



Parents' Perceptions on the Effects of COVID-19 Pandemic on the Behaviors of Learners with Autism Spectrum Disorders: Basis for Home Intervention Program

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Abstract: This study determined the parents' perceptions on the effect of COVID-19 pandemic on the behaviors of the children with autism. This also unfolded the parents' perceived needs, daily concerns and challenges and what coping strategies helped them get through the day with regard to their child's behavior. The results of the study were then utilized to come up with a home intervention program to improve the learning of the children while securing a safe and conducive environment for them. Furthermore, this study followed a descriptive quantitative design with the aid of frequency, percentage, weighted mean and multiple regression analysis that helped identify, acknowledge and give focus on the perception of parents on the effects of COVID-19 pandemic on the behaviors of children with ASD in some selected iCARE (Intervention Center for Autism and Related Exceptionalities) Special Education centers in the Philippines during the School Year 2021 – 2022. The findings of the study are the following: as to the profile of the respondents, majority of the respondents are female belongs to the age bracket of 31-40 who are college graduates, married, employed and mostly have 1 child with Level 1 severity. As to behavioral problems with ASD, majority of the parents agree when it comes to the observation of the behavioral problems of their children. Regarding the appetite of the children with ASD, majority of the respondents are unsure or uncertain vis-à-vis their children's appetite or eating behavior. In terms of their children's sleeping habits, the majority of respondents believe that their children's sleeping habits are erratic. In terms of play behaviors, the majority of respondents do not agree on certain of their child's playing habits, such as playing sports

outside and inside, and they prefer to play alone. The majority of respondents feel that all of the above are the causes of their child's behavioral changes, and that before the pandemic, the child participated in educational programs and treatments. Respondents are under a lot of stress and emotional pressure as caregivers for their children with ASD who are affected by the COVID-19 epidemic and home management strategies in place to make their home more conducive to learning. There is a substantial association between the respondents' demographic profile and the observed behaviors in their autistic child/children. There is a significant relationship between the parents' perceptions and the observed actions of their autistic child/children..

Key words: perception, Covid-19, autism, pandemic, behavior, appetite, sleeping habits, play behaviors .

Introduction:

The emergence of coronavirus illness 2019 has marked the year 2020. This illness has spread to several nations, paralyzing the lives of many individuals who have been compelled to restrict themselves at home (Zagalaz, et.al., 2020). The COVID-19 outbreak has induced dread and worry on a global scale. This phenomenon has had both short-term and long-term psychosocial and mental health consequences for children, particularly those with autism spectrum disorder (ASD).

Temporary school closures affected 94 percent of the world's student population, with the figure climbing to 99 percent in low- and lower-middle-income countries. Pre-existing educational inequities are exacerbated by the crisis, which limits opportunities for many of the most vulnerable children, teenagers, and adults - those living in poverty or in rural areas, females, refugees, people with disabilities, and those forcibly displaced - to complete their education (United Nations, 2020).

The general public has also experienced a number of psychological reactions as a result of this extraordinary event. In such a rare circumstance, the virus' spread and the lockdown both considerably increase feelings of fear, worry, sadness, or guilt (Pompili et al., 2014; Reynolds et al., 2008; Serafini et al., 2012). In order to prevent human interaction and lessen the risk of infection, mobility was decreased.

Additionally, it was noted that those with psychiatric illnesses now had a worsened clinical condition. In general population surveys, more people reported feeling anxious and depressed than they did before the pandemic outbreak (Rajkumar, 2020; Vindegaard & Benros, 2020). Furthermore, the lockdown has raised psychological symptoms, emotional disturbance, melancholy, stress, hypothyria, irritability, post-traumatic symptoms, and anger (Brooks et al., 2020).

In this complicated situation, people with prior psychiatric diagnoses are especially at risk for both the harm posed by SARS-CoV-2 to their general health and environmental alterations that might lead to a relapse of their psychiatric condition. Among these categories, Autism Spectrum Disorder (ASD) is one that is especially vulnerable to the emergence of mental symptoms during the pandemic. The DSM-5 (American Psychiatric Association, 2013) lists flexibility issues as one of the main signs of

ASD, which makes it difficult to adjust to unfamiliar environments like the lockdown (Greenlee et al., 2016; Hollocks et al., 2019; Van Steensel & Heeman, 2017). These results suggest a higher risk for this group of people and their families, who may have additional difficulties because of the pandemic's effects, such as the need to adopt new habits and lose old ones. The lockdown situation also reduced social and academic pressures, which increase daily stress for children with ASD (Khor, Melvin, Reid, & Gray, 2014).

Since the COVID-19 epidemic began, parents and caregivers have experienced higher levels of stress (Manning, Billian, Matson, Allen, & Soares, 2020; Mutluer, Doenyas, & Genc, 2020). During the lockdown, the behavioral problems in children with ASD and the closure of therapeutic services were the main stresses. Alhuzimi (2021) found that the severity of the age and gender characteristics of the ASD individual had a direct impact on parental stress and parental emotional well-being.

Autism spectrum disorder (ASD) involves a wide range of consequences. Significant changes in a person's daily routine as a result of the COVID-19 epidemic may bring significant problems to autistic people and their families. ASD is defined as a "developmental disability" by the Centers for Disease Control and Prevention (CDC) Trusted Source. It can impair how a person socializes, communicates, and acts.

Along with biologists, doctors, and humanists who are investigating the pandemic, educators are also responsible for the mental and emotional well-being of children as well as their cognitive development. The worldwide effects of COVID-19 containment attempts are detrimental to people's mental health. It seems sense that children who are unable to understand what is happening and who, in addition to arousing the worry and annoyance of their elders, may display risk factors including anxiety, affective disorders, and post-traumatic stress disorders, are the most vulnerable (Giallonardo et al., 2020).

However, education must work to provide a comprehensive education for the child, supporting their development on all fronts—physical, emotional, intellectual, family, social, and moral. The Department of Health reports that there are presently 175 million COVID-19 cases worldwide, with the number of cases in the Philippines falling to 1.3 million every day as a result of the government's increased availability of vaccinations. As a result, despite the challenges, parents and children stayed at home. It has long been known that putting children in challenging social circumstances can lead to behavioral changes, especially for children with special needs.

Because the epidemic has affected us all, most children with special needs are particularly vulnerable. For the majority of them, regularity is an important aspect of their day, and rhythms of home-school-community have been utterly and literally "shutdown" and disrupted by the epidemic. This includes less social connections with peers (restricted online), modified treatments that have now become telehealth therapies, and less help from special education teachers, particularly for individuals who require physical and higher levels of care.

The major emphasis of this study is on children with autism spectrum disorder (ASD), who are among the most vulnerable groups to suffer during a lockdown. Regression symptoms, such as more constrained and repeated routines, reduced study motivation, energy imbalances, mental health problems, academic regress, and emotional isolation, have been experienced by many people. This adds to the parents' anxiety since they must adjust to the level of assistance their children need before doing all in their power to make their homes and routines more tolerable for everyone.

This study determined the parents' perceptions on the effect of COVID-19 pandemic on the behaviors of the children with autism. This also unfolded the parents' perceived needs, daily concerns and challenges and what coping strategies helped them get through the day with regard to their child's behavior. The results of the study was then utilized to come up with a home intervention program to improve the learning of the children while securing a safe and conducive environment for them.

Research Questions

The purpose of this study was to investigate parents' perspectives on the impact of the COVID 19 pandemic on the changes in behaviors of their children with ASD in order to develop a home intervention program.

Specifically, the study sought to answer the following questions:

1. What is the demographic profile of the respondents in terms of:
 - 1.1 Gender
 - 1.2 Age
 - 1.3 Educational attainment
 - 1.4 Marital Status
 - 1.5 Number of children
 - 1.6 Employment Status
 - 1.7 Severity of child/children with ASD
2. What are the behaviors observed by the respondents in their child/children in terms of:
 - 2.1 Behavioral Problems Related to ASD
 - 2.2 Appetite
 - 2.3 Sleep
 - 2.4 Play Behaviors
3. What is the frequency of abnormal behaviors in child/children with ASD?
4. What is the perception of parents in terms of:
 - 4.1 Child's/children's behavioral changes
 - 4.2 Ability as a caregiver
 - 4.3 Home management of child/children
 - 4.4 Stress and emotional status
5. Is there a significant relationship between demographic profile of the respondents and the observed behaviors in their child/children with autism?
6. Is there a significant relationship between the parent's perception and the observe behaviors of the respondents in their child/children with autism?
7. Based on the findings of the study, what intervention program can be proposed to maintain and improve the behaviors of children with ASD especially at home during this pandemic?

Methodology

Research Design

This descriptive quantitative study was conducted in a few selected iCARE Special Education centers in the Philippines during the school year 2021–2022, aims to identify, acknowledge, and put emphasis on parents' perceptions of the effects of the COVID-19 pandemic on the behaviors of children with ASD. The study's focus included the home management techniques used by parents for their autistic children.

Research Respondents

The research was able to recruit 153 parents of autistic children between the ages of 3 and 18 who completed their education through online courses, some of whom are still getting center-based help. In Northern Mindanao's towns of Cagayan de Oro, Butuan, and Iligan, all of the participating families reside. 31 months after the total lockdown was implemented, the observation was conducted. The study was conducted in the iCARE Special Education facilities in Northern Mindanao's Cagayan de Oro, Butuan, and Iligan cities, where all of the respondents' children are enrolled.

Population and Sampling

Writing data down, this study used a purposeful sampling technique to identify the study's participants through the use of questionnaires as the research methodology because this design enables researchers to compile unbiased findings and to hear directly from the study participants (parents) about their thoughts, feelings, and perceptions.

Research Procedure

The researcher sought a special education specialist who evaluated the questionnaire before attempting to collect data from the respondents. Upon securing an approval, the researcher conducted an orientation to parent respondents which was conducted before the distribution of the questionnaire. Second, a letter was written to parents telling them of the research and asking if they would be willing to participate. The Inter-Agency Task Force on Emerging Infectious Diseases (IATF-EID) protocol was strictly adhered to by the researcher in order to protect the respondents' health and safety, but before doing so, the researcher placed the respondents' security first. Data collection procedures were carried out in part face-to-face and in part online.

Third, the respondents were given a comfortable amount of time to complete the questionnaire. The researcher pledged to treat any information provided by the respondents with the strictest secrecy. Fourth, after information from the target respondents' replies was made accessible, it was correctly maintained in an encrypted file to make sure that the researcher had access to it and to prevent unintended public disclosure.

Ethical Consideration

To preserve the respondent's privacy, the information gathered from their replies was handled with the utmost secrecy. To prevent biases in the interpretation of the data, the researcher utilized pseudonyms for the respondents for analyzing the data results. The researcher tallied the data after collecting the replies by making a frequency distribution table. Then, all data will be gathered, examined using an inductive methodology, and summarized in a table. In an effort to identify trends, the researchers examine how the pupils behave at home (as described by their parents in response to open-ended questions on the questionnaire) and how it affects the parents' perceptions as a whole. After the researcher and statistician had encoded, tabulated, interpreted, and analyzed the data, they immediately disposed of the questionnaire that the respondents had used. The researcher must ensure that the right statistical test was applied and that the results were presented accurately before evaluating the findings. Throughout the course of the study, the respondents received no payment, gifts, compensation, or incentives. The confidentiality of the information provided by the respondents was always guaranteed by the researcher.

Statistical Treatment of Data

In this study, the researcher will use appropriate statistical tools to analyze the data gathered. To wit:

1. Frequency counts (f) and percentage (%) will be used to determine the socio-demographic profile of the respondents.
2. Weighted Mean will be utilized to assess perceptions of the respondents on the effects of covid-19 pandemic towards the behaviors of children with autism spectrum disorders.
3. Multiple Regression Analysis will be used for the significant relationship of the perceptions of the respondents on the effects of covid-19 pandemic towards the behaviors of children with autism spectrum disorders: A basis for home intervention program.

Results and Discussion

Based on the data gathered, the following results are presented:

1. What is the demographic profile of the respondents in terms of gender, age, educational attainment, marital status, number of children, employment status, and severity of children with ASD?

As to the profile of the respondents, majority of the respondents are female belongs to the age bracket of 31-40 who are college graduates, married, employed, and mostly have 1 child with Level 1 severity of autism.

2. What are the behaviors observed by the respondents in their child/children in terms of:

2.1 Behavioral Problems Related to ASD

As to behavioral problems with ASD, majority of the parents agree when it comes to the observation of the behavioral problems of their children. All behavioral problems are experienced by their children with ASD.

2.2 Appetite

As to the appetite of the children with ASD, majority of the respondents are unsure or uncertain when it comes to the appetite or eating behavior of their children with ASD.

2.3 Sleep

As to the sleeping behavior of the child with ASD, majority of the respondents do agree that the sleeping behavior of their children are unstable.

2.4 Play Behaviors

As to the play behaviors, majority of the respondents do not agree on some playing behavior of their child such as playing sports outside and inside and they want to play alone. However, the respondents agree that they observed their child watching TV and using computer for leisure and doing sedentary activities in front of the screen.

3. What is the frequency of problem behaviors in child/children with ASD?

As to the frequency of problem behaviors in child/children with ASD, the majority of the respondents experiences different problem with behaviors such as listlessness, gnawing at nails, feeling depressed, easy to lose temper and easy to cry.

4. What is the perception of parents in terms of:

4.1 Child's/children's behavioral change

Majority of the respondents believe that all of the mentioned factors are the causes of their child's behavioral changes and that before the pandemic, the child engaged in educational programs and therapies, and it changed during the pandemic.

4.2 Ability as a Caregiver

Majority of the respondents believe that all of the mentioned factors have an effect to the inability to support their children with ASD and all act as the main stressors of the respondents that affects their ability as a caregiver.

4.3 Home Management of Child/children

Majority of the respondents does have home management interventions that made their house conducive to learning and supported their children with ASD.

4.4 Stress and Emotional Status

Majority of the respondents have much pressure in their stress and emotional status as caregivers of their children with ASD as affected by the COVID-19 pandemic.

5. Is there a significant relationship between demographic profile of the respondents and the observed behaviors in their child/children with autism?

There is a significant relationship between demographic profile of the respondents and the observed behaviors in their child/children with autism.

6. Is there a significant relationship between the parent's perception and the observe behaviors of the respondents in their child/children with autism?

There is significant relationship between the parent's perception and their observed behaviors regarding their child/children with autism.

7. Based on the findings of the study, what intervention program can be proposed to maintain and improve the behaviors of children with ASD especially at home during this pandemic?

The different intervention plan designed to maintain and improve the behaviors of children with ASD during this pandemic are the following: establish home routine, adaptation of the TEACH method or Treatment and Education of Autistic and Communication Handicapped Children, use of Picture Exchange Communication System (PECS) to facilitate verbal language, one-on-one special education, small group special education, collaboration between parents and teachers, counseling, consistent behavioral management, quality time with play/leisure time, physical activity, assistance in virtual learning and life skills assistance.

Conclusion

Based on the research findings, the researcher concluded the following:

1. Majority of the respondents are female dominated, college graduate, married, only have 1 child with level 1 severity. Thus, it is said that the respondents can manage their children with ASD.
2. There is a variety of behavioral changes that children with ASD experienced and are observed by the respondents. Thus, children with ASD do experience different changes in behavior problems, in particular their appetite, their sleeping and play behavior.
3. Child/children with ASD experiences different problems with behavior especially when in stressful situations.
4. There are different factors to consider when it comes to the changes of behaviors of children with ASD and factors that affect parent and children in their part.
5. The null hypothesis that states that there is no significant relationship between demographic profile of the respondents and the observed behaviors in their child/children with autism is rejected.
6. The null hypothesis that states that there is no significant relationship between the parent's perception and the observed behaviors of the respondents in their child/children with autism is rejected.

7. To be able to cope with the different effects of COVID-19 pandemic on children with ASD, there should be a variety of home intervention plans that will cope children's change of behavior to be able to ensure the quality of learning and life of the children as well as their caregivers.

Recommendations

1. Parents should get appropriate instruction and orientation since they are the parents of children with ASD and is crucial to the child's entire development.
2. To be able to notice the many behavioral changes that their child or children with ASD encounter, parents or caregivers should keep a close eye on them. To track the child's or children's behavioral changes and to make plans for what is better, teachers and caregivers should work together and maintain open communication.
3. Parents and other caregivers should have the ability to identify distinct problematic or improper behaviors in their children and then teach them how to control those particular habits.
4. When a child's behavior changes and the parents are preparing to be a caregiver, a variety of elements should constantly be taken into account. Additionally, parents need to develop time management skills and become familiar with the many methods they might use to watch over and direct their ASD child or children.
5. Interventions for parents or other caregivers are also necessary to assist them in managing the pressures of raising a child or children with ASD. To develop successful actions and interventions for them as the caregivers of the child or children with autism, improvements for their demographic profile need to be examined more closely.
6. Parental impressions and the behavioral changes in children are interrelated. Parents are aware of what is going on with their child or children and are more aware of what is best for them than anybody else. It is crucial to provide them with the right instruction, seminars, and programs to improve their capacity as parents of children with ASD who oversee controlling, correcting, and teaching their child or children.
7. There is no escape from the potential negative consequences that might result in numerous behavioral changes in the child and the strain felt by the caregivers because this epidemic has brought many obstacles and issues to all individuals, especially to children with impairments and ASD. A Home Intervention Program is a crucial tool to deal with the issues that arise for children with ASD. It ensures a solid foundation.

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