ISSN NO: 2770-2367
Date of Publication: 20-03-2022

The Methodological Triangulation Study on Language Impairments Among Students Diagnosed with Autism

Catalino N. Mendoza,
Baliwag Polytechnic College, Philippines
Arche R. Tudtod,
University of Perpetual Help System-GMA Campus, Philippines
Noel H. Vargas, P.
University of Perpetual Help System-GMA Campus, Philippines

Abstract: *A failure to develop language is one of the earliest signs of autism. Some children with ASD may not be able to communicate using speech or language, and some may have very limited speaking skills. As the focal point of this paper is on the language impairments of the autistic children, much attention will not be paid on the medical and neurological side of autism. In this study, the researchers used the mixed method approach as the research design — Methodological triangulation: use of two or more research methods in a single study. There are variations for the use of this method. The participants of the study is composed of students diagnosed with autism spectrum disorder from both genders (male and female). In terms of the language impairments in the sound development, some students with autism have backed phonemes, labialized and prolonged phonemes, and palatalized phonemes. In terms of morphology particularly on repetition of new words, omission and alteration are present among the students with autism. In terms of the non-verbal token ratio, due to the limited use of words, it is evident that there are words omitted in the sentences. Some of the participants, intended to imitate the words they hear so that they can utter it. When a child has both a language-based disorder and ASD, these difficulties can be amplified. Additionally, most academic subjects rely heavily on the use of language for instruction, so learning in all areas of study will likely be affected by a language disorder. It is but appropriate for the institutions to develop a learning manual or module intended for the students with autism specifically with the problems encountered herewith to augment the process of enhancement of the learning experiences of the students, eventually create a wonderful learning experiences.*

Keywords: language, language impairments, students with autism, mixed method, methodological triangulation

Introduction

Language impairments are basically the rich source of bullying among the Filipinos, especially when a person sending the message cannot easily be understood by the listeners or the receivers more specifically when they are within the group. Without knowing that some people find difficulties to speak specially if a person is diagnosed with autism.

People's knowledge about autism is very much superficial. Autism or Autism Spectrum Disorder (ASD) refers to a range of conditions characterized by challenges with social skills, repetitive behaviors, speech and nonverbal communication, as well as by unique strengths and differences. We now know that there is not one autism but many types, caused by different combinations of genetic and environmental influences. The term "spectrum" reflects the wide variation in challenges and strengths possessed by each person with autism.

A failure to develop language is one of the earliest signs of autism. The ability to identify the neural signature of this deficit in very young children has become increasingly important, given that the presence of speech before five years of age is the strongest predictor for better outcomes in autism. This review consolidates what is known about verbal and preverbal precursors of language

ISSN NO: 2770-2367
Date of Publication: 20-03-2022

development as a framework for examining behavioral and brain anomalies related to speech and language in autism spectrum disorders. Relating the disruptions in the speech network to the social deficits observed will provide promising targets for behavioral and pharmacological interventions in ASD.

The ability of children with ASD to communicate and use language depends on their intellectual and social development. Some children with ASD may not be able to communicate using speech or language, and some may have very limited speaking skills. Others may have rich vocabularies and be able to talk about specific subjects in great details.

Many have problems with the meaning and rhythm of words and sentences. They also may be unable to understand body language and the meanings of different vocal tones. Taken together, these difficulties affect the ability of children with ASD to interact with others, especially people their own age. A recent study found that among the 934 parents who were surveyed, approximately 77% had children on the spectrum attending mainstream schools. It also found that, in general, teachers only felt slightly confident in their ability to support students with autism, while parents were even less certain of teachers' confidence to teach their children with autism. Teachers, then, need to have a better understanding of autism and how it may affect learning. They also need help putting appropriate strategies in place. This research also includes other studies that are already discovered related to this problem or phenomenon. Some of the already discovered studies about this problem are: Autism and Development Language Impairments, Pragmatic language Impairments and Defining Language deficits across autism spectrum. Those other already discovered studies are related to the focus or problem of this research paper, because it also provides answers for the main problem of this research.

As the focal point of this paper is on the language impairments of the autistic children, much attention will not be paid on the medical and neurological side of autism. Half of all the autistic population is affected by one type of language impairment or other. This language impairment covers almost every aspect of language, for example pragmatic, syntactic, lexical, phonological, morphological, phonetics and so on (Belkadi, 2006).

The aim of this study is to explore and to discover about the language impairments of students with autism. This will help to design the materials for the teaching the children with autism. Moreover, necessary steps can be taken to initiate and improve the communication and language skill of the autism students only when the difficulties that the autistic student experiences will be acknowledged. In addition, as a future educator, this will help us on identifying students having this kind of disorder.

Literature Review

The acquisition of Theory of Mind According to Piaget, cognitive egocentrism is where the child is unable to differentiate his/her own perspective from other possible points of view because of an inability to decenter, or shift cognitively, from his/her own perspective. False belief tasks assess whether children recognize that people can have mistaken beliefs about reality and whether children can predict what an individual who has a false belief will do, say or think
(Peterson, 2003). Research has demonstrated that aspects of ToM, including false belief, are mastered by typically developing children during the preschool years (Wellman & Liu, 2004).

The Maturational Theory Gesell asserted that all children go through the same stages of development in the same sequence, although each child may move through these stages at their own rate (Matheson, 2014; Staples, 2006). He believed that a child's growth & development are influenced by both their environment and genes, but he largely investigated the children's physiological development. He called this process maturation, that is, the process by which development is governed by intrinsic factors, principally the genes.

According to Gesell, the rate at which children develop primarily depends on the growth of their nervous system, consisting of the complicated web of nerve fibers, spinal cord, and brain. As the nervous system grows, their minds develop and their behaviors change accordingly (Gordon & Browne, 2013).

ISSN NO: 2770-2367
Date of Publication: 20-03-2022

The Nativist Approach was put forward by Noam Chomsky, stating that children's brains contain a Language Acquisition Device which holds the grammatical universals. This theory came about as children have been observed to pick up grammar and syntax without any formal teaching (in spoken language). They seem to learn these fundamentals of their native language(s) purely from the input around them. Chomsky believes that the LAD helps children decipher the grammatical structures of their native language(s), subconsciously mapping new lexical items to their corresponding word class and syntactic position. The LAD could in theory mean that children while possessing this part of the brain could easily pick up the grammatical structures of any input language as they already have the building blocks in their mind. This theory is contested by a lot of linguists due to the fact an LAD has never been found on brain imaging or in other studies of children's brains. There are many other approaches which contradict Chomsky's theory but the nativist approach is still widely held in high regard by many language development experts (Emily D., 2014).

The nativist approach in no way suggests that children are born with a lexicon, the majority if not all linguists agree that lexical items are learned from input and social environment. The different approaches to language development mainly focus on how children learn grammar and syntax**.**

Conceptual Framework

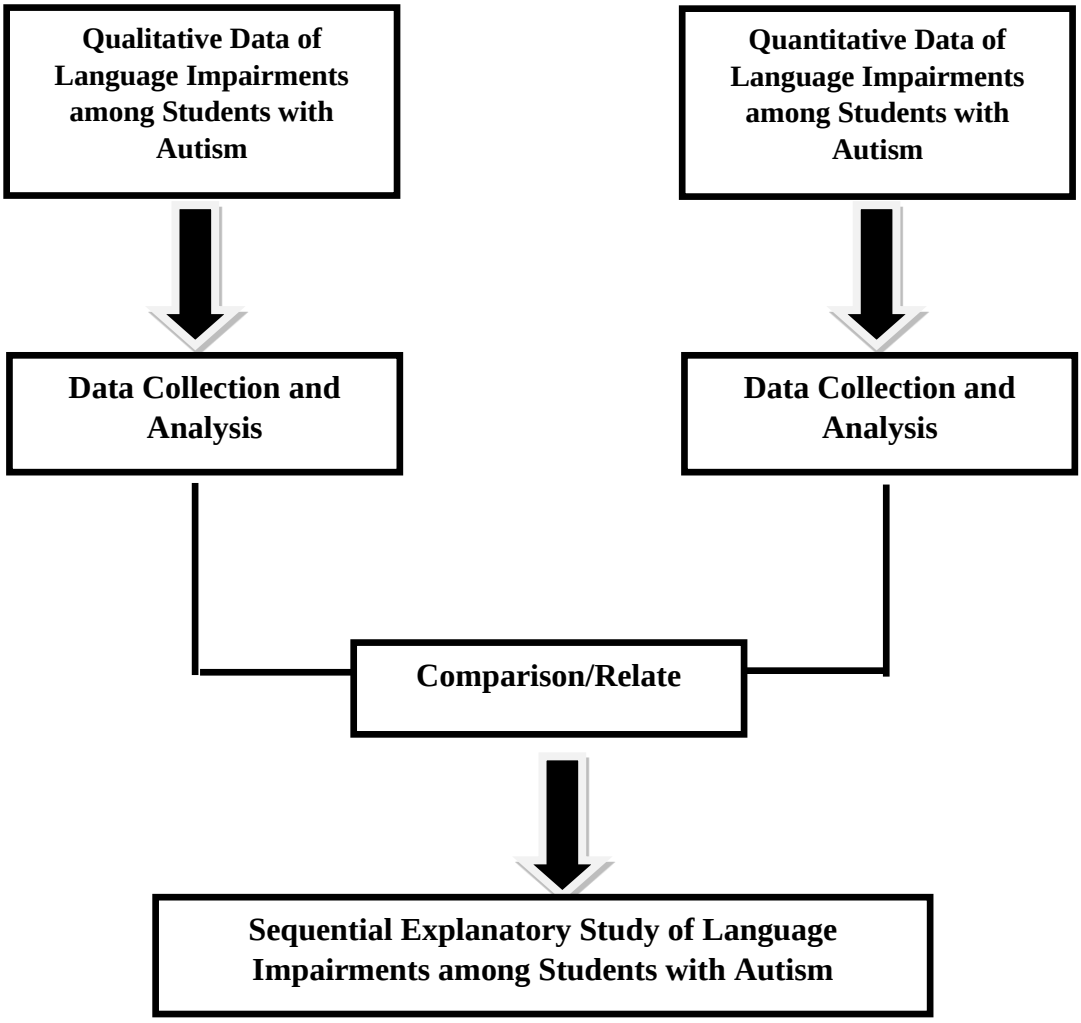

Fig.1. Paradigm of the Study

ISSN NO: 2770-2367
Date of Publication: 20-03-2022

The diagram above shows the flow of the study. It is clearly shown that the research follows the mixed method approach with the incorporation of convergent parallel design. The purpose of a sequential explanatory study mixed methods design is to conduct a qualitative phase of study in order to help explain the previous quantitative results (Creswell & Plano Clark, 2011).

Therefore, the study is divided into two phases: (1) Phase 1, a qualitative data collection and analysis about the language impairments of students with autism; and (2) Phase 2, a quantitative data collection and analysis about the language impairments of students with autism. These two phases are then combined to compare, to relate, and to analyze the data concurrently to be able to fully understand the central phenomenon of this study—the language impairments of the students with autism.

Statement of the Problem

This study will find out the language impairments of the students with autism which will help to identify the reasons behind these impairments.

More specifically, it seeks to find the answer to the following questions:

Phase I: Quantitative Questions

1. What is the profile of the students with autism in terms of:
    1.1. Age
    1.2. Gender?
2. What is the level of language impairments of the students with autism based on the following:
    2.1. Phonology
    2.2. Morphology
    2.3. Syntax
3. Is there interdependence as to the language impairments of the students with autism in terms of phonology, morphology, and syntax?

Phase 2: Qualitative Questions

1. What are the language impairments of the students with autism?
2. How do the language impairments impact the students with autism?

Methodology

In this study, the researchers will use the mixed method approach as the research design—explanatory sequential to be exact. In addition, according to Creswell (2014), mixed methods research is an approach to inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks. The core assumption of this form of inquiry is that the combination of qualitative and quantitative approaches provides a more complete understanding of a research problem than either approach alone. The explanatory sequential mixed methods approach is a design in mixed methods that appeals to individuals with a strong quantitative background or from fields relatively new to qualitative approaches. It involves a two-phase project in which the researcher collects quantitative data in the first phase, analyses the results, and then uses the results to plan (or build on to) the second, qualitative phase. The quantitative results typically inform the types of participants to be purposefully selected for the qualitative phase and the types of questions that will be asked of the participants. The overall intent of this design is to have the qualitative data help explain in more detail the initial quantitative results. A typical procedure might involve collecting survey data in the first phase, analysing the data, and then following up with qualitative interviews to help explain the survey responses (Dr. John Creswell 2003).

ISSN NO: 2770-2367
Date of Publication: 20-03-2022

The participants of the study would consist of ten (10) Students with Autism studying at Bulihan Sites and Services Project Elementary School (BSSPES); in which is composed of students diagnosed with autism spectrum disorder from both genders (male and female). The participants of the study were chosen based on the purposeful criterion strategy set by the researchers. Among the special education students residing in BSSPES, the students with autism were purposely chosen by the researchers which were needed in this study.

The researchers will provide a descriptive type of analysis for the data gathered the utilization of some statistical tools such as: Percentage and Frequency Distribution, Weighted Mean, and as well as the Point Biserial Correlation Coefficient. Qualitative data are analysed through the following: The first step involves the researchers transcribing interviews, optically scanning material, typing up field notes, cataloguing all of the visual material, and sorting and arranging the data into different types depending on the sources of information. Second is reflecting on data gathered; the researchers will try to makes sense of all the given answers and try to relate it to the topic of the research. Third is, starting code to all of the data. Coding is the process of organizing the data by bracketing chunks (or text or image segments) and writing a word representing a category in the margins (Rossman & Rallis, 2012). It involves taking text data or pictures gathered during data collection, segmenting sentences (or paragraphs) or images into categories, and labelling those categories with a term, often a term based in the actual language of the participant (called an in vivo term). After coding is the description phase where the researchers will provide a detailed rendering of information about people, places, or events in a setting to make sense of the central phenomenon of the study.

Results and Discussions

Phase 1: Analysis of the Quantitative Results

Most of the participants belong to the age bracket of 11-15 years old or 50%. While four (4) has an age starts with 11 between 15 years old or 40%. One (1) or 10% for 21-25 years old. On the other hand, no participants belongs to the age group of 16-20.

Therefore, the majority of the populations of students with autism belongs to the group age of 11-15 years old.

Specifically on language, delays in the acquisition and development of this ability are common in individuals with ASD and the linguistic impairments in these individuals may be present in morphology, phonology, syntax, semantics and pragmatics (Eigsti et.al., 2011).

There are eight (8) or 80% are male and two (2) or 20% are female. There is more male participants than female participants.

Therefore, the majority of the populations of students with autism are composed of male.

A strong male bias in autism spectrum disorder (ASD) prevalence has been observed with striking consistency, but no mechanism has yet to definitively account for this sex difference. Toward the pursuit of a more complete understanding of the biological basis for sex – differential risk, this review explores the current status of epidemiological, genetic, and neuroendocrinological work addressing ASD prevalence and liability in males and females. Recent studies continue to report a male bias in ASD prevalence, but also suggest that sex differences in phenotypic presentation, including fewer restricted and repetitive behaviours and externalizing behavioural problems in females, may contribute to this bias. Genetic studies demonstrate that females are protected from the effects of heritable and de novo ASD risk variants, and compelling work suggests that sex chromosal genes and/or sex hormones, especially testosterone, may modulate the effects of genetic variation on the presentation of an autistic phenotype. (Donna M. Werling. ASDs affect females less frequently than males, and several sex- differential genetic and hormonal factors may contribute.

ISSN NO: 2770-2367
Date of Publication: 20-03-2022

Future work to determine the mechanisms by which these factors confer risk and protection to males and females is essential. (Daniel H. Geschwind).

In terms of the language impairments in the sound development (see Table 3) chart, the expected mid score is 50. The lowest value is 27 and the highest value is 58 giving a mid score of 42.5 which is 7.5 below the expected mid score. The mean is 39.77 which is 10.23 below the mid score. The median is below the mean. The mode is below the mean which means the distribution is positively skewd. The first quartile is 58 while the third quartile is 46 giving an interquartile of 12. The distribution is dispersed at 11.22.

Language impairments refer to a broad spectrum of difficulties including limited vocabulary, expressive deficits, "Phonological deficits", comprehension deficits, and pragmatic language deficits. All these problems have been reported in studies of children with behavioral disorders (Gallagher, 1999). Thus, all children with SLI have difficulties with the processing of phonological sequences and with the analysis of inflectional morphemes. Phonological deficiencies, particularly in building phonological representations for acoustic signals, are especially visible in tasks involving the repetition of nonsense words. In fact, these types of exercises are very poorly executed by all children with SLI.

In terms of morphology particularly on repetition of non-words, (see Table 4) the mean is 14.1 and the standard deviation is 5.7. This is an indication that in this aspect there is an above average agreement among the respondents.

On the other hand, children with SLI present impairments in acquiring different aspects of language and in particular grammatical morphology, phonology and syntax. For example, Conti-Ramsden and Windfuhr (2002) found that verb inflections were more difficult than noun inflections for all children, and that children with SLI had proportionately more difficulty than their typical peers. Certain semantic classes of verbs might also prove particularly difficult for children with SLI, namely those involving placement (Hansson and Bruce, 2002). Whilst some children with communication difficulties can be described as having Pragmatic Language Impairment (PLI; Bishop, 2003) without other autistic features (Botting and Conti-Ramsden, 2003), not all children with SLI have pragmatic language difficulties.

In terms of syntax, particularly in the T unit analysis (see Table 5), the mean is 1.79 and the standard deviation is 0.61. This is an indication that the agreement is below average.

Looking at previous studies on language impairments in autism, they found that the autistic population could be divided into two subgroups: one with normal language skills and one with a severely impaired language. Those in the impaired language subgroup had discrepancies at all levels of language, including complex syntax and morphology. Furthermore, their profile was distinct from the profiles of other subgroups, defined by other criteria, such as verbal and non-verbal IQ discrepancies. Their classification of the autistic population highlights the fact that, unlike deficits in social interaction, communication and general behavior, language deficiency is not universal in autism (Kjelgaard & Tager-Flusberg, 2001).It also puts the accent on the fact that some children affected by the core symptoms of autism develop another wise normal language. Therefore, in these cases, normal acquisition of language in autism is possible despite severe deficits in Theory of Mind. For Tager-Flusberg and Joseph (Ibid), language deficiency constitutes one of the various specific phenotypes of autism rather than a mere general consequence of other phenotypes.

There is extremely low inverse relationship between Type-Token Ratio and Sound Development Chart at 1% level of confidence

There is a high relationship between Type-Token Ratio and Sound Development Chart at 59.41% level of confidence

There is extremely low inverse relationship between T- Unit Analysis and Repetition of Non Words at 6.19% level of confidence.

There is moderately low relationship between Type Token Ratio and Repetition of Non Words at 36.22% level of confidence.

ISSN NO: 2770-2367
Date of Publication: 20-03-2022

According to (Manzano, 2013), Task-based learning uses language as a tool for expressing, not a body of knowledge to be memorized, thus, using tasks to improve student's language skills. This study aimed to identify and evaluate the communication strategies used by younger siblings of ASD children in selected domestic tasks and characterize the response of ASD children to these communication strategies. Five pairs of siblings were tasked to finish a set of household chores and were video-recorded. The videos were transcribed and analyzed. Younger siblings, researcher and an observer assessed strategies. It showed that the criteria with the highest and lowest scores are speed of the ASD child's response and ability to negotiate is the criterion, respectively. Strategies used are effective in eliciting fast responses from the ASD child but not in facilitating communication. Results showed that communication strategies induced responses on ASD child; these were categorized as compliance, non-compliance and neutral. Results show that younger sibling uses affirmative strategies to continue guiding the ASD child to compliance and finish the domestic task. When the ASD child, however, manifests non-compliance and/or neutrality younger siblings the use of corrective and modeling strategies are needed to direct them back to compliance.

Phase 2: Analysis of the Qualitative Results

This chapter gives off the answer, information and findings that were acquired during the comprehensively done interviews and participant observation. The results of the research study furthered the knowledge and information about the topic—which is about the language impairments of the students with autism. The data gathered answered the following: (1) What are the language impairments of the students with autism? (2) How do the language impairments impact the students with autism? And it also presents the key findings obtained from two in-depth interviews and in-depth observations and participants direct immersion of ten (10) students with autism.

Theme 1: Language Impairments of the Students with Autism

The first theme covers the different language impairments occurred on the students with autism. The checklist that's been utilized was design to prompt the language impairments present on every student. Participants were directly observed and recorded to gather the necessary corpus for the data analysis.

Evaluation is an essential part of the special education process for children with disabilities. Children are evaluated initially to see whether or not they have an impairment and whether, because of that impairment they need special education and related services.

Phonology

Theories about Autism Spectrum Disorder (ASD) inform normal social and cognitive development, including language. However, in order to determine how these theories relate to language and language acquisition, it must first be determined if there is a difference between the language of typically developing children and children with ASD. Therefore, an important question becomes whether or not children with ASD have a typical but delayed pattern of phonological and phonetic development, or deficits specific to their disorder.

In order to conform this, the researcher used Sound Development Chart to assess if there is a phonological difficulties among the participants. Below (see the table 7) is the summary of the assessed students with autism:

Only participant 1 and 10 got a lowest PCC score of 26.92 that shows severe difficulty in producing sounds like /sh/, /th/,/ch/, while the highest PCC score of 57.69 is participant 3 which means moderately severe in difficulty of producing sounds like /h/,/w/. The lowest the score the higher possibility of having difficulties in producing sounds. Also, most of the participants have a severe phonological difficulties. Some of the participants having a hard time in producing sound phonemes on the following letters as observed by the researchers using the Sound Development

ISSN NO: 2770-2367
Date of Publication: 20-03-2022

Chart: /h/, /w/, /th (voiced)/, /sh/, /ch/, /s/ and /f/. Moreover, some students with autism have backed phonemes, labialized and prolonged phonemes, and palatalized phonemes. In addition, two children in this study produced /s/ and /z/ with nasal emission. For example, the correct term is /Dwayne/ but the participant uttered this as /Zuwayne/. It also shows that there is an alteration of the phonemes in terms of speaking.

Aside from difficulty in producing sounds of the letters, three of the participants are non-verbal it only means that they usually repeat the sounds of the words they uttered.

It only shows that some of the participants, experienced phonological delay and phonological processes deficit in which they usually repeats the sound as is. Findings also revealed a strong relationship between severity of phonological behavior and severity of language impairment. Group comparisons showed that children with moderate–severe language impairment exhibited more typical and atypical phonological processes than children with mild–moderate language impairment, and overall correlation between phonological severity and language impairment was high. The findings contrast with some earlier studies but support and extend recent research showing unusual phonological trends in some children with autism (Wolk &Brennan, 2013).

Morphology

The data suggest that accuracy alone may be too crude to detect atypical language processing in many individuals with autism – that is, even if language output appears normal, the underlying processes that created that output may be different in autism, for example in speed (e.g., processes used by individuals with autism may be slower or even faster than in typical individuals), or perhaps in kind (i.e., different processes may be used altogether).

In terms of morphology, to be able to detect the language impairments the researchers used the Repetition of Non-words Assessment.

As to the table 8 above, it only connotes that omission and alteration are present among the students with autism. But, performance at tasks involving single words, in both receptive and expressive domains, does not show consistent impairments, and in some individuals may be spared or even enhanced in some respects relative to typically developing controls (Norbury et al. 2010; Walenski et al. 2008; Walenski et al. 2006).

The language-impaired group produced fewer correct regular and fewer correct irregular past tense forms, with more unmarked errors on both (walk-walk; dig-dig), relative to both the unimpaired and borderline-impaired language groups. However, it is not clear whether the regular and irregular deficits in the language-impaired group reflect a single dysfunction affecting both types of forms (e.g., a deficit of morphosyntax) or two distinct areas of dysfunction, one affecting regulars and one irregulars. Moreover, performance at regulars and irregulars was not statistically compared, and no non-autistic control participants were included, so it is not clear if either of the latter groups might have also had some impairment at either or both regular and irregular forms.

Syntax

One of the major unanswered questions regarding language and autism is to know if the patterns of language development found in autism parallels that of normally-developing children with a substantial delay, or if language is disrupted in a more fundamental way. There is at least one important known difference between autisms and normally-developing children‟s acquisition of language: namely the role of echolalia. Echolalia implies the reiteration of a word or phrase stated by others, as if echoing them. It may be immediate or delayed. A classic example of immediate echolalia is a child echoing back a question that an individual is asking him, with the same prosody. If a lapse of time has passed between the occurrence of the verbal utterance and its repetition, this is referred to as delayed echolalia.

ISSN NO: 2770-2367
Date of Publication: 20-03-2022

Examples of delayed echolalia are the echoing of television commercials or parental reprimands sometime after hearing these, and just as these were pronounced. Eventhough all children make use of echolalia, in autistic children this phenomenon lasts longer and is much more frequent.

Through the use of T-Unit Analysis, here are some of the syntactic difficulties present in the students with autism.

From the example sentence, it is evident that there is lacking in inflectional morphemes. Students with autism always omits words or phrases in order to make their sentence structure as short as possible. Instead of saying, Itutulak kita sa hagdan—which is the correct form. They intended to produce, Tutulak sa hagdan.Truncation theory (Rizzi 1993-4, 2000) has been instrumental in accounting for various syntactic properties of typical language acquisition. This theory essentially proposes that children pass through a phase where they have the option of omitting the initial layer(s) of structure, thereby using the most economical amount of structure necessary to accommodate the overt material. More specifically, the theory proposes that an immature system initially does not systematically project to the CP layer, but if and when it does, it must contain the intermediate projections as well.

Aside from this, students with autism doesn't frequently shows difficulties in forming sentence structures because they have that sense of subject and predicate unconsciously. But, due to the limited of the use of words, it is evident that there are words are omitted in the sentences.

Some of the participants, intended to imitate the words they hear so that they can utter it. For example, if they will hear a sounds or music, they will repeat it. For example, Pa, pe, pi, po, pu…January..February…Marso..Abril..Mayo…

Looking over the areas of grammatical delays and impairments in ASD individuals, an observation that can be made is that the higher up one goes in the tree, the more likely it is that autistics encounter difficulty. These difficulties are summarized in the tree below. In light of the area of impairment, the question arises to know whether this population is having a harder time building these higher layers of functional projections. One possible explanation for the data can be provided in terms of truncation.

Theme 2: Impact of Language Impairments to Students with Autism

Second theme covers the impact of the language impairments of students with autism as perceive by the teachers.

During the interviews conducted, the participants were asked give some of the experiences they have encountered during their work as a teacher in handling students with autism. First, the adjustment experiences which the participants needed to learn in order to fit and to provide the needs of the students with autism. Being hurt due to tantrums and other incidents are evident. Second, difficulties in handling students with autism are proven due to the difference in attitudes and emotions brought out by their students. Lastly, the pressure of controlling them and teaching vocabulary words are also evident and it needs wide knowledge and innovative strategies in order to fit the needs of the students with autism.

If staff members fail to recognize the child's inability to functionally communicate, negative feelings and interactions between the student and staff members may result, which in turn negatively affects academic achievement.

In order to cope up with the dynamic changes in the attitude and emotions of the students with autism, the teachers must have an adequate strategies to fit the needs of their students. teachers handling students with autism should consider the background and nature of their students in order to fit the strategies for them. Students of all abilities and backgrounds want classrooms that are inclusive and convey respect. For those students with disabilities, the classroom setting may present

ISSN NO: 2770-2367
Date of Publication: 20-03-2022

certain challenges that need accommodation and consideration. This is evident as the teachers consider the abilities of the students with autism before applying the strategies intended for the language development program and enhancement of the knowledge.

Typically, language is easily learned through our everyday interactions with the world-people talk to us and we learn to talk back. There is little direct instruction or conscious thought about the process, it happens very naturally. When students do struggle to learn their native language, they frequently experience problems with making friends, behavior difficulties and academic underachievement. Students with language disorders often lack verbal strategies to manage in the classroom and may only take in one or two words of what is said to them. This can lead to failure following instructions which can be perceived as 'naughty' behavior by the class teacher. Similarly, students with language disorder have difficulty following playground rules, and often misinterpret jokes from peers as other children 'making fun'. In this manner, teachers play a key role in both identifying and supporting students with language impairments in the classroom. The teachers should develop a better understanding of children and young people's speech, language and communication needs and of how to address those needs. Teachers need to have enough understanding to be able to promote positive speech, language and communication strategies within any subject area and not exclusively focus on literacy as these skills impact effective access to the whole curriculum (Norbury and Broddle, 2016).

Summary of Data

The data that we have gathered on both different studies has shown comparable yet diverse results or manifestation. In quantitative study, it shows the statistical or frequency to help describe the level of language impairments present on the students with autism depending on how young or the age, their gender. Overall, the quantifiable data helps to identify the existing language disorders particularly in three aspects namely phonology, morphology and syntax. More so when it comes to qualitative study since it is more on context and transcribing answers from our given questions during the interviews. It contributes on understanding the study. The answers that were given by the participants give an in depth comprehension in our study which is the language impairments of the students with autism. All in all in our qualitative research show the detailed events or occurrence of the language disorders and their impacts on the students with autism. Since we use the mixed method which is combining the two studies. There were comparable between the two study. First, both studies show how often these language impairments occur, how often and what the interdependence between phonology, morphology and syntax are. Secondly, both of the study uses proper data gathering and takes some considerations since it is a sensitive subject to begin with. Lastly, both of the study directly dispatch its goal to help us know more and understand how these language impairments impacted the students with autism and also the teachers handling them. Whilst the cons, there is also difference between the two. Quantitative research or study uses statistical method. It is descriptive method using frequency, mean, weighted mean, pearson r and more. Aforementioned quantitative research show how these language impairments occur by the data based on the adapted checklist. Whilst, qualitative research is more on the context, breaking down or transcribing the answers that were given by the interview and shows in depth comprehension on the representations of the data gathered through checklist and from the teachers who handled the students with autism.

Conclusion

The researchers found out that the level of language impairments of the students with autism were as follows and was supported by the qualitative results:

In terms of the language impairments in the sound development, it indicates an above average in the area of sound development chart. It also specifies that most of the participants have a severe phonological difficulties. Some of the participants having a hard time in producing a sound phonemes on the following letters as observed by the researchers using the Sound Development Chart: /h/, /w/, /th (voiced)/, /sh/, /ch/, /s/ and /f/. Moreover, some students with autism have

ISSN NO: 2770-2367
Date of Publication: 20-03-2022

backed phonemes, labialized and prolonged phonemes, and palatalized phonemes. In addition, two children in this study produced /s/ and /z/ with nasal emission. It only shows that some of the participants, experienced phonological delay and phonological processes deficit in which they usually repeats the sound as is. Findings also revealed a strong relationship between severity of phonological behavior and severity of language impairment.

In terms of morphology particularly on repetition of new words, an indication that in this aspect there is an above average agreement among the participants. It only connotes that omission and alteration are present among the students with autism. But, performance at tasks involving single words, in both receptive and expressive domains, does not show consistent impairments, and in some individuals may be spared or even enhanced in some respects relative to typically developing controls.

In terms of the non-verbal token ratio, it is evident that there is lacking in inflectional morphemes. Students with autism always omits words or phrases in order to make their sentence structure as short as possible. Aside from this, students with autism doesn't frequently shows difficulties in forming sentence structures because they have that sense of subject and predicate unconsciously. But, due to the limited of the use of words, it is evident that there are words are omitted in the sentences. Some of the participants, intended to imitate the words they hear so that they can utter it.

Language-based disorders can negatively impact children in their social lives, in academics, and in adaptive functioning. For example, difficulties with language can make it harder for children to interact with their peers. Children use words to negotiate, decide on what to play, converse, build on each other's stories, or describe games to each other. When a child has both a language-based disorder and ASD, these difficulties can be amplified. Additionally, most academic subjects rely heavily on the use of language for instruction, so learning in all areas of study will likely be affected by a language disorder. Children with language difficulties may also struggle to effectively express themselves in written format or understand word problems in math, as compared to their abilities to perform math calculations. They may have a harder time understanding multi-step directions or explaining a complicated procedure. It may also be harder for children with language disorders to express themselves effectively in emotional situations (for example, when frustrated, disappointed, upset, or in disagreements).

Recommendations

Increase the students' awareness of the problem by tape recording the student while s/he is speaking with another student who uses verb tenses correctly. Play the tape back for the student to see if s/he can identify correct/incorrect verbtense use. Determine if the students' errors are the result of dialectical differences (i.e. the pattern of verb tense usage may not beatypical within his/her social group.

Strengthens the methodology in acquiring and teaching language especially to the students with autism. It is recommended that the teachers should be aware of or have a knowledge regarding the different language impairments of their students so that they can easily cope up with strategies on how to teach them properly.

The institution shall have the reinforcement of the teachers handling students with autism so that they can address the need of their students immediately and properly. The institution shall empower the skills of the teachers and provide meaningful growth for the students by establishing curricula suited for them particularly in the area of language teaching and enhancing.

Prepare a manual intended for the students with autism specifically with the problems encountered herewith to augment the process of enhancement of the learning experiences of the students, eventually create a wonderful learning experiences.

The study was limited only to the ten (10) participants described as students with autism. The inclusion of larger sample of participants is recommended it only means that it could be replicated with an increased number of participants to compare findings. The area that was studied in terms of language impairments in this study are phonology, morphology and syntax. Therefore, it is commended to study the aspect of semantics in order to have another horizon for this study.

ISSN NO: 2770-2367
Date of Publication: 20-03-2022

On the other hand, the researchers also recommended that the future researchers should focus on one area of language so that there will be a comprehensive discussion about the language impairments of the students with autism.

References

1. Baron-Cohen, S. (2004) Autism: research into causes and intervention. Paediatric rehabilitation, Vol. 7 N.2, (pp. 73-78)
2. Bishop, D.V.M. (2003). Autism and specific language impairment: categorical distinction or continuum? In G. Bock & J. Goode (Eds.), Autism: neural basis and treatment possibilities, Novartis Foundation Symposium. 251 pp 213-226. Chichester, John Wiley.
3. Botting, N., and Conti-Ramsden, G. (2003) Autism, primary pragmatic difficulties and Specific Language Impairment: can we distinguish them using psycholinguistic markers? Developmental Medicine and Child Neurology, 45, 515-545.
4. Čeponienè, R., Lepistö, T., Shestakova, A., Vanhala, R., Alku, P., Näätänen, R., &Yaguchi, K. (2002) Speech–sound-selective auditory impairment in children with autism: They can perceive but do not attend. PNAS, Vol. 100, N. 9.
5. Conti-Ramsden, G., and Windfuhr, K. (2002) Productivity with word order and morphology: A comparative look at children with SLI and children with normal language abilities. International Journal of Language and Communication Disorders, 37 (1), 17-30.
6. Eigsti, I.M., Bennetto, L., &Dadlani, M.B. (2007). Beyond pragmatics: morphosyntactic development in autism. Journal of Autism and Developmental Disorders, 37, 1007-1023
7. Tager-Flusberg, H. (2004a) Do Autism and Specific Language Impairment Represent Overlapping Language Disorders? In Rice M.L., & Warren S.F. Developmental Language Disorders. From Phenotypes to Etiologies (pp. 31-52). Lawrence Erlbaum Associates, Publishers: London
8. Tager-Flusberg, H., & Joseph, M.J. (2003) Identifying neurocognitive phenotypes in autism. Philosophical Transactions of the Royal Society of London B
9. Tager-Flusberg, H., Paul, R., & Lord, C. (2005). Language and communication in autism. In F.R.Volkmar, R. Paul, A. Klin, & D. J. Cohen (Eds.), Handbook of Autism and Pervasive Developmental Disorders (3rd ed.) (pp. 335-364). Hoboken, NJ: John Wiley & Sons.