

ENHANCING SOCIAL SKILLS AMONG YOUNG CHILDREN WITH SELECTIVE MUTISM THROUGH PEER SOCIALISATION IN EARLY CHILDHOOD CLASSROOMS

Grace Annammal Piragasam¹

Wong Chen Keh²

¹Department of Special Education
Faculty of Human Development

¹²Sultan Idris Education University
Malaysia

The prevalence of selective mutism among young children in the early years is difficult to know since these children exhibits tendencies to interact with selected peers in non-verbal situations or gesturing to make choices. However, they struggle with developing social interactions that leads to oppositional or avoidance behaviour patterns. Although early years education continues to target social interaction in natural settings it is inconsistent with evidence-based practices and not facilitated with peer socialisation at large. This study aims to explore the use of peer socialisation to enhance social skills of children with selective mutism by a) changing behavioural patterns of students with selective mutism and b) increasing the social interactions with their typical peers. The researcher used purposeful technique to select four cases of children between age four to six with selective mutism in the early childhood classrooms. Transcripts of interview data were thematically analysed and triangulated with observational data of the children's behaviour and analysis of documents comprising images and performances record. Findings of this study show that the social skills of the children with selective mutism improved following a decrease in avoidance behaviours, facilitated by supportive peer interactions. These results highlight the importance of teachers in identifying behavioural patterns and implementing ecological interventions.

Keywords: Selective mutism, early childhood education classroom, peer socialisation

INTRODUCTION

The rising prevalence of mental health issues among children has emerged as a critical concern in Malaysia. In response, the Ministry of Education Malaysia (MOE) plans to increase the number of school counsellors and raise parental awareness regarding the importance of children's emotional, communication, and social skills, particularly through peer socialisation. Addressing these issues is vital, as past studies indicate that children with mental health challenges are often misunderstood and face low levels of societal acceptance (Holka-Pokorska et al., 2018).

One condition that is often misunderstood is Selective Mutism (SM). Contrary to some misconceptions, SM is not a mental disability, but is clinically classified as an anxiety disorder. According to the American Psychiatric Association (APA, 2018), SM is characterised by a consistent failure to speak in specific social situations in which there is an expectation for speaking (e.g., at school), despite speaking in other situations. Children with SM generally possess normal language skills and speak fluently with parents or selected peers in comfortable environments, such as the home. However, due to intense anxiety during social interactions, they remain silent when expected to speak in settings like the classroom.

Due to this silence, these children are frequently mislabelled as merely being shy or having general social anxiety, often leading to exclusion by classmates. However, most children with SM are not inherently quiet. Barnowski (2019) notes that they are often willing to interact with selected peers through non-verbal means or gestures to make choices. The presentation of the disorder can also be complex; for instance, Driessen et al. (2019) indicated that approximately 20% of children with selective mutism do not present with overt anxiety in social situations, further complicating identification.

Statistics show that 69% of children with social anxiety disorder (SAD) were found to exhibit selective mutism; therefore, SAD is the most common comorbid anxiety disorder with selective mutism (Driessen et al., 2019). Except for SAD, the symptoms of selective mutism are similar to autism spectrum disorder (ASD) and oppositional defiant disorder (ODD). Nevertheless, some distinct behavioural patterns commonly identified among children with selective mutism were the frequent preferences of talking to children compared to adults (Schwenck et al., 2021). These children may show a refusal to go to school or be inactive in group activities, which results in isolation from their peer groups (Holka-Pokorska et al., 2018). On the contrary, once children with selective mutism become familiar with the situations, their communication patterns often shift from mute to using little speech with selective individuals in certain situations (Steffenburg et al., 2018).

The prevalence of selective mutism is also difficult to know since the disorder is rarely studied; which leads to increased confusion on the distinct disability's criteria and a decrease in social awareness in dealing with these children (Campbell, 2019; Barnowski, 2019; Podgorska-Jacknik, 2020). Although the statistical data does not indicate the occurrence of selective mutism in Malaysia, the prevalence of mental health problems in Malaysia among children aged 5 to 15 years is 12.1%, and within these percentages, 1.7% falls under anxiety, which requires immediate attention or remedial action (Malaysian Healthcare Performance Unit, 2017).

In the classroom settings, some teachers believe inappropriate behaviourism such as stubbornness, passiveness, and detaching oneself from social contexts have been described as avoidance behaviour. Interchangeably, the perception of teachers towards inappropriate behaviourism can also be described as oppositional behaviour. The tendencies of children being stubborn and withdrawing from group activities have made teachers perceive as symptomatic behaviour of selective mutism (Arigliani et al., 2020). Studies also show that oppositional or avoidance behaviour, which is also present in children without selective mutism, is not different from typical children.

Linked with the social cognitive theory that requires children to learn from observation to establish a new pattern of behaviour; it is likely to explore how children with selective mutism observe and imitate the pattern of behaviour through peer socialisation. Children with selective mutism understand peer behaviour through their self-efficacy and self-regulated learning. The advantage of relying on peers and learning through observation is the tool to allow children with selective mutism to learn in pairs (Thorius & Graff, 2017).

Due to the lack of exploration of selective mutism particularly in the early childhood settings, there is a need to further study the behaviours and social skills of children with selective mutism. Additionally, children with selective mutism have a less noticeable presence in school, leading to difficulty in seeking help, making friends, or improving their cognitive functions. This study aims to explore the use of peer socialisation to enhance social skills of children with selective mutism in the areas of a) behaviour patterns and b) social skills through peer socialisation.

LITERATURE REVIEW

Social Cognitive Theory

The Social Cognitive Theory (SCT) posits that children learn from observation to establish new patterns of behaviour. While foundational studies established this link (Devi et al., 2017), recent applications of this framework to anxiety disorders suggest that observation alone is often

insufficient for children with high inhibition without guided practice. In the context of Selective Mutism (SM), children observe their peers' social behaviours and visually register them; however, their ability to self-regulate and reproduce these behaviours is often blocked by the "freeze response" associated with anxiety (Danling, 2024). Therefore, current research emphasises that for SM children to modify their behaviour and adopt peer strategies, they require a safe environment that lowers the anxiety threshold, allowing self-efficacy to develop gradually through supported social engagement (Satang, 2024).

Definitions and Symptoms of SM

SM is defined as a consistent failure to speak in specific social situations where there is an expectation for speaking (e.g., at school), despite speaking in other situations (APA, 2022). The latest clinical updates from the DSM-5-TR (2022) reaffirm its classification as an anxiety disorder, distinct from oppositional defiance or communication disorders.

Clinical Presentation

Children with SM often present with a "frozen" or expressionless distinct facial appearance when triggered by social expectations (Cleveland Clinic, 2023). While they may communicate fluently with immediate family at home, they consistently limit speech in unfamiliar settings like kindergarten or school (Chatzinikolaou & Iliopoulou, 2021). Recent systematic reviews indicate that this silence is not a refusal but an automatic anxiety response; these children often want to speak but feel physically unable to do so due to severe behavioural inhibition (Vogel et al., 2024).

Psychosocial and Behavioural Correlates

Personality and Anxiety

Behaviour is significantly influenced by personality traits such as neuroticism. Recent studies confirm that children with SM display high levels of neuroticism and are prone to internalising disorders (Wang & Monga, 2023). This anxiety makes them vulnerable to misinterpretation; for instance, their silence is often mistaken for stubbornness. However, researchers now clarify that "oppositional" behaviours in SM children—such as freezing or looking away—are usually manifestations of extreme distress rather than defiance (Renk et al., 2025).

Shyness vs. Selective Mutism

The distinction between shyness and SM has become clearer in recent literature. While shy children may initially observe before eventually joining in (slow-to-warm-up), children with SM often remain withdrawn or rely entirely on non-verbal communication even after a long warm-up period (Ostergaard, 2018; Danling, 2024). This persistent avoidance suggests a distinct clinical pathology rather than just a personality variant.

Avoidance Behaviour

In this study, "behaviour" refers to avoidance mechanisms. Children with SM engage in passive avoidance—they do not aggressively refuse tasks but rather "shut down" to cope with the overwhelming pressure to speak (Tomoto et al., 2024). These avoidance behaviours can become reinforced over time; if a child is not required to speak, their anxiety drops, reinforcing the silence as a successful coping mechanism (Satang, 2024).

Social Skills and Peer Relationships

The characteristics of SM—withdrawal, anxiety, and avoidance—severely impact social functioning. Recent research highlights that while children with SM are often liked by peers, they struggle to *initiate* interactions, leading to a "passive" social existence where they are frequently excluded from play simply because they cannot verbally join in (Rede, 2023).

This lack of practice leads to deficits in social skills, not because of a lack of knowledge, but due to a lack of performance opportunities. Tomohisa et al. (2022) warned that if left untreated, these social deficits can persist into adulthood, leading to long-term interpersonal anxiety and lower self-esteem. Thus, social skills in this study refer to the child's ability to respond and build relationships using whatever communication (verbal or non-verbal) which is currently accessible to them.

Peer Socialisation as an Intervention

The Role of Peers

Peers are increasingly viewed as critical "agents of socialisation" in treating SM. New interventions move away from purely adult-led therapy toward "collaborative approaches" that involve peers in the natural classroom setting. Peer socialisation acts as a bridge; children with SM are often less intimidated by peers than by adults.

Strategies and Impact

Recent studies suggest that grouping children with SM with "supportive peers" can reduce anxiety. Satang (2024) found that strategies like Project-Based Learning (PjBL), where communication is embedded in a shared task rather than a direct question, allow children with SM to participate more freely. When peers are trained to be patient and not demand speech, the "pressure to speak" is removed, often resulting in increased non-verbal and eventually verbal participation (Wang & Monga, 2023).

Gap in Literature and Link to Present Study

Despite the growing recognition of SM as an anxiety disorder, there remains a scarcity of research on specific classroom-based peer interventions. Most recent reviews focus on clinical treatments (CBT) or medication, with limited attention paid to how *peer socialisation* specifically facilitates behavioural changes in the school environment. Furthermore, few studies have explored how peer dynamics can be structured to support children with SM in the Malaysian context. Therefore, this study aims to fill this gap by investigating the efficacy of peer socialisation in improving the social skills and behavioural patterns of children with SM.

While previous research establishes the link between anxiety, social skills, and peer influence, there remains a need to explore how peer socialisation specifically facilitates behavioural changes in the SM context. Peer socialisation might act as a bridge for children with SM to change in terms of their personalities, behaviour, and social skills in a classroom setting. In other words, children with anxiety are more concerned about how peers who ignore them view them compared to the peers who support them. Besides that, in school settings, peers have increasingly become an important agent of socialisation in the aspects of the children's personalities, behaviour, and academic skills. In the long term, children adjust their behaviour according to their peers (Wang et al., 2018). Hence, peer socialisation might act as a bridge for children with SM to change in terms of their personalities, behaviour, and social skills in a classroom setting.

METHODOLOGY

Research Design

This study employs a qualitative multiple case study design to explore the characteristics of SM and the efficacy of peer socialisation. Given that qualitative research prioritises the quality of naturalistic inquiry into social issues (Rose & Kroese, 2018), this approach allows for a holistic understanding of the behavioural patterns and social skills of children with SM.

A multiple case study approach was selected to describe, explore, and understand the phenomenon in depth. By examining four distinct cases, the researcher can identify commonalities and unique variations in how peer socialisation influences personalities, behaviours, and social skills, thereby providing a broader interpretive lens than a single case study would allow.

Participant Characteristics

The child participants were preschoolers aged 4 to 6 attending a private kindergarten in Malaysia. All child participants met the inclusion criteria of displaying consistent failure to speak in specific social situations (school) despite speaking in other situations (home). The teacher participants were the class teachers of these respective children, possessing direct insight into the children's daily behavioural patterns.

Sampling Strategy

A purposeful non-random sampling technique was utilised to select participants who are most relevant to the research phenomena. Specifically, homogeneous sampling was applied to ensure that all selected cases shared specific clinical and educational characteristics (Leavy, 2017). The study involved a total of eight participants (N=8), comprising four children diagnosed with or exhibiting characteristics of SM and four teachers familiar with these children. The selection of four cases was determined based on the principle of theoretical saturation and feasibility; this number allows for sufficient depth of analysis for each child while remaining manageable for detailed observation within the study's timeframe.

Instrument of the Study

Interviews were conducted with teachers to gather data on the children's backgrounds, personalities, and social skills. A semi-structured format was chosen to allow flexibility; while a core set of questions was asked, the order was adaptable to the flow of conversation. For instance, teachers were asked questions such as, *"How does the child react when prompted to participate in group activities compared to individual tasks?"* and *"Can you describe a specific instance where peer socialisation appeared to alter the child's behaviour?"*

Regarding observations, non-participant observations were conducted using a structured checklist. This instrument focused on specific domains, including verbal initiation (e.g., initiating conversation with peers vs. teachers), non-verbal response (e.g., nodding, gesturing, freezing), and peer interaction (e.g., parallel play, cooperative play). Furthermore, the checklist operationalised peer socialisation by specifically tracking instances where peers acted as agents of socialisation, such as inviting the child to play or helping the child complete a task. To support this primary data, relevant documents were analysed using a standardised rubric. The documents

collected included student progress reports, anecdotal records, and artwork. The analysis rubric evaluated these documents for historical evidence of anxiety, social withdrawal, or academic engagement over time.

Validity and Reliability of Instrument

To ensure content validity, all instruments—including interview protocols, checklists, and rubrics—were validated by a panel of experts consisting of two preschool teachers and two psychologists. The teachers were selected for their extensive experience (minimum five years) in early childhood education and handling children with special needs, while the psychologists were selected for their clinical expertise in diagnosing and treating childhood anxiety disorders, including SM. Following best practices for content validation (Newman et al., 2023), validators utilised an Instrument Validation Rating Scale consisting of 11 items. These items evaluated the instruments on [insert domains, e.g., content relevance, clarity, and suitability] using a scale ranging from "not valid at all" to "very high validity" (Taherdoost, 2022).

In terms of reliability, a parallel form reliability approach was applied to the interviews to ensure consistency in the questions, aligning them with The School Report Form and the study's conceptual framework. For observations, a test-retest reliability approach was used during a pilot study where the researcher observed the same children on two separate occasions. The consistency of the scores (high repeatability) confirmed the reliability of the checklist, a crucial step in minimising observer bias in educational settings (Lowe et al., 2023).

Finally, regarding data analysis reliability, data was imported into NVivo software where a codebook was created based on the literature. To ensure inter-coder reliability, the researcher matched data codes against the codebook, where codes showing high repeatability across the six files (28 coding nodes for behavioural patterns) indicated high reliability. This digital coding approach aligns with recent standards for maintaining rigour and auditability in qualitative research (Jackson & Bazeley, 2023; Braun & Clarke, 2022).

Procedures of the Study

The data collection procedures began with interview sessions that were approximately 30 to 45 minutes long and conducted in a comfortable, private classroom setting to ensure participant ease. All sessions were audio-recorded to ensure data accuracy. The line of questioning followed a semi-structured protocol, focusing on the child's family background, personality traits, and responses to peer socialisation. Following this, observations were conducted in the natural classroom setting to capture authentic behaviours. Each child was observed for [insert number] sessions over a period of [insert weeks], with each session lasting approximately [insert minutes]. The researcher acted as a non-participant observer, recording data on the checklist regarding the

child's interaction with the environment and peers. To ensure methodological rigour, the data collection tools were directly mapped to the research objectives, as visually represented in Table 1 below.

Table 1

Alignment of Research Objectives, Instruments, and Sample Items

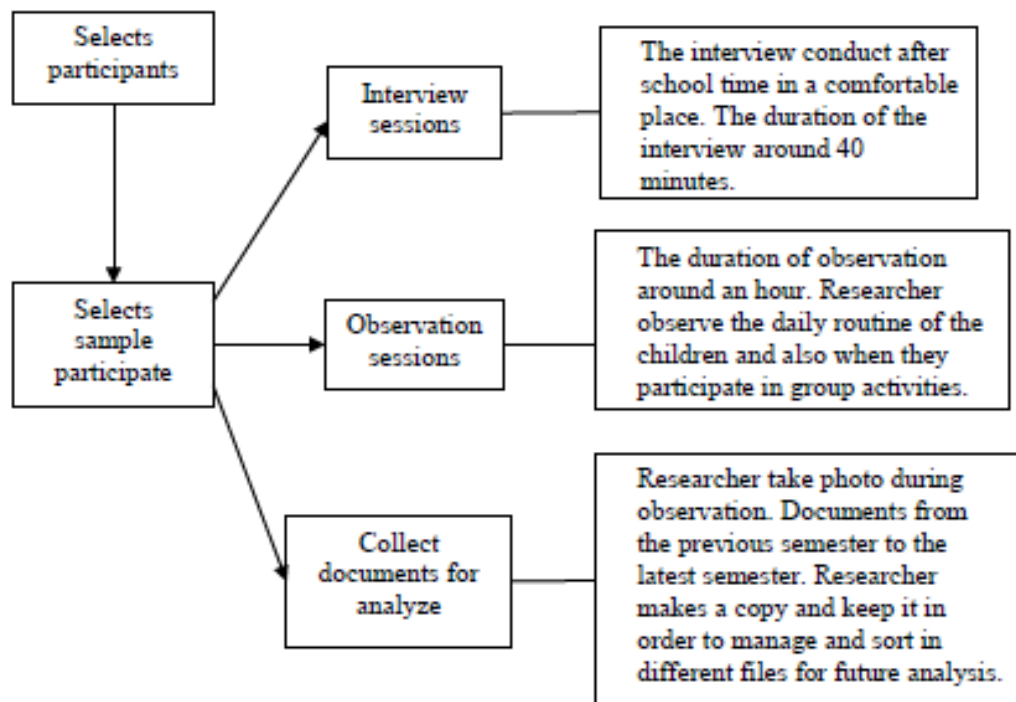
Research Objective	Instrument	Sample Item / Observation Focus
To explore the behavioural patterns of children with SM	Observation Checklist	<i>Checklist Item:</i> "Does the child freeze or withdraw when approached by an adult?"
To analyse the social skills of children with SM	Semi-Structured Interview	<i>Question:</i> "How does the child communicate needs (e.g., bathroom, water) to you or peers?"
To investigate the impact of peer socialisation	Document Analysis & Observation	<i>Observation Focus:</i> "Frequency of non-verbal participation during group work facilitated by a 'buddy' peer."

Data Analysis

Data collected from all instruments were triangulated to explore the changes in behaviours, and social skills of the children with SM through peer socialisation. Triangulation is common for researchers to use multiple data collection methods to address the same question and reach the objectives (Leavy, 2017).

Figure 1

Flow Chart of Data Collection Procedures



The data analysis spiral (Figure 1) was used for the researcher to engage in the process of moving, such as managing and reading data, classifying codes, and representing the data in the analytic circles. The researcher studied four children with SM to explore the personalities, behaviours, and social skills of SM, and the use of peer socialisation among these children. Each child with SM was managed as a case and the data was imported to NVivo. The researcher created and organised files according to the four cases. All the data included structured data, such as interview transcripts and observation checklists, and unstructured data, such as images and text from previous performance records of children with SM. Meanwhile, each case includes an interview transcript of the teacher, an observation checklist, and document analysis, such as a photo of the child or the previous performance records.

RESULTS

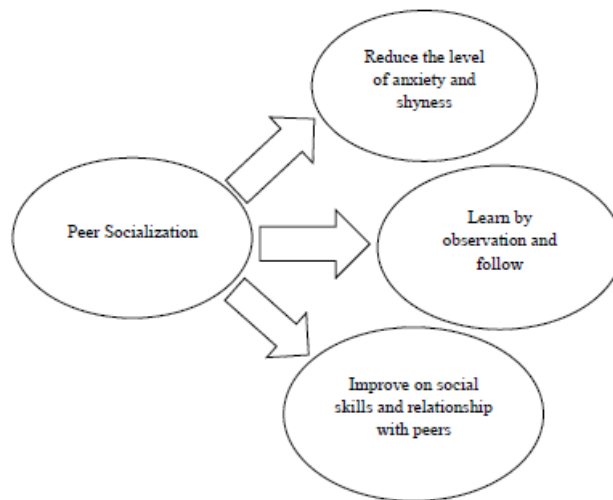
The level of anxiety and shyness of the children with selective mutism were reduced. They are willing to accept challenges and complete their work in faster ways after the children observe the ways their peer does. Children with SM adopt their peer’s behaviour through observation and learn to improve their social skills. Despite the children with selective mutism joining the activities in silence, they are slowly becoming more accepting of interacting with peers.

Behavioural Changes: Reduction in Anxiety and Observational Learning

The primary behavioural change observed was a marked reduction in anxiety and shyness. Prior to intervention, the children exhibited hesitation or refusal to engage in tasks. However, consistent with the Social Cognitive Theory (SCT) framework, the presence of supportive peers served as "modeling" stimuli. By observing peers complete tasks without negative consequences, the children with SM were able to lower their inhibition thresholds. This process of "adopting peer behaviour" is analytically understood here as vicarious learning where the child observes a peer's adaptive strategy and mimics it to navigate a stressful situation. For example, teachers noted that children were more willing to accept academic challenges and completed work faster after watching their partners. Figure 2 shows the themes of the changes in children with SM in the area of behaviour and social skills by using peer socialisation.

Figure 2

Emerging Themes of the Changes in Children with SM By Using Peer Socialisation



Social Skills Changes: From Withdrawal to Non-Verbal Engagement

Regarding social skills, the findings indicate a shift from total isolation to "non-verbal engagement." The term "interacting in silence," as initially noted, is more accurately defined as active nonverbal participation. While the children did not immediately produce speech, they moved from being passive observers to active participants who communicated through gestures, eye contact, and parallel play.

Teachers shared that peer socialisation is helpful for children with SM. Although the children with SM still interacted in silence, they were more cheerful, active, and willing to join classroom activities compared to the child's first few days in school. Except for the participant of Case 2, the teachers of Case 1, Case 3, and Case 4 commented that peer socialisation is helpful and provided some examples.

"I think peer socialisation changes the child to become better. Compared to when the child first came to school, peer socialisation helped the child improve a bit. He becomes better. For example, like last time, if he needs to take things, he will be very slow and his friend will help him. But now, maybe he sees his friend how to do it, then he can do it quickly and do it by himself."

(Teacher of Case 1)

"Peer socialisation allows the child to be more social. I think so because when the child used to have nobody to play with. But, recently when a peer starts to play with her, she looks more cheerful, and she will play more rather than just sit down. She is more active during play even though she doesn't speak. She also will take initiative and share her toys."

(Teacher of Case 3)

"The child becomes happier and less anxiety. Peer socialisation is helpful to reduce the child's worries and anxiety. Previously, the child was super anxious and worried in the classroom. She will just stand or sit there. But now, she is willing to join in group activities. I think this is because she observes how her peers work, then she follows."

(Teacher of Case 4)

The teacher of Case 2 affirmed that peer socialisation allows the child with SM to have comparison and encouragement.

“Peer socialisation provides encouragement and comparison. I show the child if some children answer the teacher or join the activities, the teacher will give the praise. Maybe give the children who join a sticker or a clap. She will try to do it after observing but do it in very unconfident way.”

(Teacher of Case 2)

This quote illustrates that the child’s "adoption" of behaviour was not merely copying, but a self-regulatory mechanism to manage anxiety, allowing them to function more efficiently in the classroom.

Through peer socialisation, children with SM can observe and interact with their peers in silence. Children with SM will adopt their peers’ behaviour based on their observations. Teachers described that the children with SM learn by observation silently. Sometimes, when children with SM are too slow or do not understand certain instructions, their peers will directly assist the children in completing their work. The children with SM will know how to do it by themselves consequently. The teacher of Case 2 also commented that the children with SM will know what to do after observing, but she still seems very unconfident when carrying out the task.

“One of his friends who sits next to him will guide him, and, he learns by observation. He will observe and see how other children do it, then he will do.”

(Teacher of Case 1)

“The child will observe. She tries to do it. But she does in a very unconfident manner.”
(Teacher of Case 2)

“The peer will directly tell her how to do it. Then the student will observe. She always observes, then only follows.”
(Teacher of Case 4)

Table 3 provides a summary of behavioural and social skills changes when facilitated by peer socialisation.

Table 3

Behavioural and Social Skills Change When Facilitated by Peer Socialisation

Domain	Before	After
Behaviour	<ul style="list-style-type: none"> • The child prefers just to sit in his/her seat. • The child initially does not talk or respond. • The child avoids to join Activities. • The child avoids eye contact. • The child lacks energy during physical education class. • The child plays with the fingernail when feeling anxious. 	<ul style="list-style-type: none"> • The movement of the child becomes faster (good spatial orientation) • The child is willing to engage in classroom activities. • The child answers the teacher’s question in a whispering voice. • The child uses the body language to respond. • The child begins to observe and adopt peers’ behaviour. • The child plays more rather than just sit in the seat. • The child communicates verbally with the teacher with minimal words.
Social skills	<ul style="list-style-type: none"> • The child is poor in social skills. • The child likes to be alone. • The child doesn’t sit or mingle with other children. • The child often observes how the peers are playing. • If the peer offers the child to play, then the child will join and play in silence. 	<ul style="list-style-type: none"> • The child observes how his peers do, and then completes work independently. • The child is willing to join in most of the activities. • The child shares toys with his/her peers. • The child willingly joins in group activities with peers. • The child interact with peers

DISCUSSION

The findings of this study align with the Social Cognitive Theory, demonstrating that children with SM actively adjust their behaviour by observing trusted peers (Wang et al., 2018). However, beyond simple imitation, this study suggests that peers function as "emotional regulators" within the classroom. Consistent with Kamani and Monga (2020), the presence of a trusted peer lowers the child's physiological arousal (anxiety), effectively "unfreezing" their behavioural inhibition. When a peer assists with tasks such as retrieving books or modeling how to write an answer, they provide a scaffold that allows the child with SM to bypass the initial "freeze response" and engage in the task, albeit silently. This supports the premise that peer-assisted learning is not just an academic tool, but a crucial psychological buffer for these children (Haas et al., 2019).

A critical analysis of the findings reveals a significant nuance: while *behavioural engagement* increased, *verbal initiation* remained resistant to change. The participants were observed to adopt peer behaviours and complete tasks faster, yet they consistently refused to initiate verbal interaction. This finding presents a divergence from previous literature which suggests peer-assisted learning comprehensively improves social skills (Maleki et al., 2019). Instead, this study argues that while peer socialisation is highly effective for increasing social participation (joining in, sharing, parallel play), it is not solely sufficient to trigger verbal initiation. The children's inability to "interrupt and interact" suggests that observation alone does not provide the specific skills needed to break the silence barrier; rather, it builds the necessary comfort foundation upon which verbalisation can eventually be built.

Contrary to the view that silence equals a lack of progress, this study interprets the children's "silent participation" as a significant developmental stride. The shift from total avoidance to "active non-verbal engagement" (e.g., nodding, gesturing, whispering) indicates a reduction in avoidance behaviour. The findings show that the children began to whisper to teachers and share materials with peers, signaling a decrease in the severity of their anxiety symptoms (neuroticism). This contradicts the notion that personality is rigid; rather, as the environmental pressure was modulated by supportive peers, the children's inherent "shyness" or "neuroticism" became less dominant, allowing more "extraverted" behaviours such as cheerfulness and willingness to join groups to emerge.

These insights necessitate a shift in pedagogical approaches. Teachers must recognise that for children with SM, "observation" is an active, cognitive process, not passive withdrawal. The findings imply that educators should implement cooperative learning structures where the child with SM is paired with a specific, consistent "buddy" to facilitate this vicarious learning. Furthermore, teachers must manage expectations regarding the timeline of progress; behavioural changes (joining the circle) will likely precede verbal changes (speaking). Therefore, interventions

should focus on praising *participation* first to build confidence, rather than pressuring for speech, which has shown in the findings can trigger the very anxiety the intervention seeks to reduce.

CONCLUSION

This study successfully achieved its objectives to explore the behavioural patterns and social skills of children with SM within the context of peer socialisation. Grounded in the Social Cognitive Theory (SCT), the findings confirm that peers serve as critical agents of modelling, where children with SM were observed to lower their anxiety and modify their avoidance behaviours by observing trusted peers. While the intervention did not result in immediate fluent speech, it successfully transitioned participants from "passive isolation" to "active non-verbal participation," validating the study's premise that social engagement is a prerequisite for verbal communication. Consequently, peer socialisation is established not merely as a classroom management technique, but as a vital therapeutic bridge. It provides a structured mechanism for teachers to facilitate social inclusion, allowing children with SM to build trust and reduce neuroticism in a safe environment. However, the persistence of verbal inhibition despite increased social participation suggests that while peer modelling is effective for behavioural adjustment, it requires sustained application to overcome the deep-seated "freeze response" associated with verbal initiation.

Despite the significant insights gained, several limitations frame the interpretation of these findings. As a qualitative multiple case study involving a small sample, the findings are context-specific; while they provide deep descriptive data, they cannot be statistically generalised to the broader population of children with SM. Additionally, the study was conducted over a limited duration (e.g., 12 weeks), which may have been insufficient to capture the full trajectory of recovery given that SM is a persistent anxiety disorder. The research was also limited to a specific context (private preschools in Malaysia), meaning cultural factors influencing child-rearing and classroom etiquette may affect how peer socialisation is implemented and received in different educational settings.

Based on these findings and limitations, future research should adopt a longitudinal design to track the long-term effects of peer socialisation, specifically investigating the timeline required for children to transition from "silent participation" (whispering/gesturing) to full "verbal initiation." It would also be beneficial to compare different peer-grouping strategies, such as assigning a single "buddy" versus small group rotation, to determine which social structure most effectively reduces anxiety for children with SM. Finally, future studies could explore the efficacy of specific training modules for teachers on how to scaffold peer interactions, ensuring that peers are "supportive" rather than "overbearing," a nuance that significantly affects the success of the SCT modelling process.

REFERENCE

- American Psychiatric Association. (2018). *The American Psychiatric Association practice guideline for the pharmacological treatment of patients with alcohol use disorder*. American Psychiatric Publishing. <https://doi.org/10.1176/appi.books.9781615371969>
- American Psychiatric Association (APA). (2022). *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.). American Psychiatric Association.
- Arigliani, E., Giordo, L., Vigliante, M., & Romani, M. (2020). Two cases of selective mutism: To speak does not mean to recover. *Clinical Paediatrics*, 60(2), 126–129. <https://doi.org/10.1177/0009922820927027>
- Barnowski, A. (2019). *Selective mutism: What it is and approaches to intervention* [Master's thesis, Sarah Lawrence College]. Child Development Theses. https://digitalcommons.slc.edu/child_development_etd/26
- Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide*. SAGE Publications.
- Campbell, K. R. (2019). *Childhood anxiety disorder: A look into selective mutism* [Honors thesis, University of Mississippi]. Honors Theses.
- Chatzinikolaou, M. D., & Iliopoulou, T. (2021). Selective mutism in children: A literature review of cognitive behavioural and integrative psychotherapeutic schemes. *Social Sciences*, 10(7), 263. <https://doi.org/10.3390/socsci10070263>
- Cleveland Clinic (2023). <https://my.clevelandclinic.org/health/diseases/selective-mutism>
- Danling, D. (2024). The language of silence: narrative psychology of the selective mutism. *Dialogue in Philosophy, Mental, and Neuro Sciences*, 16(2), 53 – 68.
- Devi, B., Khandelwal, B., & Das, M. (2017). Application of Bandura's social cognitive theory in the technology enhanced, blended learning environment. *International Journal of Applied Research*, 3(1), 721–724.
- Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR). (2022). American Psychiatry Association. <https://doi.org/10.1176/appi.books.9780890425787>

- Driessen, J., Blom, J. D., Muris, P., Blashfield, R. K., & Molendijk, M. L. (2020). Anxiety in children with selective mutism: A meta-analysis. *Child Psychiatry & Human Development, 51*, 330–341. <https://doi.org/10.1007/s10578-019-00933-1>
- Haas, A., Vannest, K., & Smith, S. D. (2019). Utilising peers to support academic learning for children with autism spectrum disorder. *Behaviour Analysis in Practice, 12*, 734–740. <https://doi.org/10.1007/s40617-019-00350-4>
- Holka-Pokorska, J., Piróg-Balcerzak, A., & Jarema, M. (2018). The controversy around the diagnosis of selective mutism—a critical analysis of three cases in the light of modern research and diagnostic criteria. *Psychiatria Polska, 52*(2), 323–343. <https://doi.org/10.12740/PP/OnlineFirst/67319>
- Jackson, K., & Bazeley, P. (2023). *Qualitative data analysis with NVivo* (3rd ed.). SAGE Publications.
- Kamani, Z., & Monga, S. (2020). Understanding the outcome of children who selectively do not speak: A retrospective approach. *Journal of the Canadian Academy of Child and Adolescent Psychiatry, 29*(2), 58–65. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7197063/>
- Leavy, P. (2017). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. Guilford Publications.
- Lowe, H., & et al. (2023). The importance of pilot studies in educational research. *Journal of Educational Psychology, 115*(2), 205–218.
- Malaysian Healthcare Performance Unit (2017) Malaysian Mental Healthcare Performance Technical Report 2016. Putrajaya: Ministry of Health Malaysia.
- Maleki, M., Mardani, A., Chehrzad, M. M., Dianatinasab, M., & Vaismoradi, M. (2019). Social skills in children at home and in preschool. *Behavioural Sciences, 9*(7), 74. <https://doi.org/10.3390/bs9070074>
- Newman, I., Lim, J., & Pineda, F. (2023). Content validity and expert review in mixed methods research. *Journal of Mixed Methods Research, 17*(1), 34–49.
- Ostergaard, K. R. (2018). Treatment of selective mutism based on cognitive behavioural therapy, psychopharmacology and combination therapy—a systematic review. *Nordic Journal of Psychiatry, 72*(4), 240–250. <https://doi.org/10.1080/08039488.2018.1444087>

- Podgorska-Jachnik, D. (2020). Selective mutism and shyness: Differential diagnosis and strategies supporting child development. *Interdisciplinary Contexts of Special Pedagogy*, 28, 125–149. <https://doi.org/10.14746/ikps.2020.28.06>
- Rede, M. (2023). *Identifying clinical profiles in a community sample of youth with selective mutism*. UNLV Theses, Dissertations, Professional Papers, and Capstones. 4848. <http://dx.doi.org/10.34917/36948199>
- Renk, K., Daleandro, K., Verdone, M., Al-Bassam, H., & Murphy, Q. (2025). Understanding Selective Mutism in Very Young Children. *Behavioural Sciences*, 15, 923. <https://doi.org/10.3390/bs15070923>
- Rose, J., & Kroese, B. S. (2018). Introduction to special issue on qualitative research. *International Journal of Developmental Disabilities*, 64(3), 129–131. <https://doi.org/10.1080/20473869.2018.1481859>
- Satang, S. (2024). Improving students' reading comprehension through rehearsal strategy. *Review of Multidisciplinary Education, Culture and Pedagogy*, 3(2 SEArticles), 168–178. <https://doi.org/10.55047/romeo.v3i2.1137>
- Schwenck, C., Gensthaler, A., & Vogel, F. (2021). Anxiety levels in children with selective mutism and social anxiety disorder. *Current Psychology*, 40(3), 1253–1260. <https://doi.org/10.1007/s12144-019-00546-w>
- Steffenburg, H., Steffenburg, S., Gillberg, C., & Billstedt, E. (2018). Children with autism spectrum disorders and selective mutism. *Neuropsychiatric Disease and Treatment*, 14, 1163–1169. <https://doi.org/10.2147/NDT.S154966>
- Thorius, K. A. K., & Graff, C. S. (2017). Extending peer-assisted learning strategies for racially, linguistically, and ability diverse learners. *Intervention in School and Clinic*, 53(4), 1–8. <https://doi.org/10.1177/1053451217712971>
- Tomohisa, Y., Ishida, Y., & Masahiko, I. (2022). Long-term outcome of selective mutism: factors influencing the feeling of being cured. *European Child & Adolescent Psychiatry*, 32(11), 1–13. <https://doi.org/10.1007/s00787-022-02055-x>
- Tomoto, A., Igarashi, T., & Nomura, K. (2024). Clarification of the function of mute behavior in selective mutism using the ABC analysis. *Japanese Journal of Behavior Therapy*, 50(1), 11–20. https://doi.org/10.24468/jjbt.50.1_11

- Vogel, F., Rose-Werkmann, C. S., Schwenck, C. (2024). Symptoms of selective mutism beyond failure to speak in children and adolescents. *European Child & Adolescent Psychiatry*, 33(10), 3603-3611. <https://doi.org/10.1007/s00787-024-02415-9>
- Wang, M., Kiuru, N., Degol, J. L., & Salmela-Aro, K. (2018). Friends, academic achievement, and school engagement during adolescence: A social network approach to peer influence and selection effects. *Learning and Instruction*, 58, 148–160. <https://doi.org/10.1016/j.learninstruc.2018.06.003>
- Wang, R., & Monga, S. (2023). Practical tips for paediatricians: Helping kids find their voices in selective mutism. *Paediatrics & Child Health*, 29(1), 7 - 9. <https://doi.org/10.1093/pch/pxad043>