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Identification of Communication Abilities among Learners Living with Autism for Adaptive Skills Acquirement in Kenya: Analysis of Discrete Learning Method

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Abstracts
Reduced hiccups in expressive and receptive language in verbal and nonverbal communication may serve as foundation for smooth integration in society among autistic learners. However, inadequacies may undermine social integration efforts, causing a feeling of rejection. Developing adaptive skills may be predicated on accurately established communicative capacities in discrete learning method. The study examined impact of communication skills identification on acquisition of adaptive skills in discrete learning approach among autistic learners. Constructivism and weak central of coherence theories guided the study. Theories advanced that autistic learners overcome deficits in conceptualization by exposure to practical learning which creates stimulative experiences for adaptive skills acquirement. Mixed-methods research design that utilizes qualitative and quantitative data analysis examined the impact of communication abilities identification on adaptable skills in learners with autism. The study participants included 30 parents sampled conveniently, 151 autistic learners and 73 teachers purposively sampled. Data was obtained using achievement tests, questionnaires, observation guides and FDGs and analyzed utilizing inferential and descriptive statistics. Quantitatively, Linear regression determined relationship between identification of communicative abilities and adaptive skill development that exhibited a statistically significant positive link (Beta =.932, p <.001). Qualitatively, respondents ascertained an increase in attainment of adaptive skills following rightful communication abilities identification. In conclusion, identification of communication skills escalated adaptive capacities attainment among autistic learners. Recommendations; A collaborative and apprenticeship culture of skill identification, integration of comprehensive identification processes into general educational programs for uniformity across schools. Further research on communication skill identification influence on critical thinking and decision-making among autistic learners.
Key Words: *Adaptive Skills; Autistic Learners; Communication Abilities; Discrete Learning.*

1. Introduction

The discrete learning method might be utilized to foster acquisition of abilities to communicate among autistic learners for enhanced adaptable skills. This technique, which unravels verbal and nonverbal skills such as expressive and receptive languages, may assist autistic learners build communication abilities and enhance beneficial social relationships. However, deficiencies in discrete learning may limit the unpacking of communicative capacities, reducing acquisition of adaptive skills for adaption. Sigafoos, Carnett, O'Reilly, and Lancioni (2019) stated that discrete learning approach could help in deconstruction of communication abilities through verbal and nonverbal skills, such as expressive and receptive languages, facilitating positive social interaction. This might be feasible, though, if the communication skills are correctly recognized as critical to the improved use of the discrete learning approach. Inadequate identification of communication skills can compromise instructional procedures, materials, and resources, affecting the effectiveness of discrete learning, leading to incompetence in adaptive skills (Mwita and Onyango, 2022). As noted by Booth and Keenan (2018) discrete learning method, which breaks down knowledge into regular steps, may aid learners with autism in developing self-reliance communicative skills. Furthermore, breaking down abilities into digestible chunks that are taught repeatedly in discrete learning are likely to assist learners with autism acquire communication skills for independence in school and social settings.

Constructive existence depends on the learning of communication skills that supports interchange of ideas with people to promote adaptation of autistic learners in society. On the same line Raisingchildren.net.au (2021) postulated that communication facilitates expression of thoughts and concepts, either orally or via utilization of gestures, in a specific setting for effective participation in learning and socializing. Based on Kamilla (2021) assertion, limited self-expression impacts autonomous functioning at school and home, resulting in learner's extensive dependency. In such instances, autistic learners may exhibit difficulties in both responsive and expressive speech, which could result in a dormant life impacting learning and functionality. Nevertheless, Tanner and Dounavi (2021) asserted that issues with language acquisition can be identified at eighteen months of development, potentially accelerating establishment of an effective intervention approach. Similarly, Raisingchildren.net.au (2021) stated that by age of two, the vocabulary of children has grown significantly, allowing utilization of an extensive selection of words that demonstrate comprehension of conversational rules.

In instances when autistic learner fails to acquire language owing to autism, achievement in communication skills suffers, causing shortfalls in social interactions. In accordance to the DSM-5-TR (American Psychiatric Association [APA], 2022), autism is characterized by communication impairments demonstrated by a child's infrequent use of speech in social contexts, seldom reacting when addressed, occasional application or recognition of actions such as pointing or waving, or hardly communicating at all. A noticeable delay in learning of communication skills indicates presence or start of a condition, such as autism, which may impede attainment of adaptable abilities. With regard to criteria pointed out in Raisingchildren.net.au (2021) and APA (2022) position on vocabulary in children by the second year, any detour in actions may insinuate issues with communication, necessitating the need for a suitable therapy for supporting attainment of adaptability abilities while minimizing issues linked with disorders.

Identification of communication abilities among autistic learners may be based on some indicators such as self-naming, item identification, response to greetings, and gesture communication as noted by Gatuura, Odundo, Ganira, and Kazungu (2023a). Self-naming implies personal identification in reference to physical parts and their functions, as well as one's worth and regard for resilience, which may not be the case with autistic individuals, as postulated by Gatuura et al., (2023a). Earlier study by Thomas, Wang, Guthrie, Cola, McCleery, Pandey et al., (2019) contended that learners on the autistic spectrum may face delays in self-naming, which could be connected to socio-communicative problems as a result of the spectrum, impacting their social integration. Item identification facilitates the recognition of words, pictures, and objects, hence assisting in the acquisition and adaptation of language. Dehaqani, Zarei, Vahabie, and Esteky (2016) explained that problems with sensory processing and perceptual integration are the main reasons why learners with autism often have difficulty with item recognition. But adopting the right intervention strategies may help autistic learners' sensory processing and item recognition for supported living.

Furthermore, Autism Center for Excellence (2021) highlighted that, learners with autism may find it difficult to play and form deep bonds with peers. According to Hickey et al., (2022) inadequacies in playing and bonding with peers may be connected to deficiencies in social interaction which is rooted in challenges in response to greetings. In light of this, it is difficult for autistic learners to maintain friendships and conversations. As a result, Hood, (2015) had earlier noted that intervention programs that would improve greeting response skills are required to increase possibility that such learners will connect and socialize with peers and lead happy lives. More so, Kistner, Dipper and Marshall (2019) posited that gesture communication aids in transmission of information that would be meaningful when used in conjunction with speech. This means that gesture communication could help learners, express ideas in a deeper way. Stephanie, Şeyda, and Lauren (2019) hypothesized that autistic learners struggled with gesture-speech pairings, relying on gestures to supplement words. However, it is not well developed. Conversely, Ye, Liu, Lv, Cheng, Zhu, Xu, Zou and Deng (2021) found that autistic learners may get isolated from peers as a result of poor gestural communication in social situations and communication. Based on this background, the study sought to examine effect of communication identification on achievement of adaptive skills among autistic learners.

Communication forms the basis of learning and interaction in human life for integration in social life. This is supported by expression and exchange of concepts within a social set up for mutual benefit of the subjects. This calls for a common understanding of both expressive and receptive language during conversation. However, learners living with autism exhibit heterogeneity in communication inadequacies ranging from incompetence in using language to convey ideas, substandard articulation, broad vocabulary that support extensive discussion on specific issues, comprehension of words pattern and sentences, apprehension of body language and acceptation of diverse tone resonance. Identifying such communication deficiencies could help in intervention techniques development that lessen the impact of autism on conceptualization of ideas for efficient communication. The identification of oneself, items, response to greetings,

and gestural communication may be utilized in establishment of communication deficits since they provide insight into the language and conceptual understanding of autistic learners. This would serve as a roadmap for use in discrete learning to help autistic learners develop adaptive capacities for long-term engagement. The study therefore sought to determine effect of communication skills identification on attainment of adaptive skills among learners living with autism in Tharaka Nithi County.

Effective identification of communication abilities is based on indicators like naming oneself, item identification, response to greetings and gestural communication. Proficiency in communication skills would enhance the ability of individuals with autism to convey ideas in many circumstances for integrated functioning. In reference to Kiessling and Fabry (2021) proposal, using both verbal and nonverbal abilities for better life is part of having well developed communication skills. More still, Kiessling and Fabry (2021) noted that time-bound processes and activities, in addition to being influenced by actions taken either internally or externally, constitute the foundation of effective communication. In accordance with Guffey, Loewry, and Griffin (2019), idea formulation, coding, channel identification, decoding, and reaction are all steps in the communication process that can be completed for successful communication in an integrative society. As a result, an individual's environment fosters the development of ideas that are communicated verbally or nonverbally, improving social cohesion. According to a previous study on the subject, Diloyan (2017) found that communication improves socializing, learning, and classroom management. In an integrated education facility, discrete learning would help autistic learners acquire the verbal and nonverbal communication skills needed for interaction with peers.

In reference to Hashem et al., (2020), autism interferes with normal brain functions, which impacts natural development of effective communication and other adaptive skills. Similarly, Chan, Williams, May, Wan and Brignell (2023) stated that learners with autism generally have limitations in receptive and expressive languages, which hinders the development of adaptive abilities. Tanner and Dounavi (2021) argued that hitches in language acquisition in toddlers begin as early as 18 months of age, potentially jeopardizing the learning of social and communicative skills. However, early detection of autism necessitates implementation of appropriate intervention methods, which may aid in acquisition of adaptive abilities. According to Raisingchildren.net.au (2021), children's vocabulary often increases at the age of two years, which promotes expression of ideas, needs and desires for positive living. Children that show delays language acquisition may not have adequate communication skills, which could hinder development of adaptive abilities.

Commensurable to pronouncement made by Ibrahimagić, Patković and Herwig (2022) learners with autism exhibit significant language and communication difficulties, like odd socio-emotional responses and subpar verbal and nonverbal communication. Such delays often cause learners with autism to lag behind in communication domains such as self-naming, item identification, greeting response, and gesture use, which negatively affects progress in developing adaptive abilities. The pronouncements are consistent with VABs' identification recommendations (Sparrow, Cicchetti, and Saulnier, 2016), particularly for receptive, expressive, and written language. Furthermore, the DSM-5-TR (APA, 2022) proposed that sporadic speech in social circumstances, a lack of reaction to cues, and occasional use of gestures all indicate incapacity in social communication. Autism may be effectively established based on identification manual standards, allowing for adoption of intervention to promote adaptive skill acquisition. In support of this viewpoint, Zwaigenbaum, Bauman, MChoueiri, Fein, Kasari, Pierce, et al., (2015) argued that early detection of autism necessitates effective use of instructional strategies to help acquisition of adaptive skills for survival.

In addition, if the learner experiences difficulties communicating by the age of three, it's possible that they are developing autism, making it difficult for peaceful coexistence in society. In line with Beard (2018), learners with autism who are proficient communicators have higher self-esteem and confidence, which facilitates interaction for the development of social skills and friendships that lead to positive engagement in society. In a similar vein, Ganira and Odundo (2023) proposed that developing communication skills successfully may boost self-assurance and encourage engagement in social activities. Communication problems affect how people express emotions and communicate with others, which makes it more difficult to learn adaptive skills and succeed academically. Inadequacy in adaptation skills can lead to insecurity and persistent depressive, anxious, angry, ashamed, or guilty sentiments, all of which affect a person's ability to integrate into society.

Based on Sigafoos et al., (2019) assertion, when learners with autism are taught both verbal and nonverbal language through effectively implemented discrete learning, the identified communication abilities may be enhanced for

acquirement of adaptive skills for good living. In line with Odundo and Ganira (2022), teachers and parents should ensure suitable identification of communication skills among learners with autism as early as possible to provide a seamless integrated living environment which permit untroubled transition from home to school. Nonetheless, acquisition of adaptive skills necessary for survival may be hampered by inadequate skill identification. Indicators such as self-naming, item recognition, greeting response, and gesture communication may steer the identification of communication abilities among learners living with autism. Therefore the study sought to examine effect of communication skills identification among learners living with autism in early years in Tharaka Nithi County, Meru and Embu Counties.

The study was guided by Piaget's (1896–1980) Constructivism theory and Frith's (1989) Weak Central Coherence theory (WCC) of autism. Weak central coherence (WCC) is a type of thinking that forces one to focus on minute details at the expense of understanding the larger picture or the context of the event. This shows that WCC inhibits learners' natural ability acquisition since it makes them focus on details rather than the big picture. This could be due to some elements of WCC, such as rigidity, which affects flexibility in learning and tends to hinder spontaneous formation and mastery of vocabularies for increased communication abilities. Visual processing deficiency is another element of WCC that disrupt eye-brain coordination, causing imperfect understanding of items in totality. This suggests that the autistic learner perceives the object but fails to grasp its characteristics such as appearance, type, and use, which limits item identification for functionality. However, WCC advances that despite learners living with autism exhibiting deficits that diminish functionality equivalently have capabilities that, when fostered by excellent instruction tactics, lead to enormously significant modifications. This insinuate that WCC is merely a thinking bias rather than a deficit that may be altered when appropriate interventions are used to improve a global understanding of situations (Happé, 2021). For instance, adoption of resources like social stories, time schedules and timers that teaches various aspects of communication skills like vocabularies, transitioning in the activities and time all which support attainment of adaptive skills for self-reliance. The theory was considered appropriate for the study because it includes intervention strategies such as sensory integration, social stories, visual supports, and speech and language therapy, which, when used appropriately, can overcome cognitive style and enable perception of situations from a global perspective.

Constructivism theory articulates that for successful learning, learners ought to be engaged actively and whatever knowledge obtained are turned into ideas and concepts. By supporting provision of stimulating experiences that help people form mental representations and permeate the assimilation of new information, constructivism theory desists the passive role of learners in learning. According to constructivism theory, learning is facilitated by the instructor, and the environment is at the center of knowledge formation. The theory is beneficial in education because of a few factors, such as knowledge creation, contextual learning, active learning, and learning in mind. To elaborate this further, Knowledge construction permit autistic learners to build understanding of ideas or situations through exploration and experimentation which creates experiences for enhanced skill attainment (Miller, Manderfeld and Harsma (2019). Active learning entails engagement in the process through hands on activities to enhance discovery of knowledge while the teacher guides what the learner does (Shah, 2019). Thus, learning happens as a result of experiences and interactions between the learner and the environment in order to develop knowledge.

In addition, contextual learning or rather scaffolding advances that teachers or peers forms a conducive and stimulative environment that support learning through modelling, adapting materials and activities that improve attainment of adaptive skill for adaptability (Kurt, 2020). Also learning in mind means that the learnt experiences through assimilation are modified through accommodation creates knew knowledge in existing schema for acquirement of adaptive skills for adaptability, (Gatuura, Odundo and Ganira, 2023b). Constructivism theory was chosen for the study because it promotes autistic learner's participation in the learning process while teachers act as facilitators. This suggests that offering a stimulating environment encourages learners to actively engage in their education by manipulating course contents, which creates a lasting memory and speeds up the acquisition of adaptive abilities. A stimulating teaching strategy promotes critical thinking, problem-solving, and information creation through experimentation or inquiry-based learning in a well-designed environment.

Constructivism and Weak Central Coherence theory were important to this study because the stimulating learning environment offers fresh experiences that enhance visual processing and alter biased cognitive thought patterns. WCC has a detrimental effect on visual processing and attention, which limits situational understanding. On the other hand, the right application of engaging teaching techniques and alluring resources stimulates creativity and problem-solving abilities, which enable construction of new knowledge for improved acquisition of adaptive skills.

The conceptual framework in Figure 1 unveils the interconnection between communication identification and attainment of adaptive skills.

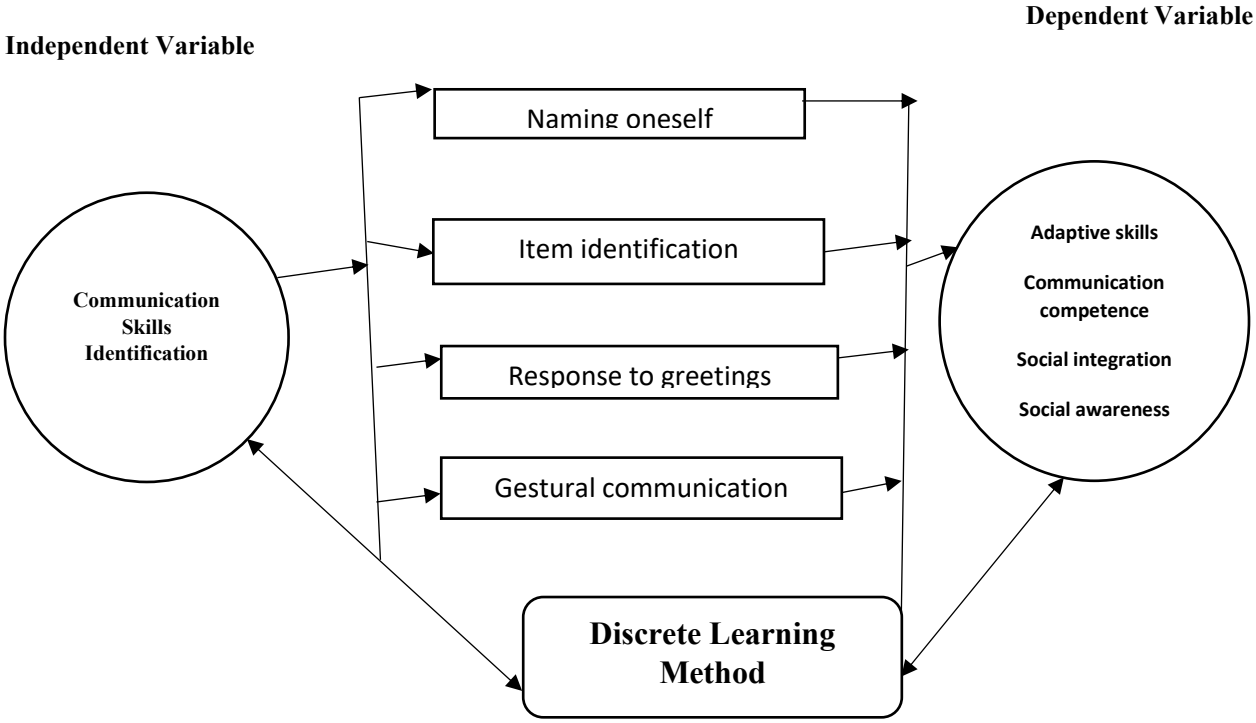

Figure 1. Perceived framework of communication skills and achievement in adaptive skills

The study visualized the association between communication skills identification and achievement in adaptive skills. Adaptive skills are attained when learner identifies oneself, recognizes items, responds to greetings and utilizes gesture in communication influenced by discrete learning method.

2. Research Methods

Constructivism and pragmatism schools of thought guided the adoption of research design, methods and approaches that enhanced data collection, analysis, and presentation for well-informed conclusions on the subject under study. According to constructivism school of thought, individuals actively generate knowledge through interactions with the outside world, personal experiences, and the social environments in which they exist (Yilmaz, 2008). Conversely, pragmatic thinking concentrates on using knowledge in practical contexts and seeks to generate information that improves human welfare by resolving practical problems. In accordance with schools of thought, the study used a mixed methods research design, with a non-equivalent control group in particular, to produce quantitative and qualitative data that would improve the identification of communication skills for the acquisition of adaptive skills. The achievement tests for learners with autism, including the pre- and post-tests, and the teacher questionnaire were utilized in quantitative data. The qualitative data adopted observation, questionnaire and FGD to investigate participant's perception and experiences in the intervention, as well its effect on learning outcomes and discrete teaching techniques. The target population included all special schools and units, autistic learners, their teachers and parents in Meru, Embu, and Tharaka Nithi counties. Given that the study primarily addressed autistic learners, special schools and units were the most appropriate settings for analyzing study dynamics. Purposive sampling was adopted to obtain 8 special schools, 65 units, 73 teachers and 151 autistic learners while convenient sampling for 30 parents.

Prior to actual data gathering, data collection tools were designed, constructed, tested, and validated. The pilot study was carried out in September 2022, and the required modifications were applied. The tools comprised classroom observation, a questionnaire for teachers of autistic learners, a focus group discussion for parents, and achievement tests (pre and posttests) for autistic learners. The qualitative analysis adopted textual analysis in a thematic approach, ensuring a substantial examination of study's themes and insights. For quantitative analysis the results were

summarized using descriptive statistics such as mean, standard deviation, frequency, and percentages and inferential statistical approaches, including t-test to assess the significance of differences between pretest and posttest results, regression analysis to determine the impact of communication skill identification on the development of adaptive skills. For thorough data analysis, statistical software package for social sciences (SPSS) version 26.0 was used. Research ethical considerations were observed by seeking consent from participants prior the study. Research permit for data collection was obtained from National Commission for Science, Technology and Innovations (NACOSTI) besides introduction letter from the University of Nairobi.

3. Analysis result and Discussion

Findings revealed that communication skills identification increased achievement in adaptive skills among autistic learners. This was ascertained by teacher's responses in questionnaire, autistic learner's performance in achievement test and parent's assertions in FGD as illustrated under indicators naming oneself, item identification, response to greetings and gestural communication. Four categories were created from the autistic learners' pool: low achievers, denoted by categories with 0 and 1–5 points, and high achievers, denoted by categories with 6–10 and 11 points. A five-point Likert scale, with the options being strongly agree (5), agree (4), neutral (3), disagree (2), and strongly disagree (1), was used in the teachers' questionnaire. The findings are illustrated as follows:

Naming oneself, the findings showed that of 73 teachers 8 (11.0%) strongly disagreed, while 17 (23.2%) disagreed on ability of autistic learners to name themselves. Learners' achievement test echoed the finding when 5 (23.8%) of low achievers in 1-5 points category exhibited incapability in the skill which may be linked to the improper use of discrete learning, leading to social isolation and restricted social interaction skills. The study supports Thomas et al., (2019) claim that learners with autism may experience delays in self-naming, which may be linked to socio-communicative issues hindering social integration. Similarly, the findings correspond to Gatuura et al., (2023a) assertion that inadequate self-naming leads to insufficient self-identification, resulting in inefficiency in expressive and receptive language. The teacher confirmed that:

> *Different autistic learners in my class have different communication styles. For instance, two learners are able to engage in learning activities because they have reasonably acquired both expressive and receptive language; the other two learners have neither. Because communication skills vary widely, meeting the needs and interests of individual learners becomes necessary in order to meet the collective demands of learners.*

The teacher's perception rhymes with Chan et al., (2023) suggestion that language difficulties may hinder the development of adaptive skills for constructive interaction in learners with autism. To complement the results, classroom observation showed that learners with autism-related learning disabilities struggled to recognize their identities and physical functions, impacting their functionality in various situations. However, effective discrete learning enhances learning potential, self-expression, and self-identification, promoting healthy social integration. On the other hand, majority of teachers 39 (53.4%) agreed while 7 (9.6 %) strongly agreed that autistic learners had acquired self-reliance skills, leading to higher achievement rates; 18 (57.1 %) and 7(100%) by higher achievers indicating self-reliance in school participation. Nevertheless, 2(6.0%) of teachers remained neutral on autistic pupils' self-identification. The study emphasized the importance of self-identification in enhancing adaptive skills, especially among learners with autism, and how effective discrete learning can facilitate this process. Therefore, identification of inability in self-naming would enhance successful implementation of discrete learning for adaptive skills attainment.

Item Identification. As stated by Mahmood, Mian, and Toneatto (2022), item identification helps with word, picture, and object recognition, which increases language acquisition and adaptation. Still, for learners with autism, a lack of proficiency in object recognition can diminish functionality. The results showed that, out of 73 teachers, 23 (31.5%) disagreed and 6 (8.2%) significantly disagreed with the ability to identify items. The results of the achievement test showed that the incompetence of both high achievers, 13 (39.4%) in the 6–10-point group and low achievers, 5 (23.8%) in the 1–5 point category, may have reduced flexibility in both the home and classroom. In corroboration with the findings, Dehaqani, Zarei, Vahabie, and Esteky (2016) affirmed that difficulties with sensory processing and perceptual integration may contribute to difficulties with item recognition in learners with autism. However, effective implementation of discrete learning enhances item identification for self-reliance. This was authenticated by Happé (2021) postulation that the problem with object processing is not deficit but rather a cognitive style that may be changed with the right kind of help. For instance, use of real-life materials and physical objects in discrete learning implementation was discovered to have significantly improved item identification abilities and functionality across different contexts as expressed by one of the parents:

> *In addition to learning survival adaptation skills, my child can distinguish between a cup and a glass and a spoon and fork. Increased functioning was made possible by tight coordination with the teacher and rigorous adherence to guidelines on how to assist learning activities at home. My child's intervention was aided much by the teacher's recommendations. He can therefore get along with his siblings and obey a few basic directions.*

This implied that improved functioning among autistic learners may be associated with increased learning capacity, which was enhanced by frequent repetition of instructions. Booth and Keenan (2018) provided evidence in support of the findings by asserting that presenting skills in simple steps repeatedly increases the likelihood of acquisition and mastery of adaptive survival abilities. However, 30 (41.6%) and 10 (13.7%) of the teachers agreed or strongly agreed that increasing social adaptability for autistic learners would require them to improve item identification skills. The view is supported by high achievers 5(15.2%) in the 6–10 group and 8(88.89%) in the 11-point category who identified objects like books, cups, and shoes in a classroom setting. Nonetheless, a small percentage of teachers 4(5.5%) affirmed non-agreement or disagreement with item identification among learners with autism. Based on the findings, it is evidence that the identification of communication skills in conjunction with successful discrete learning broadens the window of opportunity for acquiring survival-related adaptive skills. The study makes the assumption that by successfully implementing the discrete learning method, shortcomings in item identification may be overcome.

Response to greetings; the findings revealed that of the 73 teachers, 5 (6.9%) strongly disagreed and 24 (32.9%) disagreed. The achievement test showed that 5 (50%) of low achievers in the 0-point group demonstrated the inability while 5 (23.8%) in the 1–5 point category had trouble responding to greetings, which might have affected their ability to connect with peers. These results raise the possibility that incompetence in skill acquisition may have had an adverse effect on peer interactions and communication, which could have detrimental effects on both the school and the community. In agreement with findings, Autism Center for Excellence (2021) argued that learners with autism may struggle with play and peer relationships, hindering their academic progress and adaptive skills development as postulated by the teacher:

> *Isolation and repetitive behavior, which may arise from a child's incapacity to play or make friends with other kids in order to interact and socialize, are the core traits of autism spectrum disease. As a result, most autistic learners have trouble saying hello and responding to others. Less integration and decreased effectiveness in the classroom are two long-term effects of social deficiencies in autistic learners.*

In response to findings, Hood (2015). Hypothesized that because autism learners struggle to form and maintain friendships and conversations, intervention programs that improve response to greetings are essential to increasing the likelihood that a happy life will be had by autistic learners. Therefore, an individualized approach that permits one-on-one engagement may be effective in teaching response to greetings skills in learners with autism for increased participation in social events leading to a sense of belonging.

Similarly, Booth and Keenan (2018) found that learners with autism develop adaptive skills like greeting and self-reliance through repetitive visual stimuli in discrete learning methods. In a similar vein, results showed that 41 (56.2%) of teachers agreed and 1 (1.4%) strongly agreed on regular response to greetings. Achievement test showed that skills in response to greetings were consistent with the teachers' perceptions where 8 (88.9%) in the group of 11 points and above and 1(3.0%) in the 6–10 category showed such abilities. This was corroborated by observations made in the classroom, where learners with autism shook hands, smiled back, and in some cases found it difficult to speak in response to greetings, showing development of social integration skills, albeit at a slower pace. However, only 2 (2.7%) teachers had no opinion about how well their learners responded to greetings. Therefore, high scores and teachers' agreement correlation, suggested that the identification of communication skills in discrete learning accelerated the acquisition of regularity in greeting responses for greater social adaptability.

Gestural Communication: the results revealed that out of 73 teachers 12(16.4%) disagreed, and 11(15.1%) strongly disagreed. Achievement test results similarly showed that low achievers 8(80%) in the category 0 points and high achievers 5(23.8%) in the group 6-10 points exhibited difficulty with gesture use, which most likely inhibited the expression of unspoken ideas and thoughts which might have affected the acquisition of adaptive skills for self-expression in social contexts. The results mirrored those of Ye, Liu, Lv, et al., (2021), who reported that the lack of gesture use in autistic learners may impede social engagement and communication resulting in segregation from peers as disclosed by one parent:

> *From his early years, my son has never used gestures to communicate. All this time, he's been by himself, attending to personal affairs. He can't even hint that he wants food or water, so we have to be mindful of when to cater to his needs. Because of this, he has really fallen behind, and siblings who were born later have outperformed him. I feel bad for him most of the time, but since I took him to school, he has improved*.

In line with the results, Gatuura et al., (2023a) observed that proper identification of autistic competencies facilitates the adoption of successful intervention techniques that may aid in the development of adaptive abilities, such as gesture usage. Merely 4 (5.1%) teachers expressed neither agreement nor disagreement with the use of gestures by learners with autism. Conversely, 17 teachers (23.3%) strongly agreed while 29(39.7%) agreed that gestures are a useful tool for communicating and demonstrating the acquisition of adaptive skills necessary for meaningful socialization. Teachers' opinions coincided with high achievers 21(63.6%) in the group with 6-10 points and 6(66.7%) 11 points who exhibited skills in use of gestures showing discrete learning technique enhanced use of gestures for sustained engagement. Subsequent investigation showed that the use of visual cues and social stories in discrete learning may facilitate the development of expressive gestures for social integration as expressed by teacher:

> *initially, autistic learners struggle with gestural communication, but effective instructional resources like social stories and visual stimuli improve coherence and adaptive abilities, demonstrating that the ASD effect is outweighed by efficient use*.

The assertion by Mwita and Onyango (2022) supported the notion that effective learning and skill development for societal integration can be achieved through the proper use of instructional resources. Based on findings and teacher perceptions, utilization of instructional resources like social stories, visual schedules, charts, and modeling, accelerated the acquisition of adaptive skills like gestural communication supporting positive societal living.

Accurate communication skill identification can enhance adaptive skill attainment for adaptability. In spite of that Paula (2023) suggested that inappropriate discrete learning implementation can negatively impact skill transfer and social maladjustment, while cooperative implementation with parents and teachers can improve communication for interaction and integration.

Relationship between communication skill identification and achievement in adaptable abilities was analyzed using linear regression. The analysis revealed a statistical significance between the variables as indicated in Table 1.

Table 1: Linear Regression Analysis of Variable: Identification of communication Skills as Discrete Learning Methods and Achievement in Adaptive Skills

Coefficients	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.618	.416		1.485	.142
Communication skills	1.509	.190	.932	7.932	.000

As evidenced by the analysis significant and positive standardized coefficient (Beta =.932, p <.001), communication skills identification enhanced achievement in adaptive skills. This demonstrates that when autistic learners become more proficient communicators—a skill that is based on accurately identifying communication abilities—their comprehension of adaptive skills tends to improve.

4. Conclusion

The study examined impact of communication abilities identification on achievement in adaptive skills among autistic learners; Analysis of discrete learning method. The findings revealed that acquisition of adaptive abilities was positively impacted by the identification of communicative skills. The degree of communication skills was determined by indicators such as identifying oneself, item identification, responding to greetings, and using gestures. Following communication skills identification, qualitative and quantitative analysis revealed an increase in adaptive skills. Notably, functional adaption skills improved when precise communicative ability identification was paired with efficient discrete learning.

5. Recommendations

a. The study recommends the implementation of frequent professional development workshops that are tailored to the most recent identifying techniques for working with learners who have autism.
b. The study suggests that in order to facilitate the sharing of effective identification strategies, the ministry of education should encourage a culture of collaboration and apprenticeship among educators.
c. To ensure uniform methods throughout schools, the study suggests incorporating comprehensive identification processes into more general educational programs.
d. The report suggests that the government, through the Ministry of Education, set aside funds for continuous training programs that would increase understanding of standard identification techniques for trustworthy autism diagnosis throughout autistic spectrums.
e. The study recommends for further research on impact of communication skill identification on critical thinking and decision making among autistic learners.

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