PARENTAL SATISFACTION ON INCLUSIVE AND NON-INCLUSIVE EDUCATION FOR PUPILS WITH AUTISM SPECTRUM DISORDER

LEE YIK PENG

FACULTY OF EDUCATION UIVERSITI MALAYA KUALA LUMPUR 2021

PARENTAL SATISFACTION ON INCLUSIVE AND NON-INCLUSIVE EDUCATION FOR PUPILS WITH AUTISM SPECTRUM DISORDER

LEE YIK PENG

DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF EDUCATION PSYCHOLOGY

FACULTY OF EDUCATION
UNIVERSITY OF MALAYA
KUALA LUMPUR

UNIVERSITY OF MALAYA ORIGINAL LITERARY WORK DECLARATION

Name of Candidate:			
Matric No:			
Name of Degree:			
Title of Project Paper/Research Report/Dissertation/Thesis ("this Work"):			
Field of Study:			
I do solemnly and sincerely declare that:			
(1) I am the sole author/writer of this Work;(2) This Work is original;			
Any use of any work in which copyright exists was done by way of fair dealing and for permitted purposes and any excerpt or extract from, or reference to or reproduction of any copyright work has been disclosed expressly and sufficiently and the title of the Work and its authorship have been acknowledged in this Work;			
(4) I do not have any actual knowledge nor do I ought reasonably to know that the making of this work constitutes an infringement of any copyright work;			
I hereby assign all and every rights in the copyright to this Work to the University of Malaya ("UM"), who henceforth shall be owner of the copyright in this Work and that any reproduction or use in any form or by any means whatsoever is prohibited without the written consent of UM			
having been first had and obtained; I am fully aware that if in the course of making this Work I have infringed any copyright whether intentionally or otherwise, I may be subject to legal action or any other action as may be determined by UM.			
Candidate's Signature Date:			
Subscribed and solemnly declared before,			
Witness's Signature Date:			
Name:			
Designation:			

PARENTAL SATISFACTION ON INCLUSIVE AND NON-INCLUSIVE EDUCATION FOR PUPILS WITH AUTISM SPECTRUM DISORDER.

ABSTRACT

The increasing number of children with autism increases the demand for education in Malaysia. More public and private schools are opening their classes for inclusion, while more centers are emerging in the country to offer various programs and therapy. Choosing the right education is the main problem that parents of children with autism are facing. Given the different types of education placements available in Malaysia, finding a suitable type of education that could satisfy parents can be tricky. Despite the lack of facilities and other factors, parents would still choose to place their child in public mainstream education. The purpose of this study is to identify the level of parental satisfaction towards inclusive and non-inclusive education for pupils with ASD in public and private schools or centers; and also to obtain feedback from parents on how to improve inclusive and non-inclusive education for children with ASD that will lead to parental satisfaction. The design of the study is a mix method design where the quantitative data is collected using a questionnaire developed by the researcher that is adapted by the PSP (Parental Satisfaction Scale), and data was collected from 120 parents from the inclusive and non-inclusive education setting. The qualitative data is collected through an interviewing 10 parents from both education setting. Findings from the quantitative data show that parental satisfaction from both inclusive and non-inclusive education setting is high. However, parental satisfaction for inclusive education was slightly higher compared to non-inclusive education. The researcher was also able to identify a few common themes that affects parental satisfaction and also identified some new ones from the data collected from the interview. Higher levels of satisfaction for parental

satisfaction is higher for inclusive education could be due to the goals that parents have for placing their child in an inclusive education setting. However, the ability to enter mainstream education would not determine the pupil's readiness for school and could form problems in the process of obtaining education. Future research could be done to examine the well being of pupil's with autism in mainstream education.

Keywords: Inclusive education, Non-Inclusive education, Parental Satisfaction

KEPUASAN IBU BAPA TERHADAP PENDIDIKAN INKLUSIF DAN BUKAN INKLUSIF UNTUK MURID DENGAN AUTISME

ABSTRAK

Pertambahan bilangan kanak-kanak yang didiagnosis denganautisme meningkatkan permintaan untuk pendidikan di Malaysia. Lebih banyak sekolah awam dan swasta membuka kelas mereka untuk pendidikan inklusi, sementara lebih banyak pusat pendidikan muncul untuk menawarkan pelbagai jenis program dan terapi. Memilih pendidikan yang sesuai merupakan masalah utama yang dihadapi oleh ibu bapa yang mempunyai anak dengan autisme. Memandangkan pelbagai jenis penempatan pendidikan yang terdapat di Malaysia, mencari jenis pendidikan yang sesuai yuntuk memuaskan ibu bapa boleh menjadi sukar. Walaupun kekurangan kemudahan dan faktor-faktor yang lain, ibu bapa tetap memilih untuk menempatkan anak mereka dalam pendidikan arus perdana awam. Tujuan kajian ini adalah untuk mengenal pasti tahap kepuasan ibu bapa terhadap pendidikan inklusif dan bukan inklusif untuk murid-murid dengan autisme di sekolah atau pusat awam dan swasta; dan juga untuk mendapatkan maklum balas daripada ibu bapa mengenai cara meningkatkan pendidikan inklusif dan tidak inklusif untuk anak-anak dengan ASD yang akan meningkatkan kepuasan ibu bapa. Reka bentuk kajian adalah reka bentuk kaedah campuran, di mana data kuantitatif dikumpulkan menggunakan soal selidik yang dikembangkan oleh penyelidik yang diadaptasi oleh PSP (Skala Kepuasan Ibu Bapa), dan data dikumpulkan daripada 120 ibu bapa dari pendidikan inklusif dan pendidikan bukan inklusif. Data kualitatif dikumpulkan melalui temu ramah 10 ibu bapa dari kedua-dua jenis pendidikan tersebut. Penemuan dari data kuantitatif menunjukkan bahawa kepuasan ibu bapa daripada pendidikan inklusif dan bukan inklusif adalah tinggi. Walau bagaimanapun, kepuasan ibu bapa untuk pendidikan inklusif adalah lebih tinggi berbanding dengan pendidikan bukan inklusif. Pengkaji juga dapat mengenal pasti beberapa tema umum yang mempengaruhi kepuasan ibu bapa dan juga mengenal pasti beberapa tema baru dari data yang dikumpulkan dari temu ramah. Tahap kepuasan yang lebih tinggi untuk pendidikan inklusif mungkin disebabkan oleh tujuan yang dimiliki oleh ibu bapa untuk menempatkan anak mereka dalam suasana pendidikan inklusif. Namun, kemampuan untuk memasuki pendidikan arus perdana tidak akan menentukan kesediaan murid untuk sekolah dan boleh menimbulkan masalah dalam proses pelajaran pelajar tersebut. Kajian yang lebih mendalam dapat dilakukan pada masa depan untuk memeriksa kesejahteraan murid dengan autisme dalam pendidikan arus perdana.

Kata kunci: Pendidikaninklusif, Pendidikanbukaninklusif, Kepuasanibubapa

ACKNOWLEDGEMENTS

Throughout the process of writing this thesis, I have received a lot of support and assistance.

I would first like to thank my supervisor Dr.Madhya Zhagan for his supervision and guidance. His insight on the field of education for individuals with special needs have also helped me a great deal from the writing all the way to the data collection process.

The second group of people that I would like to thank is the panel of experts that helped me validate my questionnaire. This group of people is experts in the field of special education and has been working with pupils with special education needs for many years. They are Professor Dr. Loh Sau Cheong, Dr. Noor Aishah Binti Rosli, Mr. Khairi Bahari and Mrs. Vimala Narayanan.

My data collection process could not have been done with the help of the teachers from public schools around the Federal Territory of Kuala Lumpur, my colleagues from Adapt Enrichment Centre, THINK Enrichment Centre and also parent that were willing to take the time to fill in the questionnaire and conduct the interview with me. I am truly grateful for their time and patience.

TABLE OF CONTENTS

Origi	nal Literacy Work Declaration Formii
Abstr	ractiii
Abstr	rakv
Ackn	owledgementsvii
Table	e of Contentsviii
List o	of Figures xiii
List o	of Tablesxiii
List o	of Abbreviationxiv
List o	of Appendixxvi
СНА	PTER 1: INTRODUCTION
1.1	Introduction
1.2	Statement of Problem
1.3	Rational of the Study
1.4	Objective of the Study
1.5	Research Questions
1.6	Significance of the Study
1.7	Operational Definition
1.8	Limitation of Study
1.11	Summary
СНА	PTER 2: LITERATURE REVIEW24
2.1	Introduction

2.2	Related	Theories	. 26
	2.2.1	Bronfenbrenner's Theory of Ecological Approach	27
	2.2.2	Seven Pillars of Inclusion.	30
	2.2.3	Maslow's Hierarchy of Needs	. 46
2.3	Factors	that Contributes to an Effective Education Setting for Children with	1
	ASD		51
	2.3.1	Teachers	
	2.3.2	Resources.	. 53
	2.3.3	Social and Emotional Growth	. 54
	2.3.4	Parental Support	. 55
	2.3.5	Academics and Learning Progress	55
	2.3.6	Curriculum	. 56
2.4		in Malaysia	
2.5	Educat	ion in Malaysia	. 60
2.6	Educat	ion for Children Diagnosed with ASD	. 61
2.7	Special	Education in Malaysia Comparison to Other Countries	. 65
2.8	Types	of Education Available for ASD Children in Malaysia	. 69
	2.8.1	Non-Inclusive Education in Malaysia	. 69
	2.8.2	Inclusive Education in Malaysia	. 70
2.9	Parenta	l Satisfaction Towards their Child's Education Experience	. 74
2.10	Benefit	s of Inclusion	. 74
2.11	Limitat	ions of Inclusion	. 77
2.12	Benefit	s of Non-inclusion	79
2.13	Concep	otual Framework	. 81
2.14	Summa	nrv	. 81

CHA	APTER 3: ME	ETHEDOLOGY	83
3.1	Introduction.		83
3.2	Research Des	sign	84
3.3	Population		86
3.4	Sample		86
3.5	Sampling Mo	ethods	88
3.6	Sample Size		88
3.7	Location of t	the Study	89
3.8	Instruments.		89
	3.8.1 Ques	stionnaire	90
	3.8.	1.1 Part A: Academics and Learning Process	. 90
	3.8.	1.2 Part: B Parental Support	. 90
	3.8.	1.3 Part: C Resources	91
	3.8.	1.4 Part D: Social and Emotional Growth	91
	3.8.	1.5 Part E: Teachers and Educators	91
	3.8.	1.6 Part F: Curriculum	92
	3.8.2 Rubi	rics	92
	3.8.3 Sem	i-structured Interview	. 93
	3.8.4 Inter	view Protocol	. 93
3.9	Validity and	Reliability of Instrument.	94
3.10	Parental Satisfaction Questionnaire		
3.11	Scoring for Parental Satisfaction Scale		
3.12	Parental Sati	sfaction Interview	103
3.13	Analysis		. 104
3.14	Procedure of	f Data Collection	.105

3.15	Research Procedures
3.16	Summary
СНА	PTER 4: RESULTS110
4.1	Introduction
4.2	Descriptive Data
4.3	Scoring of the Parental Satisfaction Scale
4.4	Research Question 1: What are the levels of parental satisfaction towards
	inclusive education for pupils with ASD in private and public schools?113
4.5	Research Question 2: What are the levels of parental satisfaction towards non-
	inclusive education for pupils with ASD in private centers and home-schools?
	114
4.6	Research Question 3: Which type of educational experience for pupils with
	ASD has higher levels of parental satisfaction, inclusive or non-inclusive
	education?115
4.7	Research Question 4: What can lead to higher levels of parental satisfaction on
	inclusive and non-inclusive education for pupils with ASD? 116
	4.7.1 Responds from Interview for Inclusive Education Setting117
	4.7.2 Responds from Interview for Non-inclusive Education Setting120
4.8	Analysis and Findings for Interview
4.9	Theme and Code Sets
4.10	Summary
СНА	PTER 5: DISCUSSION
5 1	Introduction 128

5.2	Summary of the Results	.128
5.3	Discussion of Research Question 1	130
5.4	Discussion of Research Question 2.	132
5.5	Discussion of Research Question 3.	133
5.6	Discussion of Research Question 4.	135
5.7	Recommendations from the study	138
	Implication of Theories.	
5.9	Conclusion	140

LIST OF FIGURES

Figure 2.1: Bronfenbrenner's Socio-ecological Model
Figure 2.2: Seven Pillars of Support for Inclusive Education
Figure 2.3: Theoretical Framework
Figure 2.4: Pathway for Children with Autism
Figure 2.5: Different Educational Pathways for Children with Special Needs in
Malaysia63
Figure 2.6: Concept of Inclusive Education in Malaysia
Figure 2.7: Conceptual Framework
Figure 4.1: Analysis Result
LIST OF TABLES
Table 1.1: Severity Levels for Autism Spectrum Disorder
Table 3.1: Qualification of Panel of Experts for Parental Satisfaction Scale 97
Table 4.1: Summary of Characteristics of Sampling Pool
Table 4.2: Summary of Demographics
Table 4.3: Mean Scores for Parents of Children with ASD studying in an Inclusive
and Non- inclusive Setting115

LIST OF ABBREVIATIONS

ABA : Applied Behavioral Analysis

ADHD : Attention Deficit Hyperactivity Disorder

APA : American Psychology Association

ASD : Autism Spectrum Disorder

CBT : Cognitive Behavioral Therapy

CC : Central Coherence

DSM-IV : Diagnostic and Statistical Manual of Mental Disorders Fourth

Edition

EF : Executive Function

HFASD : Higher Functioning Autism Spectrum Disorder

IDEA : Individuals with Disabilities Education Act

IEP : Individualize Education Plan

IIUM : International Islamic University Malaysia

JKM : JabatanKebajikanMasyarakat (Social Welfare Department)

LD : Learning Difficulties

LRE : Less Restrictive Environment

MoE : Ministry of Education

NASOM : The National Autism Society of Malaysia

NGO : Non-governmental Organization

OKU : Orang KurangUpaya (term in Malay meaning less capable)

PDK : Program PemulihanDalamKomuniti (Community-Based

Rehabilitation Programme)

PEMANDU: Performance Management and Delivery Unit

PSEE : Parental Satisfaction with Education Experience

SD : Standard Deviation

SEIP : Special Education Integration Program

SEN : Special Education Needs

TOM : Theory of Mind

UPSI : UniversitiPendidikan Sultan Idris

USM : UniversitiSaains Malaysia

UKM : UniversitiKebangsaan Malaysia

WEAC : Wisconsin Education Association Council

LIST OF APPENDIX

Appendix A: Letter of Approval from the Ministry of Education and University of			
Malaya to Conduct Research			
Appendix B: Consent Letter for Panel of Expert			
Appendix C: Panel Expert Form			
Appendix D: Parental Satisfaction Scale for Panel of Expert (with comment			
column)164			
Appendix E: Feedback from Panel of Expert			
Appendix F: Consent Letter for Parents/Caregivers			
Appendix G: Consent Form for Parents/Caregivers			
Appendix H: Demographic Information			
Appendix I: Parental Satisfaction Scale			
Appendix J: Interview Consent Form for Parents/Caregivers			
Appendix K: Parental Satisfaction Interview Protocol: Inclusive Education207			
Appendix L: Parental Satisfaction Interview Protocol: Non-inclusive Education209			
Appendix M: Transcription of Recorded Interview			

CHAPTER 1

INTRODUCTION

1.1 Introduction

The special education sector in Malaysia, both private and public has been experiencing a rapid growth due to the increasing number of children with special needs every year. Due to this increasing number, more public schools are opening their classes for inclusion. Private schools have also seen to be booming around the Klang Valley area of Malaysia, offering inclusive education to children with special education needs. Between the years 2010 to 2017 alone, there has been a sharp increase in number of private and international schools in Malaysia, offering inclusive education to children diagnosed with ASD (Autism Spectrum Disorder). The New Straits Times reported in an article that there were only 66 international schools in the year 2010 and the number has increased to 126 in the year 2017 (Nasa & Pilay, 2017). International schools such as Nexus International School or Help International School are opening their classrooms to inclusion, allowing students with ASD to obtain education in a normal classroom setting with typical classmates.

Parental satisfaction towards the type of education that their child is receiving comes from the progress in terms of quality of life, such as social interactions, academic ability, life skills and many more (Bleszynski, 2018). Choosing a suitable type of education for children diagnosed with ASD can determine the rate of their progress, leading to many parents trying out different types of educational approaches to see which is more suitable for their child's educational needs.

Autism Spectrum Disorder is an invasive developmental disorder that affects approximately 1 out of 625 children in Malaysia (Lim, 2015). Autism can be

detected and diagnosed at an early age of 18 to 24 months old (Bleicher, 2013). Early detection and diagnosis plus early intervention, can give the child a chance to have a more independent and better quality life (Lim, 2015). Once parents are able to detect any unusual symptoms from their child between the ages of two to six, they should seek advice from doctors regarding diagnosis and treatment as soon as possible. As soon as a child is diagnosed with autism, parents have to decide on the next step to take that will help improve the developmental process of their child.

The Education Act 2002 of Malaysia states that every child in Malaysia has the right to education regardless of religion, race, descent, and place of origin or disabilities. Furthermore, the No Child Left Behind policy allows children with special needs to have a chance to be educated. This includes children that have special education needs, such as children that are diagnosed with Autism Spectrum Disorder.

In the path of education, a child that is diagnosed with autism has to go through early intervention. After early intervention, parents then have the option of placing their child in private or public schools for inclusion or opt for special integrated programs, home school them at home or place them at private centers that will teach them different skills, based on their learning ability (Selva, 2017). The transition from early intervention to inclusion would be a challenging time for parents as there are various modes of education available for children diagnosed with ASD in Malaysia. Parents have to take many factors into consideration before choosing a suitable mode of education for their child such as their learning ability, the severity of the disorder, the child's ability to socialize in a general classroom, behavioral issues and constant outbursts, and also other external factors such as bullying. Placing them in a suitable education setting can determine the rate of the

child's progress and ability to cope in school, which would lead to parental satisfaction with the type of education that their child is receiving.

Therefore, this study aims to obtain an insight on both inclusive and non-inclusive education in Malaysia through experienced parents that have children diagnosed with ASD studying in both private and public schools in inclusive classrooms and also children that are privately educated in a non-inclusive setting through home schooling or in private centers. Parental satisfaction on both inclusion and non-inclusion are compared to see which mode of education do parents think is more suitable for pupils with ASD. Parental feedbacks are also collected to see what can be improved in the future, and the researcher would like to see whether there are any other emerging themes that could contribute to parental satisfaction with the type of education that pupils with ASD are receiving.

1.2 Statement of the Problem

Choosing the right education is the main problem that parents of children with autism are facing (Mcdonald, 2014). Both inclusive and non-inclusive education has their benefits, and these benefits vary based on the educational needs of the child. Finding a suitable type of education that could satisfy parents can be tricky, given the different types of education placements available in Malaysia. Inclusion and mainstream education for children diagnosed with autism has been a goal for many parents and professionals (Roberts, 2015). However, some children with autism might not be ready for inclusion. Pressure and expectations from parents towards their child would cause stress and could often lead to meltdowns in class making it hard for them to cope in mainstream education.

This study is conducted to determine what type of education is more suitable for children diagnosed with ASD, through the satisfaction levels of parents that have children studying in both inclusive and non-inclusive education setting. Parental satisfaction can be experienced through the child's progress in terms of academic and social skills when attending an educational institute (Starr & Foy, 2012). Therefore, choosing a suitable type of education for their child is important as it could determine the outcome of the child's progress. Parent's choice of an educational institute could be affected more often by popularity and availability rather than effectiveness (Bleszynski, 2018). This is due to the lack of awareness of the activities and scope of education provided in each institute. Higher awareness and support from the public can provide parents with the knowledge and information they need to help their child achieve a better quality of life.

The lack of awareness among the public is the main reason why no action is taken towards a certain issue that is happening in the society. In Malaysia, children diagnosed with autism are also classified as "Orang Kurang Upaya" (the term in Malay meaning less capable). It would be convenient for individuals who fall into this category to apply for a special identity card or receive social welfare. However, when being categorized it could also strengthen biases and misrepresentation of disabilities, causing people with these disabilities to be excluded from mainstream society (Kok & Gan, 2012). Due to the lack of awareness over the recent years, there has been a huge gap on different aspects such as education, infrastructure, attitudes, facilities, teacher's attitudes, and socio emotional support for children with autism. Families have been fighting hard for education and opportunities for their children but their voices are yet to be heard (Kok & Gan, 2012).

The education system in Malaysia is still developing and is not able to support the needs of students with disabilities (Lee, 2010), this mainly includes the facilities and teaching materials available in public schools that cannot support their learning process (Mohamad Razali, Toran, Kamaralzaman, Mohamad Salleh, & Mohd. Yasin, 2013). One of the main struggles of inclusive education in Malaysia is that it is still new, and has not been the main concern of the government yet as their main focus is on providing compulsory primary education to all children, rather than emphasizing on inclusive education for children with special education needs (Lee, 2010; Ting, Lee, Low, Chia, & Chua, 2014).

The Malaysian education Blue print 2013-2025 clearly shows the government's effort to improve the education system in Malaysia. However, little was mentioned about education for students with special needs. The ministry of education aims to create an educational transformation in the span of 13 years through 3 waves, and the focus to strengthen programs for groups with special education needs falls into the second waves which starts from the year 2016 to 2020 (Malaysia Education Blueprint 2013-2025, 2013). The ministry aims to create better quality curriculums, provide more training for teachers, prepare strong infrastructures and sufficient funding, and create higher awareness in the society to help pupils with special education needs (Malaysia Education Blueprint 2013-2025, 2013). However, the policy is still new and much more is yet to be done. Due to the lack of attention given, many public schools are faced with a lack of funding, causing them to not have enough staff members and also classrooms to integrate and implement the programs for inclusive education (Hussin, Quek & Loh, 2008). Since inclusive education in public schools are less establish, some parents have no choice but to send their children to private schools or centers that provides inclusion. In addition,

due to the long waiting list in public centers, it is more common for parents to seek help from private centers or non-governmental organizations (Ting, Lee, Low, Chia, & Chua, 2014).

The lack of available materials in public schools forms an obstacle for children with a low socio economical background to attend school, limiting them from obtaining the knowledge they need. In the past, much of the discussion given to mainstream education were more towards the idea of integrating students and having students with disabilities enter mainstream classes rather than the notion of integrating the system, such as the coordinating efforts, assessment programs, education standards, teacher preparation and also facilities (Voltz, Brazil & Ford, 2001). The lack of all the aspects mentioned above affects parental satisfaction towards the type of education available for the children. Therefore, the researcher aims to see the levels of parental satisfaction towards inclusive and non-inclusive education for children with autism, based on data collected from parents.

It is seen that given the lack of all the aspects mentioned above from public schools, parents still carry hope to place their child in an inclusive education setting. However, being ready for school could be a problem for these children with autism and could affect the level of satisfaction and attitudes of parents towards inclusive education.

The increasing number of students entering school each year is also a problem for inclusive education in public schools, as they are not able to cater to each individual's needs. The lack of classrooms has caused some of the special classes in public schools to be located at inconvenient places all around the school such as the far end of the school building or near the sports equipment stores. Aligned with the Malaysia Education Blueprint, UNESCO is trying to create more

awareness towards the facilities available in educational institute for children with special education needs. By working together with the MoE (Ministry of Education), UNESCO plans to make these facilities more available for students with special education needs are in progress (UNESCO, 2009). The government is trying their best to make more classrooms available in schools around Malaysia. Furthermore, the government is working together with NGOs (Non-governmental Organization) around the country to create more awareness towards autism.

In terms of socio emotional support, parents especially mothers of children with autism have lower quality of life due to the higher responsibility when it comes to care giving (Yamada et al, 2012). They are more prone to develop mental issues such as depression, feelings of social isolation and being burnout (Carter et al, 2009; Sipos et al, 2012). This could be due to the lack of coping strategies such as support from family and friends, joining support groups, connecting with other parents of children with autism, the use of service providers, advocacy and support groups and religion (Siah & Tan, 2016).

This study is conducted so that results obtained can help parents, teachers and also policy makers to use as a reference to help improve the education system for children with autism in both inclusive and non-inclusive education setting.

The lack of an assessment scale to measure parental satisfaction towards education of children with is also a current issue. Without any formal tool to assess the feedback from parents; researcher, administrators and also other parents are not able to determine the most suitable education for children that are diagnosed with Autism. Some schools measure parental satisfaction using a questionnaire that they designed based on the facilities and services available in the school (Armstrong, Kane, O'Sullivan, & Kelly, 2010). However, these questionnaires are not able to be

used generally as they are designed specifically to cater to the particular school setting. It is important to have an assessment scale that can be used to measure parental satisfaction generally as it can be used widely throughout the country. The findings also allow parents to compare between inclusive and non-inclusive education, helping them to choose a suitable education setting for their child. Therefore, the need to create a questionnaire that is able to measure parental satisfaction towards inclusive and non-inclusive education for children with autism generally is high, and it can be used in various education settings.

The questionnaire created allows the researcher to compare parental satisfaction in both inclusive and non-inclusive education settings in the country. Parental satisfaction feedback is usually done in schools alone to receive parent's feedback regarding the particular educational institute's progress. This questionnaire gives the researcher an opportunity to gather data on parental satisfaction generally from different educational institutes.

Parents also play an important role in sharing their opinion on how to overcome the dissatisfaction that they have towards the type of education that their child is receiving as they are the main care giver of the child. Collecting information from a parent's point of view can give a new perspective towards the type of education preferred for children with Autism in Malaysia. Therefore, collecting qualitative information from parents will also be one of the main focuses of this study.

1.3 Rational of Study

The number of children being diagnosed with ASD is increasing each year, and this could be due to the higher level of awareness in the society. More parents of

children with ASD are coming out of the closet to seek various treatments for their child to improve their quality of life. Society is also learning to accept children with special education needs, providing these children to have a chance in education. However, there is still a lack of local research towards autism and education creating a knowledge gap on the comparison of inclusive and non-inclusive education in Malaysia (Ting, Lee, Low, Chia, & Chua, 2014; Ferraioli & Harris, 2011). The importance of this study is to bring the gap for the problems mentioned in the problem statement above closer for students with autism attending mainstream or other special education programs. By doing so, the researcher hopes that these students are able to expereince better quality education that wold help in their developmental growth, and alsoto imporve special education in the country.

Several studies have been done on the perception of educators and parents towards inclusion, but none has been seen comparing parent's preferences on inclusive and non-inclusive education for children with autism. There do not appear to be any comparative studies on inclusive versus specialist education placements for children with ASD in Malaysia. This gap created shows that there is a need to conduct this research and the subject of inclusive versus non-inclusive education has been a subject of considerable debate (Roberts, Keane & Clark, 2008). The researcher intends compare both inclusive and non-inclusive education in Malaysia based on parental satisfaction towards the types of education their child with ASD is obtaining. This would allow greater insights towards the type of education available for children with autism in Malaysia and what type of education do parents think is more suitable for them.

It is important for parents to find a suitable environment for their child to learn and grow as it would give them a higher chance to lead a productive life (Warren, 2014). Parents of children with ASD need to have more information regarding the types of resources available to them that can cater to their child's educational needs. The lack of this information would limit their choices when it comes to choosing a suitable education setting for their child. As intervention and inclusion is still new in Malaysia, there are no structural guidelines for parents to follow when it comes to educating their child with ASD. Making the wrong choice for their children could lead to delay in learning and once a decision is made it cannot be undone. The consequence of making the wrong choice is a negative impact towards both parents and also the child. Therefore, it is important to conduct this study so that new parents are able to make a choice based on the experience of parents that have children diagnosed with autism studying in various education settings.

The views of parents on how to overcome this problem are also important for this study. Through the input from these parents, professionals working in the education field, the ministry of education and also other parents of children with autism are able to work together to improve the quality of education for students with special education needs in the country and come up with a plan that will make education for children with autism more effective and accessible.

The researcher would like to look into the concerns of parents of children with ASD have towards the their child's education experience through an interview with experienced parents to obtain their feedback on what they feel can be improved to make their child's education experience a better one. The purpose of an interview in this study is to allow improvement when it comes to educating children with ASD.

1.4 Objective of the Study

Based on the rationale above, this study intends to identify the purpose of conducting this study. The purpose of this study is to:

- To identify the level of parental satisfaction towards inclusive education for pupils with ASD in public and private schools.
- 2. To identify the level of parental satisfaction towards non-inclusion education for pupils with ASD in private centers or home-schools.
- 3. To compare the level of parental satisfaction towards inclusive education and non-inclusive education for pupils with ASD.
- 4. To obtain feedback from parents on how to improve inclusive and non-inclusive education for children with ASD that will lead to parental satisfaction.

1.5 Research Questions

The questions developed for this research are:

- 1. What are the levels of parental satisfaction towards inclusive education for pupils with ASD in private and public schools?
- 2. What are the levels of parental satisfaction towards non-inclusive education for pupils with ASD in private centers and home-schools?
- 3. Which type of educational experience for pupils with ASD has higher levels of parental satisfaction, inclusive or non-inclusive education?
- 4. What can lead to higher levels of parental satisfaction on inclusive and non-inclusive education for pupils with ASD?

1.6 Significance of the study

Through this research, the researcher would like to find out the level of parental satisfaction with children diagnosed with autism in an inclusive and non-inclusive education setting, by comparing the levels of satisfaction obtained from parents on both setting. The researcher also seeks to obtain feedback from parents on what are the things that would affect their satisfaction towards the educational experience their child is receiving in both inclusive and non-inclusive setting. Through the interview, the researcher is able to gain further insight on factors that would affect parental satisfaction towards their child's educational experience in an inclusive and non-inclusive setting.

There would be a few parties that can benefit from this study. Firstly are parents of children with ASD as the findings would allow them to have a clearer picture of what type of education would be more suitable to cater to their child's education needs. Parents that are looking for a suitable education for their child are able to use this study as a guide to help them make decisions based on the experiences of other parents that have children diagnosed with ASD studying in various public and private schools or centers. Based on the parental satisfaction level towards a particular education setting, parents looking for a suitable education setting are able to make a decision based on the feedback from parents that are experienced.

Teachers could also benefit from this study in terms of understanding parent's expectation and hope better. Teachers spend almost as much time as parents do with the pupils in school and can be one of the main reasons that would affect parental satisfaction towards the type of education that their child is receiving. Even though parents are the ones who choose the educational institution for their children, they still have to fully depend on the teacher's role in school. Being able know what

parent's expectations and hopes are can help teachers in terms of attitudes towards the pupil.

Policy makers and also Non-governmental organizations (NGO) are able to make changes to improve their current policy based on the findings and the feedback given by parents from this study. Non-governmental organizations that have centers to educate children with special education needs can use the feedback provided by parents to improve on their syllabus or co-curriculum to promote a more positive educational experience for the children.

Improvement measures can be taken to improve the current education system in the country for children with special education need from the feedback obtained from parents through the interview. Policy makers and educators can use these feedbacks to upgrade the current syllabus, learning environment and also the materials for students with ASD that would allow maximum leaning in the classroom. Based on parent's preference, the ministry of education can also work towards creating more classrooms for inclusion or centers for non-inclusion, based on the preference of types of education parents of children with ASD would prefer. Through this study, the parties involved are able to understand the needs of the students and which factor needs more focus or are lacking in educational institutes, and find ways to improve the quality of education for students with autism.

1.7 Operational Definition

The terms mentioned below are their definitions and how it operates in the study. There are a few terms that are mention in this study, and the researcher will define these terms in this area of the chapter.

Inclusive Education:

The term inclusion captures, in one word, an all-embracing societal ideology. Regarding individuals with disabilities and special education, inclusion secures opportunities for students with disabilities to learn alongside their non-disabled peers in general education classrooms (Special Education Guide, 2013). The Wisconsin Education Association Council (WEAC) defines inclusion as "a term which expresses commitment to educate each child, to the maximum extent appropriate, in the school and classroom he or she would otherwise attend."

Inclusion is not only a preference, it's the law. If a student can succeed in a less restrictive environment (LRE), which is where he or she must be placed (Csillag, 2014). In an inclusive classroom, teachers will provide instructions to students with special education needs in the same environment as their typical peers (Eldar et al., 2010; Cirilli, 2014).

In this study, inclusive education refers to children with special education needs, mainly focusing on pupils with Autism Spectrum Disorders. Inclusive education in Malaysia can be obtained through certain public of private schools that allows the child with autism to be part of a mainstream classroom. These children are able to mingle around with typically developing peers and follow the syllabus that the school has prepared. Inclusive education in public schools in Malaysia does not necessarily require the child to be accompanied by a teacher aid, however in a private setting, it is compulsory for the student to be accompanied by a teacher aid.

Non-inclusive Education:

The term non-inclusion is the "lack of inclusion or the failure to include someone or something" (Merriam-Webster, 2020). Non-inclusive education is the opposite of inclusive education, where children with special needs have education plans specifically to cater to

their educational needs. In this study, the term Non-inclusive education can be seen when the researcher talks about Individualized Education Plan (IEP) which is a written document that outlines a child's education. As the name implies, the educational program should be tailored to the individual student to provide the maximum benefit. The key word is individual. A program that is appropriate for one child with autism may not be right for another. The IEP should address all areas in which a child needs educational assistance. These can include academic and non-academic goals if the services to be provided will result in educational benefit for the child. All areas of projected need, such as social skills (playing with other children, responding to questions), functional skills (dressing, crossing the street), and related services (occupational, speech, or physical therapy) can also be included in the IEP (Autism Society, 2016).

Places that children with special needs could go to obtain an IEP would be special needs centers that have a similar or small ratio of teacher to student, which gives the child a chance to learn on his or her own pace and abilities.

Parental Satisfaction:

The term satisfaction in the dictionary states that it is "the act of providing what is needed or desired" (Webster, 1828). Oliver (1997), stated that satisfaction is a pleasurable fulfillment which in general consumers are familiar that consumption completes some goal, desire and consequently this completion creates a pleasurable feeling. As for Halsteadet al. (1994), satisfaction refers to an alternate response that is centered on matching the result of the product with some standard set prior to the purchase and measured during or after consumption. In terms of satisfaction towards educational experiences is how parents feel towards what the school is able to of has provided to their child based on what they need or desire. Parental satisfaction refers

to the level of satisfaction with the overall quality of the child's program, special education, teachers and services provided (Bitterman, Daley, Misra, Carlson, & Markowitz, 2008).

In this study, the term parental satisfaction refers to the levels of satisfaction of parents with children with Autism Spectrum Disorder and the type of education their child is currently obtaining. A higher score shows higher levels of satisfaction while lower scores would indicate a lower level of satisfaction.

Autism Spectrum Disorder (ASD):

Autism is a complex developmental disability that typically appears during the first three years of a child's life due to a neurological disorder that affects the functioning of the brain. It is four more times prevalent in boys than girls. It shows no racial, ethnic or social boundaries, and cuts across family income, lifestyle and educational levels (The National Autism Society of Malaysia, 1987). It is a pervasive developmental disorder that affects not only the learning abilities, but also the emotion of an individual (McCary et al., 2012). ASD usually surface during the first three years of a child's life, and can be detected and diagnosed at that age (Autism Society of America, 2013). There are no specific medical tests to detect autism, instead professionals such as clinical psychologists' uses behavioral checklists and rating scales to determine diagnosis (Autism Speaks, 2013).

Individuals with ASD are diagnosed based on the following criteria, according to the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-V) (American Psychiatric Association, 2013):

A. Persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following, currently or by history (examples are illustrative, not exhaustive, see text):

- 1. Deficits in social-emotional reciprocity, ranging, for example, from abnormal social approach and failure of normal back-and-forth conversation; to reduced sharing of interests, emotions, or affect; to failure to initiate or respond to social interactions.
- 2. Deficits in nonverbal communicative behaviors used for social interaction, ranging, for example, from poorly integrated verbal and nonverbal communication; to abnormalities in eye contact and body language or deficits in understanding and use of gestures; to a total lack of facial expressions and nonverbal communication.
- 3. Deficits in developing, maintaining, and understanding relationships, ranging, for example, from difficulties adjusting behavior to suit various social contexts; to difficulties in sharing imaginative play or in making friends; to absence of interest in peers.

Specify current severity: Severity is based on social communication impairments and restricted repetitive patterns of behavior. (See table below.)

- B. Restricted, repetitive patterns of behavior, interests, or activities, as manifested by at least two of the following, currently or by history (examples are illustrative, not exhaustive; see text):
 - Stereotyped or repetitive motor movements, use of objects, or speech (e.g., simple motor stereotypies, lining up toys or flipping objects, echolalia, idiosyncratic phrases).

- 2. Insistence on sameness, inflexible adherence to routines, or ritualized patterns or verbal nonverbal behavior (e.g., extreme distress at small changes, difficulties with transitions, rigid thinking patterns, greeting rituals, need to take same route or eat food every day).
- 3. Highly restricted, fixated interests that are abnormal in intensity or focus (e.g, strong attachment to or preoccupation with unusual objects, excessively circumscribed or perseverative interest).
- 4. Hyper- or hypo reactivity to sensory input or unusual interests in sensory aspects of the environment (e.g., apparent indifference to pain/temperature, adverse response to specific sounds or textures, excessive smelling or touching of objects, visual fascination with lights or movement).

Specify current severity: Severity is based on social communication impairments and restricted, repetitive patterns of behavior. (See table below.)

- C. Symptoms must be present in the early developmental period (but may not become fully manifest until social demands exceed limited capacities or may be masked by learned strategies in later life).
- D. Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning.
- E. These disturbances are not better explained by intellectual disability (intellectual developmental disorder) or global developmental delay. Intellectual disability and autism spectrum disorder frequently co-occur; to make co morbid diagnoses of

autism spectrum disorder and intellectual disability, social communication should be below that expected for general developmental level.

Note: Individuals with a well-established DSM-IV diagnosis of autistic disorder, Asperger's disorder, or pervasive developmental disorder not otherwise specified should be given the diagnosis of autism spectrum disorder. Individuals who have marked deficits in social communication, but whose symptoms do not otherwise meet criteria for autism spectrum disorder, should be evaluated for social (pragmatic) communication disorder.

Specify if:

- With or without accompanying intellectual impairment
- With or without accompanying language impairment
- Associated with a known medical or genetic condition or environmental factor (Coding note: Use additional code to identify the associated medical or genetic condition.)
- Associated with another neurodevelopmental, mental, or behavioral disorder (Coding note: Use additional code[s] to identify the associated neurodevelopmental, mental, or behavioral disorder[s].)

- With catatonia

Severity Level	Level 3	Level 2	Level 1
	"Requiring very substantial	"Requiring substantial	"Requiring support"
	support"	support"	
Social	Severe deficits in verbal and	Marked deficits in verbal	Without supports in place,
Communication	nonverbal social	and nonverbal social	deficits in social
	communication skills cause	communication skills; social	communication cause
	severe impairments in	impairments apparent even	noticeable impairments.
	functioning, very limited	with supports in place;	Difficulty initiating social
	initiation of social	limited initiation of social	interactions, and clear
	interactions, and minimal	interactions; and reduced or	examples of atypical or
	response to social overtures	abnormal responses to social	unsuccessful response to
	from others. For example, a	overtures from others. For	social overtures of others.
	person with few words of	example, a person who	May appear to have
	intelligible speech who	speaks simple sentences,	decreased interest in social
	rarely initiates interaction	whose interaction is limited	interactions. For example,
	and, when he or she does,	to narrow special interests,	a person who is able to

	makes unusual approaches to meet needs only and responds to only very direct social approaches	and who has markedly odd nonverbal communication.	speak in full sentences and engages in communication but whose to- and-fro conversation with others fails, and whose attempts to make friends are odd and typically
Restrictive, Repetitive Behaviors	Inflexibility of behavior, extreme difficulty coping with change, or other restricted/repetitive behaviors markedly interferes with functioning in all spheres. Great distress/difficulty changing focus or action.	change, or other restricted/repetitive behaviors appear frequently enough to be obvious to the	unsuccessful. Inflexibility of behavior causes significant interference with functioning in one or more contexts. Difficulty switching between activities. Problems of organization and planning hamper independence

Table 1.1: Severity Levels for Autism Spectrum Disorder (American Psychiatric Association, 2013).

Non-governmental Organization (NGO):

The term Non-governmental Organization is an organization that conducts its operations independently of any government, usually one whose purpose is to address a social or political issue (Oxford Living Dictionaries, 2018).

Individualized Education Program (IEP):

IEP is an Individualized Education Program developed for students with disabilities to ensure that they achieve their educational goals (Olsen, 2003). It is a plan or program developed to ensure that a child who has a disability identified under the law and is attending an elementary or secondary educational institution receives specialized instruction and related services (Washington, 2017).

Special Education Needs (SEN):

The term 'special educational needs' has a legal definition, referring to children who have learning problems or disabilities that make it harder for them to learn than most children of the same age (Lim, 2015).

1.8 Limitations of Study

The limitation of this study would be the data collection method which only limits to the Federal Territory of Malaysia, Kuala Lumpur. Malaysia consists of 13 states, 11 in the peninsular and 2 other states in East Malaysia. This study would only collect data from parents of children with ASD that are studying in schools around Kuala Lumpur. Kuala Lumpur is the Federal Territory of Malaysia and is located in the state of Selangor. Even though Kuala Lumpur is the cultural, financial and economical center of the country, the lack of participants from other parts of Malaysia can make it difficult for the researcher to generalize the study to the people living in Malaysia. However, the researcher choose to collect data in Kuala Lumpur due to the higher number of private and public schools available that offer inclusive and non-inclusive education compared to any other location in the country.

The second limitation would be the sample size of the study. The total sample size for this study is 100 parents of children with autism attending public or private schools, being home-schooled or attending sessions or classes in private centers. Due to the lack of awareness and time constrain, it would be difficult to reach out to a lot of parents living in peninsular of Malaysia. In addition, time constrains and also a limited budget is a reason the researcher choose a smaller sample size.

1.9 Summary

The number of children diagnosed with ASD is on the rise in Malaysia, and so is the demand of education for these children. Due to the high demand of education for children with ASD, schools and private centers are seen coming up all over the Klang Valley area of Malaysia. Besides inclusion in schools, parents also have an option to send their child to a private center or home school which provides

an Individual Education Plan that would cater to the needs of their child. With so many choices at hand, it is hard for parents to choose the right type of education for their child.

It is difficult to find an ideal education setting for children with ASD due to the variety of special needs that would require different types of accommodation. Furthermore, the implementation inclusion for children with ASD in to general classroom in public schools is still considered new in Malaysia, and the ministry of education is still trying their best to increase the number of classrooms to accommodate these students (Bong, 2013).

A mixed method research study is designed and conducted by the researcher to see the levels of satisfaction of parents towards the type of education their child with ASD is receiving, from both inclusive and non-inclusive setting. Their feedback is collected using a questionnaire and further opinions on how the schools or center can improve are collected through an interview. The data collected is then compared to see which type of education setting and parents would find more satisfying. The study involves using two research methods: a parent satisfaction questionnaire and semi-structured interviews with parents. Data is collected over a 12-week period and arranged into tables for further analysis. The researcher then conducted a content analysis and drew conclusions based on the findings.

The information gained from this study generated two types of results: (a) a comparison on parent's satisfaction towards the education experience that their child with ASD is having and (b) a list of feedback from parents on what can be improved in the current education that their child is experiencing, to make them feel more satisfied. The purpose of this study is to see what type of education setting do parents

find most suitable for children with ASD and to obtain opinion from these parents on ways to improve their child's current education experience.

In the next chapter of the study, the researcher would like to introduce the type of theories related to the study. Literature review related to the study is also seen in the next chapter of the study, where the researcher would talk about the types of inclusive and non-inclusive education available in Malaysia, education for children with autism in Malaysia and factors that would lead to parental satisfaction towards the type of education that their child is receiving.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Inclusive education and special education for children with autism has been brought into practice in Malaysia since the 1990's (NASOM, 2008). Individuals that are clinically diagnosed with autism by government or private medical practitioners were mostly referred to NASOM for treatment and therapy in the early days. NASOM reported an increase of 30% of referred cases per annum and the number keeps increasing each year. Although there are no official records for the number of children with Autism in Malaysia, in the year 2004 alone the Ministry of health estimated that 1 out of 600 children in Malaysia were born with Autism (See, 2012). In that particular year, there were more than five hundred thousand births reported, therefore there are approximately 853 children born with Autism that year (Chiam, 2016). The increse in numbers could be due to the increase of awareness in the society. As the number of children increases so does the demand for education. Due to increasing demand of education placement for children with autism, the government has taken up the responsibility of providing special schools and inclusive education for children with autism. 26 special schools for children with disabilities, including autism were established by the government based on the Seventh Malaysia Plan which states the implementation of universal primary education during 1990 to 1995, in line with UNESCO's calling of 'education for all' (Malaysia, 1996), and many more has been added to the list since then. Many private special needs schools have also surfaced during the recent years due to the high increase in demand for special education for children with autism, and international schools have also given

opportunity for children diagnosed with autism to be part of mainstream education. Therefore, parents have more options in terms of choosing the most suitable education setting for their child.

Even though inclusion stated in the 1990's in Malaysia, it is still considered new when being compared to other countries such as the United States, Canada, United Kingdom and even Singapore, and there is still a lot of room for improvement in terms of the syllabus and also the co-curriculum offered in general classrooms for children with ASD (Lee, 2010). The increase in awareness over the years also provides opportunities for private sectors to set up non-inclusive education programs and therapies to emerge in Malaysia. Different types of programs and therapies that are said to help children with ASD improved are introduced to parents, such as social skills training, speech-language therapy, Cognitive Behavioral Therapy (CBT), Applied Behavioral Analysis (ABA), Sensory Integration or Occupational Therapy and many more (Autism Speaks, 2010).

According to the national census of Malaysia, the inclusive education programs saw the enrollment of children with disabilities with normal children in 139 schools, between the year 1996 to 2000 (Malaysia, 2001). Studies have been done on the views of parents and teachers towards inclusive education, however there are few studies that compares between both inclusive and non-incusive education. As the number of children with ASD increases, so does the need for educational resources available. Parents have a choice to allow their child to be placed in an inclusive or non-inclusive educational setting based on their opinion towards their child's education needs; and studies need to be done to see whether parents of children with ASD in both inclusive and non-inclusive education setting are satisfied with the choices that they have made.

When it comes to research and studies regarding inclusive education and autism, more studies are found done in foreign countries compared to Asian countries, with many autism prevalence studies were done mainly in Western and European countries (Ting, Lee, Low, Chia, & Chua, 2014). Therefore, we could see that some foreign studies might have a more positive point of view towards inclusive education for children with Autism.

The higher number of parents favoring inclusive education in western countries could be due to the growing trend and the higher level of awareness in the society (Elkins, Kraayenoord, & Jobling, 2003). A study conducted in the States showed that many parents favored inclusive education and only a small group of parents favored special placement for children with special learning needs (Hilbert, 2014). Parents of typically developing children in Greece also show positive attitudes towards inclusion for children with special education needs, and agree that inclusive education can help increase the child's ability to function better in society (Tafa & Manolitsis, 2003).

2.2 Related Theories

According to the Individuals with Disabilities Education Act (IDEA), Children diagnosed with ASD falls under the students with social and behavioral problems in the categories of Students with Special Needs (U.S. Department of Education, 2006). Therefore, one of the main problems that hinder students with ASD to learn is the impairments in social cognition, social skills and social interaction (Ormrod, 2011). Many theories are developed to focus on the factors that will influence learning that could lead to parental satisfaction towards their child's educational experience. Bronfenbrenner's ecological approach is aligned with the

ecological theory where he believes that the environmental context strongly affects the human development (Kail & Cavanuagh, 2016) The seven pillars of supports focus on the seven main factors that could determine successful education (Loreman, 2007). These theories work hand in hand to determine the parental satisfaction towards their child's educational experience in school based on the seven pillars and whether it is symmetrical with their child's learning.

These theories were selected as it relates strongly to the study and explains how parental satisfaction can be affected. The Bronfenbrenner's ecological approach suggests how the environment can affect an individual's development. Individuals that have a high impact on the child's development are family members and the people they meet in school. These individual such as teachers, school management, peers and parents will be the ones that will be involved in the study. The seven pillars of inclusion explain the seven main factors can determine success for inclusive education. These factors are also used as a guideline to determine parental satisfaction in this study. Maslow's hierarchy of needs is paired with the seven pillars of inclusion to determined the factors that falls into which level of need and through that the researcher can also determine how each factor will affect parental satisfaction.

2.2.1 Bronfenbrenner's Ecological Systems Theory

Urie Bronfenbrenner is the best know advocate for the ecological approach, where the theory is based on the idea that "human development is inseparable from the environmental context in which a person develops" (Kail & Cavanuagh, 2016). Bronfenbrenner divided the environment that affects a person's development into four different levels, known as the microsystem, the esosystem, the exosystem and the macrosystem (Bronfenbrenner, 1995).

People and objects of an individual's immediate evnironment at any point in life consist in the microsystem. These people are the ones closets to the individual, which includes parents, caregivers and siblings (Kail & Cavanuagh, 2016). The microsystem strongly influences a child's development and a child might have more than one microsystem depending on the situation and place the the child is in; for example, a child might have a microsystem for the family and also another microsystem for the day-care setting that he spends half the day in everyday (Kail & Cavanuagh, 2016).

The mesosystem is a connection of microsystems. It provides connections across the microsystem, where what happens in one microsystem could most likely influence the other; for example, a child that had a stressful day at school will most likely fell cranky at home as well. This shows that the microsystems for home and school are connected emotionally for the child (Kail & Cavanuagh, 2016).

The exosystem is the "social setting that a person may not experience firsthand but that still influence development" (Kail & Cavanuagh, 2016). The influence from thus system in indirect but can still have a strong effect on human development. Examples of influence from the exsosystem can include, government and social policys, parent's social network or parent's workplace.

The last level and the braodest environmental context is the macrosystem. It is the "cultures and subcultures in which the microsystem, mesosystem, and exosystem are embedded" (Kail & Cavanaugh, 2016). Ethnic groups, culture and historical events that an indivudual went through all falls under the macrosystem.

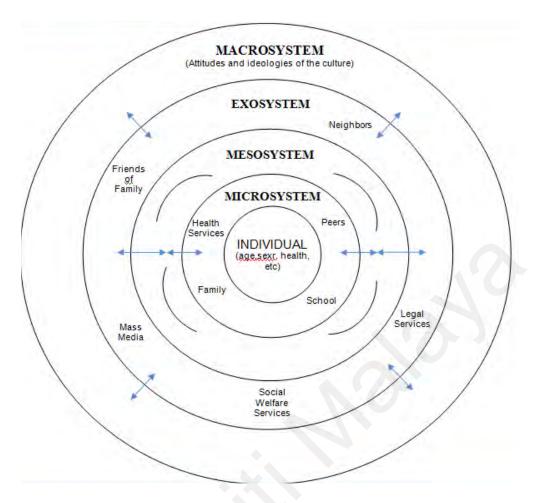


Figure 2.1: Bronfenbrenner's Socio-ecological Model (Kail & Cavanuagh, 2016)

Bronfrenbrenner (1977) states that "The ecology of human development is the scientific study of the progressive, mutual accommodation, throughout the life span, between a growing human organism and the changing immediate environments in which it lives, as this process is affected by relations obtaining within and between these immediate settings, as well as the larger social contexts, both formal and informal, in which the settings are embedded". In other words, a person's development can be influence and shaped by the changes that happen in his or her environment.

Parents, care givers, teachers and peers are the main people that can influence a child's development, and they all fall under the microsystem. A child would spend more than half a day in school as a pupil, interacting and learning from teachers and

peers, before going home to mum and dad. A positive experience in school can affect the pupil's development and further influence the parental satisfaction of their child's educational experience in a particular education setting.

2.2.2 Seven Pillars of Inclusion

This study uses the seven pillars of support for inclusive education as the main framework that influences the outcome of preference towards education experience for children with ASD. These seven pillars were designed to determine the success of education in an inclusive setting. Inclusion is a complex process, and it could be hard to achieve as it requires adjustments from the society if people with ASD are to be able to participate fully in the society (Bernard, Prior & Potter, 2000). Autism Spectrum Disorder is a condition that consists of a range of individuals with highly sophisticated responses. In order for smoother adaptation process during inclusion, the majority of these responses hopefully occur within the mainstream of provision for all or most of the time (Bernard, Prior & Potter, 2000). Parental satisfaction towards education can be linked to each pillar, whereby if the school is able to implement inclusion strongly based on these seven pillars, parents would show satisfaction towards the education their child is receiving. The seven pillars of support includes positive attitudes, policy and leadership, school and classroom processes, curriculum and pedagogy, the community, meaningful reflection and also training and resources (Loreman, 2007). According to Loreman, these seven pillars, if achieved all together are able to form effective and successful education for children with special education needs. These seven pillars are important to determine the success of inclusion and would also influence the level of satisfaction of parents towards the type of education their child diagnosed with ASD is receiving.

Therefore, it is important for schools to have a strong foundation based on all seven pillars to from successful inclusion.

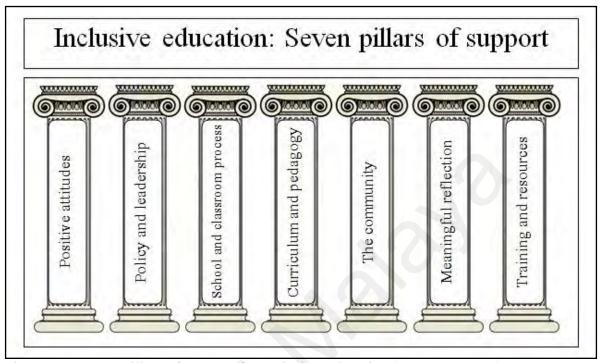


Figure 2.2: Seven Pillars of Support for Inclusive Education (Loreman, 2007).

Pillar one: Developing positive attitudes

Developing positive attitudes in the classroom is seen as one of the most important and also the first pillar to determine the success of inclusive education. Hoobs and Westling mentioned in their study that positive attitudes from teachers in a classroom virtually guarantee success of inclusion (Hoobs & Westling, 1998). Teachers are encouraged to carry out positive attitudes while providing inclusive education to a child with a special education need in the classroom. By doing so, they would tend to develop activities that can help these children achieve their learning goals (Loreman, 2007).

According to Gavalda and Tan (2012), teacher's attitudes are one for the three important factors to improve the teaching process of children with ASD which would lead to better inclusion in mainstream schools. Parents would develop more trust towards teachers when teachers teaching in an inclusive classroom have more

positive attitudes, knowledge and also understanding (Falkmer, Anderson, Joosten, & Falkmer, 2015). They would persive scholing to be inclusive when teachers use their understanding towards ASD to help the child adapt in a classroom. Teachers that carry a negative attitude towards inclusive education are seen to have a lower expectation for children with special education needs (Glazzard, 2011). Lower expectations towards a student's abilities can have a negative impact on his or her performance and slow down their rate of learning. This would also affect parental satisfaction towards the type of education that their child is receiving and would give parents a negative impression towards the educational institute.

Positive attitudes towards children with disabilities can be achieved in schools through hiring teachers that are supportive towards inclusive education and have had positive experience working with children with learning disabilities (Loreman, 2007). Negative attitudes towards inclusion once developed can be difficult to change (Murphy, 1996).

Pillar two: Supportive policy and leadership

The second pillar of support states the importance of support from the school and also system of leaders. Loreman (2003) states that it is useful for inclusive education to be conducted in a school if the school has a supportive policy or legislation, as this would represent a symbolic relationship between the school's leadership and also the law. A school with supportive leaders will also face difficulty promoting inclusive education if the environment around them lacks a supportive policy.

The ministry of education has come up with a system where school administrators, teachers and teaching assistant each hold different roles in terms of inclusion or integration. However, even with different tasks and responsibilities given, they each work towards a common goal making inclusion and integration successful in their schools. The responsibilities of headmasters in integrated schools and public schools with inclusion all across Malaysia includes forming a comity to make sure that the integrated and inclusive program is conducted smoothly, to ensure that special educations teachers exercise their roles accordingly, make sure that all physical aspects of the classroom is safe and suitable for inclusion and integration, to work closely with parents, and to prepare an achievement report to the Ministry of Education (Kementerian Pendidikan Malaysia, 2015). The responsibility of the deputy headmaster on the other hand includes administration and management, financial management, managing the lessons, and classroom management. Special education teachers are in charge of educating the students, assessing student's progress from time to time, recording the student's progress, attend courses and workshops organized by the ministry of education, conduct co curriculum activities and follow instructions given by the school administration from time to time.

Funding also plays an important role in implementing inclusion programs for public schools. The Ministry of Education has spend RM 236 million to upgrade special schools and build new vocational special schools in Malaysia as mentioned in the Ninth Malaysia Plan budget allocations (Ministry of Education, 2009). In contrast, there was no official record of any budget allocation to promote the implementation of inclusive education, and it marks a serious inequality in policy making and the actualization of policy (Lee & Low, 2014). This caused a huge setback for inclusive education during the past years. However, with the new National Education Blueprint (2013-2025), positive changes are expected to favor the funding for inclusive education.

The policy of inclusion must ensure that appropriate learning or other positive experiences will take place for the student. The success of inclusion focuses on the quality of the service or support given and not about whether the individual receives any services or support (Barnard, Prior & Potter, 2000). Most of the time, policy makers and service providers only focus on the 'educability' of the child rather than how the school system can be modified to help student's with ASD adapt better through classroom organization and restructuring of the curriculum(Zalizan & Manisah, 2014).

Loreman, 2007 suggests that there are ways the school administration can do to promote inclusive education. Firstly they can portion out 'packages' of responsibility to each member of the school. By doing this, it does not only reduce the workload of the administrators, but also creates awareness towards inclusive education. It would become everybody's responsibility and not the school leaders alone. A multi-disciplinary approach requires strong, ongoing collaboration across agencies, where different parties such as educators, clinical psychologists, parents and other therapists work together to ensure the student is developing to his or her maximum potential (Lee & Low, 2014). There is still a lack of collaboration among these agencies in Malaysia and parents have to deal with different ministries on their own initiative (Lee & Low, 2014). Secondly, the school administration can collaborate with organizations around the community such as advocacy bodies and non-governmental organization to develop community support. They are able to create more awareness among the community and foster respect for individuals that are different. Studies have shown that a school that operates with a caring and kind culture, with respect and mutual support has a successful rate in inclusive education (Loreman, 2001).

As head of schools, principals play an important role in incorporating values of acceptance inside the four walls of the school. This can be done by fostering a climate in which the school embraces the achievement of all students, including those with special education needs (Horicks, White & Roberts, 2008). The duties of the school principal towards successful inclusion include implementing education programs that cater to all students in the school, allocating the resources needed and also making sure that teachers have the resources needed to work with the students (Gavalda & Tan, 2012). Awareness and basic knowledge of headmasters and the school's administration about the inclusive education policy in Malaysia and their roles in implementing special education for students with autism is crucial to determine the success of inclusive education (Hussin, Quek, & Loh, 2008).

Enthusiasm and corporation between the staff members of the school or center would assure that children with special education needs are not left out, allowing them to learn and participate in the classroom based on their abilities would not only help improve their social skills but also their academic skills. Once parents are able to see improvement in their children, they would show more confident towards the type of education that they have chosen for their child, thus increasing the level of parental satisfaction.

Pillar three: School and classroom processes grounded in research-based practice

The whole school plays an important role in making sure that inclusive education can be successfully implemented in the school, by taking in mind a few organizational factors, such as scheduling class time and school facilities innovatively (Loreman, 2007). For example, a typical Grade 7 class is conducted in a discrete period of time. Children with special education needs might not be able to provide their full attention in that 45 minute subject block back to back, hence not

giving them the opportunity to learn best in the classroom. Regular complementary breaks during class time would also be effective for children with ASD, allowing them to receive special functions training that would benefit them such as speech therapy or occupation therapy (Gavalda & Tan, 2012). The current duration of a class time in public schools are 30 minutes per subject for primary school students and 40 minutes for secondary school students (Kementerian Pendidikan Malaysia, 2015). This is due to the total amount of time set by the ministry for students entering integrated and inclusive education schools, which are a compulsory of 1380 minutes for primary school students and 1440 minutes for secondary school students. It is not mentioned in the guidebook for the operation of integration program in Malaysia whether students would receive a break in between each period, and the linear schedule might not benefit some of the students due to their low attention span.

Research have also shown that students with ASD thrive better in smaller schools with lower number of students, as they would not have to go through social interactions that are too excessive for them to handle (Gavalda & Tan, 2012). Research on ASD and other disabilities associates a small class size with positive learning outcomes (Simpson et al., 2003). Elkins (2005) also suggests that when children with special education needs are organized into heterogeneous groups they would benefit from learning empathy, social skills, and academics. They are also able to receive mentoring from their peers when needed. Students of peers with special education needs can learn to take care of their peers with special needs, by understanding their needs and assisting them when needed.

Another organizational factor that Loreman (2007) suggested would be the need for a classroom to be able to share human and other types of resources.

Teachers are encouraged to work together with a team of therapists, consultants and also learning assistants.

A crucial element to ensure success of learning in a classroom is being able to create a facilitating social or emotional climate that students and teachers feel safe, valued, and accepted (Voltz, Brazil & Ford, 2001). Such an environment can promote an active participation and the sense of belonging among students. The safety in the classroom and physical access to facilities are important when it comes to implementing inclusive education. Proper lighting in the classroom, adequate access to facilities around the school and technological aids are said to be an 'extra teacher' when it comes to educating children with special education needs (Rinaldi, 2006). Consideration should be given to the placement of students with disabilities in the classroom. For example, highly distract able students should not be seated in areas that have many people walking pass, near windows or doors (Voltz, Brazil & Ford, 2001). Certain schools with inclusion would create a separate space designated for "special education", where children with special education needs can go to conduct special activities (Voltz, Brazil & Ford, 2001). Studies have shown that it is not generally conducive to create separate spaces like this. York, Doyle & Kronberg (1992), mentioned that it is helpful to maintain physical spaces that can be used by any group of students or teachers on an as needed basis. Flexibility in groupings without any designated spaces specially build for special education can allow academic goal and social goals of students with special education needs to be met (Voltz, Brazil & Ford, 2001).

Schools with organization styles that are highly structured can also help children with ASD to cope better as they are able to anticipate in advance what the next school day would bring (Gavalda & Tan, 2012). All mentioned above can only

be achieved through solid research by each educational institution. Therefore, it is important for staff and teachers to be always updated on the current strategies and skills.

Pillar four: Flexible curriculum and pedagogy

Schools play an important role to be able to provide multi levels of support to its students by deciding who needs what kind of support and the level of instructional intensity needed for the student (Salvia, Ysseldyke, & Bolt, 2013).

The curriculum in current school's jurisdiction is more linear and inflexible making it difficult to cater to the needs of minority groups such as children with special education needs. This sort of curriculum would lead to more teacher-centered instructions given rather than child-centered modes of instructions (Loreman, 2007). In addition, the Ministry of Education has come up with various programmes such as the Outreach programme, and some pilot projects on inclusive education for students with ASD mentioned in the 2009 National Report, but no outcome measures are established to evaluate the efficacy and feasibility of these programmes, causing the lack of availability of standardized outcome measures for students with learning difficulties in mainstream public school classrooms (Lee & Low, 2014).

Children with special education needs would benefit more from a curriculum that is flexible enough to cater to the wide range of disabilities. Loreman (2007) suggests a few ways that can benefit children with special needs in terms of modifying the curriculum to make it more suitable for them. Firstly is to create individualized goal more frequently and focus on specific skills that the child is able to perform rather than following the goals of the classroom, as more cognitive centered learning might be difficult for children with special needs to achieve such as being able to multiply for a year five student.

It is important for teachers to feel comfortable using a wide array of instructional strategies in the classroom. In an inclusive classroom there is a diversity of students involved, therefore one approach does not fit all (Voltz, Brazil & Ford, 2001). Teachers can learn to be flexible in giving instructions based on the situation and when necessary. Explicit, teacher-led instructions and guided practices may be needed at times for students with autism in a classroom to promote a particular concept or skill. However, sole reliance on a direct instructional model can deprive students with autism the chance to develop independence and take ownership of their own learning due to higher dependence towards teachers (Voltz, Brazil & Ford, 2001).

The term pedagogy is the method and practice of teaching, especially as an academic subject or theoretical concept (Oxford Living Dictionaries, 1928). Pedagogy is seen as an important aspect of learning when it comes to implementing inclusive education in schools, as it focuses on the various methods and practices teachers can use to teach in an inclusive classroom. The highly structured education system in Malaysia mainly emphasizes on result based education to determine the schools effectiveness (Corbett, 1999). This could be a setback for students with ASD entering mainstream classrooms, as their development or learning process is measured based on their ability to perform well during examinations or assessments given. The ministry of education reward public schools based on the student's excellence in examinations and as an alternative, the government could set up a different reward system to reward schools for their efforts to include students with special needs (Asia Community Service, 2012). This could encourage more schools to open their classrooms for students with ASD to participate in inclusion, and also

motivate existing inclusive schools to improve on the programs and facilities for students with special education needs.

Another method to encourage pedagogy in the classroom is that teachers can consider is grouping students into learning groups. This would allow students with ASD to have a chance to socialize with their peers, at the same time allow their peers to learn empathy towards their classmates with ASD. However, grouping based on perceived ability levels is to be avoided as stigma can be created and the children will know who is in the 'low' group and who is in the 'mastering' group. In addition, teachers should also be flexible in their scheduling and should consider rescheduling class time if the students are not able to provide their full attention due to certain circumstances (Loreman, 2007). Parents express the importance for flexibility in an inclusive classroom. It would be an advantage for children with ASD to mix with non-autistic children in the classroom, but also have the advantage of being taught by specialist teachers (Barnard, Prior, & Potter, 2000).

Pillar five: Community Involvement

The involvement of the community around the school plays an important role in determining the success of inclusive education (Loreman, 2007). Close collaboration between families and schools is an effective way to create a successful home-school partnership (Gavalda & Tan, 2012). It is seen that to a large extent schools have become disconnected from the society and school authorities and also the government are putting in a lot of effort to encourage the community to be more involve. The most important group in the wider school community is parents. Loreman (2007) states that parents not only play a role as decision makers, but are also teachers and advocates. They make decisions on behalf of their children, they are their child's only teacher from birth to the age of 4 to 5, and they want the best

for their children. Barnard, Prior & Potter (2000) mentioned in their study that inclusion cannot rely on the commitment and enthusiasm of only one or two individuals alone. It requires a shift in the whole organization's attitude and approach; otherwise it will not benefit children with autism and Asperger syndrome.

A study done in Malaysia shows that there are poor community support and parental support, making it difficult to implement inclusive education in public schools (Hussin, Quek, & Loh, 2008). Gavalda & Tan (2012) states that a student with special education needs will feel more involve in a mainstream classroom if his or her teachers and parents are on the same page. Parental involvement in schools would not only benefit the child and creates active participation of parents in the school community, but also increases parental satisfaction in the process related to inclusion (Timmons & Breitenbach, 2004). In addition, good communication between parents and teachers are perceived based on whether the parents were listened to and whether they were asked for advice on how to improve the needs of their child, as well as whether they were being informed about their child's progress in the classroom (Falkmer, Anderson, Joosten & Falkmer, 2015).

Pillar six: Meaningful reflection

Teachers are able to achieve continuous improvement through reflection. Parson & Brown (2002) states that when data collected through systematic observation are put into action, the value of reflection increases. Reflection can be mainly done through experience. When discussing about reflection, it is critical importance to have actual experience upon which an individual can reflect on (Mcalpine & Weston, 2000). The Webster's dictionary (1961, p.800) defines experience as a "direct observation of participation in events: an encountering, undergoing, or living through things, in general, as they take place in course of

time". Teachers can reflect on their teaching actions by being monitored by others in terms of external cues. By doing so they are able to track the achievements of goals, prior to or concurrent with instruction (Mcalpine & Weston, 2000). Monitoring can lead to decision making on whether to modify teaching actions, and further on lead to the building of knowledge (Mcalpine & Weston, 2000). However, building knowledge on teaching alone does not necessary makes the teacher better. It is by intentionally linking knowledge and experience to future teaching action through reflection that will likely improve a teacher's thinking about teaching and has a greater potential of making him or her a better teacher (Mcalpine & Weston, 2000).

There are a few tools that teachers can use for reflection during their teaching experiences such as keeping a teaching diary or journal. Teachers write down their teaching experiences and the problems that face each day in a journal. This allows them to have a deeper reflection when they look back and argue about their past experiences (Loreman, 2007). Reflective journals can also be used as a learning tool and as an assessment method for teachers that are undergoing their teacher training (Majid, 2016).

Teachers are able to identify the most critical points of a lesson or instructional unit before conducting the next lesson by asking himself or herself questions such as, "What is it that is most critical for all students to learn from this unit? Why is this information critical for the students? What should all students be able to take away from this lesson? What are my non-negotiables?" (Voltz, Brazil & Ford, 2001). Through reflection on the previous lessons, teachers are able to decide what content is more suitable and important to emphasize on and which areas it is more critical to intervene if the student's performance show that he or she does not understand.

Surveys and indexes are also one of the tools that teachers can use for reflection. Teachers are also able to obtain meaningful reflection by visiting classrooms of other teachers. Through observations, teachers are able to pick up different types of ideas and advice on how to implement inclusive education in different types of settings (Loreman, 2007). Furthermore, teachers' observing each other during class time opens up opportunities to discuss on what was observed and can be mutually beneficial to the observer and the teacher being observed. In addition, progress in examination results, and student's placement in a more advanced classroom can also be used as a method of reflection for teachers. Students with special education needs that are able to show improvement in their assessments or examinations tells that they are learning effectively in the current classroom and whatever the teacher is teaching is helping them in their academic progress. Students being able to move on to the next year is also a way of teachers in inclusive classroom to reflect on their teaching methods in the classroom. Certain international schools in Malaysia would not allow children with special education needs to move to the next year if he or she is not able to catch up or seen as unable to cope in the current classroom.

Meaningful reflection allows teachers to look back at their past mistakes and find ways to improve them. By doing so, teaches can learn to be more enthusiastic when teaching in an inclusive classroom; allowing students with ASD to be more involved and also finding different ways to help children with ASD cope in the classroom. Parents would also have more confidence towards the school staff when they see improvement in their child.

Pillar seven: Necessary training and resources

It is important for teachers teaching children with special needs to had adequate training before working with children that has special education needs. Studies have shown that the area in which teacher-training impacted the most on the students were on reducing social problems (Osborne & Reed, 2011). Due to the learning style of children diagnosed with ASD, it is generally accepted that they will benefit from educational intervention that has knowledgeable, trained teachers (Iovannone, Dunlap & Kincaid, 2003; Jones, 2002). It is crucial that teachers teaching in an inclusive classroom receive proper training so that they are not only able to detect but also manage certain behavioral and social problems that are shown by children with ASD. Crisman (2008) mentioned that not only teachers but all staff members in the school should be trained, as things would go on much smoother if everyone in the building understands the needs of students with autism. Barnard, Prior and Potter (2000) also suggested in their study that in education, initial teacher training should be provided for practicing teacher to identify ASD, particularly Asperger syndrome which falls under that umbrella of autism, at reception and in key stage 1.

The government is trying its best to provide training to as many school teachers as possible to equip them to teach children with special education needs. The ministry of education has currently collaborated with the University Pendidikan Sultan Idris (UPSI) to provide special training to teachers to enable them to identify students with special education needs (Basir, 2016). The university has made it compulsory for those pursuing a bachelor's degree in education to take a course in inclusive education for two semesters since the beginning of September 2015 (Basir, 2016). Besides, training courses and workshops provided by the government, there

are also private universities or collages that provides special education courses such as the University of Nottingham Malaysia that offers a Masters Degree in Special Inclusive Education, Dika Collage which offers a Diploma in Special Education and the Asian Collage of Teachers that offers a five months Special Education Course to train teachers to serve and assist children with ASD and ADHD. Local universities that offer special education courses are University of Malaya, University Pendidikan Sultan Idris (UPSI), Universiti Saains Malaysia (USM), Universiti Kebangsaan Malaysia (UKM) and International Islamic University Malaysia (IIUM).

Many teachers feel they are inadequately trained to meet the demands of an inclusive classroom (Loreman, 2007). General education teachers are responsible for teaching children with disabilities in an inclusive classroom in public schools, however these teachers rarely receive any formal training on how to work with children with Autism Spectrum Disorder (Cirili, 2014). Hence, teachers that lack of training would face difficulties while handling children with a special education need in the classroom. Staffs that are well trained will be able to respond more appropriately to the education needs of students with ASD and Asperger syndrome (Barnard, Prior & Potter, 2000). For example, teacher will know not to make many changes for students with ASD so that the sudden change would not be too overwhelming for them. Furthermore, teachers will also ensure that communication and organizational issues in the classroom are responded to consistently and are relevant to the student's level of comprehension.

Parents express their concerns towards schools that have few staffs that are adequately trained and can provide the right level of support for their child with ASD and Asperger Syndrome (Barnard, Prior, & Potter, 2000). Only by having the knowledge about ASD and also child-specific information and a teacher execute

adapted teaching strategies well (Falkmer, Anderson, Joosten & Falkmer, 2015). It is seen having experience teachers are one of the main concern for parents when choosing an educational institute for their child with ASD. Therefore, teachers that are well trained can cause parents to be more satisfied with the type of education that their child is receiving.

2.2.3 Maslow's Hierarchy of Needs

The goal of positive psychology seeks to articulate the vision of a good life. It uses empirical methods of psychology to understand what makes life worth living. Positive psychology aims to find out what actions will lead to the experiences of well being that can develop positive individuals with positive subjective experiences such as well-being, contentment, satisfaction, hope, optimism, enjoyment, creativity, originality, altruism, etc. (Reeve, 2005).

Positive psychology shares the same subject matter as humanistic psychology, and these two fields do substantially overlap one another. Maslow was one of the early humanistic psychologists who favor a more positive view of human behavior rather than dominant theories of psychoanalysis and behaviorism. In the early 1940s, Maslow expressed his concern at the lack of a definitive, motivational theory; as a result, he proposed a hierarchy of needs model (Maslow, 1943) featuring five goals, or needs levels, that he suggested should underpin future research on motivation. The five levels of motivational need are:

- 1) Physiological needs (to satisfy hunger, thirst, etc.)
- 2) Safety needs (to feel secure and out of danger)
- 3) Belonging and love needs (to feel accepted and belong)
- 4) Esteem needs (to gain approval and recognition)
- 5) Self-actualization needs (to find self-fulfillment and realize one's potential)

Maslow proposed that these are the level of needs that a person must strive to achieve in order to reach the highest level of personality fulfillment (Ciccarelli & White, 2009). Throughout the years, this model has paved the way for subsequent research on motivation and self-fulfillment in various settings (Milheim, 2012). Maslow's early works pointed to a specific interest in how certain motivating factors impact upon learning and the learning experience (Maslow & Groshong, 1934). In the context of developing countries such as Malaysia, it has long been recognized that if children in schools were to become effective learners, it is important to meet their basic needs first (Garrett, 1999). Satisfying the needs according to the levels in Maslow's Hierarchy would allow an individual to have a fuller realization of him or herself leading to more positive experiences.

Maslow's Hierarchy of needs can be connected to the Seven Pillars of Support whereby each pillar fits into a level of need, be it a physiological need or an esteem need. Each individual pillar can be connected to one or more needs of an individual. The more needs are fulfilled; parents are able to develop a positive experience such as satisfaction.

Positive attitudes carried out by teachers towards their job and the students in their classroom can be based on whether they are satisfied with their job. There are some fundamental prerequisites that need to be fulfilled for many children before they can begin to attend to the task of learning; similarly the needs of teachers must be met in order for them to become more effective individuals. Therefore fulfilling the belonging and love need in Maslow's hierarchy by having a good teacher and pupil relationship allows teachers to build more positive attitudes towards their pupils.

A school or educational institute that has a supportive policy or legislation is able to satisfy the physiological needs, safety needs and the belonging and love needs for various parties such as parents, educators, administrators and also the students. The first essential need that students must have satisfied in order to have a successful educational experience is some of the obvious necessities in a classroom such as books and other learning materials (Milheim, 2012). Safety needs include providing a safe environment for students with special education needs to learn. School facilities and other equipments are designed specially to cater the needs of these students and not cause them any harm. Furthermore, the belonging and love needs can be satisfied when law makers, school administrators, educators and parents work closely together to help facilitate the students learning.

The ministry of education plays an important role in creating a system where every individual involved has a specific role to play but work towards a common goal. By doing so, the individuals involved are able to exercise their role accordingly and make sure that the program is conducted smoothly. This will not only create a positive experience for the students but also parents and educators that are involved.

Pillar three focuses on how the school and classroom process is grounded on a research-based practice. Classrooms that are conducted based on a research-based practice allow fever room for behavioral problems or emotional outburst during class time (Loreman, 2007). For example, having regular breaks in between a lesson allows more effective learning as students with ASD can have a shorter attention span. Furthermore, highly structured organization styles can also help students with ASD to anticipate what is going to happen next as sudden changes can sometimes be too overwhelming (Gavada & Tan, 2012). These practices allow students to feel safe, thus fulfilling the safety need in Maslow's hierarchy.

Studies have shown that having a flexible curriculum in school can benefit students with special education needs (Loreman, 2007). Creating a good curriculum in the classroom does not only assure that the students have the ability to understand the materials taught but also consistent in a way that students with ASD would not feel overwhelmed with too many changes. Thus, satisfying the safety needs in Maslow's hierarchy. Community involvement on the other hand is able to satisfy the belonging and love need for parents. Parents that work together with teachers and administrators of the school are able to experience a smoother implementation process of inclusion in the classroom (Hussin, Quek & Loh, 2008).

Meaningful reflection can be achieved when all the other basic needs have been satisfied. The individual no longer feels hungry, isolated, lonely, insecure or inferior, but instead he or she feels a need to fulfill personal potential (Reeve, 2005). Self actualization needs gives an individual desire and direction to improve him or herself and become what one is capable of becoming (Reeve, 2005). In this case, teachers would willingly look for ways to improve their skills and reflection will be one of the ways they can do so.

Training and resources is considered the basic need of educators to have in the field of education. Teachers should be well equipped with the knowledge of working with students of special education needs before teaching them (Iovannone, Dunlap & Kincaid, 2003). It the responsibility of the government and also employers to provide as much training as possible to teachers working with students with ASD, and making sure that educators have the proper qualification before hiring them.

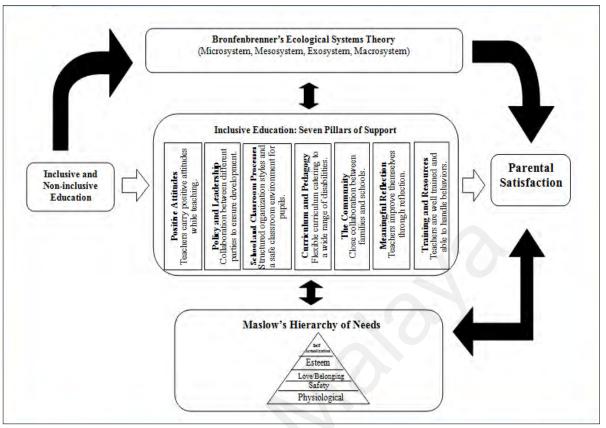


Figure 2.3: Theoretical Framework

The top of the figure shows Bronfenbrenner's Ecological Systems Theory where Bronfenbrenner believes that an individual's development is influenced by his or her environment. When a child attends school, he or she is able to interact with teachers and peers. These people become a part of their microsystem and are the main people that will influence their developmental process. These people also play an important role in determining the success of an inclusive or non-inclusive education setting based on the seven pillars of education. Teachers take up most of the pillars as they are the one that the pupil will have encounter with the most in school, followed by parents that takes up one pillar. Other people involved such as the ministry of education, the government, policy makers and law makers all fall under the exsosystem of the child and these people takes up two pillars from the seven pillars of support. The seven pillars of support also determine whether the education experience of a student with ASD is successful or vice versa, and

satisfying the human needs according to the seven pillars determine whether the type of education obtained by students with ASD are a success or not based on the satisfaction of parents. Each pillar on the seven pillars of support fulfills a need in Maslow's hierarchy of needs, be it for parents, teacher or students. The more needs are fulfilled will determine a more positive outcome in terms of parental satisfaction.

2.3 Factors that Contributes to an Effective Education Setting for Children with ASD

In order to create a suitable educational setting for children with Special Education Needs such as children diagnosed with Autism, a few factors have been identified based on the seven pillars of education. Being able to fulfill these factors can determine the levels of satisfaction for parents towards their child's educational experiences. The factors that are based on the seven pillars include teachers, resources, parental support and flexible co-curriculum. Another two factors that will influence parental satisfaction, and play an important role in the additional questions for the current study are social and emotional growth and also the child's learning progress. These factors that determine parental satisfaction will also contribute to the development of the Parental Satisfaction Scale, where questions asked in the questionnaire will be based on these six main factors. Parents that are able to see improvement in their child's learning ability and also the ability to socialize better with people will have higher satisfaction towards the leaning institute.

2.3.1 Teachers

Educators play an important role in education the future generation; these also include children that have Special Education Needs. Three out of seven pillars; pillars one, six and seven of the seven pillars of support which are positive attitudes,

meaningful reflection and training and resources are focusing on teachers or educators that work with children with special education needs. Parents perceive that teachers play an important role in terms of inclusion to help their children with Autism Spectrum Disorder (Falkmer, Anderson, Joosten, & Falkmer, 2015). Teachers have to undergo training in order to have the knowledge to handle children with Autism. However the lack of trained teachers in mainstream schools could be one of the reasons why parents would prefer placing their children in special schools compared to mainstream schools (Reed, Osborne, & Waddington, 2012). Teachers that are trained to teach typically developing children are not ready to have a child with Autism in the classroom as they might not know how to handle an emotional outburst due to their social and behavioral impairments (Lindsay et al., 2013).

A lot of attention and engagement has to be given by teachers to children with Autism. Children with Autism Spectrum Disorder would find it difficult to focus during a lesson if they do not have interest in the particular topic (Lindsay, Proulx, Thomson, &Scott, 2013). It is important for teachers to be able to communicate and build trust among his or her students in order to teach them more effectively (Falkmer, Anderson, Joosten, & Falkmer, 2015). Teachers teaching in a big classroom might find it difficult to give full attention to the child as he or she has to also pay attention to the classroom of more than twenty children. Special schools on the other hand would have a better student to teacher ratio, allowing the teacher to give more attention to the child with Autism (Reed, Osborne, & Waddington, 2012).

In addition, teachers that carry a positive attitude towards inclusion would take more initiative to have diverse activities in the classroom for the children to learn (Loreman, 2007). Teachers that carry positive attitudes would set appropriate and reachable goals for students with special needs to achieve. Negative attitudes

towards inclusion might cause teachers to set high expectations for the child because they are in a more demanding setting where the school demands to see results and the child with autism is being compared to typically developing children (Reed, Osborne, & Waddington, 2012). This could put high amounts of pressure for the child causing them to breakdown through behavioral problems. Therefore, it is important for teachers to receive proper training before handling children with autism, otherwise it would be challenging not only for the teacher but for the child as well.

2.3.2 Resources

The availability of learning materials for children diagnosed with autism can also determine the rate of their learning. In the classroom, teachers try their best to attract the attention and reach out to these children (Omar, Hussin, & Siraj, 2013). One of the most effective ways to attract their attention is to use teaching materials that are related to their interests. Schools that provide inclusive and special education should always have the teaching materials needed for teachers to work with these children. The lack of proper materials could make it difficult for the child to develop an interest in learning or attending school.

The location and the surrounding of the classroom can also stimulate learning for these children. Guldberg (2010) mentioned that it is important to create an enabling environment for children with Autism. An enabling environment can be determined by the size of the classroom, the location of the classroom, the cleanliness of the classroom and also the safety of the classroom. Classes that have children with special education needs should be located near to the facilities of the schools such as the toilets or the canteen (Jakarta, 2009). One of the reasons why children with Autism are not able to learn fast enough could be due to the

environment that is not suitable for their learning. Therefore, creating a classroom that can stimulate the learning interest of these children can promote the rate of their learning and help them to achieve academically.

When resources of the school are being concerned, the people that are involved to assure that the school has enough budgets to purchase these resources needed to aid students with special education needs are policy makers and the staff that manages the school. These people have the responsibility to create a safe and facilitating environment not only for students but teachers as well (Voltz, Brazil & Ford, 2001). This is where pillar two, policy and leadership and pillar three, school and classroom processes grounded in research-based practice come in.

2.3.3 Social and Emotional Growth

Being able to socialize with other people in the community is one of the important milestones that a child with Autism has to achieve. It gives them the opportunity to communicate with the people around them which help them to function more effectively in society (Tafa & Manolitsis, 2003). Developing peer relations is seen as helpful for children with autism to learn if they are able to develop positive relationship with their peers (Falkmer, Anderson, Joosten, & Falkmer, 2015). However, negative relations such as bullying can have an opposite effect towards the child and his or her view towards school (Parsons & Lewis, 2010).

A school or system that is highly structured can also help children with ASD to cope better as they are able to anticipate what will happen next in advance (Galvada & Tan, 2012). Sudden changes can sometimes be too overwhelming for students with ASD and would affect them emotionally causing them to have frequent meltdowns during class time. Therefore, school and classroom processes grounded in

research-based practice, pillar three plays an important role to help students with ASD cope with their surroundings.

2.3.4 Parental Support

To determine the success of implementing inclusive education, support has to be given not only by the government in terms of finances, but also from other parties such as the school, parents and teachers. Having a good leadership team in the school to guide and support the schools inclusion program is important (Loreman, 2007). This leadership team would consist of special education teachers and also parents of children that are in the special education program.

In addition to having a good leadership team, community involvement can also provide the support that parents need. A collaborative approach between teachers, teachers' aides, caregiver and other professionals, with a clear role designation and sharing of information can ensure a positive outcome for students with ASD (Robertson, Chamberlian, & Kasari, 2003; Simpson et al., 2003). Parents are the most important group when it comes to the wider school community. This is because they not only play the role as caregiver to the child; they are also decision makers, teachers and advocates. Therefore, it is important for parents to lend their support as it can determine the success of implementing inclusive education in the school. In Malaysia, parental support towards the program is still seen as minimal and also irregular (Hussin, Quek & Loh, 2008). The lack of support received can hamper the implementation of the program in the school.

2.3.5 Academics and Learning Progress

The child's ability to learn and progress academically is also a main concern that parents of children with Autism have. Teachers work hard to assure that they are able to help their students learn more each day. The student's progress is measured through an assessment and parents think that it is important to have an assessment for their children consistently (Armstrong, Kane, O'Sullivan, & Kelly, 2010).

A flexible curriculum that caters to the learning needs of the child with Autism is important. Each child diagnosed with autism has different learning abilities and a similar teaching approach used on every child might not be the best way to help them obtain knowledge. The curriculum in today's school jurisdictions has more teacher-centered instructions which are more suitable for a class of typically developing children and might not be suitable for children with Autism (Loreman, 2007).

An effective education from children with Autism will not only allow parents to see their academics improve but also allow them to understand their abilities and strengths. However, a child's ability to learn is again determined by factors such as whether the classroom is stimulating environment to learn or whether he or she has the interest to learn. Therefore it can be linked to the factors mentioned above. In order to determine whether the child is able to improve academically, parents have to first look into the factors above.

2.3.6 Curriculum

Pillar four of the seven pillars of support for inclusive education indicates that in order for inclusive education to be successfully implemented in schools, curriculums should be flexible and able to cater to not only typically developing students but students with special education needs as well (Loreman, 2007). Instead of a linear and inflexible curriculum, the ministry of education can think of various ways to make learning more adaptable in mainstream classrooms for students with ASD.

The currents education system in Malaysia emphasizes on academic achievement. Therefore, students with ASD who seem to have good potential in academic areas or seen as high functioning are expected to sit the same national examination as their typically developing peers. The difference is that they are given certain privileges in terms of the types of facilities they can use during the examinations (MoE, 2013). This makes the teaching and learning process challenging not only for the student but also for the teachers, as they are expected to finish the syllabus and at the same time they are expected to follow the National Standard Curriculum and attain the same academic achievement as the typically developing children (Ramli, 2017). As a result, teachers have no time to accommodate the individual learning needs of students with ASD as they are also required to teach the whole classroom. Students with ASD are expected to keep up on their own and for those to fail to do so would obtain lower marks for their examination (Jelas & Ali, 2014).

2.4 Autism in Malaysia

The number of children diagnosed with Autism Spectrum Disorder (ASD) is on the rise. According to recent statistics, there are 300,000 individuals that fall under the spectrum in Malaysia. In the past, autism was considered a rare disease. However, due to higher levels of awareness and the advancement in medication, it is now recognized as a developmental disability (Selva, 2017).

Most of the children with ASD may physically look like their peers, but the difference between them is a variety of behavioral and sensory challenges. Children with ASD might exhibit some of these behaviors that could be a challenge for them to enter mainstream schools such as avoidance of auditory stimulation,

hypersensitivity or hyposensitivity towards touch, frequent removal of clothing or shoes, lack of eye contact, unusual body movements, playing alone, temper tantrums, hyperactivity and also sometimes aggression (Sicile-Kira, 2014). The three major issues that cause difficulties for students with ASD are: lack of Theory of Mind, weak central coherence and delayed executive functioning (Constable, Grossi, Moniz, & Ryan, 2013).

Diagnosis for autism can start from an early age of 12 month old. Parents can seek help from psychologists or pediatrics when they notice certain red flag behaviors such as no babbling or cooing in an infant of 12 months old, no gestures such as finger pointing or waving, no single words by 16 months, and no respond when name is called and show no imitation to adult's movements (Early Autism Project, 2019). Parents can also use a Modified Checklist for Autism in Toddlers, Revised (M-CHAT-R) to do a self screening for their child. The chart is available for download at the Early Autism Project webpage, and parents are encouraged to schedule for a diagnostic evaluation once they notice any fails on the M-Chat.

Even though the awareness towards autism in this country is increasing, many people still consider this disability as a taboo and refuse to seek treatment or intervention. Some parents also express shame towards their children as living in an Asian country, every child is expected to be high achievers (Alphonsus, 2012). Therefore, data on autism in Malaysia is still relatively scarce, as there are still a handful of people that are not aware of this condition, especially those that are living in rural areas (Lim, 2015). Parents sometimes choose to isolate their children from the public due to constant meltdowns and outbreaks (Alphonsus, 2012). Therefore, we seldom see children with special needs in public areas such as shopping malls and playgrounds.

Another reason why some parents of children with autistic behaviors at clinical levels do not receive a formal diagnosis could be due to the stigma and discrimination that both child and parent would receive (Russell & Norwich, 2012). In Malaysia, a child with autism has to be diagnosed clinically before he or she can receive a formal education in a private or public educational institute. In order to enter government schools, parents also have to register their child as a special needs individual or orang kurang upaya (OKU). Parents tend to fall into dilemma when it comes to retaining the 'normal' status of the child or accepting the 'special needs' status (Russell & Norwich, 2012).

The lack of support from the society also causes frustration among caregivers as there is no support system for parents in Malaysia at the moment (Alphonsus, 2012). Parents of children diagnosed with ASD are left to figure out the next step to take, in terms of education and also the medical system. Despite the current lack of support, parents in Malaysia are trying their best to cope one step at a time. Due to the lack of solid research on Autism in Malaysia, parents have a chance to try different kinds of treatment that they feel will be beneficial to their child. This has prompt the researcher to look into how different types of education in Malaysia can affect parental satisfaction and how it influences their decision to place their child in an inclusive or non-inclusive education setting. Similar for educational experience, the various types of education offered for children with autism gives parents the opportunity to explore and find the suitable type of education that can cater to their child's needs. Through experiences, these parents are able to help others going through the similar dilemma to cope better and make better choices for their child.

2.5 Education in Malaysia

Special Education for children with learning difficulties in Malaysia was only implemented in the 1990's when the Education Act was introduced (Lee & Low, 2014). Students with special education needs entering public schools in Malaysia are categorized into three main categories: the hearing impaired, the visual impaired and the learning difficulties students. Children that are diagnosed with Down's syndrome, Autism, ADHD, Minimal Retardation, and Specific Learning Difficulties such as Dyslexia falls under the Learning Difficulties (LD) group, while both the hearing and visual impaired will include those with residual hearing and low vision. The placement in public schools is based on these three types of disabilities as diagnosed by the medical practitioners (UNESCO, 2009). Therefore, children that are diagnosed with ASD attending a public school would fall under the learning disability category and would have to share a classroom with children that are diagnosed with other types of learning disabilities.

The term 'Special education programme' means:

- i. A programme which is provided in special schools for pupils with visual impairment or hearing impairment;
- ii. An integrated programme in general schools for pupils with visual impairment or hearing impairment or with learning disabilities; and
- iii. An inclusive education programme for pupils with special needs and who are able to attend normal classes together with normal pupils (Zalizan & Manisah, 2014).

Children diagnosed with autism are placed in integrated programs in general schools or have access to inclusive education programs where they are able to attend normal classrooms with typically developing peers if they are to receive education from the government. Private sectors also offer inclusive education in international schools, otherwise, parents can choose to home school their child or place them in a private centers that offers skills development programs or therapy for their children.

2.6 Education for Children Diagnosed with ASD

The pathway that a child diagnosed with autism has to go through is much different compared to a typically developing child. From an early age, intervention has to take place in order for them to be ready to go to school. Many factors have to also be taken into account, such as financial ability of the parents, learning progress of the child during intervention, awareness, severity of autism, and many more. These factors will determine whether the child would have access to private or public education and also the consistency of them having sessions. The figure below shows the pathway of education a child diagnosed with ASD will go through in Malaysia.

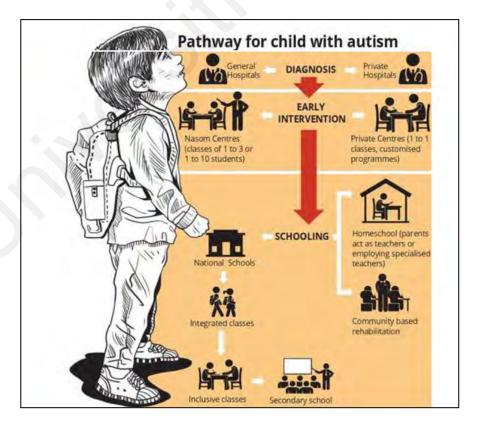


Figure 2.4: Pathway for Child with Autism (Selva, 2017).

Source: The Star Online

Pupils studying in Malaysia have the option of going to a public school or private school depending on their parent's financial capability and also the location of the school. There are six main pathways of education available through either the public or private education systems for children with special needs in Malaysia, five of which are relevant to children with autism (Lim, 2015). Figure 2.2 shows the different types of education pathways for children with special needs in Malaysia. Private schools that offer inclusion are mainly located in urban areas of Malaysia sure as the Klang Valley. Therefore, people living in the rural areas of Malaysia would have no choice but to attend a public school, while some do not have the opportunity to go to school.

Through the data collection process for this study, the researcher also realized that without early intervention, a child diagnosed with ASD could still enter mainstream education such as private or public school. It all depends on the child's ability to function independently and also the lower consistency of behavioral outbursts compared to children that has been diagnosed and falls more severely under the spectrum.

Education Pathways	Administered by	Age range	Targeted towards special needs students?
National Curriculum	Public (MoE)	5-17 years	Children who are able to function in a mainstream classroom may attend, but limited resources do not allow much individualized support.
Modified National Curriculum	Public (MoE)	5-17 years	The curriculum is modified mainly for visual and hearing impaired students. Not relevant to children with autism.
Special Education Integration Program (SEIP)	Public (MoE)	5-17 years	Special needs classes placed within mainstream school settings. Teachers have some form of special needs training. Children with different learning difficulties are typically grouped together.
Program Pemulihan Dalam Komuniti (PDK) or Community-Based Rehabilitation Programme	Public (JKM)	5-40 years	These centers provide day care, as well as some forms of therapy.
International/Private School	Private/non- governmental management	Varies by school	Students attend regular classes with or without the help of a shadow aide, depending on their needs. Admission policies and degree of support provided vary from school to school.
Learning Centers/Other Organizations	Private/non- governmental management	Varies by organization	Privately run centers or home-schooling centers that cater for children with special needs.

Figure 2.5: Different Educational Pathways for Children with Special Needs in Malaysia (PEMANDU, 2015)

Based on the figure above, the first education pathway available for children with special education needs, specifically children with autism is inclusion through the National Curriculum. This program allows children with autism who are able to function in a mainstream classroom to attend. However, due to the lack of facilities and also resources available to cater to their education needs (Ting, Lee, Low, Chia, & Chua, 2014); this pathway might not be suitable for children with autism in Malaysia yet. Another pathway for children with autism created by the ministry of education is the Special Education Integration Programme. Integration occurs when students with learning difficulties are grouped together and placed within mainstream school settings. Compared to inclusion, teachers in an integrated classroom have some form of special needs training, as they are teaching a classroom of children with special education needs (PEMANDU, 2015). Another education pathway provided by the government is the Community-Based Rehabilitation Program, also known as the Program Pemulihan Dalam Komuniti (PDK) in Bahasa Malaysia.

These community-based programs are centers set up by the government that provides day care or other types of therapy for children with autism. Individuals attending these centers can range from the age of 5 to 40 years old (PEMANDU, 2015). The remaining two educational pathways are provided by private institution or centers. Students that are entering a private or international school would attend regular classes. Some of them would need the help of a shadow aid, depending on their education needs, while private learning centers on the other hand are privately run centers or home-schooling centers that cater for children with special needs (PEMANDU, 2015). There are two ways inclusion can be done in a public school setting, through full inclusion or half inclusion. Full inclusion allows the student with special education needs to join in a mainstream classroom full time, from the start to the end of the class, based on the school's curriculum; on the other hand, half inclusion occurs when the student with special education needs only follow a certain curriculum or attend a particular subject in a mainstream classroom based on their education needs.

Students have to go through a rather tedious procedure before being able to enter a public school for integration or inclusive education. According to the integration program manual prepared by the ministry of education, a student's education process starts when his or her parents receive a confirmation from a medical practitioner that the child is a 'Disable person'. Parents then have to register under the ministry of education and wait for a placement letter. Once the application is processed, both parents and school will receive the placement letter and the child can enter school. The student will have to go through three month probation before the school team decides whether the student stays in the integration program or enter the inclusive education program (Kementerian Pendidikan Malaysia, 2015). The

procedure to enter a private school is quite similar to entering a public school in terms where they both have a certain requirement for children with special education need to enter a mainstream classroom. However, it is less tedious and more straightforward compared to entering a public school. The student only needs to see a clinical specialist to obtain a diagnosis and after that go through an assessment to see whether he or she is ready for inclusion. From the assessment, the child will be placed in a suitable classroom. The child will also have to undergo a probation period of three months and for those that are not able to adapt in an inclusive setting will be placed in an integration program instead (Mohd Sirin, 2013).

2.7 Special Education in Malaysia Comparison to Other Countries

Malaysia and Singapore share similar cultures and are neighboring countries; however, Singapore uses a different approach on education and treatment for autism compared to Malaysia. They show higher awareness towards the disorder compared to Malaysia, and has a more establish and affordable education program for children diagnosed with Autism (Ting, Lee, Low, Chia, & Chua, 2014). To create a suitable education setting for children with Autism requires a huge effort and team work from government, school and parents. The laid-back way of responding to inclusion in Malaysia also severely limits the quantity of success. A comparative study done in one of the public schools in Malaysia showed that out of thirty students that are in an integrated program for children with learning disabilities, only one student is able to be fully included into a mainstream classroom (Lee, 2010). Furthermore, the "curriculum for all" approach adopted by the Ministry of Education for inclusive education might not be suitable for children with Autism due to each child's unique individual needs (Reed, Osborne, & Waddington, 2012). It is important to adress the

child's individual needs before deciding on a suitable education model, otherwise the outcome could be challenging for both parents and also educators (Guldberg, 2010).

It is important for a country to have a solid code of practice for inclusive education to follow before implementing inclusive education into schools. Malaysia is one of the developing countries that are yet to develop a proper code of practice like other more developed countries have. When being compared to developing countries, Malaysia still has a lot more things to work on in terms of inclusive education for children with special needs. In terms of code of practice for education, United Kingdom and the Netherlands have stronger guidelines to follow. The Special Education Needs code of practice gives teachers and caregivers a clear framework on how to access and meet the child's needs (Lee, 2010).

In addition, the level of awareness in Malaysia is also lower compared to other developed countries around the world (Ting, Lee, Low, Chia, & Chua, 2014; Lee, 2010). It is seen that there are greater levels of awareness in more developed countries such as the United States and other European countries, giving the government a chance to put more emphasis inclusive education for children with special needs. While special education was not the top priority in Malaysia during the early 2000's, other countries such as the United States of America and the United Kingdom are experiencing radip development (Lee & Low, 2014). Studies have shown that parents of children with Autism in Western countries are more supportive towards inclusion in public schools (Hilbert, 2014). This could be due to the higher levels of awareness between the community and the more established programs that are provided in public schools. Awareness towards the type of education available is also one of the things that parents in Malaysia lack. Through observation during the process of this study, parent's perception of inclusive education is that their child is

obtaining education from a public school. However, some public schools do offer an alternative pathway program for children with SEN and these lessons take place in a separate classroom from mainstream classes. Parents might not be aware of this and presume that their child is in an inclusive education setting as long as they are in a school.

Due to this rapid development, the inclusive education model began to be heard (Lindsay, 2013). The shift of philosophical paradigms in education services that begin from a welfare model to a social model soon gained consensus among other developing countries around the world (Lee & Low, 2014). This education shift for children with learning disabilities has resulted in the changed attitudes for Asian towards individuals with learning disabilities (Parker, 2001). The lack of awareness among parents could cause them to feel anxious on whether their child would be frightened by the strange behavior of children with disabilities when included in an inclusive classroom (Hilbert, 2014). Children diagnosed with Autism Spectrum Disorders faces certain difficulties in terms of social and emotional understanding, all aspects of communication and also flexibility in thinking and behavior (Lewis & Norwich, 2005), and these children with special needs would not benefit if they were placed in an inclusive classroom that is not supportive of their needs (Lee, 2010). Therefore parents might find it difficult to choose the most suitable type of education setting for their child that would cater to their education needs.

Inclusive education is one of the main options available for children with Autism; it might not be the best choice for every child diagnosed with ASD. Non-inclusive education provided by private special needs centers or special needs schools might be a more suitable place for children with ASD to learn and grow. Due

to the less establish inclusive programs in schools in Malaysia, parents might favor non-inclusive education for their children with Autism.

The main focus of this paper will be to create a survey that would measure parent's satisfaction towards inclusive and non-inclusive education in both private and public setting based on the seven pillars of support that determines the success of inclusive education and also a few more additional factors that would contribute to the success of education, taken from various studies (Falkmer, Anderson, Joosten, & Falkmer, 2015; Rowley, et al., 2012), such as the child's social and emotional growth in school and also the child's academic and learning progress. The survey would be used to measure the level of satisfaction of parents with children with Autism in an inclusive and non-inclusive education setting, and to see which setting of education would be more suitable for them, and the survey will be called the Parental Satisfaction Questionnaire. In addition, parent's opinions will also be collected to see what parents in Malaysia suggest to help improve their child's education setting to help their child learn better.

Parents have the option of allowing their child to learn in an inclusive setting or a non-inclusive education setting, and both inclusive and non-inclusive education is provided in private or public schools and also in private centers. Even though the government strongly encourages children with special needs to be placed in mainstream education settings, studies have shown that it is not a must for children with Autism Spectrum Disorder to be placed in a mainstream education setting; due to the different types of needs each child has (Reed, Osborne, & Waddington, 2012).

2.8 Types of Education Available for ASD Children in Malaysia

Education for children diagnosed with autism falls into two categories. Parents have the option of placing their children in an inclusive or non-inclusive education setting. Inclusive education occurs when children with special education needs are placed into mainstream classrooms; therefore inclusive education takes place in private and public schools. Non-inclusion on the other hand consists of other form of education or therapy that takes place in private centers across the country or home-schools.

2.8.1 Non-Inclusive Education in Malaysia

An important aspect in autism treatment is special education (SPED) for children with Autism Spectrum Disorder. In Malaysia, non-inclusive or special education can be obtained mainly through private centers. These centers provide different types developmental programs, treatments and therapy that will benefit children with ASD, such as Applied Behavioral Analysis (ABA) therapy, occupation therapy, speech therapy, Relationship Development Intervention (RDI), Cognitive Behavior Therapy (CBT), and many more. However, there is a long waiting list for these public centers in Malaysia, such as Early Autism Project Malaysia Sdn Bhd which is a private company that offers both home and centre-based Applied Behavior Analysis (ABA) therapy (Early Autism Project Malaysia, 2013). The same therapy is also offered by Autism Link Sdn Bhd through classroom and group programs for children aged 3-6 years (Autism Link Malaysia, 2013). Other private centers also include Adapt Enrichment Center located in Petaling Jaya area, Learning Connections located in Solaris Mont Kiara, Oasis Place located in Brickfields Kuala Lumpur and also Early Intervention Program (EIP) Sdn Bhd located in Petaling Jaya.

Parents that choose to send their child to a private school would require paying a certain amount of fees for treatments at these centers; and treatment in public centers can be costly for families that have a lower household income.

It is more common for parents to seek treatment from NASOM which is a Non-governmental organization dedicated specially for children with autism. Another option for parents would be to send their child to PERMATA kurniah for early intervention programs. The special education government schools in Malaysia cater only for children with hearing and visual impairment. Children with learning disabilities are educated within the Integrated Programs that are run as segregated classes in mainstream schools (The Ministry of Education Malaysia, 2008). Currently, there are 1,945 regular schools in the country that run such Integrated Programs throughout the country (Every child has potential to succeed, 2012).

2.8.2 Inclusive Education in Malaysia

Certain public and private schools in Malaysia choose to open their doors to inclusion. The government has allocated at least one school in each state for inclusion, while more private schools with inclusive classrooms can only be found in the Klang Valley area of Malaysia.

The term 'inclusive education' is introduced in the Act as part of the continuum of services available for children with special needs. However, the eligibility for special education placement is based on the 'educability' of children as assessed by a team of professionals. This is documented in the Act (1998, 342), which states:

i. For government and government-aided schools, pupils with special needs who are educable are eligible to attend the special education program except for the following pupils:

- (a) physically handicapped pupils with the mental ability to learn like normal pupils; and
- (b) pupils with multiple disabilities or with profound physical handicap or severe mental retardation.
- ii. A pupil with special needs is educable if he is able to manage himself without help and is confirmed by a panel consisting of a medical practitioner, an officer from the MoE and an officer from the Welfare Department of the MWFCD, as capable of undergoing the national educational program (Zalizan & Manisah, 2014).

Private schools such as Help International School, Nexus International School, Upward Learning, St. Joseph International School and many more are also opening up their classes for children with Autism to be part of their mainstream education. Children with ASD entering these private schools are required to go through an entrance test and also an interview to see whether the child is ready to enter into a mainstream classroom (Help International School, 2014). Children that are ready for inclusive education will be allocated into a suitable classroom and have a personal learning assistant to assist them throughout the school year.

Inclusion in public schools would undergo similar assessment procedure such as those conducted in private schools before allocating the child into a suitable classroom. The difference between inclusion in a private and public setting is that the ministry of education in Malaysia offers two types of inclusion, full inclusion and half inclusion.

Full inclusion occurs when a child with special education needs is studying in a mainstream classroom with typical developing peers. He or she would follow all the academic subjects based on the curriculum that is prepared by the ministry of education, with or without support from a specialist. On the other hand, half inclusion involves a student attending certain academic subjects or extra co-curriculum activities with his or her mainstream peers based on his or her ability. These pupils will be able to participate in a mainstream classroom for certain academic subjects based on the curriculum that is prepared by the ministry of education or based on the similar curriculum but slightly modified to cater to their education needs (Mohd Sirin, 2013). The diagram below shows the concept of inclusion in Malaysian schools.

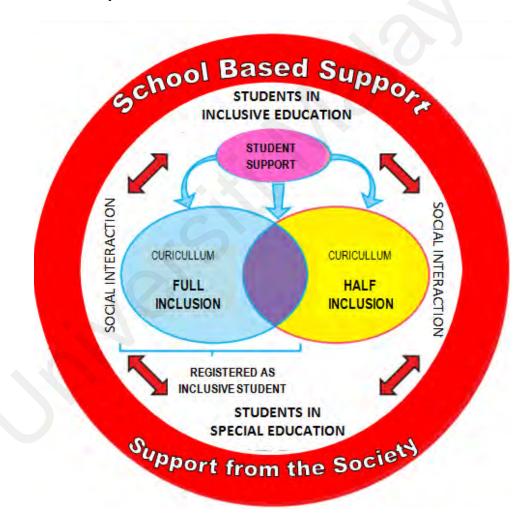


Figure 2.6: Concept of Inclusive Education in Malaysia (MohdSirin, 2013). Source: Garisan Panduam Program Pendidikan Inklusif Murid Berkeperluan Khas

Children studying in segregated classes in mainstream public schools are also given a chance to be part of a mainstream classroom. However, only a handful of

them are able to make it there, and these children are mainly diagnosed with mild autism or Aspergers syndrome (Warren, 2014). Lee (2010) mentioned in his study that through his observation in a Malaysian mainstream school, only one child from the integrated program was able to make it into a mainstream classroom.

However, the Ministry of Education in Malaysia are trying their best to improve the quality of education for children with special education needs, therefore the goal for inclusive is clearly stated in the latest Special Guide for Inclusive Program Bulletin, 2013 where the goal for inclusion is to increase the level of participation, giving children with special education needs a chance to take part in academic and non-academic programs together with children from a mainstream classroom. Inclusion will also bring awareness to the society, so that they do not deny the potential of children with special education needs, and believe that their disability can be minimized when given a chance (Mohd Sirin, 2013).

In the bulletin, the author also mentions the objectives for the Inclusive Education Program conducted by the ministry, which are:

- To ensure that children with special education needs receive the same
 right to study in an environment without any restrictions.
- ii. To increase the self-esteem of children with special education needs in order to reach their full potential.
- iii. To ensure that students with special education needs can fit into a mainstream classroom.
- iv. To increase the awareness and the level of acceptance of the school staff and also the community towards students with special education needs.

2.9 Parental Satisfaction towards their Child's Education Experience

Parental satisfaction studies were done mainly in western countries such as the US, UK and Australia. Through these studies, parents were asked to rate their level of satisfaction towards their child's education, and results show that a slight amount of parents are satisfied while many others are not (Starr & Foy, 2012). Studies in the US show that the main reason for parental dissatisfaction towards their child's education is because of bullying (Boer, 2009; Starr & Foy, 2012; Zablotsky, Bradshaw, Anderson & Law, 2012).

Students with autism are at a high risk of being bullied due their disability to make or maintain a friendship (Zablotsky, Bradshaw, Anderson & Law, 2012). Parents were mainly driven to put their child in an inclusive setting due to the social benefit their child can gain from an inclusive education. However, research shown that these pupils tend to have lesser friends and are less part of a network in the classroom compared to typically developed pupils (Boer, 2009).

2.10 Benefits of Inclusion

One of the main advantages of inclusive education is social transformation, in terms of communication and interacting with others. Parents believe that social transformation in the society for an individual with special education needs can only occur if the individuals are able to know how to merge themselves into society (Marimuthu & Loh, 2015). General education classrooms tend to offer an easier access to full curriculum and peer interaction compared to a specialized school or center (Jordan & Jones, 1999). Therefore, some parents would like their children to be part of a mainstream education even though some of them are not ready for it. Inclusive education gives the child the opportunity to mingle

with peers that are typically developing children. Parents believe that allowing them to do so can help them function better in society, mainly by being more aware of the people around them (Tafa & Manolitsis, 2003). Supporters of inclusion point out that inclusion can help improve academic progress and communication skills, increase appropriate behaviors and develop friendship when a child with learning disabilities enter mainstream education (Hunt, Staub, Alwell, & Goetz, 1994; Kennedy & Itkonen, 1994; Ryndak, Downing, Jacqueline, & Morrison, 1995).

Advocates of inclusive education believe that inclusion does not only benefit children with special education needs, but all children including those without disabilities (Grove & Fisher, 1999). Inclusion offers both social and academic benefits for children with autism. Parents of typically developing children seem to be keen to allow children with special education needs to be in the same classroom as their children as they believe that exposure to children with SEN in an early age can help them to be more understanding towards the limitation of others (Tafa & Manolitsis, 2003). Students without disabilities also benefit from inclusion by growing more tolerant towards diversity in the classroom (McConnell & Kiefer-O'Donnell, 1992; Staub & Peck, 1994-1995). Peers of students with ASD will benefit from having a classmate with ASD in the classroom through diversity. The class-wide implementation of behavior support for their peers with special education needs allows them to develop understanding and empathy towards their friends with disabilities (Sansosti, 2012). Furthermore, these students are able to be an example for their peers when it comes to learning social skills. For students with ASD, being part of a mainstream classroom gives them the benefit in terms of access to typically developing peers, where they can model age-appropriate skills (Sansosti, 2012).

Students with ASD studying in a general classroom can benefit in many ways. Parents believe that allowing their child to participate in a mainstream classroom would give them the opportunity to socialize better due to the exposure that they are receiving. Studies have showed that students with ASD studying in a mainstream classroom are able to socialize better around typical children compared to other children with ASD (Eldar et al., 2010). A case study done in a high school shows that students with disabilities show positive interactions with their teachers and peers. They are somewhat included in the activities conducted in the school throughout the day (Deshler, Shumaker, Marquis, Bulgren, Lenz, Davis, & Grossen, 2002). Deshler et al. (2002) noticed that students with special education needs were compatible to their peers and were academically engaged in the classroom.

Educators have also commented that, inclusion can accelerate the developmental skills of students with Higher Functioning Autism Spectrum Disorder (HFASD) through engagement in tricky academic tasks (Sansosti, 2012). Students with HFASD have higher cognitive abilities compared to those with ASD. They have cognitive functions within the average to above-average range, and sometime may demonstrate superior intellectual functioning, allowing them to have the capacity to attend a mainstream classroom. Specialized schools may not provide sufficient stimulation for higher functioning ASD or Aspeger students (Howlin, 1998). Despite their high cognitive functions, students with HFASD still demonstrate severity in terms of social communication (Sansosti, 2012). Another study done by Walker and Berthelsen (2008) showed that students with ASD were able to be more involved in social and play engagement in an inclusive classroom. It shows that mingling with typically developing peers can help students with ASD progress not only academically but socially as well. Parents also believe that inclusion can help their

child prepare for the future that will include work and life as part of a community through interaction with typically developing peers. By doing so they also learn to be more independent (Grove & Fisher, 1999).

Besides students with ASD and their peers benefiting from inclusion, teachers are also able to benefit through it. Teachers are able to learn to focus on the expected learning outcomes instead of achievements for children with ASD through instructional planning for an inclusive classroom (Chandler-Olcott & Kulth, 2009). A study done by Brown and MaIntosh (2012) showed that the relationship between students with ASD and their teachers increases based on the amount of time they spend with their teachers. Teachers also tend to be more inquisitive about teaching methods that can help students with ASD improve in their classroom through reflection (Chandler-Olcott & Kulth, 2009).

2.11 Limitations of Inclusion

Although inclusion has its benefits, other issues such as social limitations and academics can be a problem for children with ASD to take part in an inclusive classroom. Locke, Ishijima, Kasari, & London (2010) mentioned that due to the severity of their social limitation skills, children with ASD face a high risk of being isolated by their peers. Some of these children might be easily distracted, have poor concentration, show anxiety or confusion, suffer from information or sensory 'overload' or are unable to interpret subtle academic and social rules (Barnard, Prior & Potter, 2000). Jordan (2004) talks about the dangers of children being placed in mainstream education for ideology or pragmatic purposes without any preparation. Only when a suitable environment or adequate professional training is provided to educators, can inclusion be considered successful (Barnard, Prior & Potter, 2000).

Students and their families also faced difficulties due to the poor planning by local authorities and also the lack of support for students with autism to enter mainstream education (Barnard, Prior & Potter, 2000).

The slow momentum of change in Malaysia despite the active revision of education acts over the past 10 years has formed gaps in the transfer of policies into practice (Lee & Low, 2014). This could be due to the roots of the Asian values in the education system which is highly centralized, with policies dictated at the federal level (Ratnavadivel, 1999). The centralized structure translates into a traditional teaching methodology which strongly emphasize on excellence in examinations and the effectiveness of the school depends on how students perform academically (Corbett, 1999). Students with ASD might not benefit from this highly structured education system that does not encourage learner's diversity, thus making it difficult for them to fit into mainstream education.

Other issue such as bullying also rises as a concern for children with ASD in an inclusive classroom. Research shows that although the influence of peers can be beneficial for students with ASD in a mainstream classroom, simply placing them alongside their peers is not sufficient to assist in classroom participation and development of skills (Handleman et al., 2005). Students with ASD might have a higher risk of being a victim due to the deficits in their ability to have normal social interactions and relationship (Roekel & Scholte, 2010). They could also be target for more aggressive peers due to the more intense emotional and behavioral reaction that would likely encourage the bully (Pepler & Weiss, 2012). Not only would they not benefit from the interaction, students might be traumatize and refuse to go to school due to the bullying that is happening in the classroom. Therefore, it is seen that students with ASD are at a higher risk of being bullied in school compared to their

typically developing peers due to the differences in behavior and responses, and placing them in an inclusive environment requires much preparation. A study done by Whitaker (1994) states that a third of secondary school pupils were worried about being ridiculed or rejected by their peers if they maintained contact with students with disabilities.

In most schools, students with ASD are paired with an aid for a full time basis in order of him or her to participate in an inclusive classroom. However, some parents commented that their child might miss out on some learning opportunities with a full-time aid as the aid might intervene during a conflict situation that could have been beneficial for the student's experience (Sansosti, 2012). However, it is compulsory for some students to have aids by their side as teachers in the classroom are not able to give full attention to all the students and also the student with ASD.

2.12 Benefits of Non-inclusion

Parents that favor academics over social interaction would prefer a non-inclusive setting, as children with special education needs that are studying in a private setting are able to receive more attention from the educators. Children with special education needs studying in a private setting are seen to have a more rapid growth in terms of learning compared to those studying in a public setting. Therefore parents are in a dilemma on whether to send their child to an inclusive or non-inclusive school as both education settings has its benefits.

The reason parents choose to educate their child with ASD in a private center or through home schools are also to avoid the limitations mentioned above that inclusion will bring. Parents that undergo a negative experience through inclusion shares that those schools have lack of appropriate individualization and quality of service provision (McDonald, 2014). Parents have found that educating their child at

home not only reduces stress on the family, but also dramatically increases the educational fit for their child as they are able to create individualize education plans that is suitable for their child's education needs (McDonald, 2014). These individualize education plans can target on the child's specific profile without needing to consider an external schooling context. Studies have also shown that children with special education needs do not necessary benefit from inclusion due to the lack of attention needed (Lee, 2010). There are individuals with ASD whose interests will be best served by discrete specialized services to provide the most appropriate and meaningful education and lifelong support (Bernard, Prior & Potter, 2000). Therefore, non-inclusive education can benefit students that are not able to adapt into mainstream education better and help them to be more focused on their individual skills.

One of the characteristics of autism according to the DSM IV is restricted and repetitive behaviors. Due to this characteristic, children that are diagnosed with autism find it hard to cope with consistent changes around them. The situation in a general classroom changes from time to time and the inflexibility in their cognitive behavior may require adjustments otherwise it might trigger behavioral problems such as self-harm, aggression or uncontrollable tantrums in the classroom (Gavalda & Tan, 2012). Providing the child with a one-to-one education allows the educator to understand the child better and helps him or her to cope with changes based on their ability and not by force. For example, a student might have to deal with a change of class teacher and also classroom location each year in a general classroom setting. Children with ASD in a private center do not have to go through so much of changes compared to those in a school setting. Furthermore, parents do not have to worry about their child's insufficient academic progress as the child is given full attention

when in home school or in a private center (McDonald, 2014). These private centers or home school can improvise educational programs depending on the child's educational needs and ability.

2.13 Conceptual Framework

The diagram below is the conceptual framework of this study, which explains the concept of parental satisfaction and the success of inclusive and non-inclusive education are based on the seven pillars of support.

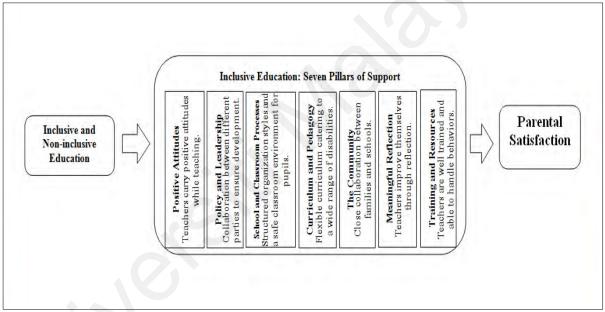


Figure 2.7: Conceptual Framework

2.14 Summary

Education for children with autism is still vague in Malaysia, and many parents do not have the proper information needed on what they can do to help their child that is diagnosed with ASD. Parents are unsure of the next suitable step to take in terms of their child's education pathway, and some of them might regret the choices that they have made. In this chapter, the researcher states about the types of

education available for children with autism in Malaysia and also mentions the strength and limitation of these educational institutes available.

In is seen that successful educational experience for students with ASD that would lead to parental satisfaction can be fulfilled though the seven pillars of support. Through the seven pillars, six factors have been identified that would lead to the success of an education experience for students. The six factors are learning progress, parental support, resources, social and emotional growth, teachers and curriculum. The Parental Satisfaction Scale is designed based on these six factors that are linked to the seven pillars of support that will be seen in the methodology chapter.

In the next chapter, the researcher would talk about the methods used to conduct the study. Topics in the next chapter would include the research design, population of the study, the location of the study, sample size, instruments, data collection procedures, research procedures and the analysis process.

CHAPTER 3

METHODOLOGY

3.1 Introduction

Autism Spectrum Disorder (ASD) is a developmental and neurological disorder that affects an individual with a wide range of disabilities, which include social communication deficits and having restricted or repetitive behaviors, interests and routines (American Psychiatric Association, 2013), causing it to be challenging for parents to find a suitable education setting that can cater to their child's needs. Inclusion is one of the options that parents have where children with ASD are educated in general classes. Another option would be non-inclusion, where children with ASD receive education or learn skills from public centers or home-schools. In Malaysia, certain public and private international schools open their classroom for inclusion, where children with ASD are given a chance to attend a mainstream classroom, while private centers or home-schooling offers a more personalized lesson plan for the child based on his or her education needs.

The current study looks into the level of satisfaction that parents have towards both inclusive and non-inclusive education for children diagnose with ASD. Adapted from the Parent Satisfaction with Education Experiences (PSEE) scale, the researcher has created a questionnaire that is used to measure the level of satisfaction for parents in Malaysia. This study would identified the type of education setting that parents find most satisfactory for their child and allow the researcher to compare between inclusive education and non-inclusive education.

In this chapter, the researcher will describe the steps taken to conduct the study which firstly talks about the research questions of the study. The researcher then talks about the participants, the sampling method used to conduct the study, the measurements to measure parental satisfaction, the procedure on how the research will be carried out and finally the proposed data analysis used to analyze the data collected.

3.2 Research Design

The design of the study is mixed methods, whereby it includes both qualitative and quantitative research design. Qualitative research is a nonexperimental research whereby the questions for the study are typically asked by the researcher while in a survey method, participants are required to respond to the questions given (McBurney & White, 2010). In the case of this study, the researcher will be looking into both methods of research. This research aims to measure the levels of satisfaction for parents of children with ASD that are in or not in an inclusion program, through a survey designed by the researcher. In addition, the feedback of parents on what they think could help to improve the current education that their child is receiving is collected through interview. Therefore the research methods include parental satisfaction questionnaire (refer to Appendix G) and semistructured parent interview (refer to Appendix I). The data collected by using the questionnaire were used to see the levels of satisfaction of parents towards the education experience their child diagnosed with ASD is receiving, and the data collected through the questionnaire is also used to compare the preference of parents on both inclusive and non-inclusive setting. The questions on this questionnaire were adapted from the Parental Satisfaction towards Education Experience (PSEE) scale by researchers John Fantuzzo, Marlo A. Perry and Stephanie Childs. In this study, the 12 items from the PSEE scale was included in the questionnaire, and the researcher includes another 30 items on the questionnaire to see the levels of satisfactions of parents based on the factors identified from the seven pillars of support that would influence parental satisfaction.

Semi-structured interview gives the researcher a further understanding of the dissatisfaction parents have towards their child's education experience and ways parents think can help improve them. Strauss and Cobbin (1998) states that qualitative findings can be used to obtain elaborate details about a phenomena such as feelings, through process, and emotions that are difficult to obtain through quantitative methods. The semi-structured interview was additional questions asked on top of the questionnaire given. As the participants have already responded to the questionnaire, they are able to understand the questions in the interview easily. Questions in the interview were more open ended, and the participants are able to express their opinion freely. No limitations are given during the interview as the researcher would like to obtain as much feedback as possible for parents participating in the study.

The reason the researcher choose a mixed method design for this study is to obtain more information regarding parental satisfaction towards the type of education pupils with autism are receiving. Creating a questionnaire adapted from the PSEE scale allows the researcher to collect quantitative data from the general population in Malaysia and compare parental satisfaction for both inclusive and non-inclusive education. An additional qualitative method allows the researcher to collect more information that the questionnaire might not cover and this could be new emerging themes to look into for future study.

3.3 Population

The target population of this study is parents of students diagnosed with ASD and are currently being educated under an inclusive or non-inclusive education setting. The inclusive education population consists of parents that have children studying in a public or private school with full inclusion, where their child is in a general classroom with typically developing peers. The non-inclusion population on the other hand consists of parents that have children in public or private schools but in integrated classrooms, home-schooled or undergoing a particular education program in a private center. The population of parents is selected from all races and has different financial and educational background living in the Federal Territory of Kuala Lumpur. Students that are diagnosed with ASD studying in an inclusive setting has to be year two and above as this would allow the student to experience a year of studying in a general classroom and would allow parents to provide a more accurate feedback based on their child's experience in school.

3.4 Sample

Parents of students with ASD are selected as samples for this study. Parents or caregivers that have children studying in either an inclusive or non-inclusive setting around the Federal Territory of Kuala Lumpur are selected samples of this study. A total of 120 parents are selected. The sample size is chosen based on the five educational district of Kuala Lumpur (Bangsar, Pudu, Gombak, Petaling and Sentul) and the schools that offer inclusive and non-inclusive education for children with autism. Educational institute that provides inclusive education are public schools or international schools, while non-inclusive education is provided by public

schools that offer integration, private centers that offer certain skills, therapy or home school.

The sample selected for this study can be the father, mother or guardian of the student, and the age of these students will vary between 7 to 9 years old and above. This age group is chosen by the researcher as children are to attend Year 1 at the age of 7 in Malaysia. However, the age of children with ASD entering school might be different for 1 to 2 years based on their developmental age and whether they are ready to enter school. The researcher will start collecting data from parents that have children studying in year 2 onwards as student's in year 1 are new to the inclusive setting and needs more time to experience inclusive education for parents to see results. A child would demonstrate indicators of transition readiness such as increased communication with peers, participation, and independent functioning in the classroom (Roberts, Keane & Clark, 2008). This transition period could take months to more than a year before the child has fully adapted to the inclusive environment in school. Therefore, the researcher chooses to only include parents that have children studying in year two and above. This would ensure that the student has already adapted to the inclusive setting, and the data obtained from parents regarding inclusive education would be more accurate. Other demographic data of the sample include name of the student's educational institute and the zone of which that educational institute is located in. Education status is also taken into account in this study as the samples are required to posses the ability to read and fill in the questions in this questionnaire. Therefore, they are also required to have fluency in the English language in order to be able to answer the questions in the questionnaire that is printed in English.

3.5 Sampling Methods

Stratified random sampling method was used to collect data for this study. Stratified random sampling occurs when a random sample in which two or more subsamples are represented according to some predetermined proportion, generally in the same proportion as they exist in the population (McBurney & White, 2010). Stratified random sampling allows the researcher to collect data in a more precise method when the heterogeneous population is split into fairly homogeneous groups. In this study, the samples selected are parents or caregivers of students with ASD studying in the Federal Territory of Kuala Lumpur, and the homogeneous groups are the five districts of Kuala Lumpur (Bangsar, Pudu, Gombak, Petaling and Sentul). Each parent is chosen by chance and they each have an equal chance of being included in the sample (Easton & McColl's, 2002).

Through this sampling method, 10 additional samples from ot not from the existing samples were chosen to conduct an interview.

3.6 Sample Size

The sample size is determined based on the number of inclusive and non-inclusive schools there are in the three districts of Kuala Lumpur. The researcher has chosen a total of 120 samples in total due to the amount of public special schools available in each district. The researcher aimed to collect an equal amount for both inclusive and non-inclusive samples, making it 60 samples for each. The total amount of samples collected for the inclusive education setting is 62 and for the non-inclusive education setting, 58.

There are limited amounts of special public school located in each district of the Federal Territory of Kuala Lumpur, and those available are: Sekolah Kebangsaan Pendidikan Khas Kampung Baharu is located in the Keramat district, Sekolah Kebangsaan Pendidikan Khas Jalan Batu is located in the Sentul district and Sekolah Kebangsaan Pendidikan Khas Jalan Peel is located in the Bangsar district.

3.7 Location of Study

Data will be collected from parents of students studying in the Federal Territory of Kuala Lumpur. The Federal Territory of Kuala Lumpur is the national capital of Malaysia and is also known as the largest city in Malaysia. Kuala Lumpur is also located in the center of the state of Selangor, which is also one of the most developed states on the West Coast of Peninsular Malaysia.

The interview is conducted in a close area where the researcher and parent find suitable and comfortable, such as a quite café around the area, or any classrooms or rooms that are available nearby. This is to ensure that the surrounding does not provide any distraction to the participant and the researcher. In addition, a close up area is better to record the response of the parent, as an open area is noisier and would affect the data collected through audio recording.

3.8 Instruments

A Parental Satisfaction Scale was used to measure the levels of satisfaction among parents towards the type of education their child diagnosed with ASD is receiving. The scale was adapted from the Parent Satisfaction with Education Experience scale (PSEE). The researcher also added another 30 additional questions to the existing 12 questions of the scale based on the factors that influences inclusive education, and also made an amendment to one of the question from the PSEE based on the feedback given by a panel of experts to more successfully measure inclusion.

3.8.1 Questionnaire

The quantitative part of the study was collected through a survey questionnaire. The questions from the questionnaire was adapted from the Parental Satisfaction with Educational Experience Scale (PSEE) which contains 12 items, and for the first draft, another additional 30 questions were added to the questionnaire on top of the 12 items in the PSEE scale, making it a total of 42 questions in total. These 30 items measures the additional factors that would influence parental preference based on the seven pillars such as resources, social and emotional growth of the child, learning progress and also teachers that were not measured in the PSEE. The additional items were added to the PSEE scale to more effectively measure parental satisfaction with education experience in this study. The questionnaire is categorized into 6 categories. Part A, B, C, D, E and F.

3.8.1.1 Part A: Academics and Learning Process

This part of the questionnaire looks at the level of satisfaction of parents towards the learning progress of their child in school or in education centers. The question adapted from the PSEE scale that is placed in this part is "School work is sent home for me to work with my child." and "Notes are sent home." The additional four questions added to this part are "I am able to tell that my child is progressing academically." "My child is being assessed frequently to monitor his or her progress." "There are various kinds of learning activities in the class." and "Appropriate learning goals are set for my child."

3.8.1.2 Part B: Parental Support

Part B of this questionnaire looks at the level of satisfaction for parents in terms of the support they receive from the school or center that their child is attending. The questions in the questionnaire include "I have someone to rely on in

the school when I need any help." "My view as a parent are respected and welcomed by the school." "I have contact with other parents." "I receive support for my family's language and culture." "Parents are involved in planning activities." "I often volunteer in the classroom." "I am able to participate in decision making." and "I have had contact with the school's principal/administrator."

3.8.1.3 Part C: Resources

The resources available is schools or centers play an important role in aiding a child with special education needs in his or her process of learning. Parents are more satisfied when the resources needed are available and sufficient for their child. The questions asked in the questionnaire for this part are "The school has the materials needed for my child's learning needs." "The school environment is clean." "The school provides a comfortable environment for my child to learn." "The school environment is safe for my child." "School facilities are located near the classroom."

3.8.1.4 Part D: Social and Emotional Growth

Part D of the questionnaire looks at parent's satisfaction towards the socio and emotional growth of their child in school. Questions that are asked in the part are "My child is able to interact with other children in the classroom." "My child is encouraged to participate in classroom activities." "My child is prepared for life outside school i.e. making friends or communicating with others." "My child likes going to school."

3.8.1.5 Part E: Teachers or Educators

Teachers play an important role in creating a positive learning environment for children with autism in a classroom. The child's ability to grow academically depends on whether the environment of the classroom is stimulating enough to trigger the interest in learning. It is seen that teachers and educators can affect the outcome of the child's academic and learning progress. Questions that are adapted from the PSEE scale in this part of the questionnaire are "I have frequent conferences with the teacher." and "I have frequent telephone conversations with the teacher." The additional five questions are "The teacher understands the needs of my child." "Teachers have realistic expectations when working with my child." "Teachers have the knowledge to handle my child when he or she is having a behavior outburst in the classroom." "Teachers have to knowledge to use the tools available to teach children with Special Education Needs." and "Teachers carry a positive attitude towards the program."

3.8.1.6 Part F: Curriculum

This part of the questionnaire looks at parent's satisfaction towards the school or center's curriculum provided that would help in their child's learning progress. Questions asked in this part are "The school has a flexible curriculum." "My child is able to work on the skills that he or she is good at in school." "The co-curriculum is modified to cater to my child's education needs." "Workshops or training opportunities are offered." and "Classroom activities are interesting and fun."

3.8.2 Rubrics

Each item on the questionnaire is measured using a 4-point Likert Scale ranging from 1 for very dissatisfied to 4 for very satisfied. Each number on the scale represents a different level of satisfaction of parents towards the type of education experience that their child is receiving. The first scale on the questionnaire is 'Very Satisfied' and is labeled using the number 4. According to the Merriam-Webster (1828) dictionary, the term 'Satisfied" is defined as "pleased or content with what has been experienced or received", and the term 'Very' is an adverb that is usually used to emphasize the exact identity of someone or something. Therefore, the term

'Very Satisfied' in the questionnaire can mean that parents have a strong content with the type of education experience that their child is receiving. The term 'Satisfied' labeled as number 3 on the other hand can also mean that parents are content with the type of education experience that their child is receiving, just less strongly compared to the term 'Very Satisfied'.

The term 'Dissatisfied' labeled as number 2 is defined as "expressing or showing lack of satisfaction" (Merriam-Webster, 1828). In this study, the term 'Dissatisfied' can mean that parents feel less content towards the item mentioned in the questionnaire. For example, question 1 state that 'I am able to tell that my child is progressing academically'. In this case, choosing 'dissatisfied' would mean that the parent can tell that their child is not progressing academically. The term 'Very Dissatisfied' that is labeled as number 1 in this study can be defined as a strong feeling of the lack of satisfaction. For example, question 5 in the questionnaire state that 'Notes are sent home'. Choosing 'Very Dissatisfied' would mean that no notes are sent home at all throughout the student's academic term.

3.8.3 Semi-structured interview

A semi-structured interview is conducted to receive feedback from twenty participants on the things that could help improve parental satisfaction towards the current education that their child is receiving. The researcher had designed an interview protocol of questions to ask the participants, and each participant is interview separately after filling in the survey.

3.8.4 Interview protocol

The interview protocol prepared consists of questions regarding the factors that would affect successful inclusion such as questions regarding school resources, parental support received from school staff, educator's knowledge and experience

towards special needs and peer interaction. The researcher has prepared two interview forms, one for parents with children studying in an inclusive education setting, and one for parents with children studying in a non-inclusive education setting. The forms for both inclusive and non-inclusive education have a total of four questions each. Each participant is given a code number for transcription purposes. A consent form is also included in the interview process to obtain permission to conduct the interview from the parents. Before data was collected, the protocol was reviewed by four panel experts along with the questionnaire to make sure that the questions asked during the interview are valid for the study, and to obtain any feedback regarding the wording of the questions. The content remained the same with minimal word changes.

3.9 Validity and Reliability of instrument

The questionnaire for this study, also known as the Parental Satisfaction Scale was adapted from the PSEE scale that was developed by researchers John Fantuzzo, Marlo A. Perry and Stephanie Childs in the year 2006, and was used to measure parents' satisfaction with experiences of various aspects of their child's early education program. The scale was co-constructed with the help of parents and teachers that have children studying or are teaching in preschools, kindergartens and first grade programs. The committee of university researchers, school administrators, teachers and parents leaders representing preschools, kindergarten and first grade programs met over a 6-month period to work on this scale and focus groups were formed with parents representing each of the early childhood programs. To support the cultural validity of the scale, it was field tested with groups of parents across the programs, with a total of 648 care givers that participated in the study.

The items in the scale are measured using a 4-point likert format (1- very dissatisfied, 2 - dissatisfied, 3 - satisfied, 4 - very satisfied) where parents were asked to report on their level of satisfactions based on the points selected. The scores of the then compiled with a higher score showing higher levels of satisfaction. The PSEE scale has a total of 12 items, measuring various aspects of education from parent's involvement in school to support given to the family's language and culture. A three factor, varimax solution was used to determine the construct validity of the PSEE. Firstly the factors retained fell within constrains that are indicated by Cattell's scree plot and parallel analysis. The factors accounted for greater than 5% of its total variance is the second factor, and thirdly, each factor demonstrated adequate internal consistency, with an alpha coefficients >.07. Teacher contact experiences, classroom contact experiences, and school contact experiences were the constructs defined by the three-factor solutions. Each construct obtained a Cronbach alpha of 0.82, 0.82 and 0.75 respectively. Therefore, we can conclude that the PSEE is valid and reliable.

This scale was chosen for the study because it measures parents satisfaction towards the educational experience of children in pre-school all the way to the first grade, and the items in the scale are aligned with the factors that would influence parental satisfaction based on the seven pillars of inclusion. Items 2, 4, 7 and 12 are volunteering in classrooms, support given for parent involvement in school, contact I have with other parents and support for our family's language and culture measures community involvement in the school and the amount of support parents receive from the community. Positive attitudes from teachers and parents can be measured in item 3 (telephone conversations with teacher), item 6 (notes sent home) and item 9 (conferences with teacher). Item 10 (contact I have with principal/administrators) is

based on the second pillar, policy and leadership. Furthermore, item 8 (workshops or training opportunities offered) refers to pillar seven, which is necessary training and resources.

There are a total of 42 questions in the new Parental satisfaction Questionnaire created. An additional 30 items were added to the adapted PSEE scale to measure parental satisfaction for this study. To ensure the face validity of the instrument used, the questions in the questionnaire have been given to four experts in the field of special education needs to be checked. The two experts are both senior lecturers from the University of Malaya; Department of Education and they both have experience working with children with special education needs. One copy was given to a school teacher that has experience working with students with special education needs. Another one panel expert is from the Ministry of Education Malaysia. The suggestions and feedback provided is taken into account and the questionnaire is edited based on the remarks given. A second draft is then sent to one of the panel of expert for approval before obtaining her consent. The table below shows the information and qualification of each panel of expert that participated in validating this questionnaire.

Affiliation	Years of Working Experience	Education Background	Field of Expertise
Professor of	_	PhD	IEP for children with special
University of	9 Months	(Educational	needs, Assistive technology for
Malaya		Psychology)	children with special needs,
			Attribution retraining,
			Motivation in learning.
Senior Lecturer	9 years	PhD Counseling	Psychological Assessment,
of University of		Psychology	Diagnosis, Child clinical
Malaya		(Child Clinical	psychology, Parenting style,
		Psychology)	Child development.
		USA	
Assistant	9 years	Degree in	Board of directors for the
Director of		Special	LINUS special educational
Special Needs		Education,	program, Panel member for
Division (MoE)		UKM	instrument program LINUS,
			Speaker for special educational
			programs.
Special	21 years	Bachelors in	Teaching and coaching students
Education		Education	with learning disabilities,
Teacher at SMK		(Hons) Special	Teaching English language to
Temerloh Jaya		Education	physically impaired (deaf).

Table 3.1: Qualification of panel of expert for Parental Satisfaction Scale

3.10 Parental Satisfaction Questionnaire

The Parental Satisfaction Questionnaire was created to measure satisfaction of parents with ASD children obtaining their education in an inclusive or non-inclusive setting. Partially adapted from the PSEE scale, the Parental Satisfaction Scale has an additional 30 questions.

The scale has six different categories that are also identified as an important factor that will determine the success of the type of education based on the seven pillars of success. The six categories are Learning Progress, Parental Support, Resources, Social and Emotional Growth, Teachers and Curriculum.

The scale is validated by a panel of experts, where a first draft with 35 questions is sent to four experts in the field of special education needs. Their feedback and remarks are then taken into account and the researcher has amended the

questionnaire to create a second draft. The second draft is then approved by a panel of expert before finalizing the questionnaire.

The changes made in before finalizing the Parental Satisfaction Questionnaire were based on the feedback from the expert panel and most of the questions from the first draft remain the same. The feedback given from the panels were as below.

Panel Expert 1:

The first panel of expert is a teacher that has 21 years of working experience working with students that have learning disabilities, and is currently teaching in a public school in the state of Pahang. The remark given on the questionnaire was on question 10, "I receive support for my family's language and culture" where the panel expert mentioned that the statement was unclear. She gave her approval on the remaining 34 questions in the questionnaire.

Panel Expert 2:

The second panel of expert is from the Ministry of Education. He is the assistant director of the Special Education Needs unit, and has 9 years of working experience. The remarks given by this panel expert are from question 4 "School work is sent home for me to work with my child" and he suggested that it would be better to focus on the teacher preparing a parental review room in a school training book for the parent to monitor the student's work at home. The second remark was for question 5 "Notes are sent home". The panel expert suggested that the question could be rephrased to "I am informed on the achievements of my child's learning in school". Another remark given was for question 7 "I have someone to rely on in the school when I need any help", and the expert mentioned that it is better to focus on how the parent further educate their child after what the teacher has taught in school. The final remark given was on question 10 "I receive support for my family's

language and culture". Similar to the first panel of expert, he believes that this question is unclear and suggested to focus on special support and equipment for children with special education needs.

Panel Expert 3:

The third panel of expert is a senior lecturer from the University of Malaya. She has a doctorate in Counseling Psychology, specializing in Child Clinical Psychology and has nine years of working experience working with children that has special education needs. This expert has given the researcher a little more comments regarding the questionnaire compared to panel expert 1 and 2. Firstly, she mentioned that the questions in the Academics and Learning Progress section were not able to apply to every child that is diagnosed with ASD as there are a few stages of development in the spectrum (mild, mid and severe). She suggested that either the questions are changed to be more specific or that the researcher would categories the sample population to students with mild, mid or severe autism. The second comment given was in the Parental Support category, question number 10. Similar to panel experts 1 and 2, this panel of expert also feels that the question is too vague and needs to be more specific. The third comment given is in the co-curriculum category, questions 31 to 34. She suggested that the questions can be more specific, for example question 31 states that 'The school has a flexible curriculum'. However, children diagnosed with ASD can find sudden changes overwhelming and would prefer a rigid schedule. She also mentioned that question 34 'Workshops or training opportunities are offered.' is not related to co-curriculum and suggest that the question be moved into a more suitable category.

The researcher choose to change the questions in the first category instead of categorizing the sample population into mild, mid and severe due to some of the

diagnosis on children with ASD being less specific. Some diagnosis given to children only mentioned whether the child has or does not have autism and do not mention the severity of the disorder. Furthermore, due to an assessment done before the child is able to enter school, it is safe to say that most of them are in the mid to higher functioning category.

Panel Expert 4:

The forth panel of expert is a Professor from the university of Malaya, and has more than 28 years of working experience in the field of Education Psychology. This expert has given the researcher a lot of comments and amendments were made in the first draft before she approved the second draft.

In the first category, the expert commented that the title Academic and Learning Progress are of the same terms and suggested that the researcher only use one of the terms. She also commented about question number 5, 'Notes are sent home.' and placed a remark asking what does the term 'note' in the question mean? The researcher amended the question to 'A daily report on what my child did in school is sent home.' She also did not approve of question number 1 'I am able to tell that my child is progressing academically.' the reason was similar to panel expert number 3, and the researcher amended the question to 'My child is able to perform a task that he or she was not able to do before i.e. count 1-10 or sing the alphabet song.' making it more specific.

The parental support category only has one remark that is similar to all three experts. Question number 10 states that 'I receive support for my family's language and culture.' The researcher then amended the question to 'I receive support from parents and teachers of different races.' Expert 4 also suggested that the number of questions in the resources category is too few and the researcher should have about 8

items in this category. Question number 17 also received a remark and the researcher amended the term 'comfortable' to 'conducive' in the question. Question number 19 'School facilities are located near the classroom.' was also removed from the questionnaire as it does not relate much for students with ASD. An additional 3 more questions were also added into this category; 'The classroom surrounding is calm and does not have loud noises that would cause any discomfort to my child.', 'The school has a calming area for my child to calm down in case of an outburst.', and "Materials used for teaching are stimulating and attractive.'

In the social and emotional category, the expert also suggested that there are too few items and the category should have about 8 items. She also commented on question number 22, 'My child is prepared for life outside school i.e. making friends or communicating with others.' the terms 'life outside school' was unclear. The researcher amended the question to 'My child can talk to others outside of school i.e. children his or her age and adults.' Another three more questions were also added into this category, 'My child has friends in school.', 'My child is able to express his or her feelings to the teacher' and 'My child is able to have social play with a group of peers.'

The next category is the teachers and educators category. There are only two comments given in this category, question 26 and question 27. In question 26, the expert commented that the item has to be specific to individuals with ASD, therefore the researcher amended that question to 'Teachers have the knowledge to use the tools available to teach children with Autism Spectrum Disorder (ASD).' She also mentioned that the term 'conferences' in question 27 is unclear, and the researcher changed the term to 'meetings' instead.

The last category is co-curriculum. Remarks given were that there are too few items and it is suggested to have about 8 items. The title of the category was also changes to curriculum instead of co-curriculum, as the expert questioned whether the focus is on curriculum or co-curriculum. Another comment given was on question number 34 'Workshop or training opportunities are offered.' The expert question for who are the workshops provided to and suggests that the researcher be more specific. The question is then amended to 'Workshop or training opportunities are offered to teachers on how to create a more effective curriculum for students with ASD.' An additional 2 more questions were also added into this category; 'The learning objectives are set especially for my child.' and 'The lesson is planned according to my child's ability to understand.'

3.11 Scoring for Parental Satisfaction Scale

The scores of this questionnaire are based on the accumulated amount that the subjects have responded. The subjects will rate each question according to their satisfaction with 4 for satisfied and 1 for very dissatisfied. The scores for all 42 questions are then accumulated to get a total score. The higher the score determines that parents are very satisfied with the type of education that their child is obtaining. The lowest score that can be obtained is 42 while the highest score that can be obtained in 168. The scores from the data collected is then complied and scores that fall between 42 to 105 are considered low while scored that fall between 106 to 168 are considered high.

3.12 Parental Satisfaction Interview

The interview was included in the study to gather additional information that can lead to parental satisfaction that the questionnaire might not have covered. This interview also allows parents to express the reason on their satisfaction or dissatisfaction with the current inclusive or non-inclusive education program that their child is receiving.

The tools used to collect data from this interview are an interview protocol, a recorder and stationeries such as a pencil and eraser. The interview protocol consists of 4 questions, and the researcher designed two types of protocol, one for parents of children with ASD studying in an inclusive educational setting and another is for parents of children with ASD studying in a non-inclusive educational setting. Each subject of the interview is labeled in codes and the interview process is recorded for further analysis.

The interview questions for inclusive education are:

- 1. Are you satisfied with the type of inclusive education program in the school that your child is currently attending?
- 2. What are the things or aspects that you are dissatisfied about the inclusive program offered by the school your child is currently attending?
- 3. What do you think the school can do to improve their inclusive education program?
- 4. Would you consider placing your child into a non-inclusive education program or classroom in the future? If yes, then please explain why?

The interview questions for non-inclusive education are:

1. Are you satisfied with the type of non-inclusive education program in the school or centre that your child is currently attending?

- 2. What are the things or aspects that you are dissatisfied about the non-inclusive program offered by the school or centre that your child is currently attending?
- 3. What do you think the school or centre can do to improve their non-inclusive education program?
- 4. Would you consider placing your child into an inclusive education program or classroom in the future? If yes, then please explain why?

This interview would benefit parents and children by collecting additional information about parental satisfaction on top of what has been asked in the questionnaire and also rather than just the common factors that already exists. Due to changes that happen on and off in the education system, new factor that would cause satisfaction or dissatisfaction can occur. By identifying those factors, the researcher is able to discover new themes in the current educational settings that can benefit both parent and child.

3.13 Analysis

The instruments used to collect data for this study is through a questionnaire and also an interview. Data collected from the questionnaire is analyzed using the SPSS statistical software. The mean score for parents of students with ASD studying in an inclusive and non-inclusive education setting was found to determine the levels of parental satisfaction for research question 1 and 2. Comparison of both means is then done using an independent sample t-test and the results answers the 3rd research question.

During data collection for the interview, the conversation between the researcher and respondent is recorded. The information obtained is then processed

and analyzed. Themes and codes are identified during the analysis process and reported in the results part of the study. Coding method is used to transform raw qualitative data into information that allows the researcher to communicate with the reader more effectively (Linneberg & Korsgaard, 2019). The coding method used by the researcher in this study is the inductive coding method. Inductive coding is also known as open coding and the codes are produced directly from the data collected (Linneberg & Korsgaard, 2019). The researcher would firstly break down the qualitative data set into smaller samples, and read through the samples of data. Codes are the created based on each small sample, and new codes are created when they do not match the ones that already exist. Coding allows the researcher to look at themes that are important in this study and also identify new themes that are formed in the data collection process.

3.14 Procedure of Data Collection

Purposive random sampling method is used to collect data from five educational districts of the Federal Territory of Kuala Lumpur. Before the questionnaire is distributed and the interview conducted, the researcher had to make an application to the Ministry of Education to obtain approval to enter schools in the Federal Territory area to collect data. The application took place online and the researcher had to attach a letter from the university and also a letter from my supervisor confirming that the researcher is a student of the university and is currently in the process of data collection to complete this thesis. A letter of approval is then given by the Ministry of Education.

Participants are firstly identified based on the criteria mentioned above and is approached personally, through schools or via email. Data that are collected from

schools are distributed to the parents through teachers. The researcher distributed some questionnaires to the teachers based on the number of pupils with ASD in the school, and came to collect them back from the teacher once they are filled up by the parents. Another method of collecting data was to identify and approach the parent directly. The parent is asked whether he or she would like to participate in the study and upon agreement a consent form was given to sign before starting the questionnaire.

The different educational districts in the Federal Territory of Kuala Lumpur servers as a guideline for the researcher to collect data from each district evenly and to get a suitable sample size according to the schools and centers that are providing inclusive and non-inclusive education in that district. Kuala Lumpur is known as the capital city of Malaysia and is also the largest city in the country. Therefore, it is highly developed in terms of economy and population. Due to its high population density and rapid development, Kuala Lumpur also has a lot of educational institute, be it public or private schools.

The researcher would ask for the participant's approval to participate in the study before proceeding to the next step. Upon agreement to participate in the study, the participants are first given the consent form to fill in. They are required to read the content of the consent form and sign at the space given below the form as agreement to participate in the study. In the consent form, it is stated that individuals participating in the study can withdraw from the study if they wish to without any prejudice. Their information will also be kept as confidential, and if they need further information, they can contact the person conducting the survey through the email address provided.

The adult participants are selected based on their gender and their status as a parent. Once the consent form is collected, the participants are given a survey booklet to fill in. The participants are required to read and answer each question carefully. However, they are also reminded that the questions given is not a test, therefore there is no right or wrong answer. They are asked to fill in each question based on what they are experiencing or feeling at the particular time. An estimate of thirty minutes is given to each participant to fill in the survey booklet, and for those responding via email; a week to respond. Once they have completed the survey, the booklet is then collected for further analysis. The participants are also thanked for their participation.

A total of ten parents are also selected among the participants to provide their opinion on how to improve the education setting that their child is currently in; five of which have children studying in an inclusive setting and another five in a non-inclusive setting. The interview will be conducted by the researcher and the parents on a one-to-one basis and the process of the interview will be recorded for further analysis.

To ensure confidentiality for both the parent and child, a few steps were taken to make sure that the information were not made know to public. The first measure taken was to give each parent a consent form before data collection, the parent have to read through the form and give their consent before participating in the study. No personal information such as names, address and telephone number were taken from the participants, only the demographic information needed for the study such as the nationality, relationship with pupil, education level and child's current education setting were taken.

The sets of questionnaire given out were each put in a white envelop when given out to the parents. Upon completing the questionnaire, parents were required to seal the envelope before returning the questionnaire. This is to ensure that the researcher was the only person that had access to the data. Sealing the envelope would also ensure that the content is intact during the transaction and no data is lost in between.

3.15 Research Procedures

This study uses mixed method which includes both quantitative and qualitative method of collecting data. Quantitative data is collected using the Questionnaire containing the Parental Satisfaction Scale, and data collected is analyzed using the SPSS software.

Qualitative data are collected through an interview with 10 selected participants. Each interview is recorded and further analyzed. Themes and codes were identifies during the analysis process and the data is then presented in a report form in chapter 4.

3.16 Summary

The research design, participants, instrument used for the study, data collection method and data analysis were described in detail in this chapter. The mixed method design of this study gathered quantitative and qualitative data from parents of children with ASD across different states in Malaysia. The data collected is analyzed and discussed in the following chapters. The instruments used and data collected will be complied in the appendix section of this study.

In the next chapter of this study, the researcher would talk about the results obtained from the data collected from the study and analyze the data collected.

CHAPTER 4

RESULTS

4.1 Introduction

The purpose of this study was to identify the level of parental satisfaction towards inclusive and non-inclusive education for pupils with ASD in public and private schools. One hundred and twenty parents participated in this study, and ten parents from the one hundred and twenty also participated in an interview. The research tool used to collect the quantitative data for this study is the PSS (Parental Satisfaction Scale). The questionnaire consists of 42 questions and is measured using a Likert scale from the distribution of 1 = very dissatisfied, 2 = dissatisfied, 3 = satisfied and 4 = very satisfied. The research questions for the study are:

- What are the levels of parental satisfaction towards inclusive education for pupils with ASD in private and public schools?
- 6 What are the levels of parental satisfaction towards non-inclusive education for pupils with ASD in private centers and home-schools?
- 7 Which type of educational experience for pupils with ASD has higher levels of parental satisfaction, inclusive or non-inclusive education?
- 8 What can lead to higher levels of parental satisfaction on inclusive and noninclusive education for pupils with ASD?

In this chapter the researcher will first give a description of the demographics of the sample and subjects then present an inferential analysis of the data collected from the questionnaire to answer the research questions. In addition, the qualitative data collected through the interview will also be decoded, analyzed and presented in this chapter.

4.2 Descriptive Data

The sample population for this study is parents of children with ASD that are studying in an inclusive or non-inclusive education setting from schools around the Federal Territory. More than 180 questionnaires were given out and a total of 120 were collected. See Table 1 for the demographic data for the overall sampling pool of parents with children with ASD studying in an inclusive or non-inclusive education setting.

Table 4.1: Summary of Characteristics of Sampling Pool

Parents of children wit	h		%
ASD	Frequency		
Inclusive education		62	51.7
Non-inclusive education		58	48.3
Total		120	100.0

The participants responded to a series of demographic question in the second part of the questionnaire after signing the agreement form to participate in the study. Questions in the demographic form include gender, nationality, relationship with pupil, education level and education setting. The demographic information was analyzed for frequency and percentage, and can be seen in Table 2.

Table 4.2. Summary of Demographics

Variable	Frequency	%
Gender		
Male	38	31.7
Female	82	68.3
Nationality		
Malaysian	100	100.0
Others	0	0.0
Relationship with pupil		
Father	34	28.3
Mother	79	65.8
Guardian	7	5.8
Education Level	31	25.8
High School	23	19.2
Diploma	41	34.2
Bachelor's Degree	8	6.7

Master's Degree Others	17	14.2
Education Setting	62	51.7
Inclusive	58	48.3
Non-inclusive		

4.3 Scoring for the Parental Satisfaction Scale

The Parental Satisfaction Scale was designed to measure parental satisfaction towards the type of education that their child with ASD is receiving, and this questionnaire addresses research questions one, two and three.

Before the data is being analyzed and the results presented, the researcher summed up the scores for all the 42 questions. The scores are then categorized into 2 categories, low and high. The scores ranges from lowest = 42 and highest = 168. Scores between 42 -105 were categorized as low while scores between 106 -168 were categorized as high. The reason the researcher decided to categorize the scores into two categories was to differentiate between being satisfied and not satisfied for the variable parental satisfaction.

Data obtained was not categorized into 3 categories, satisfied, neutral and non-satisfied because of the results that were obtained for both inclusive and non-inclusive education. In this method of scoring, both results will fall in the neutral category with scores between 84 to 126, and the researcher would not be able to determine whether parental satisfaction is high or low for inclusive and non-inclusive education.

In addition, the data as also not categorized into 5 categories: Very dissatisfied, Dissatisfied, Neutral, Satisfied and Very Satisfied as the results would be similar to the current result were both inclusive and non-inclusive education fall under the Satisfied category with a range score of 118 to 142.

4.4 Research Question 1: What are the levels of parental satisfaction towards inclusive education for pupils with ASD in private and public schools?

The study answers the research question, what are the levels of parental satisfaction towards inclusive education for pupils with ASD in private and public schools? Data collected for this question was though the quantitative design, where participants had to answer the questions from the Parental Satisfaction Scale. There are a total of 42 questions in the questionnaire that measures parental satisfaction based on the 6 main factors: (a) Learning Progress, (b) Parental Satisfaction, (c) Resources, (d) Social and Emotional Growth, (e) Teachers, and (f) Curriculum.

The population sample for this study is parents of children with ASD studying in an inclusive education setting. The data that was collected from parents of children with ASD studying in an inclusive setting was contemplated, and the results can be seen in Table 3.

The mean score of the data collected from parents of children with ASD studying in an inclusive setting was used to determine the level of parental satisfaction. Scores between 42 -105 were categorized as low while scores between 106 -168 were categorized as high. The mean scored obtained for this question is 124.39. Therefore it falls in the high category. Table 3 displays the mean and standard deviation for parents of children with ASD studying in an inclusive or non-inclusive setting. Finding from the data collected shows high levels of parental satisfaction. Therefore we can conclude that parental satisfaction towards inclusive education for pupils with ASD is high (M = 124.387, SD = 21.803).

4.5 Research Question 2: What are the levels of parental satisfaction towards non-inclusive education for pupils with ASD in private centers and homeschools?

The study answers the research question, What are the levels of parental satisfaction towards non-inclusive education for pupils with ASD in private centers and home-schools? Data collected for this question was though the quantitative design, where participants had to answer the questions from the Parental Satisfaction Scale. There are a total of 42 questions in the questionnaire that measures parental satisfaction based on the 6 main factors: (a) Learning Progress, (b) Parental Satisfaction, (c) Resources, (d) Social and Emotional Growth, (e) Teachers, and (f) Curriculum.

The population sample for this study is parents of children with ASD studying in an inclusive education setting. The data that was collected from parents of children with ASD studying in an inclusive setting was contemplated, and the results can be seen in Table 3.

The mean score of the data collected from parents of children with ASD studying in a non-inclusive setting was used to determine the level of parental satisfaction. Scores between 42 -105 were categorized as low while scores between 106 -168 were categorized as high. The mean scored obtained for this question is 121.41. Therefore it falls in the high category. Table 3 displays the mean and standard deviation for parents of children with ASD studying in an inclusive or non-inclusive setting. Finding from the data collected shows high levels of parental satisfaction. Therefore we can conclude that parental satisfaction towards non-inclusive education for pupils with ASD is high (M = 121.414, SD = 17.197).

Table 4.3: Mean Scores for Parents of Children with ASD Studying in an Inclusive and Non-inclusive Setting.

Education Setting	M	SD	
Inclusive	124.387	21.803	
Non-inclusive	121.414	17.197	

4.6 Research Question 3: Which type of educational experience for pupils with ASD has higher levels of parental satisfaction, inclusive or non-inclusive education?

The study investigated the research question, Which type of educational experience for pupils with ASD has higher levels of parental satisfaction, inclusive or non-inclusive education? Data collected for this question was though the quantitative design, where participants had to answer the questions from the Parental Satisfaction Scale. There are a total of 42 questions in the questionnaire that measures parental satisfaction based on the 6 main factors: (a) Learning Progress, (b) Parental Satisfaction, (c) Resources, (d) Social and Emotional Growth, (e) Teachers, and (f) Curriculum. The population samples for this study are parents of children with ASD studying in an inclusive and non-inclusive education setting.

Findings from comparing both the mean scores of the data shows that the inclusive education setting has a higher level of parental satisfaction compared to the non-inclusive education setting. An independent sample t test was also conducted to see whether there is any significant difference between these two categories. The independent sample t test compared means between the two groups of parents, and the results were based on cumulative scores of all forty-two questions they responded on the Parental Satisfaction Scale. The t test for the independent samples was conducted with a significant alpha level of 0.05. Results showed that parents of children with ASD studying in an inclusive setting have higher levels of parental

satisfaction compared to parents of children with ASD studying in a non-inclusive setting. The results also showed that there was no significant difference between the scores of these two groups of parents.

4.7 Research Question 4: What can lead to higher levels of parental satisfaction on inclusive and non-inclusive education for pupils with ASD?

The forth question of this research looks into factors that can lead to higher levels of parental satisfaction towards inclusive and non-inclusive education for pupils with ASD. Answers to this question can be found through analyzing the data collected through the qualitative research.

Qualitative research is a subjective reality that can be experienced differently by each individual and cannot regard truth as objective (Vishnevsky & Beanlands, 2004). The purpose of conducting an additional qualitative research to the study was to allow the researcher to obtain additional information about parental satisfaction. It allows the researcher to explore the participant's experiences towards the two different types of education setting for children with ASD. Qualitative samples are often small but could offer a significant depth of information about the experience (Ryan, Coughlan & Cronin, 2007). Through this qualitative research, the researcher hopes to find new themes or factors that could influence parental satisfaction in addition to the factors that are already measured using the questionnaire.

The participants are two categories of parents, parents of children with ASD studying in an inclusive education setting, and parents of children with ASD studying in a non-inclusive education setting. Both group of parents answered a series of four questions prepared by the researcher following the protocol where consent is first provided and the researcher also reminds the participants that the conversation will

be recorded. Transcription of the interview can be seen in Appendix L. Codes were used to label participants one to ten. Parents of children with ASD studying in an inclusive education setting were labelled with the codes PI01 to PI05 respectively, while parents of children with ASD studying in a non-inclusive education setting were labelled with codes PNI01 to PNI05 respectively making 10 participants in total.

4.7.1 Responds from Interview for Inclusive Education Setting

Parents of children with ASD studying in an inclusive education setting that participated in the interview had to answer 4 questions. Their response was recorded and recorded below. A detailed transcription of the interview can be found in appendix J.

Question 1: Are you satisfied with the type of inclusive education program in the school that your child is currently attending?

Responds from the interview showed that 2 parents were satisfied with inclusive education provided by the school, 1 was not sure and another 2 was not satisfied. PI01 and PI03 that was satisfied stated "Yes, I would give 75 over 100 marks" and "Yeah", PI02 that was not sure stated "Because I did not go and survey to see whether other Inclusive programs are okay or not, so all along I think that this Nexus school has done a good job in especially this AP program" while PI04 and PI05 that was not satisfied stated "From our experience, we had some bad experience la, so....." and "Nope".

Question 2: What are the things or aspects that you are dissatisfied about the inclusive program offered by the school your child is currently attending?

Question 2 of the questionnaire asks parents what are the things or aspects that they dislike about the school or center that their child is currently attending?

PI01 and PI04 mentioned about the teachers. PI01 stated that "The school that my daughter is currently attending is lack of resources and support on handling special needs children." The researcher went on to clarify asking "As in the teachers?" and the respondent said "Yes, correct." PI04 mentioned in question one that "Inclusive is actually; theoretically it might work la, but then depends on the teachers. Some teachers are very nice but most of the teachers they are not very helpful." And suggested in question 2 that the school allow an assistant or a shadow aid "They should allow shadow aid for these special kids because in a class they have at least 20-28 students' right? So if the teachers have to handle all the kids and they cannot give special attention to these special need kids. So there should be somebody coming in to assist these kids. So guru pengiring is important for these kind of kids. If parents can afford then I think the school should allow guru pengiring." PI05 also gave a respond that was related to the attitude of the teacher towards the pupil, stating that "I feel like he is being ignored and not getting the attention that he is suppose to get. So I feel like he is being left out."

PI02 mentioned about the fees of the school which were too high and PI03 mentioned about the pupils behavior and mood during class time and not being able to cope with the curriculum "Monday and Tuesday she has exercise in school. Sometimes she does not want to go down. Sometimes when her mood is okay then she will go down and join.", "Sometimes see her mood. Like when she want to do her homework she will do well. If she don't want to do she will cry and shout."

Question 3: What do you think the school can do to improve their inclusive education program?

Question 3 of the interview asks parents what they think the school can do to improve the current inclusive education program. PI02 and PI03 did not give much

respond to this question. They each said "no comment" and "I did not think about it that much". PI01, 04 and 05 on the other hand responded to having more assistant teachers or therapist in the classroom to assist the class teacher, improvement on teacher's attitudes and also more training and exposure provided to teachers. The each responded saying "I think one or two special needs teacher or therapist should be deployed into the classes, so as to support the teachers can co-teaching lessons. The most important is to help to plan the behavioral strategy or social skills support strategies, especially to the special needs children.", "The teachers have to be willing. Willing means they should be comfortable with this idea, because they are the main person there. If they don't agree then indirectly they will do things that will make the kids uncomfortable and the parents uncomfortable and it definitely won't work out, so the teacher should willingly accept this idea of inclusive education." and "Maybe more exposure to teachers on how they should handle the kid rather than just ignore because he is different."

Question 4: Would you consider placing your child into a non-inclusive education program or classroom in the future? If yes, then please explain why?

The fourth and last question of the interview asks parents whether they would consider placing their child into a non-inclusive education setting in the future and why. All four respondents responded with a strong no. PI03 responded with "mix" indicating that she would also consider therapy as an alternative after school, but she would not consider non-inclusive education as a full time education setting for her child.

Overall, findings from parents of children with ASD studying in an inclusive education setting shows that they are not satisfied with the current education that

their children are receiving. However, they would not consider putting their child in a non-inclusive education setting. Findings also showed that the main reason for parents of children with ASD studying in an inclusive education setting to be dissatisfied was due to the teachers in the school and the parents commented on teachers attitudes and the lack of experience in handling children with SEN.

4.7.2 Responds from Interview for Non-inclusive Education Setting

Parents of children with ASD studying in a non-inclusive education setting that participated in the interview had to answer 4 questions. Their response was recorded and recorded below. A detailed transcription of the interview can be found in appendix J.

Question 1: Are you satisfied with the type of non-inclusive education program in the school or centre that your child is currently attending?

Respondents were labeled as PNI06 to 10 for the non-inclusive group. PNI06 was not satisfied with the current education that her child is receiving. PNI08 and PNI10 were unsure, while PNI07 and PNI09 were satisfied with the education setting.

Question 2: What are the things or aspects that you are dissatisfied about the non-inclusive program offered by the school or centre that your child is currently attending?

Question 2 of the non-inclusive education interview asks parents what are the aspects or things that they dislike about the school or centre that their child is currently attending. PNI06 and PNI10 both stated that the lessons were not suitable for the academic level of their child. PNI06 stated that "The school are not well prepared to support my kid in a higher level. Once my son cannot follow the syllabus, the school pulls him out and put him into another class." and PNI10 stated

that "I think for like the academic wise, the level is somehow not suitable for my child." PNI08 did not have any comment, while PNI07 and PNI09 both have concerns about the way their child is being assessed or monitored for their progress in the school or centre. PNI07 mentioned that "Not really not happy, but I think in Malaysia overall we can improve the KPI on how we measure the children's progress and benchmark again their monthly and weekly progress, to improve on the area." She also added that "I think not only in this centre la, but in Malaysia generally, this centre they do quite well. It's just that em...... how well we want to measure EIP, you know the education plan? and benchmark again their progress la, more on monitoring and supervision." PNI09 commented about the consultant and how her child is being monitored in the centre. She stated that "Because the consultant in this centre only come once a month, and only observe the children once in a blue moon..... and then there are some method or not every method that she suggested can be use..... You need to observe the child one week once or maybe depend on like my kid, he needs really to be observed for quite a few times then only you will know that oh okay, this boy can do a lot of things actually."

Question 3: What do you think the school or centre can do to improve their noninclusive education program?

Question 3 of the interview asks parents on their opinion on what they think the school or centre can do to improve the non-inclusive education program. PNI06 suggested that it would be good for the school to provide a more holistic program to cater to her child's education needs. She stated that "The school should have a holistic plan to fully support the special kid so that they can be ready for inclusive education in the future." She also mentioned about school readiness and shows that she would have interest to place her child in an inclusive education setting in the

future. PNI07 mentioned that the school system could minor the school systems from some of the more developed countries. She also suggested that the infrastructure of the school such as the equipments and also the educators in the school can improve the education program of the school. PNI08 suggested that more social activities such as group play could help improve non-inclusive education program for the school or centre, while PNI09 stated that "Because the consultant in this centre only come once a month, and only observe the children once in a blue moon..... and then there are some method or not every method that she suggested can be use..... You need to observe the child one week once or maybe depend on like my kid, he needs really to be observed for quite a few times then only you will know that oh okay, this boy can do a lot of things actually. Because if you only visit once in a blue moon, how are you going to assess him? Because the last time, he know "oh got person come to assess me then I can try to do something else or be cheeky". Because in class suppose to be only teacher and him, but when there is another person he would thing "okay I got chance now to play or not to do my homework" that's why the observation fail, and she would say this kid cannot do this or do that.", suggesting that assessments and observation be carried out more frequently to monitor the progress of her child. PNI10also suggested more assessments be carried out to make sure that the program can cater to her child's education needs. She stated that "I think, they can emm..., do more assessment on the child first, assess the level, then only decide like what subject they can take."

Question 4: Would you consider placing your child into an inclusive education program or classroom in the future? If yes, then please explain why?

The last question of the interview for parents of children with ASD studying in a non-inclusive education setting asks parents whether they would consider

placing their child into an inclusive education setting in the future and explain why. All five parents answered with a yes. PNI06 also said no because of the lack of IEP in an inclusive setting. However, she would consider inclusive education for her child when he is ready. The other 4 parents answered with a strong yes and their reason was so that their children could mix with typically developing children. PNI07 also mentioned that inclusive education would be the ultimate goal, stating "Of course, this is the ultimate goal. Because we want them to absorb into the normal society. This is the end goal of the intervention program."

Findings from the interview of this group of parents show that they are somewhat satisfied with the non-inclusive education programs that the school or centre is providing. They would also strongly consider placing their child in an inclusive education setting in the future. The factor that parent of children with ASD studying in a non-inclusive setting were more concern of was the learning progress, where they commented that more assessments were needed, and more appropriate learning goals should be set for their child based on their education needs. This could be seen from the suggestions given by PNI06, 09 and 10.

4.8 Analysis and Findings for Interview

In line with research question 4, What can lead to higher levels of parental satisfaction on inclusive and non-inclusive education for pupils with ASD? findings from the data collected from the interview shows that parents from both education setting has given a few suggestions that they think will help increase the levels of parental satisfaction on inclusive and non-inclusive education for pupils with ASD.

Parents of pupils with ASD studying in an inclusive education setting suggested that the school should allow special needs teachers or therapists to be

deployed into classrooms to assists teachers in planning behavioral strategies or social support strategies. Another parent suggested that teacher's attitude towards inclusive education should be positive; he also mentioned that public schools should allow shadow aids to enter school to aid pupils with ASD. Teacher's awareness and attitude towards inclusion should be more was also one of the suggestions given by a parent.

It is clearly seen that parents of pupils with ASD studying in an inclusive education setting were more concern about teacher's attitudes and awareness towards inclusion and feels that higher awareness and a more positive attitude can help increase parental satisfaction.

Parents of pupils with ASD studying in a non-inclusive education setting suggested firstly that the school should have a more holistic plan to support the pupil and prepare him or her for inclusive education. PNI02 suggested that the school should have a better infrastructure in term of the programs, and PNI03 would like to see more group play session in the centre to encourage interaction and also to create awareness between peers to curb bullying. Both parents PNI04 and PNI05 suggested that the school should conduct more consistent assessment on the progress of the pupils.

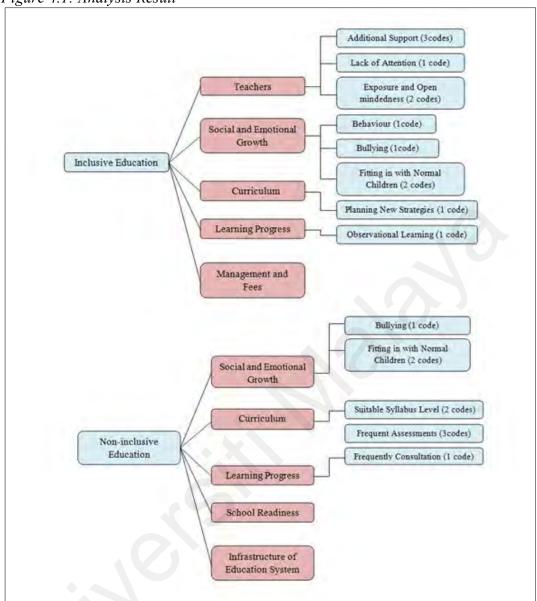
In terms of non-inclusive education, parents were not concern in terms of teacher's awareness and attitudes as teachers or therapists already have the knowledge to handle pupils with ASD. The parents were more concern about the programs offered by the school and also the frequency of assessments being conducted. Findings from the interview also show that parents of pupils with ASD studying in a non-inclusive education setting would strongly consider placing their

child in an inclusive education setting. Therefore, they see non-inclusive education setting as a platform to prepare their child for inclusive education in the future.

4.9 Theme and Code Sets

The results were categories into two groups, parents of children with ASD studying in an inclusive education setting and non-inclusive setting. The researcher was able to identify 18 themes from the interview after transcribing the data collected. The higher level themes were mentioned more frequently during the responds such as (a) teacher, (b) social and emotional growth, (c) curriculum, and (d) learning progress. New themes were also identified in the process such as (a) infrastructure of education system, (b) school readiness, and (c) management and fees. The distribution of the themes and codes can be seen in Figure 5.





4.10 Summary

In this chapter, the researcher presented the results of the data collected and the analysis conducted to obtain the results. Two types of analysis were done for the qualitative and quantitative data collected. The analysis of the data from the questionnaires was analyzed using the SPSS software and the results were presented in this chapter. Data from the interview recording was transcribe and analyzed. Themes and codes were then identified and presented.

Parents of children with ASD studying in an inclusive and non-inclusive setting both show high levels of satisfaction towards the type of education their child is receiving. Parents of children with ASD studying in an inclusive setting were more satisfied compared to parents of children with ASD studying in a non-inclusive education setting. However, the differences were small; therefore there is no significant difference between parental satisfactions for both education setting. The researcher was also able to identify a few new themes from the qualitative data collected such as the infrastructure of education system, school readiness and management and fees.

CHAPTER 5

DISCUSSION AND CONCLUSION

5.1 Introduction

This final chapter of the study offers a summary of the results. The researcher will organize the chapter according to the following sections (a) summary of the results, (b) discussion of the quantitative results, (c) discussion of the qualitative results, (d) recommendations for future research, and (f) conclusion.

Review of information from the previous chapters will also be included in the summary of the results. This review will include research methods in chapter 3 and the recap of the findings from chapter 4.

5.2 Summary of the Results

The purpose of this study was to identify the level of parental satisfaction towards inclusive and non-inclusive education for pupils with ASD studying in schools or centers. The second purpose of this study was also to obtain additional feedback from parents on how to improve inclusive and non-inclusive education for children with ASD that will lead to parental satisfaction. The researcher uses a mixed method design for this study, and data was collected through a questionnaire and through interview.

In order to measure parental satisfaction based on the five main factors: learning progress, parental support, resources, social and emotional growth, teachers and curriculum, the researcher has developed a Parental Satisfaction Scale adapted from the Parent Satisfaction with Education Experience scale (PSEE). Additional 30 questions were added to the questionnaire and the validity of the questionnaire was

determined by four panels of experts in the field. Fine tuning and amendments were then done before the researcher proceeded with data collection.

Parents of pupils with ASD studying in an inclusive and non-inclusive education setting were selected for this study, and data was collected from schools around the Federal Territory area. To ensure confidentiality, parents were given a consent form to fill in before participating in the study, and no names or contact numbers were collected from the participants. In addition to the questionnaire, ten participants were asked to participate in an interview. The purpose of the interview was to allow the researcher to obtain addition information and identify new themes that would influence parental satisfaction.

Findings from chapter 4 showed that parents of children with ASD that are studying in an inclusive and a non-inclusive education setting both show high levels of parental satisfaction. The levels of parental satisfaction was measured based on the scores from the questionnaire answered by the parents. Scores between 42 to 104 were categorized as low while scores between 105 to 168 were considered high. The mean score obtained for both parents of children with ASD studying in an inclusive and non-inclusive education setting showed 124.4 and 121.4 respectively. Therefore, the levels of parental satisfaction towards inclusive and non-inclusive education for pupils with ASD in schools are high.

Research question 3 requires the researcher to compare the mean score of both groups of parents of children with ASD studying in an inclusive and non-inclusive education setting. Inclusive education experience for pupils with ASD has a higher level of parental satisfaction compared to a non-inclusive education experience. However, the difference between the mean of both groups were small.

Findings from the interview also showed otherwise. The researcher conducted an interview with 10 parents of both inclusive and non-inclusive education setting. Data obtained were coded and to answer research question 4. Parents of children with ASD studying in a non-inclusive setting were more satisfied compared to parents of children with ASD studying in an inclusive setting.

5.3 Discussion of Research Question 1

The first research question asked in this study was: What are the levels of parental satisfaction towards inclusive education for pupils with ASD in private and public schools?

Finding collected from the questionnaire showed that the levels of parental satisfaction towards inclusive education for pupils with ASD in private and public school are high. From the findings, we could see that parents are satisfied with the type of inclusive education setting that their child with ASD is receiving.

Parent's main goal for inclusion was to allow their child to communicate and interact with typically developing children. Through this interaction, parents hope that their child can learn to merge themselves into society (Marimuthu & Loh, 2015). These findings relates to the attitudes of parents and their goal of placing their children in an inclusive education setting. It is predicted that parents would favor inclusive education more as placing their child in an inclusive education setting would allow the pupils to mingle with typically developing children. There are many opportunities for inclusive education for pupils with ASD in Malaysia whether it is in public schools or private schools. Less strict qualifications and a more flexible criterion for admission from schools allowing more pupils with ASD to participate in

an inclusive education classroom could also be one of the contributions to higher levels of satisfaction among parents of children with ASD.

Abu-Hamour and Muhaidat (2014), identified several themes that contributes to what parents think would lead to successful inclusion. These themes include independent skills, playing skills, behavioral skills, imitation skills, routine skills, social skills, paying attention skills, language skills, and pre-academic and academic skills. These skills can mainly be learned through imitation of a peer which can be achieved through inclusion. By going to school and mixing with typically developing peers, parents carry hope that their child with ASD is able to learn and pick up different types of skills through interaction and imitation. Due to the changes happening in the education system throughout the past ten years, educating children with special needs have been a main goal for parents not only in Malaysia but all around the world (De Boer, 2009).

Parental satisfaction can also be influenced by their attitude towards inclusive education. Parents that carry a more positive attitude will tend to seem less concern and more satisfied while parents that are undecided would tend to fell that inclusion is not the right option for their child (De Boer, 2009). This could be the trust they have towards the education system and also the ability of their child to cope in an inclusive setting. Children entering schools have to go through an assessment before admission, and passing the assessment would assure parents that their child is able to cope in school. It is seen that most parents from this study carry a positive attitude towards what inclusion can do for their child resulting in higher levels of satisfaction. From the finding of the interview, some parents that have children in an inclusive education setting are less satisfied with the type of education that their child is receiving. These parents have children that usually go through a negative experience

in school causing them to feel that way. However, before the negative experience, it was their goal to place their child in an inclusive education setting.

5.4 Discussion of Research Question 2

Research question 2 asks: What are the levels of parental satisfaction towards non-inclusive education for pupils with ASD in private centers and home-schools? Findings shown in chapter 4 showed that the level of parental satisfaction towards non-inclusive education for pupils with ASD in private centers and home schools is high. Majority of these parents find the non-inclusive education setting that they have placed their child in satisfying, be it in a private centre or home schooling.

In Malaysia, non-inclusive education can be mainly obtained through private centers or NGO's that provide different kinds of programs or therapy. Another form of non-inclusive education would be from integrated programs where children with SEN are placed in segregated classes in mainstream schools (The Ministry of Education Malaysia, 2008). Most of the data from this study was collected from private centers and integrated programs in schools. One of the reasons that parents consider placing their children in a non-inclusive education setting is because children with special education needs can find it hard to fit in to mainstream education, especially children with ASD (Parson & Lewis, 2010). Some parents have also choose to withdraw their children from mainstream education to home school them instead due to their child not being able to fit into the system (Kendall & Taylor, 2016). These parents find that homeschooling would be a better option for their children because of various issues that they were facing in mainstream schools, and were more satisfied with the outcome then when their child was in an inclusive education setting.

Some find that educating their children at home could reduce the stress put on the family that could be caused by limitations provided by inclusive education (McDonald, 2014).

High levels of parental satisfaction towards non-inclusive education could also be due to the experience that the teachers have. Private centers or schools usually hire teachers with experience working with children with special education needs or at least have a qualification in teaching children with special needs. Therefore, results showed that parents of children with ASD studying in a non-inclusive education setting are less concerned when it comes to factors such as teachers and their attitudes and also resources.

One-to-one teaching or a smaller number of pupils in a classroom could help children with ASD studying in a non-inclusive education setting learn better due to a better and more personalized education fit. Pupils with ASD could benefit better with a more appropriate and personalized educational plan (Bernard, Prior & Potter, 2000). IEP's designed especially for the pupil are able to cater to his or her educational needs. Therefore, parents of children with ASD studying in a non-inclusive education setting are satisfied based on the amount of attention the child is receiving from the educator and the more personalized education plans for the child.

5.5 Discussion of Research Question 3

Research question 3compares both type of education setting by asking: Which type of educational experience for pupils with ASD has higher levels of parental satisfaction, inclusive or non-inclusive? By comparing the two variables, findings showed that inclusive education for pupils with ASD has a higher level of parental satisfaction. A bigger number of parents from the inclusive education

category are more satisfied with the type of education their child is receiving. Parents from both category showed high levels of satisfaction towards the type of education that their children are receiving, however more parents from the inclusive education category are more satisfied compared to the non-inclusive education setting. The mean score for parental satisfaction for inclusive education and non-inclusive education are 124.4 and 121.4 respectively. The researcher decided to conduct a t test and found that there was no significant difference between the overall satisfactions of these parents. Therefore, it is seen that the difference between these two groups are small, and we could see that the parental satisfaction levels for inclusive and non-inclusive education is almost the same.

It has always been most parents' goal to place their child with ASD in an inclusive education setting, therefore this could be the reason why inclusive education has a higher level of parental satisfaction compared to non-inclusive education. Being in an inclusive education setting allows the child with ASD to mingle with peers that are typically developing, learn from them and hopefully be able to merge into the society (Marimuthu & Loh, 2015). Parents of children with ASD hope that being able to mingle with typically developing children can help their child to develop better socializing skills which will allow them to communicate with the society better, that is why parents that place their child in a non-inclusive education setting would also consider placing their child in an inclusive education setting. Findings from the interview also showed that parents of pupils with ASD studying in a non-inclusive education setting stating that they will strongly consider placing their child into an inclusive education setting in the future, and parents of pupils with ASD in an inclusive education setting stating that they will not consider

placing their child into a non-inclusive education setting, even though they were not very satisfied with the education that their child is receiving.

Non-inclusive education also has its benefits, and it could also be the reason why levels of parental satisfaction are high for non-inclusive education. Parents consider non-inclusive education as a platform for children with ASD to prepare before placing their child into an inclusive education setting. Difficult behaviors can be modified to help the child cope in an educational setting can be done more successfully in a non-inclusive education setting through higher levels of attention and a more customized education plan (McDonald, 2014). However, it does not possess the type of academic and social opportunities that inclusive education can provide (Hurlbutt, 2012). Therefore it is seen that parents of pupils with ASD studying in an inclusive education setting having higher levels of parental satisfaction.

5.6 Discussion of Research Question 4

Research question 4 asks what can lead to higher levels of parental satisfaction on inclusive and non-inclusive education for pupils with ASD, and the data was obtained through interviewing parents of both inclusive and on-inclusive education setting. The qualitative study measures parental satisfaction based on the 5 themes (1) Learning progress, (2) Parental Support, (3) Resources, (4) Social and emotional growth, (5) Teacher, and (6) Curriculum. 4 of these themes was also identified in the qualitative study (1) Teacher, (2) Social and emotional growth, (3) Curriculum, and (4) Learning Progress. Findings from the qualitative data provide the researcher a greater insight on the factors that can affect parental satisfaction. Parental satisfaction towards inclusive education says otherwise compared to the

findings from the quantitative data. Parents of children with ASD studying in an inclusive education setting were less satisfied towards the type of education that their child is receiving compared to parents of children with ASD studying in an inclusive setting.

The main theme that affects parental satisfaction for inclusive education was teachers. Parents found that their child received less attention from teachers in school and also mentioned that teachers needed additional support from assistance, shadow aids or therapist to manage a child with ASD in the classroom. This situation mainly occurs in an inclusive education setting in public schools. This could be due to the limited amount of schools that provides inclusion for children with ASD. Even though the level of awareness towards autism is higher compared to the past, the government is still trying to cope with the growing need of education for children with special education needs (Lee & Low, 2014). Therefore, teachers from public schools did not receive the training needed to work with children with autism and would find it difficult to handle certain behaviors.

A new theme that emerged in the findings is management and fees. This concern could only apply to parents that send their children to a private of international school. Private or international schools impose a hefty fee compared to public schools which mainly offer free education. However, the parent that mentioned about this was satisfied with the setting and the facilities provided by the school.

Teachers did not seem to be a concern for parents of children with ASD studying in a non-inclusive setting. This could be due to the knowledge and experience that teachers already have teaching in a special needs school or centre. The factor that parent of children with ASD studying in a non-inclusive setting were

more concern of was the learning progress. This could be due to their goal of placing their child in an inclusive education setting in the future. The ability to learn and be at the same pace with typically developing children is one of the criteria for children with SEN to enter schools. Therefore, they would show more concern towards this area, and to ensure that their child is monitored more frequently to make sure that his or her education needs are met. Placing a child in the right education level or setting can boost learning in terms of their academic and social skills (Starr & Foy, 2012).

Two new themes that are seen in the qualitative study are school readiness and infrastructure of the education system. These two themes occur in the non-inclusive setting. Parents of children with ASD studying in a non-inclusive education setting were aware that school readiness was important and it was the reason why they placed their child in a non-inclusive education setting, but aims to send them to include them in the future once they are ready for school.

Bullying was also a theme that emerged in the interview findings for both inclusive and non-inclusive group. It is seen that in either setting, bullying can occur for children with SEN. In addition, bullying does not only come from peers but can also come from teachers and parents. Students with autism have a high risk of being bullied (Zablotsky, Bradshaw, Anderson & Law, 2012), and this could be one of the reason for dissatisfaction among parents. This situation could be linked to the first theme which is teachers. The parents that mentioned bullying has a child in public school and experience bullying from teachers. This could be due to the lack of training and awareness towards autism. Teachers might not have the knowledge or proper resources to work with children with autism causing them to think that these pupils with autism are more problematic and impose more punishment towards them.

Despite being dissatisfied with the inclusive education setting or satisfied with the non-inclusive setting, there was one thing that all 10 parents agreed on, it was to place their child in an inclusive education setting. All 5 parents from the inclusive setting said 'No' to placing their child in a non-inclusive education setting, and all 5 from the non-inclusive setting said "Yes' to placing their child in an inclusive setting in the future. This could be due to the opportunity to mingle with typically developing children.

5.7 Recommendations from the study

From this study, the researcher found that parental satisfaction was high for both inclusive and non-inclusive education setting, however parents were more satisfied with the inclusive education setting, and this could be due to the goal of placing their child in an inclusive education setting. Inclusive education would allow their child to mingle with typically developing children and learn from them. However certain issues have to also be taken into account such as awareness among teachers and peers, acceptance and also bullying. Bullying in schools has been a major issue that has been happening in our current society and it happens not only to typically developing children, but also children with special needs as well. Future research needs to be done to create a greater awareness for individuals with SEN. Researchers can look into the affects of bullying for children with autism or patterns that a indicate that an individual with autism is being bullied in school to help curb bullying for pupils with autism.

It is also recommended that future research can look into more areas of measuring parental satisfaction. With accumulated experience from parents, more and more factors can be identified that would affect parental satisfaction. Factors

such as school readiness and the infrastructure of the education system can be included into the measuring tool. Furthermore, a study can also be done on school readiness and the process of entering schools for children with autism in Malaysia. During the data collection process, the researcher had an opportunity to enter various schools around the Federal Territory area, and realized that many schools do not adhere to the administration procedure for children with SEN. The procedures are important to follow as it determines whether the child is ready for inclusive education or not. Future research can be done on the ability to cope for children with ASD in an inclusive education setting.

5.8 Implication of Theories

Parental satisfaction towards a type of educational setting can be determined by different kinds of factors. Theories can be used to predict and also determine these kinds of factors. By determining the type of factors, researcher can come up with suggestions that could help improve the education system for pupils with ASD.

Bronfenbrenner's Ecological System theory is based on the idea that an individual's development is affected by his or her environment (Bronfenbrenner, 1995). Parental satisfaction towards the type of education their child is receiving can be affected based on the people that are involved in the child's life. In this study, the individuals that are involved in a pupil's life that affected parental satisfaction are teachers, peers, and stakeholders such as the principal. Based on the data collected through this research, it is seen that teachers have a strong influence towards the child's education experience that would affect parental satisfaction. Teachers fall into the microsystem of a child's life as he or she spends more than half a day in school almost every day (Kail & Cavanuagh, 2016). Feedback received from parents

through the interview gives an insight that teacher's attitude plays an important part in affecting parental satisfaction. Batter inclusion can be achieved with a positive teacher's attitude as it would help improve the teaching process for children with ASD (Galvada & Tan 2012). Parents also tend to develop trust when teachers carry a more positive attitude, understanding and also knowledge of working with children with special education needs (Flakmer, Anderson, Joosten & Falkmer, 2015).

Another theory that was the frame of this study is the seven pillars of support. The seven pillars were designed to determine the success of education in an inclusive setting (Bernard, Prior & Potter, 2000). The success of education can determine the level of parental satisfaction towards the type of education that their child with ASD is receiving. In this study, the researcher uses 7 factors to develop the Parental Satisfaction Scale and was based on the seven pillars of support. The 7 factors in this study are 1) Academics and Learning Progress, 2) Parental Support, 3) Resources, 4) Social and Emotional Growth, 5) Resources, 6) Teachers and 7) Curriculum. Each factor was link to one or more pillar to determine that it could measure parental satisfaction based on the pillars of support. A positive attitude was one of the first pillars of support and is also one of the main factors that would influence parental satisfaction. Parents of children with ASD studying in an inclusive education setting stated that they would like teachers that are working with children with ASD to carry a more positive attitude towards inclusion and also to have more training which is also the seventh pillar, training and resources.

5.9 Conclusion

The conclusion of this study on parental satisfaction towards inclusive and non-inclusive education for pupils with ASD showed that parents of both inclusive

and non-inclusive education group have high levels of parental satisfaction towards the type of education that their child is receiving. However, parents from the inclusive group show a slightly higher level compared to parents of the non-inclusive group. Even so, the difference between the both group were small therefore there is no significant difference between parental satisfactions of these two groups. Based on the discussion, levels of satisfaction for parental satisfaction is higher for inclusive education could be due to the goals that parents have for placing their child in an inclusive education setting. However, the ability to enter mainstream education would not determine the pupil's readiness for school and could form problems in the process of obtaining education. Future research could be done to examine the well being of pupil's with autism in mainstream education and look into various factors such as anxiety levels, acceptance among peers, ability to cope and more.

Through this study, the researcher was also able to identify a few new themes that emerged during the interview process such as bullying, infrastructure, financial ability and school readiness. These themes can be reference for future researcher to look into especially bullying as it is becoming an issue for students in school. Children with SEN are more prone to being bullied in school compared to their typically developing peers. Despite this issue happening in schools, parents are aware and would still consider placing their child in an inclusive education setting. Therefore, future research could also look into ways that could help pupils with autism cope better in school.

REFERENCES

- Abu-Hamour, B., & Muhaidat, M. (2014). Parents' attitudes towards inclusion of students with autism in Jordan. *International Journal of Inclusive Education*, 18(6), 567-579.
- American Psychiatric Association (2000). Diagnostic and statistical manual of mental disorders-Text Revision (4th ed-TR). Washington, DC: Author.
- American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed. Arlington, VA: American Psychiatric Association; 2013.
- Alphonsus, A. (2012). *Battling Autism: One Hopeful Step at a Time*. Retrieved January 13, 2018, from freemalaysiatoday.com: http://www.freemalaysiatoday.com/ category/nation/ 2012/04/11/battling-autism-one-hopeful-step-at-a-time/
- Andersson, L. (1998). Loneliness research and interventions: A review of the literature. *Aging & Mental Health, II* (IV), 264-274.
- Armstrong, D., Kane, G., O'Sullivan, G., & Kelly, M. (2010). National survey of parental attitudes to and experiences of local and national special education services. Meath, Ireland: National Council for Special Education.
- Au, K. H. (1998). Social constructivism and the school literacy learning of students of diverse backgrounds. *Journal of literacy research*, 30(2): 297-319.
- Barnard, J., Prior, A., & Potter, D. (2000). *Inclusion and Autism: Is it Working?*1,000 examples of inclusion in education and adult life from The National Autistic Society's members. London: The National Autistic Society.
- Barnard, J., Prior, A., & Potter, D. (2000). *Inclusion and Autism: Is It Working?* London: The National Autistic Society.
- Bassil, N., Ghandour, A., & Grossberg, G. T. (2011). How anxiety presents differently in older adults . *Current Psychiatry*, 65-72.
- Basir, E. K. (2016, April 1). *Training Teachers to Handle Special Kids*. Retrieved May 2, 2018, from The Star Online: https://www.thestar.com.my/news/education/2016/04/10/training-teachers-to-handle-special-kids/
- Beck, A. T., Epstein, N., Brown, G., & Steer, R. A. (1988). An inventory for measuring clinical anxiety: psychometric properties. *Journal of Consulting and Clinical Psychology*, 56: 893–897.
- Bernardon, S., Babb, K. A., Larson, J. H., & Gragg, M. (2011). Loneliness, attachment, and the perception and use of social support in university students. *Canadian Journal of Behavioural Scienc*, 40-51.

- Bilash, O. (2009, May 1). Retrieved May 26, 2018, from Best of Bilash improving Secong Language Education: https://sites.educ.ualberta.ca/staff/olenka.bilash/Best%20of% 20Bilash/inductivedeductive.html#
- Bishop, A. J., & Martin, P. (2007). The Indirect Influence of Education Attainment on Loneliness Among Unmarried Older Adults. *Educational Gerontology* (33): 897–917.
- Bitterman, A., Daley, T. C., Misra, S., Carlson, E., & Markowitz, J. (2008). A National Sample of Preschoolers with Autism Spectrum Disorders: Special Education Services and Parent Satisfaction. *Journal of Autism and Developmental Disorders*, 1509-1517.
- Bleicher, A. (2013). *Hunting for Autism's Earliest Clues*. Retrieved February 15, 2018, from Autism Speaks: https://www.autismspeaks.org/science/science-news/hunting-autisms-earliest-clues.
- Błeszyński, J. J. The Quality of Life of Pupils with Autism Spectrum Disorders— Comparative Research on Mainstream Integrated Education and Special Education Institutions in Poland. Stanisław Juszczyk, 284.
- Boer, A. d. (2009). Attitudes of parents towards inclusive education: a review of the literature. International association of special education, 274-276.
- Bong, M. S. (2013). *Garis Panduan Program Pendidikan Inklusif Murid Berkeperluan Khas*. Putrajaya: Kementerian Pendidikan Malaysia.
- Bowlby, J. (1980). Attachment and Lost: Vol. 3, Loss: Sadness and Depression. New York: Basic Books.
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. American psychologist, 32(7): 513.
- Bronfenbrenner, U. (1995). Developmental ecology through space and time: A future prespective. In P.Moen, G. H. Elder, Jr., & K. Lusher (Eds.), Examining lives in context: Prespectives on the ecology of human development (pp.619-647). Washington, DC: American Psychological Association.
- Brown, J., Aczel, B., Jimenez, L., Kaufman, S. B., & Grant, K. P. (2010). Intact Implicit Learning in Autism Spectrum Conditions. *Journal of Experimental Psychology*, 1789-1812.
- Brown, J. A., & McIntosh, K. (2012) Training, Inclusion, and Behaviour: Effect on Student–Teacher and Student–SEA Relationships for Students with Autism Spectrum Disorders. *Exceptionality Education International*, 22, 77-88. Retrieved from https://ir.lib.uwo.ca/eei/vol22/iss2/11

- Byers, A. L., Yaffe, K., Covinsky, K. E., Friedman, M. B., & Bruce, M. L. (2010). High Occurrence of Mood and Anxiety Disorders Among Older Adults. *Original Article*, 67 (5): 489-496.
- Carter AS, Martínez-Pedraza F de L, Gray SAO (2009). Stability and individual change in depressive symptoms among mothers raising young children with ASD: Maternal and child correlates. *Journal of clinical psychology; 65* (12): 1270–1280. doi:10.1002/jclp.20634
- Chandler-Olcott, K., & Kluth, P. (2009). Why everyone benefits from including students with autism in literacy classrooms. *Reading Teacher*, 62(7): 548-557. DOI: 10.1598/RT.62.7.1
- Charman, T., Pickles, A., Simonof, E., Chandler, S., Loucas, T., & Baird, G. (2011). IQ in children with autism spectrum disorders:data from the Special Needs and Autism Project (SNAP). *Psychological Medicine*, 619-627.
- Ciccarelli, S. K., & White, J. N. (2009). *Psychology*. New Jersey: Pearson International Edition.
- Cirilli, S. (2014). Teacher Practices and Resources for Preparing Teachers to Assist Students with Autism Spectrum Disorder in Inclusive, Primary Classrooms (Doctoral dissertation, Jones International University).
- Clark, B. (2014). The Sociological Needs of Children with Autism in Elementary Inclusive Settings. Ann Arbor: ProQuest.
- Corbett, B. A., & Abdullah, M. (2005). Video Modeling: Why does it work for children with autism? . *Journal of Early and Intensive Behavior Intervention*, 2-8.
- Corbett, J. (1999) 'Inclusive education and school culture', *International Journal of Inclusive Education*, 3 (1): 53–61.
- De Boer, A. (2009). Attitudes of parents towards inclusive education: A review of the literature. *International Association of Special Education*, 274-276.
- Demir, M. (2010). Close Relationships and Happiness Among Emerging Adults. *Journal of Happiness Studies*, 293–313.
- Demir, M. (2008). Sweetheart, You Really Make Me Happy: Romanticrelationship Quality and Personality as Predictors of Happiness Among Emerging Adults. *Journal of Happiness Studies*, 257–277.
- Ditzen, B., Schmidt, S., Strauss, B., Nater, M. U., Ehlert, U., & Heinrichs, M. (2008). Adult Attachment and Social Support Interact to Reduce Psychological but Not Cortisol Responses to Stress. *Journal of Psychosomatic Research*, 479–486.
- Easton, V. J., & McColl, J. H. (2002). Statistics glossary.

- Elkins, J., Kraayenoord, C. E., & Jobling, A. (2003). Parents' Attitudes to Inclusion of Their Children with Special Needs. *Journal of Research in Special Educational Needs*, 122–129.
- Else-Quest, N. M., Higgins, A., Allison, C., & Morton, L. C. (2012). Gender Differences in Self-Conscious Emotional Experience: A Meta-Analysis. *Psychological Bulletin, V* (138): 947–981.
- Ernest, J. M., & Cacioppo, J. T. (1999). Lonely Hearts: Psychological Perespectives on Loneliness. *Applied and Preventive Psychology*, 1-22.
- Ernst, J. M., & Cacioppo, J. T. (1999). Lonely Hearts: Psychological Prespectives of Loneliness. *Applied and Preventive Psychology*, 1-22.
- Falkmer, M., Anderson, K., Joosten, A., & Falkmer, T. (2015). Parents' Perspectives on Inclusive Schools for Children with Autism Spectrum Conditions. *International Journal of Disability, Development and Education*, 1-23.
- Ferraioli, S. J., & Harris, S. L. (2011). Effective educational inclusion of students on the autism spectrum. *Journal of Contemporary Psychotherapy*, 41(1): 19-28.
- Fosnot, C. T. (2005). Constructivism: Theory, Prespectives and Practive (Second Edition). Danver: Teachers College, Columbia University.
- Fraley, R. C., & Shaver, P. R. (2000). Adult Romantic Attachment: Theoretical Developments, Emerging Controversies, and Unanswered Questions. *Review of General Psychology*, 132-154.
- Gavalda, J. M., & Tan, Q. (2012). Improving the Process of Inclusive Education in Children with ASD in Mainstream Schools. *Social and Behavioral Sciences*, 4072-4076.
- Glazzard, J. (2011). Perceptions of the Barriers to Effective Inclusion in One Primary School: Voices of Teachers and Teaching Assistants. *British Journal of Learning Suppot*, 56-63.
- Guldberg, K. (2010). Educating Children on the Autism Spectrum: Preconditions for Inclusion and Notions of 'Best Autism Practice' in the Early Years. *British Journal of Special Education*, 168-174.
- Grove, K. A., & Fisher, D. (1999). Entrepreneurs of meaning: Parents and the process of inclusive education. *Remedial and special education*, 20(4): 208-215.
- Handleman, J. S., Harris, S. L., & Martins, M. P. (2005). Helping children with autism enter the mainstream. In F. Volkmar, R. Paul, A. Klin, & D. J. Cohen (Eds.), Handbook of autism and pervasive developmental disorders (3rd ed., pp.1029–1042). Hoboken, NJ: John Wiley &Sons.

- Hastings JS, Van Weelden R, Weinstein JM (2007). Preferences, information, and parental choice behaviour in public school choice. National Bureau of Economic Research Cambridge, Mass., USA. http://dx.doi.org/10.3386/w12995
- Hawkley, L. C., Thisted, R. A., Masi, C. M., & Cacioppo, J. T. (2010). Loneliness Predicts Increased Blood Pressure: 5-Year Cross-Lagged Analyses in Middle-Aged and Older Adults. *Psychology and Aging*, 25, 132–141.
- Hazan, C., & Shaver, P. (1987). Romantic Love Conceptualized as an Attachment Process. *Journal of Personality and Social Psychology, III* (52): 511-524.
- Hilbert, D. (2014). Perceptions of Parents of Young Children with and without Disabilities Attending Inclusive Preschool Programs. *Journal of Education and Learning*, 49 -59.
- Holmes, B. M., & Johnson, K. R. (2009). Adult Attachment and Romantic Partner Preference: A Review. *Journal of Social and Personal Relationships*, 833–852.
- Howlin, P. (1998a). Practitioner review: Psychological and educational treatments for autism. *Journal of Child Psychology and Psychiatry*, 39: 307–322.
- Hunt, P., Staub, D., Alwell, M., & Goetz, L. (1994). Achievement by all students within the context of cooperative learning groups. *The Journal of the Association for Persons with Severe Handicaps*, 19, 290-301.
- Hussin, S., Loh, S. C. & Quek, A. H. (2008) 'Policy into Practice: The Challenge for Special Education in Malaysia'. Paper presented at the 11th International Conference on Experiential Learning, Sydney, Australia, 8-12 December.
- Iovannone, R., Dunlap, G., & Kincaid, D.(2003). Effective educational practices for students with autism spectrum disorders. *Focus on Autism and Other Develop-mental Disorders*, 18: 150–168.
- Jelas, Z. M. & Mohd Ali, M. 2014. Inclusive education in Malaysia: policy and practice. *International Journal of Inclusive Education*, 18, 991-1003.
- Jakarta, U. C. (2009). *Malaysia: National Report on the Provision of Inclusive Primary and Junior Secondary Education for Children with Disabilities*. Jakarta: UNESCO International Bureau of Education.
- Jones, G. (2002). Educational provision for children with autism and Asperger syndrome: Meeting their needs. London: David Fulton.
- Jordan, R. (2004). Meeting the needs of children with autistic spectrum disorders in the early years. *Australian Journal of Early Childhood*, 29: 1–7.
- Jordan, R., & Jones, G. (1999). Meeting the needs of children with autistic spectrum disorders. London: David Fulton.

- Kashdan, T. B., Volkmann, J. R., Breen, W. E., & Han, S. (2007). Social Anxiety and Romantic Relationships: The Costs and Benefits of Negative Emotion Expression are Context-dependent. *Journal of Anxiety Disorders* (27): 475–492.
- Kennedy, C., & Itkonen, T. (1994). Some effects of regular class participation on the social contacts and social networks of high school students with severe disabilities. *The Journal of the Association for Persons with Severe Handicaps*, 19: 1-10.
- Knox, D., Smith, K. V., & Zusman, M. (2007). The Lonely College Male. *International Journal of Men's Health*, 273-279.
- Kok, J. J. K., & Gan, C. C. (2012). Narrative from the care givers of Autism Spectrum Disorder children in Malaysia. *International Proceedings of Economics Development and Research, Academic Journal*, 48: 193-197.
- Lee, I. (2016, April 11). Cost Of Autism: Raising An Autistic Child In Malaysia.

 Retrieved February 14, 2018, from iMoney.my learning center: https://www.imoney.my/articles/cost-of-autism-raising-an-autistic-child-in-malaysia
- Lee, L. W. (2010). Different Strategies for Embracing Inclusive Education: A Snap Shot of Individual Cases from Three Different Countries. *International Journal of Special Education*, 98-109.
- Lee, L. W., & Low, H. M. (2014). The Evolution of Special Education in Malaysia. British Journal of Special Education, 42-58.
- Li, T., & Li, J. (2008). Adult Attachment, Social Support, and Depression Level of Poststroke Patients. *Social Behaviour and Personality*, 1341-1352.
- Lim, J. M. (2015). *Living With Autism in Malaysia*. Kuala Lumpur: Institute for Democracy and Economic Affairs.
- Lindsay, G. (2003) 'Inclusive education: a critical perspective', *British Journal of Special Education*, 30 (1): 3–12.
- Lindsay, S., Proulx, M., Thomson, N., & Scott, H. (2013). Educators' Challenges of Including Children with Autism Spectrum Disorder in Mainstream Classrooms. *International Journal of Disability, Development and Education*, 347-362.
- Linneberg, M. S., & Korsgaard, S. (2019). Coding qualitative data: A synthesis guiding the novice. *Qualitative Research Journal*.

- Liu, D.-G., Wang, S.-S., Peng, R.-J., Tao, Q., Shi, Y.-X., Teng, X.-Y., et al. (2011). Interaction of Social Support and Psychological Stress on Anxiety and Depressive Symptoms in Breast Cancer Patients. *Asian Pacific Journal of Cancer Prevention* (12): 2523-2529.
- Loreman, T. (2007). Seven Pillars of Support for Inclusive Education. *International Journal of Whole Schooling*, 22-38.
- Lynne Kendall & Elizabeth Taylor (2016) 'We can't make him fit into the system': parental reflections on the reasons why home education is the only option for their child who has special educational needs, *Education 3-13*, 44:3, 297-310.
- Majid, F. A. (2016). The Use of Reflective Journals in Outcome-Based Education During the Teaching Practicum. *Malaysian Journal of ELT Research*, 32-42. (2013). *Malaysia Education Blueprint 2013 2025*. Kuala Lumpur: Kementerian Pendidikan Malaysia.
- Malaysia, K. P. (2015). Buku Panduan Pengoperasian Program Pendidikan Khas Integrasi. Putrajaya: Bahagian Pendidikan Khas Kementerian Pendidikan Malaysia.
- Mallinckrodt, B., & Wei, M. (2005). Attachment, Social Competencies, Social Support, and Psychological Distress. *Journal of Counseling Psychology, III* (52): 358–367.
- Malta, S. (2007). Love Actually! Older Adults and their Romantic Internet Relationships. *Australian Journal of Emerging Technologies and Society*, 5, 84-102.
- Marimuthu, S., & Loh, S. C. (2015). Inclusive Education for Social Transformation. *Social and Behavioral Sciences*, 317 322.
- Maslow, A. H. (1943). Theory of motivation. Psychological Review, 50(4): 370-396.
- Maslow, A. H., & Groshong, E. (1934). Influence of differential motivation on delayed reactions in monkey. *Journal of Comparative Psychology*, 18(1): 75-83.
- McAlpine, L., & Weston, C. (2000). Reflection: Issues related to improving professors' teaching and students' learning. *Instructional science*, 28(5): 363-385.
- McBurney, D. H., & White, T. L. (2010). *Research Methods*. Belmont: Wadsworth, Cengage Learning.
- McCary, L. M., Grefer, M., Mounts, M., Robinson, A., Tonnsen, B., & Roberts, J. (2012). The importance of differential diagnosis in neurodevelopmental disorders: Implications for IDEIA. American Psychological Association. Retrieved from http://www.apadivisions.org/division16/publications/newsletters/school-psychologist/2012/04/neurodevelopmental-disorder-

- McDonald, J. (2014). How Parents Deal with the Education of Their Child on the Autism Spectrum. Rotterdam: Sense Publishers.
- McDonnell, J., & Kiefer-O'Donnell, R. (1992). Educational reform and students with severe disabilities. Journal of Disability Policy Studies, 3: 54-73.
- Md Yasin, M. A., & Dzulkifli, M. A. (2010). The Relationship between Social Support and Psychological Problems among Students. *International Journal of Business and Social Science, III* (1), 110-116.
- Merriam-Webster. (n.d.). Noninclusion. In *Merriam-Webster.com dictionary*.

 Retrieved September 2, 2020, from https://www.merriam-webster.com/dictionary/noninclusion
- Milheim, K. L. (2012). Towards a better experience: Examining student needs in the online classroom through Maslow's hierarchy of needs model. *Journal of online learning and teaching*, 8(2): 159.
- Ministry of Education (2009) 'Malaysia national report on the provision of inclusive quality primary and secondary education for children with disabilities'. Paper presented at the Sub-regional workshop on 'Building inclusive education system to respond to the diverse needs of disabled children', UNESCO International Bureau of Education, Jakarta, 3–5 November.
- Mohamad Razali, N., Toran, H., Kamaralzaman, S., Mohamad Salleh, N., & Mohd. Yasin, M. H. (2013). Teachers' Perceptions of Including Children with Autism in a Preschool. *Asian Social Science*, 1911-2025.
- Mohd Sirin, R. B. (2013). *Garisan Panduan Program Pendidikan Inklusif Murid Berkeperluan Khas*. Putrajaya: Bahagian Pendidikan Khas Kementrian Pendidikan Malaysia.
- Moya, M., Exposito, F., & Ruiz, J. (2000). Close Relationships, Gender, and Career Salience. *Sex Roles*, 825-846.
- Olsen, P. (2003, January 1). What Is an IEP? Definition, Examples & Objectives.

 Retrieved March 3, 2018, from Study.com: https://study.com/academy/lesson/what-is-an-iep-definition-examples-objectives.html
- Omar, H., Hussin, Z., & Siraj, S. (2013). Teaching Approach for Autism Students: A Case in Malaysia. *Procedia Social and Behavioral Sciences*, 2522-2561.
- Ong, S. H. (2010, July 13). *The Star Online*. Retrieved April 16, 2012, from The Dark Truth About a Sweet-talking Casanova: http://thestar.com.my/news/story.asp?file=/2010/7/13/nation/6655020& sec=nation
- Ormrod, J. E. (2011). *Educational Psychology Developing Learners Seventh Edition*. Boston: Pearson.

- Parker, K. (2001) 'Changing attitudes towards persons with disabilities in Asia', *Disability Studies Quarterly*, 21 (4): 105–113.
- Parsons, S., & Lewis, A. (2010). The home-education of children with special needs or disabilities in the UK: Views of parents from an online survey. International Journal of InclusiveEducation, 14,67–86. doi:10.1080/13603110802504135
- Pellicano, E. (2010). The development of core cognitive skills in autism: A 3-year prospective study. *Child Development*, 81(5): 1400-1416.
- Pepler, D., & Weiss, J. A. (2012). Bullying Experiences Among Children and Youth with Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders*, 266-277.
- Pou, L. K. (2008). *Mediating Learning to Children: A Practitioner's Journal*. Singapore: Centre for Enhancing Learning Potential Pte.Ltd.
- Pudrovska, T. (2004). Being Single in Late-life: Single Strain, Moderating Resources, and Distress. 1-69.
- Ramli, L. I. B. (2017). Attitudes of Preschool Teachers towards the Introduction of Inclusive Education (IE) in Malaysian Government Preschools (Doctoral dissertation, University of Leeds).
- Ratnavadivel, N. (1999) 'Teacher education: interface between practices and policies. The Malaysia experience 1979–1997', *Teaching and Teacher Education*, 15 (2): 193–213.
- Reed, P., Osborne, L. A., & Waddington, E. M. (2012). A Comparative Study of the Impact of Mainstream and Special School Placement on the Behavior of Children with Autism Spectrum Disorder. *British Education Research Journal*, 749-763.
- Reeve, J. (2014). Understanding motivation and emotion. John Wiley & Sons.
- Rehfeldt, R. A., & Barnes-Holmes, Y. (Eds.). (2009). Derived relational responding: Applications for learners with autism and other developmental disabilities: A progressive guide to change. New Harbinger Publications.
- Roberts, J. M., Keane, E., & Clark, T. R. (2008). Making inclusion work: Autism Spectrum Australia's satellite class project. *Teaching Exceptional Children*, 41(2): 22-27.
- Robertson, K., Chamberlain, B., & Kasari, C. (2003). General education teachers' relationships with included children with autism. *Journal of Autism and Developmental Disorders*, 33: 123–130
- Roekel, E., & Scholte, R. H. (2010). Bullying Among Adolescents With Autism Spectrum Disorders: Prevalence and Perception. *Journal of Autism Development Disorder*, 63-73.

- Rogers, P. L., Berg, G. A., Boettcher, J. V., Howard, C., Justice, L., & Schenk, K. D. (2009). *Encyclopedia of Distance Learning, Second Edition*. Hershey: IGI Global.
- Rokach, A. (2000). Perceived Causes of Loneliness in Adulthood. *Journal of Smial Behavior and Personality.*, I (15): 67-84.
- Rotheram-Fuller, E., Kasari, C., Chamberlain, B., & Locke, J. (2010). Social involvement of children with autism spectrum disorders in elementary school classrooms. *Journal of Child Psychology and Psychiatry*, 51(11): 1227-1234.
- Rowley, E., Chandler, S., Baird, G., Simonoff, E., Pickles, A., Loucas, T., et al. (2012). The Experience of Friendship, Victimization and Bullying in Children with an Autism Spectrum Disorder: Associations with Child Characteristics and School Placement. *Research in Autism Spectrum Disorders*, 1126–1134.
- Rubin, Z., Peplau, L. A., & Hill, C. T. (1981). Loving and Leaving; Sex Differences in Romantic Attachments. *Sex Roles, VIII* (7): 821-835.
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The Revised UCLA Loneliness Scale: Concurent and Discriminant Validity Evidence. *Kournal of Personality and Social Psychology*, *39*: 472-480.
- Russell, G., & Norwich, B. (2012). Dilemmas, diagnosis and de-stigmatization: Parental perspectives on the diagnosis of autism spectrum disorders. Clinical Child Psychology and Psychiatry, 1-17.
- Ryndak, D., Downing, J., Jacqueline, L., & Morrison, A. (1995). Parents' perceptions after inclusion of their children with moderate or severe disabilities. *The Journal of the Association for Persons with Severe Handicaps*, 20: 147-157.
- Salvia, J., Ysseldyke, J. E., & Bolt, S. (2013). *Assessment: In Special and Inclusive Education*. Belmont: Wadsworth Cengage Learning.
- Sansosti, J. M. (2012). Inclusion for Students with High-functining Autism Spectrum Disorders: Definitions and Decision Making. *Psychology in the Schools*, 917-931.
- Sarah Parsons & Ann Lewis (2010) The home-education of children with special needs or disabilities in the UK: views of parents from an online survey, *International Journal of Inclusive Education*, 14:1, 67-86.
- Schachner, D. A., Shaver, P. R., & Gillath, O. (2008). Attachment Style and Long-term Singlehood. *Personal Relationships*, 479–491.

- Schwartz, I. S., Sandall, S. R., McBride, B. J., & Boulware, G.-L. (2004). Project DATA (DevelopmentallyAppropriate Treatment for Autism): An Inclusive School-Based Approach to Educating Young Children with Autism. *Topics in Early Childhood Special Education*, 156-168.
- See, C. M. (2012). The Use of Music and Movement Therapy to Modify Behaviour of Children with Autism. *Pertanika Journal of Social Sciences and Humanities*, 20(4): 1103-1116.
- Selva, M. T. (2017, April 29). *Star Online*. Retrieved January 18, 2018, from www.thestar.com.my: https://www.thestar.com.my/metro/community/2017/04/29/ giving-support-to-children-with-autism-it-is-an-uphill-struggle-for-those-diagnosed-with-the-disorder.
- Siah, P. C., & Tan, S. H. (2016). Relationships between Sense of Coherence, Coping Strategies and Quality of Life of Parents of Children with Autism in Malaysia: A Case Study among Chinese Parents. *Disability, CBR & Inclusive Development*, 27(1): 78-91
- Simon, R. W., & Nath, L. E. (2004). Gender and Emotion in the United States: Do Men and Women Differ in Self-Reports of Feelings and Expressive Behavior? *American Journal of Sociology*, V (109): 1137–1176.
- Simpson, R. L., De Boer-Ott, S. R., & Smith-Myles, B. (2003). Inclusion of learners with autism spectrum disorders in general education settings. *Topics in Language Disorders*, 23: 1 16–133.
- Sipos R, Predescu E, Muresan G, Iftene F (2012). The evaluation of family quality of life of children with autism spectrum disorder and attention deficit hyperactive disorder. *Applied Medical Informatics*; 30 (1): 1–8.
- Slater, R. (2007). Attachment: Theoretical Development and Critique. *Educational Psychology in Practice*, *III* (23): 205–219.
- Starr, E. M., & Foy, J. B. (2012). In parents' voices: The education of children with autism spectrum disorders. Remedial and Special Education, 33(4): 207-216.
- Staub, D., & Peck, C. (1994-1995). What are the outcomes for non-disabled students? *Educational Leadership*, 52(4): 36-40.
- Stevens, N., & Van Tilburg, T. (2000). Stimulating Friendship in Later Life: A Strategy for Reducing LonelinessAmong Older Women. *Educational Gerontology* (26), 15–35.
- Stevens, N., & Westerhof, G. J. (2006). Marriage, Social Integration, and Loneliness in the Second Half of Life A Comparison of Dutch and German Men and Women. *Research on Aging*, 713-729.

- Stokes, J., & Levin, I. (1986). Gender Differences in Predicting Loneliness From Social Network Characteristics. *Journal of Personality and Social Psychology*, V (51): 1069-1074.
- Sutton, D. A., Moldofsky, H., & Badley, E. M. (2001). Insomnia and Health Problems in Canadians. *Sleep, VI* (24): 665-670.
- Sutton, D. A., Moldofsky, H., & Badley, E. M. (2001). Insomnia and Health Problems in Canadians. *Sleep, VI* (24): 665-670.
- Tafa, E., & Manolitsis, G. (2003). Attitudes of Greek Parents of Typically Developing Kindergarten Children Towards Inclusive Education. *European Journal of Special Needs Education*, 155-171.
- Teachman, B. A. (2006). Aging and Negative Affect: The Rise and Fall and Rise of Anxiety and Depression Symptoms. *Psychology and Aging, 1* (21): 201–207.
- Teachman, B. A., & Gordon, T. (2009). Age Differences in Anxious Responding: Older and Calmer, Unless the Trigger Is Physical. *Psychology and Aging, 3* (24): 703–714.
- The National Autism Society of Malaysia. (1987). Retrieved January 12, 2018, from nasom.org.my: http://www.nasom.org.my/autism/
- Ting, X. N., Lee, L. W., Low, H. M., Chia, K. H., & Chua, C. (2014). Prevalence, Diagnosis, Treatment and Research on Autism Spectrum Disorders (ASD)in Singapore and Malaysia. *International Journal of Special Education*, 82-92.
- Vygotsky, L. S. (1978). Mind in Society: The Development of Higher Psychology Processes. Harvard University Press. Page 27.
- Walen, H. R., & Lachman, M. E. (2000). Social Support and Strain From Partner, Family, and Friends: Costs and Benefits for Men and Women in Adulthood. *Journal of Social and Personal Relationships*, *I* (17): 5-30.
- Washington, U. o. (2017, June 28). What is the difference between an IEP and a 504 Plan? Retrieved March 3, 2018, from Disabilities, Opportunities, Internetworking, and Technology: https://www.washington.edu/doit/what-difference-between-iep-and-504-plan
- Warren, H.(2014). Parental Satisfaction and Teacher Perspectives on Inclusive Education of Students with Asperger Syndrome: An Educational Tool. (Master's thesis). Retrieved from http://scholarcommons.sc.edu/etd/2695
- Webster's Third New International Dictionary (1961). Editor in chief, P. Babcock Gore. Springfield, MA: G. & C. Merriam Co.

- Wei, M., Russell, D. W., & Zakalik, R. A. (2005). Adult Attachment, Social Self-Efficacy, Self-Disclosure, Loneliness, and Subsequent Depression for Freshman College Students: A Longitudinal Study. *Journal of Counseling Psychology, VI* (52), 602–614. *What are special educational needs?* (n.d.). Retrieved March 3, 2018, from nidirect government service: https://www.nidirect.gov.uk/
- Whitaker, P. (1994). Mainstream students talk about integration. *British Journal of Special Education*, 21: 13-16.
- White, S. E. (2014). Special education complaints filed by parents of students with autism spectrum disorders in the midwestern United States. *Focus on Autism and Other Developmental Disabilities*, 29(2): 80-87.
- Wolitzky-Taylor, K. B., Castriotta, N., Lenze, E. J., Stanley, M. A., & Craske, M. G. (2010). Anxiety Disorder in Older Adults: A Comprehensive Review. *Depression and Anxiety*, 27, 190-211.
- Yamada A, Kato M, Suzuki M, Suzuki M, Watanabe N, Akechi T, Furukawa TA (2012). Quality of life of parents raising children with pervasive developmental disorders. *BMC Psychiatry*; 12 (1): 119. doi:10.1186/1471-244X-12-119
- York, J., Doyle, M. B., &Kronberg, R. (1992). A curriculum development process for inclusive classrooms. *Focus on Exceptional Children*, 25(4): 1-16.
- Zalizan, J. M., & Manisah, M. A. (2014). Inclusive Education in Malaysia: Policy and Practice. *International Journal of Inclusive Education*, 991–1003.
- Zanobini, M., Viterbori, P., Garello, V., & Camba, R. (2018). Parental satisfaction with disabled children's school inclusion in Italy. European Journal of Special Needs Education, 33(5): 597-614.
- Zimet, G. D., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, 30-41.
- Zimmer-Gembeck, M. J. (2002). The Development of Romantic Relationships and Adaptations in the System of Peer Relationships. Journal of Adolescent Health, 31: 216-225.