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ORIGINAL

Experimental research on the social skills of people with intellectual disability

Investigación experimental sobre las habilidades sociales de las personas con discapacidad intelectual

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ABSTRACT

People intellectual disabilities (ID) and co-occurring mental health conditions (MHC) are likely to find it challenging to make friends. Self-harm (SH) and problematic behaviours are also linked to social skill deficiencies (SSD). In this research, we sought to determine if teaching individuals with intellectual impairments life skills impacted their social abilities. In an empirical research employing a pre-test (PreT) and post-test (PosT) methodology, the experimental groups (EG) and control groups (CG) were randomly assigned an equal number of participants each. Nine sessions of life skills training (LST) were given to the EG (n=30) while the CG was in a neutral state (NS). For the PreT and the PosT, the instructor filled out the Social Skills Rating Scale (SSRS) (teacher Form) for each participant. *MANCOVA (Multivariate Analysis of Covariance)* was used to analyze the data using SPSS software. In an empirical research using the PreT andPosT techniques, the EG and CG were randomly assigned an equal number of individuals. The CG remained inattentive, while the EG (n=30) received nine sessions of life skills training (LST). Each member of the PreT and PosT groups had their Social Skills Rating Scale (SSRS) completed by the instructor. Data were examined using MANCOVA and SPSS software. The results of this research show how important it is to teach high school pupils ID Life Skills (LS), such as CO-OP, Ast, and SC.

Keywords: Life Skills (LS); Self-Harm (SH); Control Group (CG); Intellectual Disabilities (ID); Experimental Groups (EG); Social Skills (SS); Life Skills Training (LST).

RESUMEN

Las personas con discapacidad intelectual (DI) y enfermedades mentales concurrentes (MHC) suelen tener dificultades para hacer amigos. Las autolesiones y los comportamientos problemáticos también están relacionados con las deficiencias en las habilidades sociales. En esta investigación, pretendíamos determinar si enseñar habilidades para la vida a personas con discapacidad intelectual repercutía en sus habilidades sociales. En una investigación empírica que empleó una metodología de pretest (PreT) y postest (PosT), los grupos experimental (GE) y de control (GC) fueron asignados aleatoriamente a un número igual de participantes cada uno. Se impartieron nueve sesiones de formación en habilidades para la vida (LST) al GE

(n=30), mientras que el GC se encontraba en estado neutro (NS). Para el PreT y el PosT, el instructor rellenó la Escala de Calificación de Habilidades Sociales (SSRS) (formulario del profesor) para cada participante. Para analizar los datos se utilizó el programa informático SPSS *MANCOVA (Análisis Multivariante De Covarianza)*. En una investigación empírica en la que se utilizaron las técnicas PreT yPosT, el GE y el GC fueron asignados aleatoriamente a un número igual de individuos. El GC permaneció desatento, mientras que el GE (n=30) recibió nueve sesiones de entrenamiento en habilidades para la vida (LST). El instructor completó la Escala de Calificación de Habilidades Sociales (SSRS) de cada miembro de los grupos PreT y PosT. Los datos se examinaron mediante MANCOVA y el software SPSS. Los resultados de esta investigación muestran lo importante que es enseñar a los alumnos de secundaria Habilidades para la Vida (HV) de ID, como CO-OP, Ast y SC.

Palabras clave: Habilidades para la Vida (LS); Autolesión (SH); Grupo Control (GC); Discapacidad Intelectual (DI); Grupos Experimentales (GE); Habilidades Sociales (SS); Entrenamiento en Habilidades para la Vida (LST).

INTRODUCTION

The phrase intellectual functioning (IF) refers to a variety of mental processes, such as language skills, learning aptitude, the ability to reason logically, and Practical Intelligence (PI). It manifests and communicates via various skills, deeds, viewpoints, and feelings.[1] Important goals like employment and independent living are part of the Disabilities Education Act (DEA) particular education criteria for students with disabilities. Working provides financial independence, personal fulfillment, and self-assurance.[2] But compared to students with other impairments, those with intellectual disabilities (ID) sometimes have more trouble finding work when they graduate. Numerous programs have been demonstrated to aid children with Autism Spectrum Disorders (ASD) develop their SS.[3] First, the treatments based on applied behavior analysis make it easier for people to talk to each other and reduce behavior problems like hostility. Second, a program called Social Skills Training (SST), which imparts specific skills through social and behavioral learning techniques, may assist children afraid of being around others.[4]The parents have the most influence on their children's behavioral traits. The ability to express oneself in an alexithymic state is one of the traits that parents may use to socialize their children successfully.[5] Physical fitness (PF), bone health (BH), psychological health (PH), and social participation (SP) are all improved by regular physical exercise (PA). The involvement of children with ID in PA is crucial for their development (Dv), health (Hl), and quality of life (QL).[6]

Children with impairments engage in less physical exercise than their peers, which impedes their development. Academics have recently been particularly interested in assessing and distributing research-based Social Skills Therapies (SST) resources for children with ASD. [7]The main objective of SS was to compare how adolescents with ID alone functioned to those with co-morbid ID/ASD in several areas crucial to Adolescent Development (AD), according to parents and teachers. Assessments of young people's conduct and Mental Health (MH) as evaluated by their mothers and instructors, as well as their SS friendships and their mothers' health.[8]However, it can be challenging to include all children and teenagers with disabilities in a Physical Education Class (PEC). Inclusive practices have many advantages for students with disabilities, students without disabilities, and physical education teachers.[9]

Verbal analysis of Theory of Mind (TOM) data and profiles of ASD-affected children without ID, were found. They compared these profiles with children with typical development (TD).[10] The utilization of 26 teaching techniques by 535 special education teachers who interact with children that have autism and intellectual impairments was required.[11]How recently they had access to training and resources on those practices, how they choose which methods to use, how important they thought various subject areas (like SS and reading) were, and how prepared they were to deliver that instruction. We engaged eight parents and eleven participants in interactive group conversations to learn about the skills that young adults want and how they may utilize Facebook and YouTube to achieve them.[12] Participatory approach with groups of eleven people. To learn what talents young adults are looking for and how they might utilize YouTube and Facebook to develop these skills, they consulted with eight parents. The related research used virtual settings, virtual figures (avatars), and animation to teach social skills. Discussed their use in the iAnimate Live project.[13] Examined how a behavioral skills training package (BST) helped six people with autism spectrum disorder (ASD) have more good conversations. Demonstrates the need for more research using augmented and virtual reality, more comprehensive strategies, and tried-and-true methods of assisting individuals.[14] Research that attempted to help people with ASD improve their SS at work.[15] Development, viability, and confirmed efficacy of an 8-week Assistive Soft Skills and Employment Training (ASET) program for young people with high-functioning ASD.[16]

Students with ID expected and how they felt when they were in an inclusive individual support PSE

program. Semi structured conversations were made with four students and six peer advisers at the beginning and end of one school term.[17] Investigated parents' opinions of children with ID about the effectiveness of inclusive education in traditional Greek schools.[18] Centered on how digital learning resources impact the SS of students studying social studies. In this research, standardized social cognition, social skills, and motivation assessments were administered to 67 autistic and 58 non-autistic (NA) persons.[19] Outcomes of these tests—individually and about their dyadic partners could forecast how autistic and NA persons would do in a five-minute get-to-know-you chat with a stranger.[20] In this Evidence Base Update looked at how well the tests of children's and teens' SS and social ability worked in clinical settings. A thorough review of the literature turned up eight popular tests of SS and one test of social ability.[21] Expanded the knowledge of these new ways to help children with ASD get along with their peers.[22] Investigated was how the classroom environment inclusive vs special education affected the development of ToM in young persons with mild intellectual disability. To foster students' social and personal skills (SS and PS), sport education (SE) research data.[23] There have been conflicting findings when comparing inclusive and specialized settings for early intervention in autistic children. Research such as the Early Start Denver Model (ESDM) has shown improvements in social communication in both contexts.[24] The requirement for tailored strategies to maximize results based on unique child features and educational contexts is highlighted by the identification of factors such baseline cognitive capacity, social interest, and attentiveness to others as important moderators.[25]

METHOD

Participants

This experimental research uses CG, PreT, and PosT designs. 50high school boys with intellectual impairments between 15 and 18 enrolled in public schools comprise the sample. Random sampling was used to choose the participants. Two institutions were selected at random from the list of institutions. Participants were randomly chosen from these two schools, and each EG and CG had 30 children the semi-experimental design required 16 as the minimum sample size for each group. Seventeen people were selected for the sample size using the methodology given. However, due to the likelihood of people dropping out throughout the research, the sample size was set at 30 participants.

Procedure

Students between 15 and 18 were required to meet the inclusion criterion, live with their parents, and be in grades 9 through 12. Participants were removed from the research if there was any indication that they had significant health issues other than ID or developmental disabilities. This also applied to those who could be more actively engaged in a training program with a comparable focus.

The names of the experimental and CGs were randomly assigned to the groups via drawing. The names of the practical and CGs were written on paper slips in this technique. The slips were then picked at random from a container. In contrast to the CG, which got no training, the experimental group had nine sessions of life skill instruction. The individual was removed from the trial if there was any indication of developmental issues or a significant medical condition other than ID.

Sessions and Program contex for each section

Self-development (SD):

- Session 1: Diagnose the difference between misunderstanding and error, and identify the pupils' good traits.
- Session 2: Familiarity with the objectives and life skills program.
- Session 3: Identifying traits that are desirable or undesirable, how they evolve, and how they affect perception.

Cognitive-Development (CD):

- Session 4: Essential choices and diagnoses for each reasonable belief separation focus on excellent and adverse choice outcomes.
- Session 5: Managing emotions and stress, evaluation of programs.

Social Development (SD)

- Session 6: Teamwork and collaboration, a successful interpersonal relationship, abilities to make decisions.
- Session 7: Practical expertise in conflict resolution, Identifying the reasons for rejection and loneliness.
- Externally contemplating another viewpoint.
- Session 8: Refused to see others as lonely, The best techniques for overcoming loneliness and

rejection self's function in claiming sensation.

- Session 9: Understanding negative emotions, practical techniques for adjusting to them, and tolerance for loneliness and rejection.

Statistical analysis

The three subscales of this scale are SSRS-P for parents, SSRS-T for teachers, and SSRS-S for students. This research made use of SSRS-T. The three subscales, Co-op, AST, and SC, are examined this way. On the Co-op subscale, assisting others, sharing resources, and adhering to rules and norms are all rated.

The intervention training method in the experiment was a living skills course (LSC). Numerous competencies are included in this curriculum. The EG received Life Skill Teaching (LST) for nine sessions (two 50-minute sessions each week), but the CG received no instruction. During this time, there was no interaction between the research team members and the sample subjects. The instructor completed an SSRS-T Form for each topic during the pre-tests and post-tests. The result metrics from each group were employed in both the PreT and the PosT. The data were analyzed using a MANCOVA.

The Ast subscale rates aggressive acts, including contacting someone for information, making small talk, and responding to their conduct. The Self-Control Subscale (SCS) assesses conflict-related behaviors, such as answering questions honestly, and non-conflictual actions, such as compromise and sharing. Three subscales with ten items each make up the 30-item SSRS. The range of values of a total score is 0 to 60. Values for the SSRS-T are assigned on a 4-point Likert scale ranging from 0 (never) to 3 (often). Greater scores signify outstanding interpersonal abilities, whereas lower levels suggest a deficiency in social talents. SSRS's internal coherence is acceptable.

RESULT

Descriptive statistics

The results of the sub-scales of social skills were compared between each group using descriptive statistics. Their mean scores (M) and standard deviation (SD) are shown in table 1 as a collective group index.

Table 1. For each subscale and group, pre-test and post-test descriptive statistics (ds)

Sub-scales (S)		EG		CG	
		M	SD	M	SD
Cooperation (CO-OP)	PreT	10,60	2,11	10,65	2,29
	PosT	14,94	2,25	10,55	2,15
Assertion (A)	PreT	9,98	2,40	9,70	2,24
	PosT	13,40	2,48	9,85	1,86
Self-control (SC)	PreT	8,55	2,11	8,55	2,19
	PosT	20,11	1,10	8,70	1,98

It is often called a subscale when anything is scaled down from its full-size or full-scale counterpart. It is often employed in several fields, including engineering, research, and modeling. There are three subscales: cooperation, assertiveness, and self-control. Subscale cooperation is a concept that often applies to complex systems or projects where it's essential for several interconnected components to work together harmoniously. Even though each subscale element may serve a different purpose or execute another function, how effectively they all operate together is crucial to the system's overall effectiveness and performance. The cooperation of EG cooperation is shown in figure 1a. The standard deviation (S.D.) and mean (M) of PreT and PosT are 10,60, 2,11, 14,94, and 2,25, respectively. Figure 1b displays the CG's cooperation, and the Mean and Standard Deviation are shown by the values of 10,65, 2,29, 10,55, and 2,15, respectively.

A conventional definition of an assertion is asserting oneself and defending one's rights, beliefs, or ideas. Figure 2a Standard deviation (SD) and mean (M) of PreT and PosT is 9,98, 2,40, 13,40, and 2,48, respectively. Figure 2b displays the CG's cooperation, and the Mean and Standard Deviation are shown by the values of 9,70, 2,24, 9,85, and 1,86, respectively.

Typically, the expression self-control subscale refers to a particular subset or component within a broader assessment or measuring instrument that evaluates a person's degree of self-control or self-regulation. Figure 3a Standard deviation (SD) and mean (M) of PreT and PosT is 8,55, 2,11, 20,11, and 1,10, respectively. Figure 3b displays the CG's cooperation, and the Mean and Standard Deviation are shown by the values of 8,55, 2,19, 8,70, and 1,98, respectively.

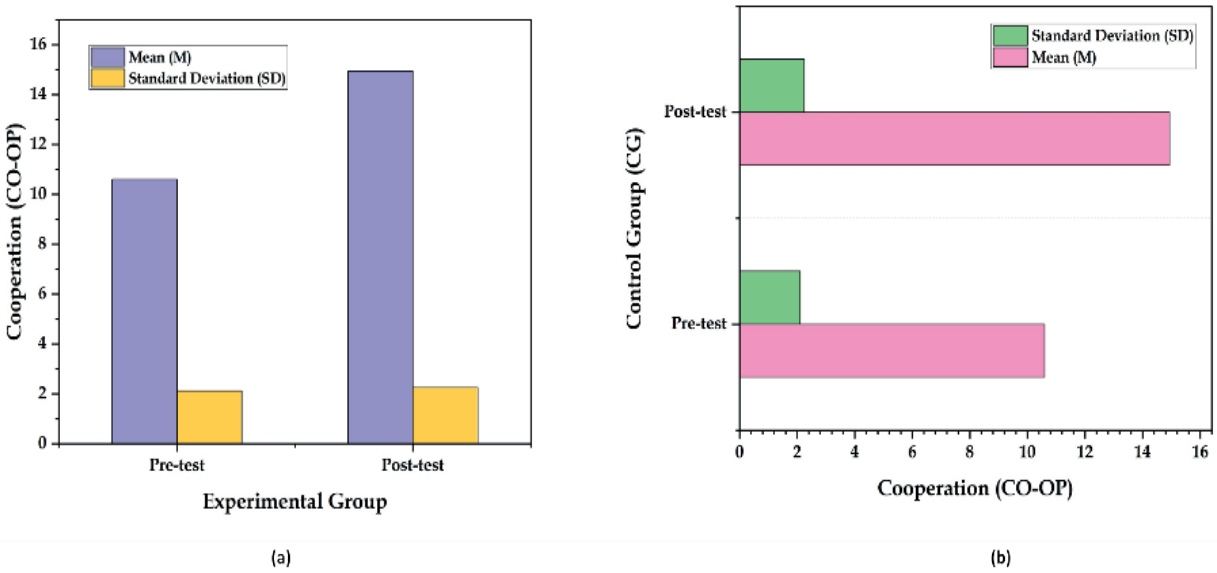

Figure 1. Cooperation subscale (a) experimental group and (b) control group

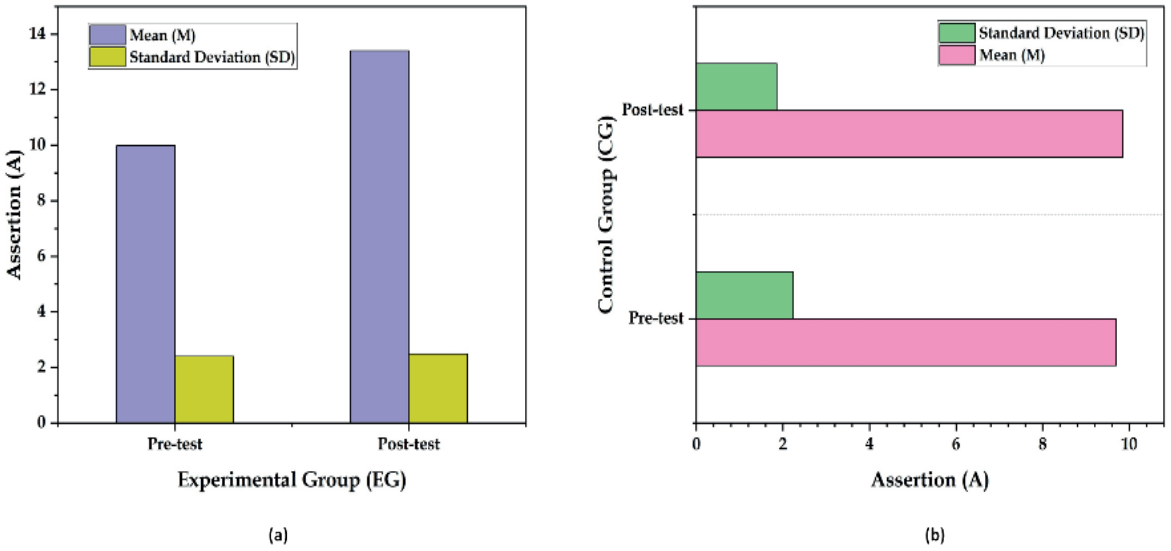

Figure 2. Assertion subscale (a) experimental group and (b) control group

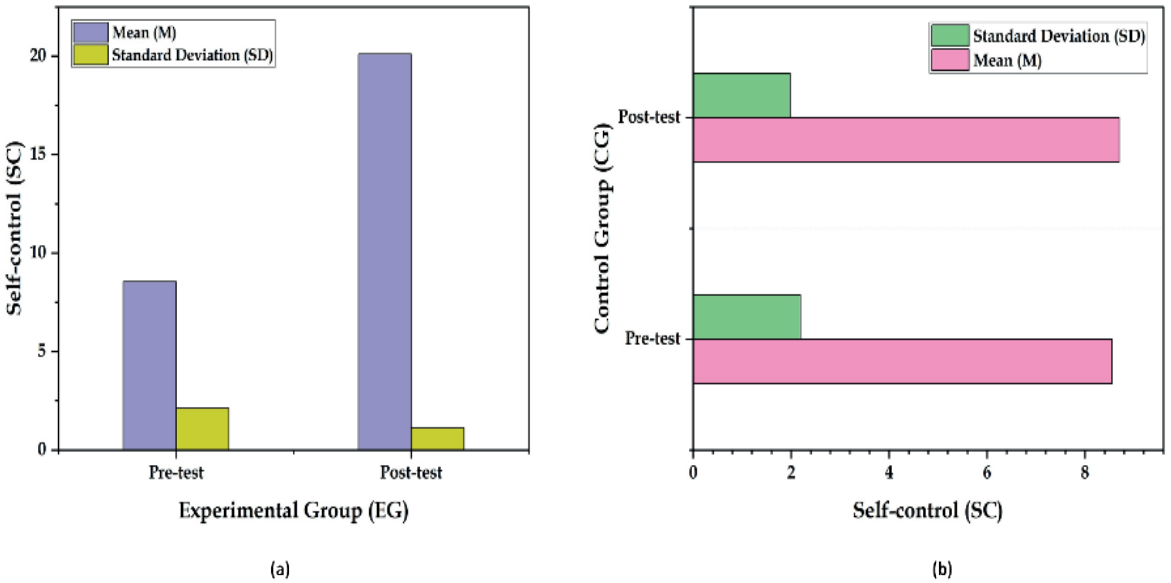

Figure 3. Self-control (a) experimental group and (b) control group

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Covariance analysis (co-v) executive

The average age and IQ of the experimental and CGs were determined to be 16,11 and 16,25 years old and 60,31 and 61,86, respectively. Analysis of Covariance (ANCOVA) was initially performed to assess the program's impact by comparing the SSRS-T PreT and PosT outcomes in both the CG and EG (table 3). ANCOVA revealed differences in some mean scores when the covariate's effect was considered. By comparing the experimental and CGs mean scores, it was shown that the PreT and the PosTscores were linearly related. Furthermore, our research validated the equality-of-variances assumption.

According to table 2, the correlation between the PreT and PosT scores is strong, and the covariate has a significant effect (F1,38=44,963, P0,0004). We assessed SSRS using MANCOVA to distinguish between children with ID. The total Coop, Ast, and SC subscales scores were employed as predictors. Wilk's lambda for the whole sample was significant, suggesting that the overall predictors successfully separated the two groups. We used the MANCOVA test to analyze the variations in collaboration, assertiveness, and self-control subscale scores between EG and CGs.

Table 2. Covariance analysis (co-v) executive

Source of Change (SC)	df	MS	SS	F	Sig.	2η
PreT	1	79,839	79,839	44,963	>0,0004	0,478
Group	1	2813,890	2813,890	678,745	>0,0004	0,976
Error	38	2,879	76,325			
Total	40		2347,800			

There were significant variations in the subscale ratings for Coop, Ast, and SC between the experimental and CGs (P0,0005) in Table 3. The findings of MANCOVA showed that LST significantly and favorably affected cooperative, Ast, and SC abilities (F=405,298, P0,0005).

Table 3. Summary of multivariate covariance analysis

Depended Variable (DV)	Source (s)	SS	df	MS	F	Sig.	2η
Cooperation		28,332	1	28,332	58,367	<0,0005	0,729
Assertion	Pre-test	35,184	1	35,184	74,278	<0,0005	0,786
Self-control		19,998	1	19,998	49,965	<0,0005	0,689
Cooperation		197,578	1	197,578	405,298	<0,0005	0,996
Assertion	Group	126,845	1	126,845	312,467	<0,0005	0,982
Self-control		89,345	1	89,345	168,390	<0,0005	0,929

DISCUSSION

In this research, we looked at how well individuals with intellectual impairments' SS were improved by life skills training. First, we evaluated the effects of LST on the SS of HSSs with intellectual disabilities at the PreT and PosT by randomly assigning students to one of two groups (experimental or control). To determine the differences between the EG and CG, we also examined the subscales of the SS for both groups during the Pr-T and Po-T. The findings of this research confirm that SS training for HSS with ID has positive impacts. As a result, we deduced that LS, mathematical reasoning (MR), and critical thinking (CT) were strongly related.

Our results supported the assertion made that interpersonal results and peer relationships were influenced by both verbal and nonverbal behavior. Current particular education SS research focuses on students' involvement and development in general education classes. Many educators were curious whether the standard-based approach made programs for children with intellectual impairments more academically oriented and devoted less time to functional activities. The SS of children with intellectual impairments using an A-B-A-B design while implementing a Social Skills Education Program (SSEP) and paying attention to problematic behaviors. The results demonstrated a good and substantial effect on the respondents' behavior and LST. A functional program paired with an academic curriculum helps children with intellectual impairments develop the skills they need to live and work in their society. As a result, young people's coursework must include an LST program. Children with intellectual challenges need to be introduced to interactions with others and personal skills that are crucial LS. Other studies have shown the significant and positive impacts of LS training on co-op, Ast, and SC skills.

CONCLUSION

Teaching life skills (TLS) to children with ID may help them improve their social skills. A Multilevel Behavioral Intervention (MBI) called LST is used for the treatment and prevention of behavioral, emotional, and developmental issues in children and adolescents. It is based on social learning concepts. Even though life skills training may enhance student interactions and relationships, getting ready for LST is very important. This research showed how SST for high school students with intellectual impairments improved their social skills. Our research revealed that life skills training significantly and favorably affected collaboration, assertiveness, and self-control abilities. This research has several restrictions. First, dealing with someone with an intellectual handicap often takes varying forms. Children with intellectual disabilities usually advance slower and need more time and instruction to master critical ideas, making it challenging to gauge their progress.

Due to its intricacy, thorough education research may be the most challenging of all the sciences. The diversity of the topics is one aspect of particular education research that makes it more difficult. Additionally, there needed to be more focus on students' color and ethnicity in the given demographic data. Because of this restriction, it was challenging to extrapolate the research's findings to the broader public. The small sample size was another drawback. Results may be difficult to apply to other special education children since were 40 participants in the Reserach. Additionally, it is preferable to design life skills training with intellectual impairments to foster social skills (FSS)and build friendly and constructive interactions.

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CONFLICTS OF INTEREST

None.

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None.

AUTHORSHIP CONTRIBUTION

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