Bridging the Sociolinguistic Gap: An Individual-Centric Model for Social Communication Training in Autism

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ABSTRACT

Autism Spectrum Disorder (ASD) often involves challenges in pragmatic language use, but sociolinguistic aspects like register variation, identity negotiation, turn-taking and engagement in social contexts remain underexplored. This study examines the sociolinguistic challenges faced by autistic individuals in social communication and introduces the Individual-Centric Sociolinguistic Language Training (ISLT) Model as an adaptive and structured approach. The objectives of this study are threefold: to identify key sociolinguistic challenges faced by autistic individuals, to develop the ISLT Model as an adaptive training tool, and to evaluate the model's validity, reliability and applicability in educational and speech therapy settings. Using qualitative research and analyzing discourse from the CHILDES corpus, the study identifies challenges such as turn- taking, engagement, registers and identity construction. The ISLT Model is developed based on these identified challenges, incorporating real- world language use and sociolinguistic theory. Grounded in Wenger's (1998) Communities of Practice (CoP) theory, the model is aimed at improving sociolinguistic competence focusing on the context-sensitive quality of the language training. Feedback from educators and speech therapists confirms the applicability of the model to educational and speech therapist settings, where it becomes evident of its suitability in fostering social communication. The current research proposes a new avenue in autism communication interventions through the sociolinguistic theory application that would make language teaching more inclusive as well as adaptive for autistic people.

INTRODUCTION

Autism Spectrum Disorder (ASD) consists of chronic impairments in social interaction, communication, and restricted patterns of behavior (APA, 2013). Whereas considerable emphasis has gone into the exploration of pragmatic language impairments in autistic people, including indirect speech comprehension and topic maintenance, relatively little attention has been given to social dimensions such as style shifting and community-specific norms and how language is applied in the construction of identity.

Sociolinguistics emphasizes language as a social practice, shaped by community norms, contexts and interaction (Holmes & Wilson, 2017). Autistic individuals often experience barriers in sociolinguistics

adaptation, which affect their ability to participate in peer groups, classroom discussions and informal community interactions (Sterponi et al., 2015). These challenges are both linguistic and social in nature, often resulting in exclusion and impacting identity formation.

Despite multiple interventions focusing on functional or behavioural communication, few models address the sociolinguistic competence required for integration into diverse social contexts (Bottema-Beutel et al., 2017). This study responded to this gap along focus on the development of a novel framework like Individual-Centric Sociolinguistic Language Training (ISLT) Model with its evaluation in edcutional and speech therapy settings.

Problem Statement

Existing communication interventions for autistic individuals largely emphasis structural or behavioral aspects of language use, often neglecting sociolinguistic competencies such as register variation, identity negotiation, engagement and turn-taking, focusing instead on structural or behavioral deficits (Bottema- Beutel et al., 2017; Paul et al., 2007). As a result, autistic individuals may develop functional language skills yet remain socially marginalized due to an inability to navigate diverse communities.

There is a lack of linguistically grounded, adaptive models that address how autistic individuals can use language to belong, participate and negotiate identity across varying social settings. Without a sociolinguistic focus, current models risk reinforcing scripted and decontextualized language use rather than promoting dynamic and socially integrated communication. Thus, there is a dire need for a structured, theoretically grounded and individual- centric sociolinguistic training model that empowers autistic individuals to engage meaningfully with their social environments.

Objectives of the Study

a. To identify key sociolinguistic language challenges faced by autistic individuals in social communication.
b. To develop the ISLT Model as a structured and adaptive approach.
c. To evaluate the validity, reliability and applicability of the ISLT model in educational and speech therapy settings.

Research Questions

Q.1 What are the primary sociolinguistic challenges encountered by autistic individuals in social interactions?
Q.2 How can the ISLT model be developed as a structured and adaptive approach to address these sociolinguistic challenges?
Q.3 To what extent is the ISLT model valid, reliable and applicable in educational and speech therapy settings?

Significance of the Study

This study contributes to a paradigm shift in autism communication research by incorporating sociolinguistic theory into intervention design. By focusing on community-based language practices, it aligns with modern understandings of language as a medium for identity formation and social participation (Wenger, 1998).

The ISLT model moves beyond rigid communication drills by offering adaptive training modules tailored to individual discourse patterns, a linguistically informed curriculum integrating real-world speech contexts and practical applications for educators and speech therapists seeking socially inclusive training strategies. By empowering autistic individuals with sociolinguistic tools, the research aims to reduce exclusion and foster genuine communicative participation.

Theoretical Framework and Alignment with Sociolinguistics

The theoretical framework of this research is based on Wenger;s (1998) CoP Theory, which sees language as a mediator in social participation. This theory holds that identity and belonging become realized as a person shares presence in linguistic practices that a given social group views as being in common.
From a Sociolinguistic view, Wenger's (1998) CoP theory further strengthens the argument that language operates socially and is not purely structural or functional. Exclusion of autistic individuals from those communities of practice adds yet another layer of disability-the layer of social disconnection-on top of the linguistic barrier (Sterponi et al., 2015). This model is aligned with sociolinguistic principles while focusing on how autistic individuals can learn to participate linguistically in real-world communities. Each module in ISLT Model is designed to simulate or reflect community-based interactional practices, thus supporting the learner's journey into full participation within their social groups.

Delimitation of the Study

The study focused exclusively on autistic individuals aged 7 to 15, aligning with school where sociolinguistics development is critical. The research is qualitative and relies on CHILDES corpus for discourse data rather than conducting primary feedback. Only English-speaking autistic individuals were included to maintain linguistic consistency.

LITERATURE REVIEW

Sociolinguistic Challenges in Autism

Autistic individuals often face challenges in navigating socially embedded language norms, particularly those involving identity negotiation, audience awareness and contextual flexibility. Sociolinguistics views language not simply as a vehicle for information exchange but as a socially regulated practice that reflects and reinforces group norms, roles and affiliations (Holmes & Wilson, 2017). Within its framework, language functions as a marker of inclusion, hierarchy and shared knowledge.

For autistic individuals, failure to align with implicit sociolinguistics expectations such as when to shift tone, how to acknowledge power dynamics or how to manage conversational roles often leads to social exclusion (Sterponi et al., 2015). These are not pragmatic failures in the clinical sense, but sociocultural mismatches between the speaker and the community's expectations. Hence, language training must move beyond decontextualized rule-teaching and address socially situated communicative practices.

Key Areas of Sociolinguistic Difficulty

Engagement and Interaction

Autistic individuals may not respond to typical cues such as eye gaze, prosody or gesture which can lead to perceptions of aloofness or detachment (Bottema- Beutel, 2017; Ochs & Solomon, 2010). Sterponi and de Kirby (2016) argued that this disengagement is less a result of inability and more due to differing norms of interaction. Without clear social scaffolding, autistic individuals may remain present yet unrecognized in conversations, creating a persistent sense of interactional asymmetry.

Turn-Taking and Conversational Flow

Capps et al., (1998) found that autistic children frequently interrupt or pause inappropriately, disrupting the flow of conversation and sometimes leading to social exclusion. These turn-taking violations reduce opportunities for reciprocal exchange and undermine efforts to build rapport. de Marchena and Eigsti

(2010) noted that even high-functioning autistic individuals may struggle with maintaining conversational coherence, turn transitions and responsiveness to listener cues.

Register Variation and Contextual Adaptability

Losh and Capps (2003) observed that children with autism often use inappropriate registers in narrative tasks. It suggested a limited grasp of social roles and audience expectations. Parson et al. (2007) argued that without explicit instruction, autistic individuals struggle to understand the social function of register shifts, leading to further communicative isolation.

Identity Construction and Linguistic Belonging

According to Bucholtz and Hall (2005), identity is constructed through interaction. However, for autistic individuals, participation in these identity-building conversations is often hindered. Ochs and Solomon (2010) showed that linguistic identity is frequently mediated by therapists, reducing the individual's autonomy. Wenger (1998) asserted that identity is formed through participation in CoP. When autistic individuals are excluded from such linguistic communities due to sociolinguistic barriers, their capacity for identity formation and social belonging is severely compromised.

Previous Studies

Numerous studies have investigated language impairments in autism; however, few have directly focused on sociolinguistic gaps. Sterponi et al. (2015) emphasized that autistic children's discourse often deviates from community expectations not merely due to deficits, but due to sociocultural mismatches in communication norms. This gave rise to the call for intervention based on discourse analysis and ethnography, establishing the relevance of socially situated language intervention.

Ochs and Solomon (2010) conducted a long-ranging ethnographic inquiry into language socialization in families having autistic children. The results revealed that autistic individuals are part of communities of practice and said that interventions should honor these distinct communicative patterns instead of imposing stiff norms.

Bottema-Beutel et al. (2017) reviewed the literature systematically for social communication interventions for children with autism. They found that most models did not include a component that addressed variances in sociolinguistic norms, such as context-sensitive politeness, style-shifting, or directness of construction, all of which are critical for real-world social inclusion.

Mckeown (2019) examined how autistic persons interpret and negotiate conversational norms in peer and classroom interactions. She used discourse analysis and interviews to show that autistic participants were aware of their linguistic divergence from neurotypical norms and often experienced social exclusion because of this. Her work concluded with a call for training programs that embrace identity-sensitive and community-based linguistic practices, aligning directly with the goals of the ISLT Model. Peristeri et al. (2021) found that bilingual autistic speakers struggled with culturally specific politeness norms and code-switching conventions. The findings underscored the need for context-responsive models that consider local language ideologies and practices particularly relevant in linguistically diverse countries.

Identified Gap and Rationale for the ISLT Model
The literature reveals a persistent gap as most interventions overlooked the sociolinguistic dimension of communication. Current research pointed to difficulties in turn-taking, register awareness, engagement and identity, yet not structured, culturally grounded training model exists to address these issues specifically for autistic individuals.

The ISLT Model responded to this gap by recognizing language as a social recourse used to negotiate roles and relationships, drawing from Wenger's (1998) Communities of Practice to embed language learning in shared, meaningful group contexts and structuring modules around real- life interactional norms rather than abstract rules, allowing individual customization based on sociolinguistics profiles, cultural background and learning needs, and aiming to empower autistic individuals to participate more fully in diverse communities by equipping them with sociolinguistic tools for choice, flexibility and belonging.

RESEARCH METHODOLOGY
Research Design

This study adopted a qualitative research design to identify key sociolinguistic language challenges faced by autistic individuals in social communication, develop ISLT Model as a structured and adaptive approach, and evaluate the validity, reliability and applicability of the ISLT Model in educational and speech therapy settings. Qualitative design was particularly appropriate because it captures the complex, contextualized and socially embedded nature of language use (Creswell, 2013). It enables deep, interpretive analysis of language as a reflection of identity, group membership and communicative competence (Tagliamonte, 2012). Therefore, qualitative inquiry offers the most suitable framework to uncover linguistic behaviours shaped by identity, interaction and context.

By focusing on naturally occurring conversations and incorporating practitioner feedback, this research was designed while ensuring both empirical depth and real-world relevance, aligning closely with the goal of sociolinguistic inquiry and the practical orientation of the ISLT Model.

Data Collection

Primary Source: CHILDES Corpus

This study used the CHILDES (Child Language Data Exchange System), particularly the ASD Bank and Tager-Flusberg Corpora, as its primary data source (MacWhinney, 2000). These repositories contain naturalistic of transcripts of autistic children engaged in real life conversational settings. The URL link of CHILDES corpora is mentioned here

https://sla.talkbank.org/TBB/childes/Eng-UK/Belfast

The reasons behind choosing transcripts from CHILDES are inevitable. It provides authentic and spontaneous discourse which is ideal for sociolinguistic analysis ((MacWhinney, 2000). It also avoids observer bias or artificiality inherent in clinical assessments (Simmons- Mackie & Domico, 2003).

Sampling and Dataset

According to Palinkas et al. (2015), purposive sampling is particularly useful in qualitative research for identifying and selecting information-rich cases that are especially knowledgeable about or experienced with a phenomenon of interest. Using purposive sampling, the researcher selected five transcripts each from six autistic individuals. There was total 30 conversations. These were chosen to ensure variation in conversational diversity and thematic situation, which is considered sufficient in qualitative discourse studies (Guest et al., 2006).

Educator and Therapist Feedback: Evaluation of ISLT Model

To assess the applicability, relevance and adaptability of the ISLT Model in real-world settings, the researcher created a Google Form survey. The form was shared with educators and speech-language therapists experienced in autism support. The form included open- ended questions targeting the validity, reliability and applicability of ISLT Model in both educational and speech therapy settings.

The form was divided into three sections: demographic information, questions on model and the third section was regarding questions on the application of the model. The URL link of Google Form is mentioned here

https://docs.google.com/forms/d/e/1FAIpQLScJIkaK_9ItmTkDvBBLWV5QzJXrl9xwuf24vplt-aQpSwBSWw/viewform?usp=header

This method ensures that the model is not only theoretically robust, but also practically applicable across educational and therapeutic contexts. Gathering practitioner insight strengthens the model's validity and real-world relevance, a key component of applied sociolinguistic research (Tagliamonte, 2012).

DATA ANALYSIS

The present study employed manual thematic discourse analysis to examine the sociolinguistic communication patterns of autistic individuals using naturally occurring conversation data from CHILDES corpus. The goal was to identify recurring sociolinguistic challenges such as difficulties in turn-taking, indirect speech comprehension and register variation and to use these insights to inform the structure of the ISLT Model.

Braun and Clarke's (2006) six-step thematic analysis framework for the data analysis. Each of the 30 selected transcripts was read and re-read to achieve data familiarization, followed by inductive coding that remained grounded in sociolinguistic theory and Wenger's (1998) CoP framework. The key analytical categories included tun-taking structures, register and style- shifting, identity and engagement. Themes were identified by grouping recurring patterns across transcripts and interpreting them within their conversational context, ensuring that meaning was not decontextualized. Each code was not only classified linguistically but also interpreted socially and functionally.

The Development of ISLT Model

The ISLT Model was developed as a structured, adaptive intervention based on patterns observed in the CHILDES data. The model was designed in three phases:

a. Discourse Mapping: Thematic analysis of the 30 transcripts identified recurring sociolinguistic challenges e.g., breakdowns in turn-taking and failure to adapt register.

b. Module Structuring: Each challenge area was translated into a training module, grounded in

sociolinguistic theory (e.g., Wenger's (1998) CoP).

c. Theoretical Integration: Each module was aligned with Wenger's (1998) principles, emphasizing mutual engagement, shared repertoire and joint enterprise as core elements of sociolinguistic competence.

Wenger's (1998) CoP as Theoretical Framework

The study is grounded in Wenger's (1998) CoP Theory, which views learning and identity as emerging through participation in shared social and linguistic practices. A community of practice is formed when people engage in mutual activities, develop shared norms and use language as a tool of alignment and meaning making (Wenger, 1998).

In the lens of Sociolinguistics, this theory aligns with the understanding that language is performative, contextual and identity-based (Holmes & Wilson, 2017). For autistic individuals, difficulties in social

communication reflect misalignment with dominant community norms not an absence of language, but a mismatch in sociolinguistic expectations (Sterponi et al., 2015).

By using this theory, the ISLT Model framed autistic speakers as emerging participants in multiple discourse communities, aimed to empower by helping learners gain adaptive sociolinguistic competence and emphasizes flexibility, identity negotiation and context- sensitive interaction rather than rigid performance.

Ethical Considerations

a. All data used were obtained from publicly accessible CHILDES corpus, which are ethically approved for secondary research.

b. No personal identifiers were accessed. The study does not involve direct human participants, ensuring compliance with research ethics standards (MacWhinney, 2000).

c. The acquiesced agreement was gained through e-consent form for partaking in anonymous Google Form response collection. Data secured was used exclusively for research purposes.

Data Analysis

This section provides an analysis of the sociolinguistic challenges encountered by autism sufferers in social communication. Analysis of data reveals the four major themes, for instance, identity, register, engagement and turn-taking. All these were viewed under Wanger's (1998) CoP Theory. Most importantly, he emphasized the grammar of social participation and engagement with negotiation of identity in the communal context (Wanger, 1998).

Thematic Analysis and Theoretical Lens

The analysis was based on Wanger's (1998) CoP Theory. This theory considers learning and communication as social processes. Wanger (1998) argued that membership in a CoP is about not just shared knowledge, but about engaging in social exchanges and forming one's identity through extended engagement. When it comes to people with autism, impediments in social communication are often directly related to their inability to negotiate their identities, use appropriate registers, participate meaningfully, and control turn-taking in conversation.

Braun and Clarke's (2006) six-step thematic analysis framework was used to analyze the emergent themes like identity, engagement, register and turn-taking. These themes were identified in the data collected from CHILDES corpus. Also, the responses of educators and therapists to evaluate validity, reliability and applicability of the ISLT Model. The analysis was conducted by following Braun and Clarke's (2006) framework which includes steps such as familiarization with expert responses, generation of initial codes, development of overarching themes, review of themes for coherence, definition and naming of themes and final interpretation and write up.

Thematic Analysis of Sociolinguistic Challenges faced by Autistic Individuals

Identity

Identity is not an individual trait but something that is shaped by social interactions within a community (Wenger, 1998). The identity theme emerged from the analysis as a key challenge, particularly in how autistic individuals navigate self-representation and role enactment in social contexts. Children enacted various identities through utterances. Their utterances can be given in the form structured form as in table 1.

Table 1. Extracted Utterances of Autistic Individuals reflecting identities

Autistic Individual	Utterances
John	*I'm the tiger!* *I'm the boss of this place!*
Michelle	*I'm not a baby. I'm big now.*
Courtney	*I'm the vet. This is my animal hospital.*
David	*I'm the king. I make the rules.*

Analysis

The variety of identities is reflected from the utterances of children. Some identities are imaginative as reflected from utterance of John. Some are age-related or hierarchical as reflected from the utterance of Michelle. The statement of Courtney positioning herself within a structured role. The dialogue of David asserted authority in fantasy play.

The child has difficulty distinguishing between imaginative play and identity role-play. The confusion between self-presentation and role enactment makes it difficult for the child to establish a coherent identity within a social group. As Wanger (1998) suggests, identity development is a fundamental aspect of participating in a Communities of Practice, and this is particularly challenging for individuals on the autism spectrum who may struggle to align their actions with socially accepted role.

Ochs and Solomon (2010) further explained that identity is constructed through participation in communicative exchanges. In this case, the child's difficulty in role negotiation limits their ability to form a stable social identity.

Register

It is a variety of language associated with setting and communicative purpose (Biber & Conrad, 2009). It allows individuals to anticipate and adjust their language according to according to the expectations of audience. Wanger (1998) notes that CoP shares a repertoire of Practice which includes specific linguistic registers appropriate to various contexts. The child's failure to adjust their register when addressing an authority figure reflects a breakdown in the social norms that govern language use. The analysis showed that autistic individual often struggles with using appropriate registers, resulting in communication breakdowns as illustrated in table 2.

Table 2. Extracted Utterances of Autistic Individuals demonstrating Register usage

Autistic Individual	Extracted Utterances
Conor	*Get me juice!*
Barbara	*Give me that right now!*
Michelle	*You bad girl!*
David	*Move! You're in the way!*

Analysis

Many utterances revealed direct or inappropriate speech. The utterance of Conor and Barbara lacked politeness. Michelle used expressions, pointing another individual as bad girl, without regard for tone. Similarly, the utterance of David illustrated direct speech that may disrupt peer interactions. The analysis showed that autistic individual often struggles with using appropriate registers, resulting in communication breakdowns.

According to Sterponi and Shankey (2014), individuals with autism often have difficulty understanding the social functions of language, leading to inappropriate or rigid speech. In a Wanger's (1998) CoP, members share not only common knowledge but also common ways of speaking, adjusting language to fit the context.

Engagement

Engagement is a critical element in Wanger's (1998) CoP. It refers to the way individuals participate in communicative activities, co-constructing meaning with others. Autistic individuals face challenges in maintaining mutual engagement, which affects their ability to participate fully in social exchanges as reflected from utterances in table 3.

Table 3. Extracted Utterances of Autistic Individuals illustrating Engagement varieties

Autistic Individual	Extracted Utterances
Courtney	*Why did he cry?*
John	*Then what happened?*
David	*The fire's over there! Let's go!*
Michelle	*Now the dog is all better!*
Conor	*Truck go fast!*

Analysis

The extracted utterances illustrated variety in engagement. The question asked by Courtney and John respectively is the example of conversation investment. The statement of David and Michelle reflected narrative involvement. However, the utterance of Conor showed disengagement as there is abrupt shift in topic. It illustrated a lack of mutual engagement, where the child shifts the topic abruptly and fails to respond to the adult's questions.

Bottema- Beutel et al. (2021) highlighted that autistic individuals may struggle with maintaining engagement in conversations due to difficulties in sustaining attention r understanding social cues. Wanger (1998) argued that engagement is foundational to participation in a Communities of Practice and without it individuals cannot contribute to the shared enterprise.

Turn-taking

Turn-taking is understood as a rule-governed process by which participants in a conversation manage when and how each speaker takes their turn, ensuing smooth communication (Sacks et al., 1974). It reflects both the structure of talk and the social norms of interaction in various communities. It refers to active participation in the social practice of the community through mutual interaction, negotiation of meaning and shared activities (Wanger, 1998). It allows for orderly and cooperative communication. In analysis, frequent disruptions in turn-taking were observed, leading to conversational breakdown. The extracted utterances are given in table 4.

Table 4. Extracted Utterances of Autistic Individuals revealing Turn-taking challenges

Autistic Individual	Extracted Utterances
John	*I say it first!*
Barbara	*Wait, I was telling it!*
David	*No! Me say it first!*
Courtney	*Let me finish! I'm the vet, not you!*

Analysis

The utterance of John and David reflected that they are trying to dominate the conversation. Their interruptions show they have not yet developed the ability to wait for their turn or recognize that others are speaking. Someone interrupted Barbara while talking. It led to breakdown in communication.

Courtney insisted on controlling the narrative or share the story telling space. It showed limited grasp of cooperative communication. The child's interruption and lack of awareness of conversational flow illustrate difficulties in managing turn-taking. Kissine (2021) explained that autistic individuals may not intuitively grasp the rhythm of conversation, leading to disruptions in the flow of dialogue. It points to immature sociolinguistic skills in managing conversational flow.

The Development of The ISLT Model

The ISLT Model was developed to address the challenges identified in the themes above by adopting a grounded qualitative approach. The model was formulated based on observed sociolinguistic challenges commonly experienced by autistic individuals, particularly in four core domains: identity formation, register management, social engagement and turn-taking. These domains were repeatedly identified in both literature and practical observations as major barriers to communicative competence (Wenger, 1998; Paul et al., 2007). The phases included in the development of model were:

- The preliminary needs analysis, using qualitative tool including observation, was conducted. These observations were guided by the target situation needs framework (Hutchinson & Waters, 1987), focusing on sociolinguistic deficits.
- The model was embedded within Wenger's (1998) Coummunities of Practice theory.
- The model's component architecture was designed. Each component was derived from observed sociolinguistic challenges in autistic communication. This reflects a bottom-up architecture, aligning with principles of grounded theory (Charmaz, 2006). The visual representation of ISLT Model is presented below

Figure 1. ISLT Model

Through iterative thematic analysis of existing communicative patterns, key structural elements were identified and organized into four training modules, each addressing one sociolinguistics domain. Data from these analyses guided the selection of strategies such as role- play, scenario-based dialogues, visual scaffolding and guided turn-taking exercise. These were adapted to suit individualized needs

while maintaining a structured pedagogical sequence. The ISLT Model can be summarized in the form of table as

Table 3. ISLT Model: An Overview

Module	Target Area	Purpose	Strategies
Identity	Self-concept & Role Understanding	Build a coherent, socially functional identity	Role-play, identity dialogues, reflective expression.
Register	Contextual Language Variation	Teach appropriate language use across social settings	Scenario modeling, contrastive dialogues, role-reversal feedback.
Engagement	Sustained Interaction & Interest	Enhance active participation and shred communication	Visual maps, storytelling, collaborative play
Turn-taking	Conversational Timing & Reciprocity	Develop rhythm, patience and turn boundaries in dialogue	Visual cues, games and timed drills

The development process was conceptually framed with Wenger's (1998) CoP Theory, positioning the ISLT Model not as a mere set exercises nut as a scaffolded pathway toward social participation. Thus, the ISLT Model was developed as a structured yet adaptive framework, directly emerging from empirical data and theoretical synthesis.

Validity, Reliability and Applicability of the ISLT Model in Educational and Speech Therapy Settings

To empirically evaluate the ISLT Model's validity, reliability and applicability in educational and therapy settings, a structured Google Form was designed. Qualitative data was collected using this form. The responses were analyzed using Braun and Clarke's (2006) six-step thematic analysis.

Validity

Cohen et al. (2018) stated that validity refers to the extent to which a concept, conclusion or measurement is well-founded and accurately reflects the real- world phenomena it is intended to represent. The emergent themes after analyzing the responses of educators and therapists are represented below

Table 4. Responses of educators and therapists: Validity of the ISLT Model

Respondent	Emergent Theme	Response
Respondent 1	Theoretical Alignment	*The modules reflect real- life language gaps seen in autistic learners especially in register and self-reference.*
Respondent 5		*It connects well with the actual communication needs of children we see every day.*
Respondent 2	Contextual Appropriateness	*Yes, the activities are culturally and developmentally appropriate for our classroom and therapy settings.*

3006-6638

ACADEMIA International Journal for Social Sciences
Volume 4, Issue 2, 2025   ISSN-L (Online): 3006-6638

| Respondent 3 | Content Soundness | *What impressed me is the alignment with daily needs.* |
| Respondent 4 | | *Each module targets a specific but essential skill.* |

The responses of educators and therapists confirmed that the ISLT Model is conceptually valid.

Reliability

Bryman (2016) claimed that reliability concerns the consistency and stability of a research instrument or procedure, indicating whether it yields the same results under consistent conditions. The emergent themes after analyzing the responses of educators and therapists are represented below

Table 5. Responses of educators and therapists: Reliability of the ISLT Model

Respondent	Emergent Theme	Response
Respondent 1	Consistency in of Expert Perception	We would expect similar outcomes across different learners due to its structured format.
Respondent 3	Clarity of Framework	The tools standardize implementation and reduce confusion.
Respondent 2		Well-organized modules ensure uniform understanding and delivery.

Expert consensus suggests strong reliability. The ISLT Model's standardized structure and tool- set promote consistent use across settings and practitioners.

Applicability

Guba and Lincoln (1985) asserted that applicability refers to the extent to which research findings or interventions can be effectively applied in real-world settings beyond the immediate study context. The emergent themes after analyzing the responses of educators and therapists are represented below

Table 6. Responses of educators and therapists: Applicability of the ISLT Model

Respondent	Emergent Theme	Response
Respondent 2	Educational Integration	Fits smoothly into story time and morning circles. It also does not lead to disruption to curriculum.
Respondent 1		Children like to enjoy the group activities.
Respondent 5	Therapeutic Use	The modular design is adaptable to individual learning styles.
Respondent 4		Turn-taking and register can be tackled in therapy.

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The ISLT Model shows high adaptability in the terms of educational as well as speech therapy setting. Its adaptability and resource-light structure further enhance usability.

RESULTS AND DISCUSSIONS

Results

Based on the above qualitative data analysis, the results can be summarized easily. It is important to go through the findings to align them with the objectives, so that to see if the objectives of research are fulfilled.

Objective 1. To identify key sociolinguistic language challenges faced by autistic individuals in social communication.

The analysis demonstrated that autistic individuals face four main sociolinguistic challenges in social communication. First, they exhibit difficulties in constructing a stable social identity. Their confusion between imaginative play and role-play affects their ability to navigate social interactions effectively. Second, they showed frequent use of inappropriate registers that disrupt social norms. They failed to adjust their language to different interlocutors. Third, challenges were also observed in maintaining mutual engagement in conversations. These individuals exhibited disengagement. Last, the issue of turn-taking was prevalent. Many participants displayed difficulties with conversational timing.

Objective 2. To develop the ISLT Model as a structured and adaptive approach.

The ISLT Model was developed to target the four sociolinguistic challenges identified in analysis. The development was based on the principles proposed by Wenger (1998) in his CoP theory to establish social participation and communicative competence. Role-play, scenario- anchored dialogues, visual scaffolding, and guided turn-taking exercises as techniques involved in the approach.

Objective 3. To Evaluate the validity, reliability and applicability of the ISLT Model in educational and speech therapy settings.

First, it's important to note how validity was determined through feedback from educators and therapists, stating that the model addresses real-life communication needs and suits the social communication challenges experienced by autistic learners. Second, reliability was determined by consistent feedback that the model's architecture facilitated consistency in understanding by and delivery across different settings. Finally, the applicability of the ISLT Model was evaluated by analyzing the reports of educators and therapists that the model integrated well into existing educational and therapy settings without hindering the curriculum.

DISCUSSION

The study explored the sociolinguistic challenges faced by autistic individuals in social communications, and an ISLT Model was developed to address the challenges. After developing the model, validation, reliability and applicability of the model were evaluated within the educational and speech therapy contexts.

The findings found several definite challenges to social interaction that matched with earlier studies by Ochs and Solomon (2010), as well as Brinton et al. (1997). It mentioned the intervention demanded to work on the challenges through specific means, in accordance with the work of Sterponi and Shankey (2014) and Kissine (2021).

The ISLT Model was based on Wenger's (1998) CoP theory with respect to individualization and community participation. This agrees with the finding made by Rogers and Dawson (2010) with emphasis on individualized and participatory approaches for people with autism.

The feedback from teachers and therapists helped in evalauting the validity, reliabilty and applicability of the ISLT Model. It indicated that the model addressed the right challenges (Gresham et al., 2001). By consistently yielding similar results across different settings, as revealed from the feedbacks, the reliability of the ISLT model is supported by the findings of Wright et al. (2015). Applicability to that framework was established by the model's well-intrinsic incorporation in educational or therapy setting, while aligned with the findings of Laugeson et al. (2020).

CONCLUSION

This study revolves around the sociolinguistic problems confronting autistic individuals in social interaction peculiarities and the development of the ISLT Model to act as a structured intervention toward these sociolinguistic issues. The researcher has identified identity construction, disengagement, turn-taking problems, and inappropriate registers as some of the main social inclusion hurdles. The ISLT model is underpinned by Wenger's (1998) theory CoP which seeks to enable a meaningful form of social participation or linguistic competence. Alongside its theoretical basis placed on sociolinguistic theories, the ISLT model has also come to demonstrate its practical use in ameliorating communication needs in real situations. That it has been tested for reliability and applicability and relevant feedback given by educators and therapists indicated that it was useful in educational and speech therapy settings.

The results of this study highlight several implications for the future. In speech therapy, the ISLT Model can aid in bringing self-driven and context-sensitive interventions for fostering social communication skills among autistic children, depending on their own discourse preference. When applied in education, the ISLT Model may bolster the development of school programs aimed at inclusive practices by helping autistic learners with social communication and social participation in classrooms. With exposure to sociolinguistic principles, teachers can join hands with a speech therapist in cross-disciplinary practice to enhance the linguistic-social development of autistic learners in a more inclusive adaptive context.

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