

UNLOCKING VOICES: A MULTIFACETED APPROACH IN ASSESSING AND MANAGING A PRESCHOOLER WITH SELECTIVE MUTISM

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ABSTRACT

This case study aims to report on the psychological assessment and intervention for a 4-year-old preschooler with selective mutism. A comprehensive assessment that involves parents and teacher interview, classroom observation, Seguin Form Board Test (SFBT), Vineland Adaptive Behaviour Scales Third Edition (Vineland-3), Behaviour Assessment System for Children, Third Edition (BASC-3), Childhood Autism Rating Scale, Second Edition Standard Version Rating Booklet (CARS 2-ST), and School Speech Questionnaire were conducted. The psychological assessment revealed that the child fulfils the criteria for selective mutism. Play-based intervention sessions were then conducted, which involved gradual exposure to the child's teacher and peers and facilitation of verbalization related to child's interests and classroom routines. The child demonstrated improvement in her frequency of verbalizing in the classroom following the intervention, as supported by the improved score in the School Speech Questionnaire (SSQ). This case study illustrates the advantages of a collaborative approach that engages parents, teachers, and peers in the management of selective mutism during early childhood.

Keywords: preschooler, selective mutism, exposure therapy, case study

INTRODUCTION

MK, a 4-year-old girl, is silent in the classroom. While she does participate in activities like dancing, she rarely engages in play with other children. Her teacher was surprised when she heard MK give a loud goodbye greeting one day as she was leaving. Her teachers discovered from her parents that although MK is reserved in her speech at school, she is very expressive at home. She enjoys naming colours, reciting the alphabet and numbers, and recite prayers when guided by her parents. She is also able to greet strangers loudly when she was outside of her home with her parents.

Selective mutism is categorized as an anxiety disorder in the DSM-5-TR and involves the inability to communicate verbally in certain social situations for more than one month, despite being able to talk in other settings (APA, 2022). Selective mutism is often accompanied by developmental issues and is not an isolated disorder (Rozenek et al., 2020). It is a rare condition, with a prevalence of around 0.03-1.9% (APA, 2022). Risk factors for selective mutism during early childhood include female gender, having a comorbid communication disorder, and displaying temperaments of shyness and behavioural inhibition (Rozenek et al., 2020; Muris et al., 2021). Other than higher prevalence, females also tend to show more comorbid conditions as compared to males if they have selective mutism (Dogru et al., 2023).

Detection can occur quite late as parents often rely on teachers to provide feedback regarding the child's silence in class, since the child is usually able to talk at home (Kovac & Furr, 2019). As compared to traditional treatment, a collaborative approach involving teachers and peers in selective mutism intervention can help with the generalization of skills learned in session to classroom settings (Furr et al., 2020). It may also help the teacher become more aware of the child's actual capability in verbal communication. In the case of MK, her preschool teacher promptly identified her struggles and subsequently referred her for a psychological assessment. This case report aims to fill in the gap in literature on the lack of collaborative approach in selective mutism treatment and to provide a comprehensive summary of the psychological assessment conducted and to outline the successful management strategy employed in addressing MK's selective mutism within a preschool environment. This case holds significance due to its focus on early detection and multi-faceted intervention for selective mutism. MK's teacher's proactive approach in suggesting help seeking to parents illustrate the importance of educators' roles in identifying selective mutism during early childhood. The report also aims to highlight the significance of collaboration between teachers and mental health professionals to address selective mutism among young children.

METHODOLOGY

Research Design

This is a secondary analysis of clinical record of a child with selective mutism. Case study was employed to obtain in depth quantitative and qualitative data about the assessment and treatment for MK, a child with selective mutism. Clinical records of the session notes related to the psychological assessment and intervention for the student were extracted and analysed for the case study. Pseudo name was given to ensure the anonymity of the case. Upon the decision to publish the case as a case report, written consent was obtained from the parents.

Sample

MK is a 4-year-old Malay girl from a middle-class family. She was selected for this case study via purposive sampling as she met the criteria for selective mutism, and her parents and teachers were actively involved and committed to the treatment.

Instruments

Seguin Form Board Test (SFBT). The SFBT is a neuropsychological assessment tool that measures an individual's speed to perceive, process, and manipulate spatial information, providing insights into the child's cognitive functioning (Seguin, 1928). It involves manipulating geometric shapes to fit into respective cutouts on a board. It can be administered

without necessitating verbal expression, thus facilitating rapport-building and screening on cognitive ability within a brief duration.

Vineland Adaptive Behaviour Scales Third Edition (Vineland-3). The Vineland-3 is a comprehensive tool used to evaluate adaptive behaviours, which includes communication, daily living skills, socialization, and motor skills domains. It is widely used to assess developmental delays and disabilities (Sparrow et al., 2016). Composite scores on the Vineland-3 are standardized, with a mean of 100 and a standard deviation of 15. Higher scores indicate stronger adaptive functioning, while lower scores suggest deficits in adaptive behaviors.

Behaviour Assessment System for Children, Third Edition (BASC-3). The BASC-3 is a multi-dimensional assessment tool designed to evaluate emotional and behavioural functioning in children and adolescents (Reynolds & Kamphaus, 2015). It includes various rating scales that provide information about child's emotional symptoms, adaptive skills, and behavioural problems. Scores on the BASC-3 are norm-referenced, with T-scores having a mean of 50 and a standard deviation of 10. T-scores above 60 are typically indicative of clinically significant emotional or behavioral difficulties.

Childhood Autism Rating Scale, Second Edition Standard Version Rating Booklet (CARS 2-ST). The CARS 2-ST is a structured observational tool used to assess autism symptoms in children and differentiate autism from other developmental disorders (Schopler et al., 2010). Scores on the CARS 2-ST range from 15 to 60, with higher scores indicating greater severity of autistic symptoms. Interpretation involves categorizing scores into levels of severity, with higher scores reflecting more pronounced autistic features.

School Speech Questionnaire (SSQ). The SSQ is a teacher-report rating scale that measure how frequent a student engaged in speaking behaviours in the classroom using a four-point scale (i.e., always, often, seldom, never) (Bergman et al., 2002). Higher SSQ scores represent more speech in class.

Procedures

The psychological assessment and intervention were conducted by a clinical psychologist who is undergoing Doctor of Psychology (Clinical) training. Table 2 summarizes the 15 sessions conducted. The process started with a comprehensive assessment, incorporating clinical interviews, observations, and administration of standardized assessment tools. The intervention involved ten play therapy sessions, each lasting for an hour, initially conducted individually (four sessions) and gradually involving exposure to the teacher (two sessions) and the teacher and peers (four sessions) in the classroom. During the play sessions, the child's strengths and interests (e.g., ability to name colors, letters, numbers) were used to encourage verbalization in the presence of others. For example, MK would be asked to name the alphabet and colors after completing alphabet puzzles or naming objects or colors of toys she played with. During the session with the teacher, an example of a session involves the teacher conducting morning circle time routines where MK would greet, recite prayers, and sing nursery rhymes with the teacher. Psychoeducation sessions and progress feedback sessions were also conducted with parents and the teacher before and after the intervention.

Table 1
Session outline

Session	Procedures
1	Assessment: Clinical interview with parents and teacher, play observation with MK, administration of Vineland-3 and BASC-3 (2 hours)
2	Assessment: Teachers interview and classroom observation (4 hours)
3	Assessment: administration of SFBT and CARS-2 with MK (2 hours)
4	Psychoeducation to parents and teachers about MK's condition, administration of SSQ (1 hour)
5	Individual play therapy session with MK (1 hour)
6	Individual play therapy session with MK (1 hour)
7	Individual play therapy session with MK (1 hour)
8	Individual play therapy session with MK (1 hour)
9	Teacher- child session (1 hour)
10	Teacher- child session (1 hour)
11	Classroom session involving teacher and peers (1 hour)
12	Classroom session involving teacher and peers (1 hour)
13	Classroom session involving teacher and peers (1 hour)
14	Classroom session involving teacher and peers (1 hour)
15	Administration of SSQ and progress feedback to parents and teacher (1 hour)

RESULTS

The results from the assessment instrument are summarized below.

Seguin Form Board Test (SFBT)

SFBT was administered to estimate MK's mental age. As a reference, the expected score for her age would be 216 seconds for the total time and 56 seconds for the shortest time. MK used a total of 335 seconds to complete the three trials and the shortest time among the three trials was 96 seconds. This suggests a mental age that is below 3 years old.

Vineland Adaptive Behaviour Scales Third Edition (Vineland-3)

Vineland-3 was administered to her parents to evaluate her adaptive functioning skills. MK's overall adaptive behaviour skills are in the Moderately Low range. Her daily living skills and socialization skills are in the Adequate range. However, her communication skills and motor skills are in the Moderately Low range. The primary difficulty revealed was her Low level of expressive communication skills, where her parents reported that she communicated in phrase speech with unclear pronunciation. Table 2 summarizes MK's Vineland-3 results.

Table 2
Vineland-3 results

Domain/composite	Score	Percentile rank	Age Equivalent (Year: month)	Descriptive category
Adaptive Behavior Composite	79	8 th		Moderately Low

continued

Communication	75	5 th		Moderately Low
Receptive	10		1:11	Moderately Low
Expressive	9		1:11	Low
Written	12		3:2	Moderately Low
Daily Living Skills	87	19 th		Adequate
Personal	13		3:4	Adequate
Domestic	16		5:4	Adequate
Community	10		<3	Moderately Low
Socialization	86	18 th		Adequate
Interpersonal Relationships	11		2:1	Moderately Low
Play and Leisure	12		2:4	Moderately Low
Coping skills	15		4:8	Adequate
Motor skills	79	8 th		Moderately Low
Gross	12		2:8	Moderately Low
Fine	11		2:9	Moderately Low

Behaviour Assessment System for Children, Third Edition (BASC-3)

MK's mother and class teacher completed the BASC-3 to evaluate on her overall well-being and behaviours. Both her mother and teacher reported that MK does not have issues with attention problems, hyperactivity, aggression, anxiety, depression, anger control, complaints of health problems, adaptability to situations, and daily living skills. However, both mother's and teacher's ratings indicated that she has Clinically Significant issues with social withdrawal. MK is generally alone, has difficulty making friends, and/or is unwilling to join group activities. They also reported that she has At-risk functional communication issues. She demonstrates poor expressive and receptive communication skills and has difficulty seeking out and finding information on her own. Additionally, her mother's rating shows At-Risk classification while her teacher's rating shows Clinically Significant classification for Developmental Social Disorders scale. MK has poor social skills and difficulty communicating with others. Her teacher also reported that MK has At-Risk social skills. She has difficulty showing tactful and socially acceptable manners.

Childhood Autism Rating Scale, Second Edition Standard Version Rating Booklet (CARS 2-ST)

CARS 2-ST was used to evaluate MK's autism symptoms based on the clinician's observations. She obtained a raw score of 24 (T-score= 33), which indicated Minimal to No symptoms of autism spectrum disorder. Her symptom level is higher than 5% of individuals with ASD.

Summary of assessment interpretation and intervention

Based on the assessment, MK met the criteria for selective mutism based on the DSM-5-TR (APA, 2022). She was unable to speak in specific social situation (i.e., classroom) for more than 1 month and this has interfered with her social and educational functioning. Her difficulties could not be fully explained by her delayed speech as she was capable to engage in spontaneous speech outside of home. She also did not fulfil the criteria for autism spectrum disorder.

The intervention then focused on gradual exposure via play-based intervention, starting with individual sessions before involving the teacher in the therapy room, and finally including

the teacher and peers in the actual classroom. The SSQ was administered to MK's teacher before and after the ten play intervention sessions. MK obtained a score of 0/18 initially, which improved to a score of 8/18 after the intervention, indicating an increase in her frequency of speech with teachers and peers. Consistent with the improvement in the SSQ after 10 sessions, her teacher reported that MK is often able to respond verbally to her teachers and peers after the intervention. However, she has yet to initiate conversation or ask questions. Her parents also observed that she was able to communicate verbally with her current and previous teachers when they picked her up after school.

DISCUSSION AND IMPLICATIONS

Based on the analysis of the clinical records from the psychological assessment, it is evident that MK faces significant challenges primarily centered around her expressive communication skills, which then affects her socialization skills. Her verbal communication is characterized by phrase speech with unclear pronunciation. Moreover, a prominent concern is her selective mutism within the classroom environment. It is notable that MK exhibits spontaneous speech at home, yet this ability does not extend to the school setting. The assessment results from Vineland-3 also align with the findings of Rozenek and colleagues (2020), who identified a comorbid communication disorder as a risk factor for selective mutism. Additionally, MK displays delayed motor development, consistent with the understanding that selective mutism manifests in heterogeneous ways (Kearney & Rede, 2021).

This case study illustrates the importance of addressing selective mutism in a comprehensive manner (Kearney & Rede, 2021). A collaborative approach is recommended to be implemented, involving parents, teacher, and peers. For instance, psychoeducation session was conducted to guide adults in the child's life about the struggles and necessary support that the child's need (Zakszeski et al., 2017). In this case study, psychoeducation was provided to both parents and the teacher, facilitating a deeper understanding of selective mutism. In particular, the initial meeting with MK's parents included her class teacher, equipping the teacher with insights into MK's actual speech abilities and current challenges.

Based on the literature, a focused intervention strategy is recommended to be adopted when managing selective mutism, centered around gradual exposure techniques employing play-based methods (Furr et al., 2020; Lee, Saw & Ramlee, 2024). In line with the current case, this approach showed effectiveness in facilitating MK's self-confidence and willingness to engage in verbal interactions with both educators and peers. The intervention underscored the importance of tailored exposure within a nurturing and controlled environment, resulting in a tangible improvement of MK's communication in the classroom, as supported by the improved score on the SSQ. The intervention of this case is in line with the findings from a recent systematic review by White and Bond (2022) that highlighted the importance roles of school in early detection and facilitating intervention of selective mutism.

While this intervention involves collaboration with teachers, a more holistic approach is suggested, which includes speech and occupational therapy (not readily available in the preschool), in an external setting. It was recommended that MK attends regular speech therapy sessions to target the enhancement of both her receptive and expressive communication skills (Muris & Ollendick, 2021). Additionally, engagement in occupational therapy was recommended given its potential in improving MK's motor skills (Martino & Lape, 2021). These interventions collectively exemplify a holistic and multidisciplinary strategy aimed at effectively managing MK's selective mutism,

CONCLUSION

This case study illustrates the benefits of a multifaceted and collaborative approach in addressing selective mutism during early childhood. By involving not only the parents but also the classroom teacher and peers in the assessment and intervention process, a more comprehensive and informed management was devised. The integration of gradual exposure techniques, play-based interventions, and collaborative efforts highlights the potential of such a comprehensive approach in managing selective mutism and facilitating improved communication outcomes in preschoolers.

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CONFLICTS OF INTEREST

The authors declare that there are no conflicts of interest regarding the publication of this study.

AUTHOR CONTRIBUTIONS

Lee S.H. was responsible for the conception and design of the study, data collection, data analysis, interpretation of the findings, and preparation of the manuscript.

Perveen, A. and Ramlee, F. was responsible for preparation and reviewing of the manuscript.

DECLARATION OF GENERATIVE AI USE

No generative artificial intelligence (AI) tools were used in the design, data collection, analysis, interpretation of the findings, or writing of this manuscript.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the author upon reasonable request.

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