded that children with ASD are the

result of inadequate parenting, specifically that of a cold and neglectful mother. This obviously created a harmful notion towards mothers who blamed themselves for their child's psychological condition, however, this hypothesis was found to be untrue as the founder Bettelheim had credibility issues as reported by O'Reilly et al. (2019) in the same paper.

There are several diagnostic procedures and screening tools utilised to recognize symptoms of ASD. Examples of screening tools are the Modified Checklist for Autism in Toddlers which is a widely used questionnaire for children who are aged 16 to 30 months and the ASQ or the Ages and Stages Questionnaire which aims to assess challenges faced during development at certain ages. Other forms of diagnosis also include Autism Diagnosis Interview-Revised (ADI-R) and the Autism Diagnostic Observation Schedule-Generic (ADOS-G) (Okoye et al., 2023). Currently, treatments for ASD are mainly prescribed to minimise the interference of some symptoms with daily life activities and are tailored towards the individual's specific needs. They vary from behavioural and psychological approaches to prescription of medication depending on the symptoms that present as mentioned by Okoye et al. (2023).

What exactly causes ASD largely remains a mystery and not fully understood, however, there is a general recognition of environmental as well as genetic factors contribute a significant role in the development of the disorder. Essentially, heritability rates range from 40-80%, highlighting the role genetics play in the onset of Autism (Rylaarsdam & Guemez-Gamboa, 2019). This paper also provides evidence through the notable twin studies wherein it was revealed that fraternal twins have a low concordance rate of autism in comparison to identical twins, which was later supported by further research. Exposure to foetal hazards, poor air quality and maternal health are some of the numerous environmental aspects that might pose a risk factor of ASD (Al-Dewik, 2020). Not only do biology or the environment influence ASD, psychological and cognitive aspects also contribute to the characteristics displayed by ASD

patients. Therefore, several psychological theories have evolved to explain behavioural and psychological traits associated with autism spectrum disorder such as Theory of Mind and Weak Central Coherence Theory. Amongst all these theories, this paper will focus mainly on the Theory of Mind.

Engagement in social interactions is a vital part of an individual's daily life and to achieve successful as well as meaningful communication, humans participate in a process called social cognition. Essentially, one's capability of comprehending others' behaviours and the purpose behind them to act accordingly while considering social, moral and other codes of conduct is underpinned by a series of processes within social cognition (Arioli et al., 2018). The Theory of Mind (ToM) falls under these processes as a fundamental aspect of social cognition. This theory states that humans have a natural tendency to 'mentalizing' others' behaviours i.e. comprehend others' mental states such as beliefs, goals etc to interpret and anticipate their future actions. In addition to that, it entails the understanding that people possess mental states that are different to our own as described in the same research paper. The Theory of Mind has garnered attention as one of the most researched areas of developmental cognitive science while also engaging interest in other fields such as social neuroscience (Beaudoin et al., 2020). Korkmaz (2011) describes the process of social cognition as one that encompasses all that is crucial to initiate social interactions in addition to maintaining personal relationships in humans and other living beings alike, with theory of mind being a contributing element. In the paper, a link between the memory system and the emergence of ToM capabilities has been established, alongside other components such as language.

Another skill closely related to ToM is the development of executive functions, yet, they are two independent abilities, wherein possessing strong executive functions does not necessarily result in good performance in ToM (Korkmaz, 2011). Therefore, it is proposed that 'theory of mind' impacts an individual's life across many different domains including the

social aspect of their lives. Children who possess indicators of social adaptation such as elevated communication skills and are achieving students generally have a good sense of ToM while children with a diminished ToM usually suffer from conditions that result in varied social behaviour such as patients of autism spectrum disorder mentioned by the same paper. In relation to autism spectrum disorder, research conducted by Baron-Cohen et al., in 1985 particularly in ASD patients is described as ‘the starting point for the investigation of ToM’ (Persson, 2021). In this study, children were presented with two characters, Sally and Anne, and a scenario. In this scenario, Sally places an object in a certain spot and leaves and Anne moves it to a different position. Then, the children are to anticipate where Sally will search for the object and their responses give an insight into their ToM. Unlike ‘normal’ children and Down Syndrome children who pointed to the original position of the ball, ASD children struggled with the task and incorrectly predicted where Sally would look for the object.

According to the results above, it is believed that children with ASD failed at this task as they were unable to understand false beliefs (Baron-Cohen et al., 1985) which constitutes an important component of theory of mind. Over the past 25 years, abundant studies concerning the development of ToM in individuals across the lifespan have been presented and it is of common belief that struggles encountered by ASD patients are due to a dysfunctional ToM (Fletcher-Watson et al., 2014). This conclusion was reached as individuals within the spectrum exhibited notable lower results on ToM tasks such as false beliefs and drawing inferences of others’ mental states through photographs in comparison to ‘typical’ individuals (Kimhi, 2014). Thus, comprehending how ASD progresses from childhood to adulthood requires a deeper insight into theory of mind.

Fundamentally, dysfunction in the emergence of complete ToM offers an explanation to poor social and communication skills usually displayed by ASD individuals (Fletcher-Watson et al., 2014). The manifestation of ToM abilities during early development as well as

later stages of life can be experienced differently amongst those who grew up ‘typically’ and those with ASD. Amongst typically developed children, ages between 3 and 4 is where expression of ToM skills usually emerges (Korkmaz, 2011). Studies have indicated that typically developing infants acquire theory of mind skills from a young age, which positively impacts their emotional regulation skills and social cognition. Contrastingly, children on the autism spectrum fail to obtain such skills which adversely influences their perception of others’ viewpoints and mutual coordination of attention, resulting in diminished emotional regulation and social relationships as mentioned by Lei and Ventola (2018). Adolescents with ASD have been found to usually succeed in ‘explicit, conceptual’ ToM tests, however, their performance does not always apply to real-life situations. Another study conducted on high-functioning ASD adults concluded that even though they were able to effortlessly excel in false belief tasks, they struggled to predict others’ behaviours (Kimhi, 2014).

During the class debate, it was stated that ASD individuals performed poorly on a test called the ‘Reading the Mind in the Eyes’. A similar study conducted by Pagni et al. (2020) confirms the above statement as it was found that neurotypical adults displayed a better performance in the RME test in comparison to those on the autism spectrum. Life satisfaction reports were spoken about briefly during the debate where it is suggested that diagnostic procedures result in diminished quality of life for ASD individuals. Not only that, but deficits in ToM skills pose challenges in initiating and sustaining personal relationships. Consequently, this gives rise to feelings of isolation and loneliness which is linked to a decline in self-esteem and life satisfaction levels (Persson, 2021). Interventions based on the assumptions of ToM have emerged to assist in improvement of social skills of ASD individuals. These interventions specifically aim to treat causes of ToM and ‘thought bubbles’ is an example of such treatments where other peoples’ thoughts and beliefs are demonstrated in bubbles to help ASD children understand them (Fletcher-Watson et al., 2014).

Even though the strength of ToM might lie in its ability to offer an explanation regarding the poor social and communication abilities of ASD individuals, it is heavily criticised for lack of updated information and evidence in addition to being invalidated by later research. In a paper written by Gernsbacher and Yergeau (2019), Baron-Cohen's False Belief Task and his conclusion that failure in these tests is exclusive to ASD children is heavily critiqued as many studies have discovered that several conditions such as Down syndrome and Williams syndrome have the potential to fail in such tasks. Additionally, exposure of children to prenatal hazards and typical children from particular family or socioeconomic backgrounds are more prone to exhibit poor performance in this task. All in all, the ability to mentally represent others' mental states is impacted by a range of factors and not necessarily specific to those with ASD.

Scientifically speaking, a theory is only reliable if the results obtained are replicable and one of the studies experimented by Baron-Cohen stated that autistic children struggled with comprehending the purpose behind peoples' actions. When subsequent researches attempted to replicate the same experiment, they failed to produce the same results or found no significant variation in results when comparing autistic to typically developed children (Gernsbacher & Yergeau, 2019). This can raise concerns over Baron-Cohen's studies in regards to their validity and replicability. Moreover, Gernsbacher and Yergeau state that tasks designed to test ToM abilities do not necessarily dictate how well an individual performs in social settings. Plenty of evidence has been mentioned to support this claim including a research where different factors that were utilised to predict theory of mind performance in autistic adults were ineffective except for language abilities. Even though autistic individuals might struggle in comprehending others' mental states, research exists that suggest quite the contrary of that statement (Gernsbacher & Yergeau, 2019).

Negative connotations have long been associated with a number of terminologies used to address ASD and autistic individuals, leading to stigma around the disorder and individuals

living with it. For example, the term ‘mindblindness’ is often used interchangeably with ToM wherein Baron-Cohen used it to explain ASD individuals’ ‘inability to mindread’ (Dinishak & Akhtar, 2013). However, this paper criticised the use of this term on the basis that it carried demeaning undertones, that social as well as communicative struggles can be attributed to both autistic and non-autistic individuals and lastly, neglect abilities of autistic individuals which can be of significance and advantageous. In my opinion, this adds to one of the many ways through which society and research contribute to the struggle in addition to stigmatisation of autistic individuals.

A rather intriguing observation that garnered consensus by participants during the class debate was the fact that limited research and information exist in relation to how autism influences the quality of life for adults as compared to the bulk of information available on autistic children. Despite this gap in literature, the past two decades have witnessed an expanding interest in varying elements of autism in adulthood (Alaghband-rad et al., 2023). A similar statement holds true in the field of ToM research as it was discovered that methodological limitations exist within some ToM tests, thus, affecting our understanding of how differences in ToM manifest in autistic adults or its relation to ASD’s symptoms and outcomes as outlined by Livingston et al. (2018). For instance, Livingston et al. mentions that classic theory of mind tasks such as strange stories depend on several factors such as verbal skills. Consequently, autistic individuals who encounter difficulties in language expressions might have their ToM skills underestimated. While, autistic individuals who possess good language skills might exhibit poor ToM skills (Livingston et al., 2018). Moreover, the ToM theory is said to possess an inability to encompass all aspects of ASD leading to the alternative theories such as the weak central coherence which suggests that autistic individuals exert more focus on insignificant details and struggle in connecting the pieces to understand the bigger context

(Persson, 2021). The existing link between ToM and Weak Central Coherence theory was discussed during the class debate as well.

In conclusion, autism spectrum disorder is characterised by a range of symptoms ranging from weak social and communication skills in addition to repetitive behaviours experienced by autistic individuals. Several theories have been proposed to explain these so-called ‘deficits’ and in this essay, I focused on the rather widely recognized, yet, heavily critiqued Theory of Mind. This concept suggests that autistic individuals possess these ‘deficits’ due to their inability in creating mental representations of others and themselves. Although research and studies have somewhat confirmed ToM’s hypothesis, more recent investigations have suggested that results obtained from previous studies are questionable due to its reliability, generalizability and validity.

Additionally, ToM has been faulted for its ‘dehumanising view’ and outdated choice of language when addressing autistic individuals (Marocchini, 2023). Further exploration of ToM and ASD is required specifically in the transition from childhood to adulthood, considering how the impact of symptoms can vary and evolve over time. Theories such as Weak Central Coherence Theory have been proposed to address missing elements in the ToM research field. With the purpose of developing interventions and support systems that are effective to autistic individuals, it is crucial to comprehend and address issues that present within the ASD research field, especially those related to evolvement of ASD throughout the lifespan.

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