HOW GIRLS IN PRESCHOOL PRESENT WITH AUTISM
AND THE POSSIBLE EFFECTS OF LATE DIAGNOSIS

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to Athlone Institute of Technology
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DECLARATION

I declare that this project was composed by myself as part of the requirements for the Degree of Bachelors of Arts (Hons) in Early Years Care and Education. It is entirely the work of the author except where explicitly stated otherwise in the text. This work has not been submitted for any other degree or professional qualification except as specified. Where use has been made of the work of other people it has been fully acknowledged and fully referenced.

Signed: __________________________  Date: ________________________

Breda McElduff
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ABSTRACT

The purpose of this thesis is to examine how girls in preschool present with Autism and evaluate the possible effects of late diagnosis. In order to explore this both quantitative and qualitative research was carried out in the form of questionnaires and interviews. The results show Autism is a lot less prevalent in girls in preschool, that there are certain behavioural traits associated strongly with Autism which appear less evident in girls in preschool and finally the difficulties experienced by girls who go into primary school undiagnosed.
CHAPTER 1: INTRODUCTION

Autism is a lifelong intellectual disability which is characterised by social communication difficulties, repetitive behaviour, fixated interests and routine. The exact statistics of the prevalence of Autism in Ireland was discovered to be 1 in 100 people by researchers in 2016. The diagnosis of Autism is much more prevalent in boys than girls. Despite this the author has gained a lot of experience of working with girls with Autism and has developed a special interest in this area.

The purpose of this thesis is to examine how girls in preschool present with Autism and evaluate the possible effects of late diagnosis. The objectives of this research project are to investigate the diagnosis procedures of girls with autism in preschool, to examine how girls in contrast to boy’s present with autism in preschool and finally to evaluate what are the possible effects of late diagnosis for girls with autism. These objectives will be explored through the carrying out of both quantitative and qualitative research. Questionnaires were distributed to 20 participants who work in preschool settings the answers of which form the quantitative results of this project. Along with this the author conducted interviews with parents of children with Autism in primary school which formed the qualitative research.

The layout of the research project is as follows: Chapter 2 outlines the Literature Review where the author will evaluate the work and study completed by others relevant to this topic. Chapter 3 outlines the methodology used for the research and following this Chapter 4 outlines the results of this research. Chapter 5 forms the discussion chapter where the results of the previous chapter will be analysed and discussed and finally Chapter 6 consists of the project conclusions.
CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

The purpose of this chapter is to review significant national and international research which has been published to date relevant to the topic of this study. Several scholarly articles, journals and publications will be critically evaluated and discussed in relation to Autism, symptoms of Autism, Autism in preschools, the differences in gender and finally late diagnosis of Autism.

2.1 What is Autism?

Autism or Autism Spectrum Disorder (ASD) is a lifelong neuro-developmental disability characterised by social communication impairments and the presence of fixated interests and repetitive behaviours (American Psychiatric Association 2013). People with autism have difficulties in communicating and forming relationships with people, in developing language and in using abstract concepts. It also diminishes their ability to make sense of the world around them (Irish Autism Action).

Autism is described as a ‘spectrum disorder’, this means that the symptoms and characteristics of autism can present themselves in a wide variety of combinations and can range from mild to severe (Irish Autism Action, 2017).

Autism was first defined in its modern sense by Leo Kanner in 1943 with his account of ‘Autistic Disturbances of Affective Contact’ which became a classic in the field of psychiatry (Kanner 1943). His study of eleven children in 1943 was revolutionary as he was the first to describe Autism as a specific syndrome as opposed to previous depictions of such children as being feeble minded or mentally retarded.

In 2016 researchers in Dublin City University carried out a study entitled ‘Autism Counts’ which revealed the prevalence of Autism in Ireland. This study found that 1 in 100 people present with ASD in Ireland similar to rates revealed by recent studies in both the UK and the USA (Sweeney et al. 2016).
### 2.2 Symptoms of Autism

Rapin et al. (2008) stated that the defining symptoms of Autism almost invariably become overt in toddlers and pre-schoolers. They tend to persist throughout life, although often in more muted form. Sociability, rigidity and communication are the three key defining domains within which symptoms of Autism are typically identified:

1. **Sociability** – Impaired sociability, empathy, and ability to read other people’s moods and intentions, with resulting inadequate or inappropriate social interactions.
2. **Rigidity** – Rigidity and perseveration, including both stereotypes (purposeless repetitive movements and activities), the need for sameness and resistance to change.
3. **Communication** – Impaired language, communication and imaginative play. (Rapin et al. 2008).

### 2.3 Diagnosis of Autism in Preschools

Irish Autism Action outlines that ASD is generally diagnosed from the age of two and a half years. This is because some of the skills or emerging skills that the assessment team seek would not be apparent in a typically developing child younger than this.

In Ireland applications for ASD assessments are made through the Health Service Executive (HSE). The Disability Act 2005 outlines that any child born after the 1st June 2002 is eligible to apply for an assessment of need. Part 2 of this Act states that children with disabilities have a right to an independent assessment of their health and educational needs arising from their disability, an assessment report, a statement of services they will receive and the right to make a complaint if they are not happy with any part of the process. The main point of contact is the local Assessment Officer who is responsible for the child’s assessment, provision of support and issuing of the assessment report (Irish Autism Action).

Involvement of the preschool in the official assessment procedure is restricted to the practitioner issuing a statement on the child at the request of the local Assessment Officer. Often it is the case that the preschool practitioner will be the first person to bring concerns about Autistic traits in a child to the parent’s attention. As well as this they possess an in-depth knowledge about the child’s behaviours, traits, preferences, routine and emotions which have been gathered from daily interaction.
A Swedish study carried out by Andersson et al. (2013) is an excellent example on the importance of further developing and evaluating methods for ASD observation in the child’s everyday environment such as preschool. The author is in full agreement with this paper’s statement that we need instruments that can be used in order to identify symptoms of autism even if the child, for whatever reason, cannot participate in a formal test situation at a clinic. The aim of the study was to determine whether structured observation in a preschool setting of 2 to 4-year-old children suspected of suffering from ASD yields the same overlapping or different information as an established assessment procedure in a specialised autism clinic (Andersson et al. 2013).

The main finding of this study was that preschool observation by an Autism-experienced rater of children with suspected ASD, yielded almost the same amount and type of information as the highly-structured assessment performed by two specially trained clinicians in a specialised clinic setting (Andersson et al. 2013). The author deeply shares the opinion of Andersson et al. (2013) in the belief that preschool teachers often have a high level of knowledge about the child and this is important to take advantage of in the ASD diagnostic process. Preschool teachers should be encouraged to make observations and documentations of the child in everyday situations so as to better enable identification of the children’s strengths and difficulties and to assist in the early intervention process.

2.4 Girls vs Boys with Autism

ASD is diagnosed four times more frequently in boys than girls (Rivet and Mason 2011). In the absence of intellectual impairment, the male to female Autism ratio increases to approximately 10:1, reflecting evidence that clinically identified girls with ASD are more likely to present with intellectual impairment (Rivet and Mason 2011).

In an article for Scientific American, ‘Autism – It’s Different in Girls’ Szalavitz (2016) discusses the topic of girls with Autism with Kevin Pelphrey who is a leading Autism researcher at Yale University’s world-renowned Child Study Center. Despite his profession Pelphrey did not recognize the condition in his own daughter who was only diagnosed at the later age of seven (Szalavitz 2016). The criteria for diagnosing ASD are based on data derived almost entirely from studies of boys. These criteria, Pelphrey and other researchers believe,
may be missing many girls and adult women because their symptoms look different (Szalavitz 2016).

An interesting study to assess the differences in gender was carried out by Hiller et al. (2014) which investigated whether sex differences in the diagnostic rates may be, at least in part, due to girls presenting with different overt behaviours, leading to the under-detection of the disorder. To explore this diagnostic assessments and reports were examined of 69 girls and 69 boys who had all been diagnosed with high-functioning ASD (Hiller et al. 2014). Results suggested some key areas that may make ASD more difficult to identify in cognitively-able girls. Compared to boys, fewer girls with ASD presented with restricted interests and less lining up or sorting behaviours (Hiller et al. 2014). Teachers reported substantially fewer concerns with girls’ behaviour than with boys. Relative to boys, girls were reported to more commonly demonstrate appropriate classroom behaviour adding evidence to the belief that boys with ASD present as more disruptive in the school environment, potentially making impairments more salient to teachers (Hiller et al. 2014). Importantly, boys and girls reportedly suffered equally from a lack of social understanding (e.g., the ability to interpret non-verbal cues), however the overt behaviour impairments which may influence a decision to explore a potential ASD diagnosis manifested quite differently between the sexes, an example being girls being better able to use nonverbal gestures and engage in reciprocal conversations (Hiller et al. 2014).

2.5 Late Diagnosis

In medicine, early diagnosis is considered better than late diagnosis. After all, the earlier a condition is detected, the sooner intervention can begin and the better the outcome could be (Baron-Cohen et al. 2007). Take Asperger Syndrome (AS) which is one of the major subgroups of the ASD umbrella, until Dr Lorna Wing published her article about AS in 1981 the English-speaking medical profession had barely heard of it (Baron-Cohen et al. 2007).

Thus, Autism and its various subsets are quite relatively recent in the medical world and it is likely to assume that the generation born before 1980 were overlooked. The same can be presumed for many since then and many still as the area of assessment and diagnosis is still continually developing.

Baron-Cohen et al. (2007) wrote that many attended their clinic in young adulthood and middle age and tell of a now-familiar story – all through their school years they had trouble making
friends or fitting in, by young adulthood many had suffered clinical depression because their underlying condition had gone unrecognized and therefore unsupported. Some had run into problems in work through not understanding what the employer and other staff might expect of them, or being passed over for promotion because of their lack of team skills (Baron-Cohen et al. 2007). The unlucky ones succumbed to the low self-esteem that comes from a childhood being bullied or feeling excluded and dropped out of school with some cases they were asked to leave because school couldn’t cope with their odd and disruptive behaviour in class (Baron-Cohen et al. 2007).

2.6 Conclusion

This study investigates how girls in preschool present with Autism and the possible effects of late diagnosis. There is a distinct need to carry out an investigation on preschool girls in Ireland presenting with Autism. There is a significant gap which exists in current research on the diagnosis of girls in preschools with ASD and the effect on their primary education life a late diagnosis may have.
CHAPTER 3: METHODOLOGY

3.0 Introduction

In this chapter, the author will describe in detail the research method chosen for this study. The aim of this research is to gather some primary data. The methodology section will be laid out as follows – the different methods of research will be defined clearly; the proposed methods will then be outlined along with the justification for this choice. Following this the actual process, sample group, limitations and ethical considerations will also be discussed.

3.1 Methods of Research

A quantitative method of research has an emphasis on quantity and attempts to gather relatively large amounts of information using for example a structured, predesigned questionnaire (Class notes). Punch 2005 states that quantitative research collects numerical data and uses typically structured and predetermined research questions, conceptual frameworks and designs. This type of research aims to gather measurable data to form facts and attempt to uncover patterns in the data. A qualitative method of research places an emphasis on quality attempting to gather high quality information rather than relatively large amounts. It uses interviews and focus groups and the target information does not need to be measurable (Class notes). According to Punch 2005 qualitative methods attempt to understand individuals’ perception of the world.

3.2 Proposed Method

The researcher proposes to use both a quantitative and qualitative method of research in order to collect data for this project in the form of a questionnaire and interviews. The questionnaire was chosen due to its practicality allowing the researcher to gather large amounts of information from a large group of people in a relatively short time period in an inexpensive way. The completion of the questionnaire will be at the volunteer’s convenience and the anonymous nature assures that respondents will answer as honestly as possible. When the data has been quantified it can be used to illustrate the findings graphically. The justification behind carrying out interviews was based around the third objective of this project - to evaluate what are the possible effects of late diagnosis for girls with autism. It was thought that this form of research was better in this case as there was not as many participants as with the questionnaire and it would allow the author to gain a higher standard of information. This method would allow more freedom for those being interviewed to share their own insights and opinions.
3.3 Process

The questionnaire is designed based on the different objectives of this research project. Twenty questionnaires are to be distributed to preschool practitioners with an aim to collect them a week later leaving the volunteers enough time to complete them at their own convenience. For the interviews the author was fortunate to know parents of girls attending primary school with Autism who had not been diagnosed with the condition during their preschool years. The author explained the background behind the research and asked the parents if they would participate in a short interview. It was an informal format allowing the parents to do a lot of the talking and direct the interview being prompted by the author.

3.4 Pilot Questionnaire

It was necessary to complete a pilot questionnaire and three friends, a mixture of A.I.T. and non-A.I.T., were requested to complete the questionnaire giving constructive criticism. After receiving and taking into account feedback it was satisfied that the questionnaire could be easily understood and filled out. It was also noted that the time to complete the questionnaire took each of the participants no longer than ten minutes.

3.5 Ethics

An information cover letter and consent form will be distributed with all questionnaires and before interviews. This will outline to participants that their contribution to the research will remain completely confidential and anonymous. It will also outline to them that they are free to withdraw from the questionnaire process at any stage should they wish. In accordance with the Irish Data Protection Acts informed consent process the information letter will also outline what will happen with the data which they provide and how long it will be kept on record for.

3.6 Limitations

Certain limitations exist in the carrying out of this research study. The chosen sample group for the quantitative research is limited to twenty preschool practitioners and this is a relatively small number to base concrete research results on. Also, there is no guarantee that participants will fill out all questions as accurately as possible. A similar limitation exists with the qualitative research whereby there was only two parents who were interviewed. This is again a small number to base solid research results on however a high quality of information was obtained.
CHAPTER 4: RESULTS

4.0 Introduction

This chapter outlines the results of the questionnaire and interviews on how girls in preschool present with Autism and the possible effects of late diagnosis. The questionnaire results are shown in narrative, tabular and graphical format. Twenty participants were asked to participate in the questionnaire process. All participants work in various parts of the early years’ care and education sector most were practitioners, one was a student and one was an occupational therapist. The results will be laid out in a question by question basis following the order of the objectives.

4.1 Questionnaire Results

The diagnosis procedures of girls with autism in preschool

Q1. Age bracket:

<table>
<thead>
<tr>
<th>Age Bracket</th>
<th>n (number)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 - 20 Years</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>21 - 25 Years</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>26 - 30 Years</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>31+ Years</td>
<td>14</td>
<td>70</td>
</tr>
</tbody>
</table>

Table 1. Age of questionnaire participants

70% (n=14) of participants were agent over 31 years. 20% (n=4) of participants were aged between 26 and 30 years. One participant was between the age of 21 and 25 and one participant was in the 17 – 20 yeas category.

Q2. Gender:

<table>
<thead>
<tr>
<th>Gender</th>
<th>n (number)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 2. Gender of participants

All participants were female.
Q3. Which of the following positions do you hold in the preschool setting?

Figure 3 below shows that 35% were proprietors/owners. 20% were managers. 25% were preschool teachers. 10% were preschool assistants. 10% were in the category of other and specifically were an occupational therapist and a student. None of the participants were special need assistants.

![Figure 1. Position held by questionnaire participants](image)

Q4. How many years have you worked in a preschool setting?

Figure 2 shows that eleven of the participants had more than ten years’ experience in childcare setting. Five practitioners had more than five experience in childcare setting. One practitioners had 3 to 4 years’ experience in the childcare setting. No-one had two years’ experience and three practitioners had less than 1 years’ experience in a childcare setting.

![Figure 2. Years of Experience in a preschool setting](image)
Q5. Which of the following represents most accurately your experience with Autism?

65% of participants stated they had a lot of experience with autism. 30% said they had a little experience and 5% (n=1) stated that they had no experience of working with Autism.

![Figure 3. Level of Experience working with Autism](image)

How girls in contrast to boys present with autism in preschool

Q6 (a). How many girls have presented with Autism in your preschool in the past 5 years?

Figure 4 below shows that 65% of participants had 1-2 girls who presented with Autism in their preschool in the past 5 years. 25% (n=5) of participants said that no girls presented in their preschool with autism in the past five years. 10% of participants said that they had 3-5 girls in their setting with Autism in the past five years.

![Figure 4. How many girls with Autism in the past 5 years](image)
Q6 (b). How many boys have presented with Autism in your preschool in the past 5 years?

Figure 5 below shows that 30% of participants had 3-5 boys who presented with Autism in their preschool in the past 5 years. A further 30% of participants said that 1-2 boys presented in their preschool with autism. 25% of participants said that they had more than 5 boys in their setting with Autism in the past five years. 5% (n=1) said that there were more than 10 boys with Autism in their setting in the past five years and a further 5% said they had no boys.

![Figure 5. How many boys with Autism in the past 5 years?](image)

Q7. To what extent are you in agreement with the following statement? – ‘Poor social competency in children lead to consistent behavioural difficulties and less interactions with peers in the preschool setting’.

55% of participants strongly agreed with the statement, 40% of participants agreed with the statement and 5% of the participants disagreed with the statement.

![Figure 6. Extent of agreement with statement](image)
Q8. As a Preschool Practitioner would you expect a different level of social competency and emotional development in girls than boys in your setting?

Figure 7 below shows that 35% of participants said that they sometimes expect a different level of social competency and emotional development in girls. 20% of participants said that they expect a different level most of the time with a further 20% saying that they rarely expect a different level. 15% of participants stated they did not know with 10% answering that they never expect a different level of social competency and emotional development in girls.

![Figure 7. Different level of social competency for girls](image)

Q9 (a). Which of the following behaviours and traits have you observed in boys with Autism in the preschool setting?

Figure 8 shows there was 18 indications for lack of social interaction. There were 15 mentions for behavioural issues, 14 for difficulty with communication and 14 also for repetitive behaviour. There were 12 indications for difficulty with change, 11 for early language delay and 10 for special and specific interests. 4 mentioned advanced level of language development and 1 mentioned easily participate in group activities.
Q9 (b). Which of the following behaviours and traits have you observed in girls with Autism in the preschool setting?

Figure 9 shows there was 9 indications for difficulty with change. There were 8 mentions for lack of social interaction, 6 for special and specific interest, 6 for repetitive behaviour and 6 also for early language delay. There were 5 indications for behavioural issues, 4 for difficulty with communication, 3 mentions for easily participate in group activities and 2 mentions for advanced level of language.

Figure 8. Behaviours/traits in boys with Autism

Figure 9. Behaviours/traits in girls with Autism
Q10. In your experience with girls and boys with Autism, do girls present more with any of the following traits?

Figure 10 below shows that an equal number of participants, 30%, mentioned the traits desire to please, wider variety of play and stronger ability to fit in. 30% of participants also indicated that they had not noticed any. 10% of participants mentioned coping better with change and 5% (n=1) indicated better verbal and non-verbal communication.

![Figure 10. Do girls present more with certain traits?](image)

Q11. To what extent are you in agreement with the following statement? – ‘Girls with Autism in preschool settings are much better at following the social rules of the classroom when compared to their male counterparts?’

45% agreed with the statement, 35% disagreed, 15% had no opinion and 5% strongly agreed.

![Figure 11. Agreement with statement](image)
4.2 Interview Results

Q. What has late diagnosis meant for your daughter?

*Parent 1: This parent has two daughters with Autism.*

Late diagnosis meant that the girls lost some years of vital early intervention.

Starting school was very difficult for the girls as struggling to cope with all the sound in a class of 30 children.

The loud sound of the interactive whiteboard often created a meltdown for the girls.

The girls struggled with concentration and to sit in one seat all day.

It was very draining for the girls having to concentrate on fitting in during the day and conforming to the rules and regulations of school life.

It was difficult to get the girls to school in the mornings.

Our girls had meltdowns and emotional outburst after school as the constraints of school routines were very difficult for them.

It was hard for the girls to join in games with their peers and I was told by one of my girls she would watch other children playing to figure out how it was done so she could take part.

*Parent 2: This parent has one daughter with Autism who was undiagnosed before primary school and one daughter who’s recently diagnosed in preschool*

It hard to explain what autism is particularly to family and the girls are often sees as spoiled and bold.

Emotional and social interaction is the hardest as our girls are getting older and often the girls don’t want to play with each other.
CHAPTER 5: DISCUSSION

This chapter discusses the significance of the results of the study. The three objectives form the relevant headings. In an attempt to highlight the significance of the findings they will be compared and contrasted to findings of others discussed in the literature review.

Objective 1: To investigate the diagnosis of girls with Autism in preschool:

The vast majority of the surveyed group had 1-2 girls with Autism in their setting in the last 5 years, with a small minority answering 3-5 girls and no one answering more than 5. This is in strong contrast to the boy’s figures. An almost equal number of respondents said they had 1-2 boys, 3 -5 boys and more than 5 boys with Autism in their settings in this time. These results support the findings of Rivet and Mason (2011) which stated that ASD is diagnosed four times more frequently in boys than girls. Szalavitz (2016) discusses the topic of Autism with a leading Autism researcher who did not recognize Autism in his own daughter who was diagnosed at the later age of seven, the study discusses how the criteria for diagnosing ASD are based on data derived almost entirely from studies on boys and that these criteria may be missing many girls because their symptoms look different. The results of the survey carried out showing the contrasting numbers of girls and boys presenting in preschool with Autism support this theory of Szalavitz (2016).

Objective 2: To examine how girls in contrast to boys present with Autism:

When asked would they expect a different level of social competency and emotional development in girls than boys the majority of respondents answered ‘most of the time’ or ‘sometimes’ with almost half of this majority number answering ‘rarely’ or ‘never’. These figures are important because it shows that the majority of participants expect different social and emotional behaviours in girls than boys. These results can be compared to the findings of Hiller et al. (2014) which found that teachers reported substantially fewer concerns with girls’ behaviour than with boys. This study outlined that relative to boys, girls were reported to more commonly demonstrate appropriate classroom behaviour adding evidence to the belief that boys with ASD present as more disruptive in the school environment, potentially making impairments more salient to teachers (Hiller et al. 2014).

In response to question 9 of the survey around behaviours and traits 75% of participants answered that ‘behavioural issues’ were a trait observed in boys with Autism vs only 25% of
participants who said this was a trait observed in girls with Autism. These results are supportive of the theory outlined by Hiller et al. (2014) in the previous paragraph that if boys present as more disruptive with more ‘behavioural issues’ it may make their behaviour more obvious to teachers. The results of this survey may have a strong impact on the diagnosis of Autism in preschools if the majority of participants expect different social and emotional competency in girls than boys which may be leading to the potential under diagnosis of girls with Autism.

In response to being asked if girls present more with certain traits 30% answered they had not notices, the 70% majority said they noticed girls had greater desire to please, a stronger ability to fit in and enjoy a wider variety of play when compared to boys. This supports the work of Hiller et al. (2014) which states that overt behaviour impairments which may influence a decision to explore a potential ASD diagnosis manifested quite differently between the sexes, an example being girls better able to use nonverbal gestures and engage in reciprocal conversations. This study shows girls better abilities to mimic the social norms of the classroom and engage in conversations with the peers. Hiller et al. (2014)’s study also found that when compared to boys, fewer girls with ASD presented with restricted interests and less lining up or sorting behaviours which also ties in with the survey results. This is in agreement with the results of the survey whereby the majority of respondents responded that they noticed girls more so presenting with a desire to please, better ability to fit in and not so narrow a range of interest. A strong majority of respondents in the survey who noticed these traits in girls more so than boys are supporting this argument. These results and their agreement with the study carried out by Hiller et al. (2014) are of fundamental importance. This suggests that girls with Autism in contrast to their male counterparts have a stronger desire to please making them potentially less disruptive and are also better at mimicking the social norms of non-Autistic children possibly making their condition a lot harder to observe. Preschool practitioners are often the first person to approach parents in early years settings about the possibility of getting your child assessed. If 70% of experienced preschool practitioners believe that girls present more with certain traits which may be responsible for masking their Autistic symptoms and thus not raising alarm bells is it any wonder why there are likely so many girls with Autism slipping through the cracks of the system.

**Objective 3: What are the possible effects of late diagnosis of girls with Autism?**

According to the interviewees – late diagnosis meant that vital early intervention was missed. This is supported by Baron-Cohen et al. (2007) which stated that in medicine early diagnosis
is considered better than late diagnosis, the earlier a condition is detected the sooner intervention can begin and the better the outcome can be. The primary school environment is very different from the early year’s education environment. Teachers have curriculums to get through and if a child is not keeping up with the pace then it may be assumed it is because he/she are unable academically. Together with the noise of classroom environments and the strict routine it must be very difficult for a child with Autism. When early intervention happens, it allows both parents and children to prepare for the big transition into primary school and be equipped with the information on how to make the child’s transition as easy as possible.

The study carried out by Baron-Cohen et al. (2007) paints a picture of late Autism diagnosis outlining that for many all through their school years they had trouble making friends or fitting in. This can be compared to the interview of the parent who had two daughters diagnosed late in which she discussed how difficult starting school was for the girls and how they struggled to cope with the loud sounds of the classroom and how one daughter watched the other children play together in an attempt to mimic their behaviour.

Although the girls whose parents the author interviewed were diagnosed late their conditions were still caught in primary school. This is in contrast to the subjects of study by Baron-Cohen et al. (2007) a lot of whom were much older. It outlines that by young adulthood many had suffered clinical depression because of the condition going unrecognized and untreated. Some ran into problems in work because of lack of understanding or lack of team skills. The unlucky ones succumbed to the low self-esteem that comes from a childhood being bullied or feeling excluded and dropped out of school with some cases they were asked to leave because school couldn’t cope with their odd and disruptive behaviour in class (Baron-Cohen et al. 2007).

**Evaluation of method:**

The author used both quantitative and qualitative methods for this study. The quantitative method was very effective in easily gathering a large amount of data from a group of 20 people gave a good representation of the experienced childcare professional body. It was quick, cheap and could be easily graphed in order to detect trends in the data. The qualitative method was effective in getting some good detailed insight into the third objective however two interviews cannot be considered to be a solid representation of people who are affected by late diagnosis. Overall the methods worked very well and it was interesting to see the difference between the information obtained from the two.
CHAPTER 6: CONCLUSION

The foremost aim of this research project was to appraise how girls in preschool presented with Autism and the possible effects of late diagnosis. The author researched literature by other authors on this subject. The literature review focused on Autism, preschool girls with Autism, why girls are not diagnosed at this age as well as the differences between boys and girls. The research carried out by the author was conducted using both a qualitative and quantitative method by a means of a questionnaire and interview. The vast majority of participants surveyed for the questionnaire clearly identified more boys presenting with Autism in preschool than girls. Girls who presented with Autism were less prevalent. Girls presented with a stronger ability to fit in and more desire to please. Findings also found out that the majority of participants expected different social and emotional behaviours in girls than boys which supports the theory that girls are less disruptive in preschool environments. Girls also presented with a less narrowed interest range but in the author’s experience this interest might present in a different way such as small miniature soft toys rather than lining up toys for boys. Little research to support that girls and boys present with Autism similarly in preschool exists so the author could not counter argue this research project. Interviews carried out with parents of girls who were diagnosed late perceives that girls find the transition into primary school extremely difficult when not diagnosed. It is thus clear that early intervention for children with Autism in preschool is important and an area which needs to be focused on. This is further justified by findings which highlighted that early year’s practitioner’s knowledge and understanding of children’s everyday interactions in preschool environments would enrich the assessment team. This in turn would help identify girls with Autism more effectively and promptly facilitating an easier transition into primary school for each child, their family and the school. The findings of this study show that awareness needs to be made among practitioners about the trait differences in girls and boys presenting with Autism in preschool. In conclusion, this research highlights that more research is required as to how girls and boys present differently in preschool with Autism in order to support diagnosis of girls while in preschool. The author intends to keep an up to date record of ongoing research on this very interesting new topic of how girls present with Autism in preschools.

Recommendations:
Updated research must be used by Early Intervention Assessment Teams including practitioners.

Practitioners must upskill their knowledge and awareness of difference between girls and boys with Autism

More research is required on girls with Autism at preschool age in Ireland, Europe as well as the USA who are leading advocates of this research.

REFERENCES


• Kanner, L. (1943). Autistic Disturbances of Affective Contact.

• Irish Autism Action 2017.


APPENDIX A

Questionnaire on Girls with Autism in Preschools

Please attempt to answer all the following questions and tick the relevant boxes where provided. All information given by you will be treated with the strictest confidence and remain anonymous. You may withdraw from the questionnaire process at any time if you wish.

Q1) Age bracket
    □ 17 - 20 years    □ 21 - 25 years    □ 26 - 30 years    □ 31+ years

Q2) Gender
    □ Male    □ Female

Q3) Which of the following positions do you hold in the preschool setting?
    □ Proprietor/Owner    □ Manager    □ Preschool teacher    □ Preschool assistant
    □ Special Needs Assistant    □ Other ______________________________

Q4) How many years have you worked in a preschool setting?
    □ Less than one year    □ Two years    □ Three to four years
    □ Greater than five years    □ Greater than ten years

Q5) Which of the following represents most accurately your experience with Autism?
    □ No experience    □ A little experience    □ A lot of experience

Q6(a) How many girls have presented with Autism in your preschool in the past five years?
    □ None
    □ One to two girls
    □ Three to five girls
    □ More than five girls
    □ More than ten girls
Q6(b) How many boys have presented with Autism in your preschool in the past five years?

- None
- One to two boys
- Three to five boys
- More than five boys
- More than ten boys

Q7) What extent are you in agreement with the following statement:

‘Poor social competency* in children lead to consistent behavioural difficulties and less interactions with peers in the preschool setting’

- Strongly agree
- Agree
- Don’t know/no opinion
- Disagree
- Strongly disagree  (*competency – skill, talent, ability)

Q8) As a Preschool Practitioner would you expect a different level of social competency and emotional development in girls than boys in your setting?

- Most of the time
- Sometimes
- Don’t know/I have no opinion
- Rarely
- Never

Q9 (a) Which of the following behaviours and traits have you observed in boys with Autism in the preschool setting? Please tick all appropriate.

- Lack of social interaction
- Difficulty with communication
- Early language delay
- Advanced level of early language development
- Difficulty coping with change
- Easily participate in co-operative play/group activities
- Repetitive behaviour
- Special & specific interests e.g. Fondness toward a particular toy/animal/child
- Behavioural issues
Q9(b) Which of the following behaviours and traits have you observed in girls with Autism in the preschool setting? Please tick all appropriate.

- Lack of social interaction
- Difficulty with communication
- Early language delay
- Advanced level of early language development
- Difficulty coping with change
- Easily participate in co-operative play/group activities
- Repetitive behaviour
- Special and specific interests e.g. A fondness toward a particular toy/animal
- Behavioural issues

Q10) In your experience with girls and boys with Autism, do girls present more with any of the following traits?

- Desire to please
- Stronger ability to fit in with their peers
- Can cope better with change
- Better verbal and non-verbal communication skills
- Enjoy a wider variety of play
- I have not noticed that girls present more with any of the above

Q11) To what extent are you in agreement with the following statement:

‘Girls with Autism in preschool settings are much better at following the social rules of the classroom when compared to their male counterparts’

- Strongly agree
- Agree
- Don’t know/no opinion
- Disagree
- Strongly disagree