

Multi-Approach Intervention in Enhancing Adaptive Behavior of ASD: A within-subject Experimental Design

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complex difficulties that majority of children diagnosed with ASD are experiencing. Thus, a single approach may address some of their needs but will not meet all their deficits.

chosen must be simple and can cause a pleasant reaction in the child, so that the therapist can use them flexibly and adjust them to the child's clinical and developmental needs at any given time. The therapist can respond to the child's voice, screams, and movements, which have rhythm and volume and can be organized musically [12,25,40].

Thus, considering these suggestions, this study made use of music to initiate interaction, facilitate learning and means to build a warm relationship with research participants as well as to identify skillful inclinations that may fall within the intervention parameters using tools they are already attached to.

Play intervention approach

Lack of creative imagination among children diagnosed with ASD results in the absence of or reduced social interest. Hence, social skills set the greatest challenges to educate children diagnosed with ASD as these require them to participate and collaborate with others. These difficulties clearly influence

extended applicability at home and school environments with minimal skill requirements [55-57].

Optimal effectiveness in dealing with ASD as basis for inclusion criteria

Over the years, a number of studies and reviews were conducted to design the best intervention for individuals diagnosed with ASD. These studies indicated that early intervention gives better prognosis for children diagnosed with ASD. One of the earliest reviews of early behavioral intervention for autism was conducted by Green [58] based on the studies of Birnbrauer and Leach [59], Lovaas [60], McEachin, et al. [61] and Perry, et al. [62] about early intervention, may it be home-based, school or center-based, revealing that the best outcomes were evident for those children who started treatment at age two or three

skills necessary to meet the typical demands of daily living [80]. Studies have disclosed that the overall level of functioning of both children and adults diagnosed with ASD are relatively marked with

Considering the pervasive nature of ASD and the assumption that a single approach will only address some, but not all symptoms of ASD, the researcher combines three proven effective techniques to intensify and to dispersedly address the varied symptoms of autism.

Conceptual framework

Considering Mahler's psychological stages of development, the current study's multi-approach intervention program is premise on the concept that participants perceive themselves and the researcher as separate individuals. To facilitate relationship or period of symbiosis, the researcher made herself as a model of behavior using relational-connectedness approach to facilitate connection [38] with different

Definition of terms

The following operationally defined terms were used to help facilitate the reader's understanding of this study.

Adaptive behavior refers to the research participant's ability in areas of communication, daily living skills, socialization, and motor skills as

	1. Understanding of letters and words as manifested by:	1. High technology Augmentative Alternative Communication
	a. Distinguishing letters from numbers.	Play
	b. Recognizing the writing and reading pattern such as left to right or top to bottom.	(see Appendix G-K)
	c. Identifying at least 10 letters of the alphabet.	
	d. Identifying upper and lower case.	
	The Multi-Approach aims to enhance the following behavior:	
Daily Living Skills	1. Understanding the use and function of basic utensils such as fork, spoon, glass, straw and plate.	Creative Play
	2. Performing basic routines such as removing shoes and packing of toys before leaving the therapy room.	No Technology Augmentative Alternative Communication
Community	3. Understanding the function of the telephone.	Creative Play
Socialization		
	The Multi-Approach aims to enhance the following behavior:	
Interpersonal Relationship	1. (Ability to look/Looking) at the eyes of the researcher for 5 seconds.	Play and Music
	2. (Ability to initiate/Initiating) social contact.	
	3. (Ability to show/Showing) interest in person than in object.	
	The Multi-Approach aims to enhance the following behavior:	
Play and Leisure	1. (Ability to respond/Responding) to researcher's playful non-verbal facial expressions.	Play and Music
	2. Interest in the environment.	
	3. (Ability to play/Playing) simple interaction games with others.	
	The Multi-Approach aims to enhance the following behavior:	
Coping Skills	1. Ability to adapt changes in routines, toys and activities.	Play and Music
	The Multi- Approach aims to enhance the following behavior:	
Gross	1. Throws ball in specific direction following a simple instruction.	Small /Big group play
	The Multi- Approach aims to enhance the following behavior:	
Fine	1. Transfer object from one hand to another.	Play and Music
	2. Pick up toys in not more than 2 inches dimension using thumb or fingers.	
	3. Demonstrate ability to hand toys to other person when asked.	

accept her, what she will do to deal with tantrums, what approaches to use to get the participants' attention and the parents' reaction to the

T is permitted the researcher to introduce another target behavior in addition to the acquired behaviors. The same presentation- acquiring process was continuous and repeatedly done until the desired adaptive behavior was attained.

T is is the period of behavioral change were the participants

improvement. With the 90 percent confidence interval, Participant 1's VABS-II Adaptive Composite score of 64 was categorized as mild deficit. This could mean that Participant 1's adaptive functioning is higher than 1% of similarly aged children in the norm sample. The

need for extended assistance before the child can learn to understand words to be able to form, use and express it as means of communication.

Using VABS-II Expanded Form using 90 confidence, Participant 3s

	Socialization	72	Moderately Low	89	Adequate
	Motor	83	Moderately Low	100	Adequate
	Maladaptive Behavior Index	19	Elevated	15	Adequate
	Adaptive Behavior Composite	66	Mild Deficit	86	Adequate
2	Communication	23	Profound Deficit	42	Moderate Deficit
	Daily Living	73	Moderately Low	79	Moderately Low
	Socialization	58	Mild Deficit	82	Moderately Low
	Motor	76	Moderately Low	91	Adequate
	Maladaptive Behavior Index	18	Elevated	7	Average
	Adaptive Behavior Composite	55	Mild Deficit	71	Moderately Average
3	Communication	35	Severe Deficit	79	Moderately Low
	Daily Living	74	Moderately Low	79	Moderately Low
	Socialization	60	Mild Deficit	88	Adequate
	Motor Skills	76	Moderately Low	100	Adequate
	Maladaptive Behavior Index	10	Average	6	Average
	Adaptive Behavior Composite	58	Mild Deficit	84	Moderately Low

Adequate: reasonable limitations;

Moderate deficit: an perform but needs extended period of time;

Profound deficit: dependent on others/ very limited;

Average: no more maladaptive behaviors.

Community	11	12.33	1.33	1.51	0.27	
Composite score	standard	70.67	81.67	11	1.1	0.18
Socialization						
Interpersonal Relationship	6.67	11.33	4.67	14.00*	0.00	

all approach' thus, the researcher combined three proven effective techniques to intensify and be more able to dispersedly address the varied symptoms of autism. Among the 35 clients in the center, 5 were selected to undergo 24 sessions using play, music and augmentative

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