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Research Article

The Level of Motor Skills and Social Skills Among Mild Mental Disability (Educable) and Its Relationship to Demographic Variables

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ABSTRACT

The study aimed to reveal the relationship between motor skills and social skills in mentally disabled children who are learning (educable) and relation to demographic variables (gender Male/Female - age). The study sample consisted of a simple random sample of mentally disabled students who are capable of learning in Gezira State- Central Sudan. The number of sample members was (65) male and female students, representing (44.52%), including 33 females and 32 males. The social skills assessment scale for mentally disabled children who are capable of learning (Educable), prepared by Mubarak, Sarah (2016), and the motor skills scale prepared by Weiland were used. Its translate and applied in Arabic by Al-Otaibi, Bandar, (2004), the data were analyzed using the Statistical Package for Social Sciences (SPSS), The study reached the following results: The level of motor skills among mentally disabled children who are capable of learning is low. There is a statistically significant relationship between motor skills and social skills at an average level. There are statistically significant differences due to gender (males/females) in motor skills and social skills in favor of females. There are statistically significant differences at the level of (0.05) in motor skills and social skills among mentally disabled children who are capable of learning due to older age. There are no statistically significant differences between males and females in motor skills among mentally disabled children who are capable of learning. There are no statistically significant differences between mentally disabled people who are capable of learning regarding motor skills due to age. The study recommends implementing an integration system between the mentally disabled and normal children because integration has great benefits in developing motor and social abilities, and also activating extracurricular activities, especially the following: physical exercises, providing schools and special education institutes with training tools and a physical education specialist to develop motor skills.

Keywords: Motor skills, social skills, mental disability, capable of learning.

Introduction

Mental disability is one of the factors that influence development in all its aspects: mental, psychological, social, and physical. This can impact a child's future at all stages of development, reduce their abilities in all aspects, and hinder the development of various skills. Disability mentality It is defined as “a state of markedly reduced general intellectual functioning that appears during development and is accompanied by deficits in adaptive behavior. A deficit in general intellectual functioning is considered marked if there are two standard deviations below the mean, i.e., an IQ score below 70 on the Wechsler scale or 68 on the Binet scale. Deficits in adaptive behavior mean that the individual lacks the competence to assume social responsibility and enjoy the personal independence expected of those of his or her age and social/cultural group.” The preacher, (Al-Hadeedi, 2004, p. 13).

In recent years, the complex relationship between Motor skills and social skills Academic achievement is based on interest across multidisciplinary fields, blending insights from education, psychology and health sciences., There is growing evidence that activity plays a crucial role in cognitive and educational development (Singh A., Uijtdewilligen, et al ,2011), where it connects Gianluca Borghini (2024)Between physical health and cognitive

development and that mastering motor skills can impact academic outcomes especially in the following communication skills, Shoman, Nermin (2022) and Abdel Nabi, Ra'ada (2023) point to the impact of motor skills on learning Social skills, while the study indicates Lubans, Morgane, et al(2010) to The relationship between motor skills and academic performance. Motor skills, including coordination and balance, and It is highly related to academic performance in subjects such as mathematics and reading. This is what he also pointed out. Valla, Lisbeth (2020) Which stressed that motor skills in infancy are important developmental markers, not only for later motor skills, but also for more widespread social, cognitive, and communicative development.

The current study attempts to reveal the relationship between motor skills and social skills in mentally disabled people learn (Educable) and its relationship with some demographic variables such as (gender male/female and age), as there are no similar studies in Sudan according to the researcher's knowledge. Also, revealing this relationship can contribute to enriching psychological counseling programs and developing social skills that constitute an important aspect of adaptive behavior.

Research problem

Mental disability has major effects on physical, mental, psychological and social development. Mental disability also affects motor development and affects the development of abilities. Social and communication skills development**,** where Some studies indicate the impact of motor skills of the mentally disabled on social development, which leads to a lack of self-concept among them (Abdul Jabbar, Fatima (2017) Muhammad, Naima (2016), and the lack of social competence is reflected in the delay in independence from parents and family, which increases its burdens and prolongs the childhood of the mentally disabled.

Poor motor skills and social communication skills also affect the disabled child's feeling of psychological loneliness, which exposes him to introversion and stress. Psychological and this leads to psychological disorders such as anxiety and depression, which deprive him of developing his social abilities (Al-Ajami, Misfir, Al-Shirawi, Maryam ,2020).

The current study attempts to uncover the level of motor skills and their relationship to social skills among (Educable). It attempts to answer the main question: What is the level of motor skills among (Educable)? The following sub-questions branch out from this question:

1.What is the degree of correlation between motor skills and social skills among (Educable)?

2.Are there statistically significant differences between motor skills and social skills have (Educable) back to gender Male/Female.

3- Are there statistically significant differences between motor skills and social skills among (Educable) back to the age.

4-Are there statistically significant differences in motor skills among (Educable) due to gender male/female?

5- Are there Statistically significant differences in motor skills among (Educable) back to the age?

Study objectives the current study aims to reveal the level of motor skills and their relationship to social skills among (Educable), as motor skills are an entry point for social competence and they also help the mentally disabled person to get out of psychological loneliness, which helps in building his social growth (Al-Khudaydi, 2020). This study aims to:

1- Detecting the level of motor skills due to their importance in building skills. Social and cognitive development helps the family quickly make the child independent from his parents and family and reduces the burden of caring for the child.

2- Exploring the relationship between motor skills and social skills is an introduction to develop the skills of the mentally disabled, as both skills are important in the child's life.

3- Discovering the relationship between motor skills and social skills and linking them to some important variables such as gender (male/female) or age helps in developing psychological counseling programs and constructing extracurricular educational activities that help the mentally disabled person communicate and interact with his peers.

Importance of the study Parents and educators strive to develop various skills for children with mental disabilities. The earlier the intervention to develop these skills, the greater its potential. The importance of the current study lies in addressing two important skills: motor skills and social skills, thus helping to...

1- Reducing psychological stress for the mentally disabled, by developing motor skills, especially through targeted integration programs or peer participation, which develops social skills.

2- Knowing the individual differences between the mentally disabled in some variables such as gender and age in terms of motor skills and social skills will develop the child's cognitive abilities and raise his social competence, which helps in the growth of self-esteem.

3- To reveal the relationship between motor skills and social skills in the mentally disabled. Reduces individual differences between them and normal children, especially in the social aspect, which becomes more apparent with age.

4- Determining the level of motor skills and linking them to social competence among the mentally disabled helps teachers, families, and curriculum developers design educational and psychological programs for the physical and social domain.

Hypotheses

1-Characterized by Motor skills in mentally disabled children who are (Educable) is Declining.

2-There is a relationship between motor skills and social skills with (Educable).

3- There are differences statistically significant relationship between motor skills and the skills social have been due to Gender: Male/Female.

4-There are statistically significant differences in motor skills and the social skills among (Educable) Back to the age.

5-There are statistically significant differences in motor skills among (Educable) due to gender (male/female).

6. There are statistically significant differences in motor skills among (Educable) due to age.

Study limitations This study aims to reveal the level of motor skills among (Educable) of learning as an independent variable and its relationship to social skills and some demographic variables such as gender (male/female) and age.

Spatial boundaries A sample of (Educable) in Gezira State, central Sudan.

Time limits: Academic year 2022 - 2023.

Study terms

Motor skills It is a function that involves specific movements of the body's muscles to perform a specific task. These tasks can include walking, running, or riding a bike. To perform this skill, the nervous system, muscles, and brain must work together. While performing the skill (Definition from Workplace Testing, 2021)

Social skills: Social skills are defined as "a child's ability to interact socially with others." His peers, and exploitation, Moreover, cooperation with others and the ability to control Self, to the availability of personal skills in establishing positive relationships constructive. Additionally, managing affairs and behavior, With the ability to control school skills academy (Shash, 2015, p. 179).

Mental disability The American Association on Intellectual and Developmental Disabilities (AAID) defines intellectual disability as limitations in either intellectual functioning or adaptive behavior spanning many social and daily work skills. This disability arises before the age of 18. Intellectual limitations refer to an intelligence quotient (IQ) that falls within two standard deviations (<70) on measures of intelligence and adaptation., and Performance limitations refer to skills limitations in at least two out of ten domains (2002AAIDD,).

Educable The category of learners falls under disability. Simple mentality and it is Mental capacity less than Average, Ranges between 50-55 and 70, concurrent delay in adaptive functioning that appears before age 18 (Jack. S. g,2023).

Literature Review

Intellectual disability is a neurodevelopmental condition that affects an individual's ability to learn and perform daily activities, behavior, social skills, and the ability to maintain hygiene and self-care. It develops during childhood and can be diagnosed based on three criteria: intellectual challenges in academic and experiential learning, reasoning, problem-solving, judgment, and abstract thinking; and difficulty with adaptive functioning such as communication, social skills, and independent living(Daniel J. Reschly, et al ,2002), and approximately 3% of the population has an IQ of (IQ) less than 70, less than half of them are classified as mentally disabled (Flint et al., 1995) This is accompanied by a deficiency big in Skills social . The process and conceptual (as the situation in communication between people, or Deduction, or care Subjectivity) necessary to perform Tasks Daily Independent Which It begins before age18 general (Dictionary of Merriam Webster. (2023) and show Signs Disability mentality early like difficulty in speaking, Delay to learn movement and walking, wear clothes, Nutrition Subjectivity, following Instructions, Delay growth Skills social and skills Kinetic, behavior aggressive, Seizures, difficulty solution problems, and expression on emotions (Rashmi. Rai. ,2024). and involves Disability mental on Restrictions big in two or more from Fields Skills Basic necessary to deal with requirements life Daily, on Way Example. Communication, moreover, care Subjectivity, life Home, and skills social, dealing with the society, guidance Self, health, safety, Skills academy, entertainment, Work, maturity, learning, independence Personal, responsibility social expected to level Their age and their category Cultural (Human Rights Which ,2024).

Educable (mild mental retardation) According to: For evidence Diagnostic and the statistician It is characterized by backwardness mental light (MR) For individuals who suffer from disabilities cognitive Compatible with degree Intelligence between (50-55 and 70) inability in performance Adaptive that He appears before age 18 year. He is type most commonly from mental disability (Sara. E. .2024). It indicates Disability mentality simple to disability in Jobs intellectual related thinking. But they often They fulfill standards disorder hyper movement and deficiency Attention.AS well as the effect remains clear. on performance adaptive where skills such as skills necessary for transportation in life Daily (Lindblad. Da & Fernell Elisabeth, 2023).

Motor skills It is the known ability to produce a predetermined movement with maximum potential. Motor learning is the relatively permanent change in the ability to perform a skill as a result of practice or experience. (English & Arabic Dictionary,2019) and includes gross motor skills in children with moderate intellectual disability: Crawling, walking, standing, sitting, and carrying objects. Fine motor skills include climbing and descending stairs, visual-motor coordination, using fingers, writing, drawing, coloring, and clay work, grasping objects for a short time (pinching with fingers and palm). Transferring objects from one hand to another. picking up objects with the thumb and forefinger. Using the finger to explore and touch objects. Placing blocks on top of each other, turning the pages of a book, using a pen or coloring paper, cutting with scissors. Threading large beads onto a string, folding paper in half (Khawla Yahya & Magda Obeid, 2014: 210). And there are motor abilities on social and cognitive progress, where progress in basic gross and fine motor skills is important because the ability to perform movements has a direct and practical benefit to the child's daily life and independence (Sacks, B, & Buckley, S ,2023). It is important to emphasize the importance of fine motor strengthening exercises, such as finger and grip muscles, as they are essential for writing and holding a pen. Educational programs focus on developing children's senses, such as touch, hearing, sight, and smell (Ibrahim Al-Maghazi, 2023: 150). An important training method is the use of brain exercises as a treatment to determine the motor skills and abilities of students with mild mental retardation. Among these methods are brain exercises, which train in the coordination of basic movements. They are a series of exercises based on body movements. Brain sports are the name of a series of simple exercises intended to increase the effectiveness of learning activities. This helps develop attention, concentration, memory, physical coordination, social relationships, self-responsibility, and organizational skills (Galang Baqiyudin & Nurhasan, Suroto,2012).

social skills It is considered disabled person mentally Less able to adapt socially and behave in social situations and in his interaction with people (Al-Beblawy, 2013, p. 290), Furthermore, early childhood for people with mild intellectual disability is characterized by difficulties in social growth such as relationships with peers, making friends, and difficulties appear in play settings, and affect many aspects of children's interactions with peers and with similarly

normal children. These difficulties appear in their failure to maintain and persevere in interactive play with peers, and that they engage in forms of individual play, and show inappropriate forms of problems in resolving their conflicts during play, such as rigidity and aggression. (Khair Allah, 2014, p. 146) that success life he depends In a way big on Learn skills social. Mostly what take this is amazing skills as an order. Usually what is done to learn is amazing skills on road Note. But many people with disabilities have mental skills socially low. And that because development skills social depends in a way is very important on capabilities intellectual certain. Where it is connected skills social in connection closely with skills the language and communication. Includes communication effective usage flow and the interpretation per from communication verbal and other verbal, it includes ability on to understand speech metaphorical not also the literal (Julie. Advocatem,2024)

Pre Studies

Gianluca Borghini (2024) The study aimed to investigate the relationship between motor control, mobility, and stability - as measured by the Functional Movement Scree (FMS) and academic performance in high school students. This descriptive, non-experimental study was conducted with 201 participants from a public high school in Spain. Students were divided into high- and low-achieving academic groups based on their grade point average, with the average used as a discriminating criterion for assessing basic motor skills across mathematics, language, science, and physical education subjects for academic performance. The results revealed a significant relationship between motor control, mobility, stability and academic achievement, indicating that students with higher motor skill proficiency had higher academic achievement

Mohammadi, Ahmed (2024) The study was conducted with the aim of identifying the effect of a proposed electronic educational program in developing verbal communication skills among children with mental disabilities in Ahad Al-Masariha Governorate, Jazan region. A verbal communication skills scale and an Electronic Educational Program were used to develop verbal communication skills. The study population consisted of students from Al-Hasmah Institute for Intellectual Education. A random sample of (30) students was selected from among the students who suffer from simple mental disability accompanied by a communication disorder. Among the most important results of the research: Students with simple mental disability suffer from a severe weakness in verbal communication skills. There are statistically significant differences between the pre-measurement and the post-measurement in favor of the post-measurement.

. **Abdul Nabi, Ra'eda's study (2023)** The study aimed to identify the relationship between motor skills and social skills in a sample of children with autism spectrum disorder. The research sample consisted of (5) children with autism spectrum disorder, (4) males and (1) female, in the age group of (4-6) years, who frequent the Future Kids Center. The researcher used the motor skills scale for children with autism spectrum disorder and the social skills test for kindergarten children. The results showed a significant positive correlation at the level of (0.01) between communication with others as a social skill and balance skill as a motor skill. It also showed a significant positive correlation between social interaction as a social skill and each of the basic hand skills, daily life skills, transfer skills, control skills, and the total score as a motor skill. There was also a significant relationship between participation as a social skill and control skills as a motor skill, and between dealing with the school environment as a social skill and control skills as a motor skill.

Shoman, Nermin.(2022) The study aimed to reveal the impact of the program the activities interactive to learn some basic motor skills and develop social communication and joint attention in children People with Autism spectrum disorder, on a sample of (9) children with mild autism spectrum disorder their ages(8:12) At the Egyptian Center for Autism in Al minya, and among the research tools, the intelligence test (Stanford-Bienia), the autistic child diagnosis scale-CARS2-ST)) Second Edition, Motor Skills Tests, Basic Motor Skills Performance Assessment Form, Social Communication Scale, Joint Attention Scale, Proposed Interactive Activities Program. The results showed that: The proposed program using interactive activities led to an improvement in some basic motor skills and the development of social communication and joint attention in children with autism spectrum disorder.

Cheung, W, H (2022) Many students with autism have difficulties navigating classroom environments and making friends, which are often affected by deficits in social, communication, and motor skills. The data set from the Primary Longitudinal Study of Special Education (SEELS, 2000), focusing on elementary students with autism, explored the longitudinal relationships between social, communication, and motor skills and the mediating role of motor skills between communication and social skills using structural equation modeling analyses. The results showed that (a) motor skills mediate the relationship between communication and social skills in elementary school, and (b) there

are significant longitudinal relationships between these skills in elementary school. Increased motor skills support improved social skills for students with autism in elementary school.

Andalò, Beatrice (2022) The study aimed to reveal the relationship between motor development and language development in childhood, especially between Gross motor skills or minute that It affects linguistic outcomes such as spatial vocabulary. Thirty-six monolingual Italian children (58% girls) participated in this study, divided into two groups according to their ages. Motor and linguistic abilities were measured using the Griffiths scales for mental development Where it was evaluation of language results in three Vocabulary, she: Nouns, predicates, and spatial terms, using Pictures, names, ping game Game-Ping. Hierarchical linear regressions show that motor skills influence language abilities in the late second and third years, but the effect varies depending on the type of motor skill and the children's age.

Sari, Fatahin (2021) The aim of this study was to identify the deficits in social skills of children with Down syndrome who are trainable and Educable, specifically cooperation skills. The sample size was (30) children (18) males and (12) females, aged between (8-12) years, from the departments of the Pedagogical Center in Setif. The social skills scale was used, as well as the Stanford-Binet Intelligence Scale. The results showed that children with Down syndrome who are trainable and Educable suffer from problems in learning and acquiring cooperation skills. The study also concluded that there are statistically significant differences between male and female children with Down syndrome who are trainable and Educable in cooperation skills.

Elizabeth, Jane E Robert (2021) The study participants included 37 children with Down syndrome, And 37 children suffer from FXS, Identical to the age Temporal and non-verbal, the results showed the relationship between the two syndromes for Motor and communication areas, where children with Down syndrome scored significantly higher than children without syndrome X fragile chromosome Fragile X syndrome (FXS) in the areas of communication, but less in skills gross mobility. The results revealed significant correlations between the areas of movement and communication for both groups.

Reikerås, Elin, et al (2020) This longitudinal study which was done through examination a statement relationships between language and motor skills in toddlers and preschoolers (n = 646) in real-life situations where it was examined Language skills in preschool (4 Years and 9 Months) data were collected through structured observation of play and daily life activities (authentic assessment) by staff in Norwegian early childhood education and care institutions. Correlations between motor life skills and language skills were big, it was stronger between motor life skills and language skills. Which reveals the relationship between the level of motor life skills in childhood and language skills in preschool age.

Al-Khudaydi, Mona (2020) The study aimed to reveal the effectiveness of a training program based on sensory integration in developing social competence among a sample of female students with mild intellectual disabilities in Taif, Kingdom of Saudi Arabia. The study sample consisted of (20) female students with mild intellectual disabilities, their ages ranged between (9-12) years, and their intelligence level was (55-69). They were divided into two homogeneous groups: an experimental group and a control group, and another experimental group. The study used the Stanford-Binet Arab Intelligence Scale (fourth edition) prepared and standardized by Masry Hanoura (2001), the Social Competence Estimation Scale for People with Mild Intellectual Disabilities prepared by the researcher, and the training program based on sensory integration prepared by the researcher. The study yielded the following results: There were statistically significant differences on the social competence scale in the post-test in favor of the experimental group, additionally, in social competence, and there were no statistically significant differences in social competence in the post-test and follow-up tests.

Ibrahim, Rania (2020) The aimed of the current research is to reveal the effectiveness of Use Peer learning strategy to improve some skills social mentally disabled children who are capable of learning and integrated into integration kindergartens, the study sample consisted of (15) children, divided into (5) normal children whose ages ranged from (5-6) years, and (10) mentally disabled children who (Educable), whose ages ranged from (8-11) years. The study used the following tools: Test of John Raven's Color Progressive Matrices, and Skills Scale Social have mentally disabled children who are capable of learning (prepared by the researcher), The results of the study showed that there were statistically significant differences in the pre- and post-measurements on the skills scale. Social In favor of the dimensional measurement, and the presence of statistically significant differences on the skills scale social in favor of the experimental group.

Al-Ajami, Misfir& Al-Shirawi, Maryam (2020) The study aimed to identify the differences in feelings of psychological loneliness and depression among high and low social skills of children with mild mental disabilities. The research sample consisted of:(90) Male and female students with mild mental disabilities (59 males, 31 females) enrolled in intellectual education schools in the State of Kuwait, aged between (9-12) years. The research results indicated that the level of social skills was average among children with mental disabilities, and the results indicated that the average scores of males in social skills were higher than the average scores of females. The results showed that those with mental disabilities with low social skills felt more psychological loneliness than those with high social skills. The results also showed that those with mental disabilities with low social skills felt more depressed.

Valla, Lisbeth (2020) Purpose from the study Knowing relationship between fine and gross motor development in infants at age (6-12) Month and communication skills at age (24) month It was used. Question depends on ages and stages (ASQ-II) to measure gross motor, fine motor, and communication skills in a sample of (1,555)) infants from five municipalities in Southeastern Norway. The relationships between motor skills were analyzed using linear regression analysis. And showed Results: Arrange Gross motor skills in age (6) months positively also at age when (24 months) motor skills were associated with age (12) A month positively with communication skills at age (24) months. The results also reveal that the association between early motor development and later communication development in childhood.

Nasser, Baqer (2019) Which aimed to reveal differences in the level of basic motor skills among primary school students in the state of Biskra in Algeria. Depending on the gender variable and the motor practice variable (students practicing and not practicing physical education and sports)), the sample consisted of a random sample of (127) students from fifth grade students and for the purpose of using the test(TGMD) which includes eight tests that measure basic motor skills, which are distributed as follows: Transitional skills: (running, hopping, jumping, and forward leaping from a standing position)The study concluded that there are statistically significant differences between both groups favor males

Kirstin Macdonald, et al (2018) The study aimed to reveal the connections the Positive associations between physical activity, cognition, and academic performance in children and adolescents and relationships between motor proficiency and academic performance in mathematics and reading in school-age children and adolescents. A systematic search of electronic databases was conducted to identify relevant studies. A critical appraisal was conducted to fifty-five from eligible articles and underlying data were extracted and synthesized. The results support the association between several components of motor proficiency and academic performance in mathematics and reading. Especially efficiency fine motor skills in the early years of school. Significant positive correlations were also evident between academic performance and components of gross motor competence, specifically speed, agility, and upper limb coordination.

Abdul-Jabbar, Fatima (2017) The study aimed to reveal the most important aspects of social communication and self-concept, and the possibility of predicting social communication through the dimensions of self-concept among both integrated and non-integrated mentally disabled children in the Kingdom of Bahrain. The study sample consisted of (70) male and female students with mild mental disabilities divided into two groups, the first: consisting of (31) male and female students who are not integrated into integration schools and are enrolled in Al Amal Institute for Intellectual Education, their ages ranged from (6-12) years with an average of (8.84) and a standard deviation of (1.77). The second group of students enrolled in integration classes in eight primary schools, numbering (39) male and female students, the study used both the social communication scale and the self-concept scale for mentally disabled children, and the results of the study indicated that the integrated children were more distinguished in several aspects of social communication than their non-integrated peers, and the self-concept was more positive among the integrated children. The results also indicated that the social self-concept dimension is what can be used to predict social communication among mentally disabled people, whether integrated or non-integrated.

Muhammad, Naima (2016) The study aimed to design and standardize a diagnostic scale for social communication disorder (pragmatic) in children, and to identify its relationship with some demographic variables (gender, chronological age, socioeconomic level). The research sample consisted of two groups, the first group of (600) children, (400) males and (200) females, whose ages ranged between (6-11) years. The second group consisted of (149) children, (106) males and (43) females, with social communication disorder (pragmatic), from primary schools in Cairo Governorate. The scale for diagnosing social communication disorder (pragmatic) in children was used, along with the scale of the family's socioeconomic level (prepared by / Abdel Aziz Al-Shakhs, 2006). The

research results showed that males are more susceptible to social communication disorder (pragmatic) compared to females, and that older children are more susceptible to social communication disorder.

Housen, Suzanne, et al (2016) The study aimed to examine the interrelationships between motor cognitive and language development in children with intellectual and developmental disabilities (IDD) compared to those in children without ID. Seventy-seven children with IDD (mean developmental age: 1.8 years) and (130) typically developing children (calendar age between 0.3 and 3.6 years) were tested. The Dutch Bayley Scales of Infant and Toddler Development, Third Edition, was used, which assesses development across three domains using five subscales: fine motor development, gross motor development (motor), cognition (cognitive), receptive communication, and expressive communication (language). The results showed that the correlations between the motor, cognitive, and language domains were particularly strong in children with ID. This means that both fine and gross motor development are more strongly related to cognition and, consequently, language.

Al-Khadi, Nasima, et al (2015) The study aimed to identify the degrees of fine and large motor skills among kindergarten children according to gender and age group. The study sample consisted of (86) boys and girls from kindergarten in Jeddah using the Peabody Scale of Motor Development - Second Edition the Peabody Developmental Motor Scales - 2nd Edition. The study reached the following results: There are no statistically significant differences between the average scores of gross and fine motor skills and the total score for male and female children in the kindergarten stage, except for the balance skill, there are differences in favor of males, as well as between the two age groups in favor of the older age group, which is (18 to 24) months.

Vuijk, Pieter, Jelle. (2010) The study aimed to detect the motor skills of people with mild mental disabilities, and to determine whether there was a relationship between intelligence and motor performance. A total of 170 children aged between(7-12)year from people with mild mental disabilities It was used Movement Assessment Battery Test (MABC).The results showed:(81.8%) of those with mild intellectual disability, (60%) of those with borderline intellectual disability and (60.0%) of those with severe intellectual disability performed well decreased motor skill performance, and there is correlation between IQ and manual dexterity performance, ball skills, and balance skills.

Lubans, Morgane, et al (2010) The study aimed to know the relationship between motor skills and job cognitive and academic performance. The scale was used Movement Screen (FMS), where coordination and balance are linked to academic performance in subjects such as mathematics and reading, study results indicate that proficiency in motor control and stability lead to improved academic outcomes. Physical health is closely linked to academic achievement, reinforcing the importance of integrating motor skill development into educational strategies. Mastery of fundamental motor skills (FMS) contributes to children's motor, cognitive, and social development, particularly in running and jumping skills, object control skills (such as grasping and throwing), and stability skills (such as balance and twisting).

Methodology Starting out from nature this is amazing the study and goals that Seeking for Achieve depend on researcher in procedure on Curriculum Descriptive to survey, its suitability to the objectives of the study, along with. Descriptive approach That he is: “Describing the phenomenon that one wants to study and collecting accurate descriptions and information about it. The descriptive method depends on studying reality and is concerned with describing it accurately, qualitatively and quantitatively."(Othman, Ibrahim, 2009, 84).

Study community:

Population The study population consists of mentally disabled children who are capable of learning (Educable) who have been diagnosed by the Ministry of Education and have been housed in government mentally disabled schools or special education institutes in Gezira State, where there is no integration system for the disabled with normal children in the state. The number of mentally disabled children who are educable reached There are (146) male and female students registered for study, distributed across all the state’s localities (Ministry of Education, Gezira State, 2023). Gezira State is one of the states of Sudan, located between longitudes 25 -32 and 18 -34 east and latitudes 29 -15 and 36 -13 north. It’s distinguished by its strategic location on the map of the country and is the largest source of income for Sudan (the Gezira Scheme), the largest food and economic source in Sudan. It is distinguished by its location in the middle of Sudan., The capital of the state is Wad Madani. The most important cities are: Hasahisa, Al-Managil, Rafaa, Al-Kamlin, 24 Al-Qurashi, and Umm Al-Qura. (2023.Wikipedia).

sample the study sample consists of a simple random sample of Educable students in Gezira State. The number of sample members was (65) male and female students, representing (44.52%), including (33) female students, representing (50.77%), and 32 male students, representing (49.2 %).). The following tables show the sample details:

Table No. (1) Distribution of the study sample according to gender male/female.

Sex	repetition	Ratio
Female	**33**	**50.8**
Male	**32**	**49.2**
the total	**65**	**100.0**

Table No. (2) shows the ages of the sample members.

The age	repetition	Ratio
7-9	**30**	**46.15**
10-12	**35**	**53.85**
13-15	**65**	**100.0**

Instruments

Social Skills Rating Scale for the Mentally Handicapped The test was prepared by Mubarak, Sarah (2016), and its aim is to measure social skills by teachers. It consists of (59) paragraphs distributed over (6) dimensions, which are: social interaction, self-control, social responsibility, forming friendships, initiative, and academic social skills. school.

Scale description the scale consists of (59) paragraphs, measuring the social interaction of the skills of exchanging conversation between people with mental disabilities and others, and interacting with them by participating in activities. It also measures the skill of self-control: It includes the skill of self-discipline, and the ability of the mentally disabled to control his emotions, accept criticism, besides, use appropriate reactions to the situation. It also measures social responsibility, which is represented by the skill of the mentally disabled person's respect for laws, his application of orders and instructions, Moreover, his preservation of private and public property. It also measures the formation of friendships: It includes the important skills for the mentally disabled person to establish a positive relationship with others, and his peers' social acceptance of him. The test measures initiative: It is the skill of the mentally disabled person in initiating interaction with others and taking the initiative.

How to apply and correct the scale The Social Skills Assessment Scale is applied to individuals with mild mental disabilities, through teachers' responses to the scale items by choosing the answer item closest to the examinee's observed skills, where a mark (✓)before item The answer(a lot) if was phrase Describe Skill that He does With it The examinee In abundance and continue (In a way permanent), and it is done situation sign(✓)before item The answer(sometimes)if was phrase describe skill that He does With it the examinee In a way wobbling (in some Sometimes), in when It is done situation sign(✓)before for answer (never) if the statement describes a skill that is not strong is completely inspected.

psychometric of the scale (validity and reliability) Mubarak, Sarah (2016) verified the validity and reliability of the scale through a survey sample of (40) male and female students with mild mental disabilities from intellectual education schools in the State of Kuwait, where the validity of the scale was calculated, it was done apparent validity was achieved by presenting it to (11) arbitrators who are specialists in the field of special education, psychology, measurement and evaluation. The internal consistency validity of the scale was also verified by calculating the Pearson correlation coefficient. The correlation coefficients of the statements with the total score of the scale were, in most cases, statistically significant at the level of (0.01). The validity of the hypothetical structure of the scale was

verified by calculating the correlation coefficients between the dimensions that make up the scale and the total score. It was found that all dimensions that make up the scale are significantly related to the total score at the level of (0.01). The internal consistency stability of the social skills assessment scale for the mentally disabled was also extracted using Cronbach's alpha coefficient, which reached a value for the total score of (0.966). (Mubarak, Sarah, 2016).
To achieve the study objectives and answer its questions, the researcher recalculated the validity and reliability after taking a sample from the study community consisting of (30) mentally disabled people capable of learning.
Self-Validity The validity of the study tool was verified by presenting the study tool to: five from the arbitrators with expertise in universities and educational institutions, and a group of arbitrators who are experts in educational specializations, to review and check its phrases and dimensions to determine the appropriateness of each phrase, the extent of its belonging to its own dimension, its linguistic soundness, the soundness of the formulation, and to suggest amendments if necessary, by deletion or In addition, the researcher has fulfilled the arbitrators' comments..
Constructive validity to make sure to ensure the construct validity of the scale, Pearson's correlation coefficient was calculated. It reached (0.86). All test phrases were related to the overall dimension of the test at the level of (0.05).
Tool stability Reliability refers to the possibility of obtaining the same results if the instrument is applied again to the same individuals, to verify the reliability of the scale axes, Cronbach's alpha reliability coefficient was used. Cronbach's alpha It reached (0.95).
Second, motor skills scale Measures motor skills according to the scale Adaptive Behavior Vienland Adaptive Behavior Scale: It's issued in its first form by countries Doll the year (1935) and was published in 1965. It appeared as a standardized measure of growth that measures motor skills developed by Sparrow and Bala. (Subaro & pala) in the year (1984) (Al-Otaibi, Bandar, 2004). The motor skills test consists of (38) phrases, including (19) phrases to measure large muscles, and (19) phrases to measure small muscles.
It has been selected Motor skills from gauge Vaillant Adaptive behavior causes the following: Pot and Scale on discrimination between the Individual performance, He is characterized by great stability and honesty. Scale capacity reveals degree and severity of disability, measures Scale period from birth until age eighteen, applied Scale at different ages and in different environments. The scale measures motor skills Motor Skills:
A.big muscles (where Measures an individual's skills in using the arms and legs and motor coordination, including sitting, walking, running, and play activities.).
B - Fine muscles: measures the individual's skills in using the hands and fingers (The ability to control objects, draw, use scissors (Al-Otaibi, Bandar, 2004)
Test correction It is done test scores are recorded as follows:
If the examinee performs the behavior, he gets (two points).
If the examinee performs the skill sometimes, he is given (one point).
If the examinee is unable to perform the skill, he will not receive a score and will be marked (zero).
If there is no opportunity to monitor the behavior, the symbol (M) is placed.
The scale was graded using a three-point Likert scale. (Yes = 2, Sometimes = 1, never = 0).
validity
Self-validity the scale was presented to five specialists in psychology, special education, and measurement to judge the scale and its validity and suitability for the purpose of the study. The judges' comments were considered.
Constructive validity of the scale to verify the construct validity of the scale, Pearson's correlation coefficient was calculated and reached (0.92), and all the scale's statements are significant at the (0.05) level.

reliability the reliability of the scale was calculated by: Factors stability alpha-Cronbach (Cronbach's Alpha), and it reached (0.93).

Processors Statistics To answer the study questions and check the indicators of validity and reliability, use: researcher Processors and methods Statistics Next during Analysis Using program (SPSS): Factors connection Pearson to measure sincerity internal consistency, a test alpha Cronbach to measure stability tool the study, T-test was used to identify the differences between sample members.

Results

Table No. (3) Scores of study outcome criteria categories and their limits according to the Likert scale.

Degree	Standard for judging results	Average category		degree of decline
		from	To	
2	Yes	1.34	2	Few
1	Sometimes	0.67	1.34	Medium
0	No	0	0.67	Big

Results related to the first question: Do The level of motor skills of (Educable) is decline?

To answer this question, a calculation was made. Mean and standard deviation for identification to what extent is it characterized? Motor skill level of (Educable), and it is shown in Table No. (4) below.

Level	Number	arithmetic mean	standard deviation
motor skills	65	1.15	.570

It is clear from Table No. 5 above that: Motor skill level of mentally disabled people who are capable of learning Characterized by decline.

Second question Are there a positive relationship between motor skills and social skills in (Educable)?

To answer this question, a calculation was made. Pearson's correlation coefficient over the course of presence there is a positive relationship between motor skills and social skills among mentally disabled people who are capable of learning, as shown in Table No. (5) below.

Relationship	Correlation coefficient
The relationship between motor skills and social skills	0.64

It is clear from Table No. (5) above that: There is a positive relationship between motor skills and communication skills with (Educable) is moderate degree.

Third question Are there any significant differences Statistics in skills Motor and communication skills of Educable due the gender Male/Female?

To answer this question, a test was calculated. T-Test To find out how different with motor skills and social skills of Educable return to gender Male/Female and it is shown in Table No. (6) below.

Sex	number	arithmetic mean	standard deviation	Value-T	Significance level
Male	32	.930	.410	-2.12	0.02 Function

Female	33	1.38	.370		

Table No. (6) shows that there are statistically significant differences. At the level of (0.05), between males and females around motor skills and social skills of the Educable are attributed to gender Male/ Females.

Fourth question Are there any statistically significant differences in motor skills and social skills with Educable due to age.

To answer this question, a test was calculated. T- Test to find out how different it is to be attributed to the age, and it is shown in Table No. (7) below.

The age	Number	arithmetic mean	standard deviation	Value-T	Significance level
7-9	30	.990	.380	-2.50	0.022 Function
10-12	35	1.49	.340		

It is clear from Table No. (7) that: There are significant differences. Statistics in motor skills and social skills at the level of (0.05) It goes back to age.

Fifth question Are there any significant differences in motor skills back to gender Male/ Female

To answer this question, a test was calculated. T- Test to find out how different motor skills Condolences gender, and it is shown in Table No. (8) below.

Sex	Number	arithmetic mean	standard deviation	Value-T	Significance level
Male	32	1.42	.320	-1.63	0.12 not function
Female	33	1.41	.290		

It is clear from Table No. (8) that there are no direction Statistically significant differences in motor skills between males and females.

Question 6 Result Are there any statistically significant differences in motor skills back to age?

To answer this question, a test was calculated. (T- Test) To find out how different motor skills due to age is shown in Table No. (9) below.

The age	Number	arithmetic mean	standard deviation	Value-T	Significance level
7-9	30	1.27	.480	-1.95	0.09 not function
10-12	35	1.31	.360		

It is clear from Table No. (9) There are no significant differences statistics on motor skills with Educable back to the age.

Discussion:

The first question Do The level of motor skills of mentally disabled children declines?

It is clear from Table No. (4) that: Motor skill level has learners characterized by decline. The results of the study are consistent with the results of studies by: Andalò, Beatrice (2022), Kirstin Macdonald, et al (2018), Muhammadi Ahmad (2024) on the decline of motor skills in Educable children , This affects other important aspects, such as: The results indicate study of Gianluca Borghini(2024) , on the existence of a significant positive relationship between degrees motor skills test academic achievement indicates that students with high proficiency in motor skills have higher academic achievement., Moreover, Study Lubans DR, Morgane, et al (2010) a whose results indicate There is a significant positive relationship between motor skills test scores and academic achievement also, and it is Closely related to cognitive functions and social, it is also highly related to performance in mathematics and reading abilities

points out Cunningham, Cliff (2016) People with mental disabilities suffer from physical characteristics that make them have low motor abilities, especially children with Down syndrome, such as: narrow sinuses, weak muscle tone, and obstruction of the upper airway, which makes them breathe through their mouths. This causes the sternum to contract inward, neck and spine problems, knee and patella noises, and ligament laxity. They are more susceptible to colds, which reduces their ability to exercise. All of this can reduce their motor abilities and prevent them from acquiring important motor skills.

The researcher attributes the poor motor skills of the sample members to the lack of specialists in physical education or physiotherapy within public and private schools. Moreover, the school environment lacks the training tools that help develop motor skills in schools for the mentally disabled. It is well known that Sudanese schools do not apply the integration system in its various forms, which deprives them of extracurricular activities with their peers, the normal children.

The second question Is there a positive relationship between motor skills and social skills of Educable?

It is clear from Table No. (5) There is a positive relationship between motor skills and social skills with Educable. Moderately the results of this study agree with studies of :Housen, Suzanne, et al (2016) Beatrice (2022) Abdul Nabi, Ra'eda (2023):These studies found a statistically significant relationship between motor skills and social skills Like the relationship between evolution Motor and language development as one of the important social media tools In childhood, where Hierarchical linear regressions show that motor skills influence language abilities in late second and third years. A study indicates that Cheung, W, H (2022) There are longitudinal relationships between social communication and motor skills, Furthermore, that motor skills mediate the relationship between communication skills and social skills in elementary school. And the improvement in motor skills supports improved social skills. Cunningham, Cliff (2016) found that self-help and social skills are related to mental abilities in the early years, and that there is an advancement of social age over mental age, then language age, as this pattern appears more evident in Down syndrome disability.

The third question Are there any statistically significant differences in motor skills and social skills with Educable referred to gender Male/Female?

It is clear from Table No. (6) In the presence of statistically significant differences at the level (0.05) between males and females in favor of females. The result is consistent with Sari and Fatahin's study (2021) About existence social skills deficits in Educable children in Collaboration skills as one of the social skills, there are statistically significant differences between males and females in cooperation skills in favor of females. The result did not agree with the study. Al-Ajami, Misfired & Shirawi, Maryam (2020) the results indicated the differences in motor skills were in favor of males. The results of the study by Muhammad, Naima (2016) also indicate that males are more likely to suffer from social-pragmatic communication disorder than females. While the results indicate that study Al-Khadi, Nasima et al (2015) to non-existence statistically significant differences between the average scores of gross and fine motor skills, the total score of male and female children in kindergarten, except for the balance skill Which was for males Abu Bakr, Suad (2018) found there are statistically significant differences between the average scores of males and females in social skills for the benefit of Males. The researcher attributes the result to the presence of differences in motor skills and dexterity the social advantage for females is due to the age nature of the sample individuals, and to the

nature of the growth stage in terms of physical and social maturity in favor of females. Al-Hussein, Asma (2006) indicate that females grow faster and are therefore heavier and more mature than males at ages (6-11) years old.

The fourth question: Are there any statistically significant differences in motor skills and social skills with Educable back to Age (7-9) (10-12)?

It is clear from Table No. (7) that there are statistically significant differences at the level of (0.05) In skills Motor and skills Social between children with Educable back to the age in favor

to old age. The result is consistent with the study of Al-Khalidi, Nasima (2025), whose results indicated the presence of statistically significant differences in gross and fine motor skills for kindergarten children for the older age group (18 to24) month. Not only- but also Study of Muhammad, Naima (2016) Which concluded that older children are more likely to develop social communication disorder than younger children. While a study of Valla, Lisbeth (2020) indicates that the link of skills gross motor skills positively influences communication skills. Also, he finds motor skills with social media skills. The researcher attributes the result to the physical development and level of motor maturity among the mentally disabled in childhood stage. As people age, individual differences in social skills become more apparent compared to their average peers.

The fifth question Are there any significant differences statistics in motor skill with Educable back to gender Male/Female.

Table No. (8) show that there are no direction statistically significant differences between males and females in motor skills for Educable. The result agreed with the study of Al-Khalidi ,Naseema (2015) that there is no statistically significant differences in gross and fine motor skills and overall score for boys and girls...and differs from the study of Baqer, Nasser (2019), which Its results revealed differences between boys and girls in basic motor skills tests: kick the ball, throw the ball, over-the-shoulder throw, running, jumping, Jumping from a standstill is more favor for males. Alawi Mohammed Hassan (1994), points out, that Males in late childhood They are distinguished by their ability to quickly adapt their movements to different conditions. While He sees Jadou, Saleh Mohammed (2007) Males and females are equal at this stage. In terms of physical abilities, male children outperform females in arm strength, while females have overall flexibility that is greater than that available to males. As a result, males excel in some sports, such as baseball. In contrast, Females have an advantage in other sports, such as gymnastics. also, the presence of performance skills in Jumping, throwing, and running are slightly higher in males and continue until early adolescence. Along with, weight and long limbs and strength in throwing things, building bones and tissues are in favor of males at this stage. The researcher attributes the lack of individual differences in motor skills among the mentally disabled to the lack of physical activities, the absence of a sports specialist, and the lack of interest in extracurricular activities in special education schools and institutes in Gezira State.

The Sixth question There are no statistically significant differences in motor skills among Educable back to Age (7-9) (10-12)?

Table No. (10) shows that there are no statistically significant differences in motor skills back to age. The result is differ with the study of Al-Khalidi and Naseema (2015) that there are significant differences in motor skills in favor of older age, which is what the study of Muhammad, Naima (2016) reached, while the results of the study indicate that Valla, Lisbeth (2020)on relationships between fine motor development with communication skills to connect gross motor skills in six Positively known for communication skills, fine motor skills at 12 months were associated with communication skills(Sacks, B, & Buckley, S .2023)

There is greater variation in basic motor development in children with Down syndrome, compared to typically developing children. For example, the average age of walking in typically developing children is 13 months and ranges from 9 to 17 months, while the average age of walking in children with Down syndrome is 24 months and ranges from 13 to 48 months., with weak timing, as well as Growth takes It takes longer to improve their skills and they may not reach the same levels of fine coordination.(Latash, ML,2000), what Share studies Reid, G. & Block, M.E. (1996), Latash, ML (2000),Balance is particularly challenging and remains a weakness in the teenage years. This may explain why many people with Down syndrome struggle to master riding a bike. The skill level remains low compared to And

with Ordinary people. Therefore, mentally disabled children need more exercises to reach the same strength levels with normal children.

Conclusion

The results of the study indicate that Motor skill level of Educable low, and that the relationship between motor skills and social skills in Educable Intermediate level, And the existence there are statistically significant differences due to gender (males/females) in motor skills and social skills in favor of females, There are statistically significant differences at the level of (0.05) in motor skills and social skills among Educable due to older age. There are no statistically significant differences between males and females in motor skills among Educable. There are no statistically significant differences between Educable in motor skills due to age.

Recommendations The study recommends implementing an integration system between the mentally disabled and normal people, as integration has great benefits in developing motor and social abilities, as well as activating extracurricular activities, especially physical exercises, and providing schools and special education institutes with training tools. and specializing in physical education to develop motor skills.

References

[1] Andalò. Beatrice. (2022). Do motor skills impact on language development between 18 and 30 months of age? Journal of Infant Behavior and Development, Volume 66, February 2022, 101667,https://www.sciencedirect.com/science/article/abs/pii/S0163638321001417

[2] Armatas. V. (2009). Mental retardation: definitions, etiology, epidemiology and diagnosis. Journal of Sport and Health Research. 1(2):112-122

[3] American Association on Intellectual and Developmental Disabilities. Mental Retardation Definition, Classification and Systems of Supports. (2002) 10th ed. Washington DC: AAIDD,

[4] American Association on Mental Retardation (AAMR). (2000). Available at: http://www.AAMR.org. May 2000.

[5] Abdul Jabbar. Fatima. (2017). Social communication and self-concept among integrated and non-integrated mentally disabled children, Journal of Literary Humanities and Languages, 1 College of Graduate Studies - Arabian Gulf University - Kingdom of Bahrain, Volume 61, Issue 61 - Serial number of issue 61, August 2017, Page 863-489 10.21608/artman.2017.146211 https://artman.journals.ekb.eg/article_146211.html

[6] Al-Khalidi, Naseema et al (2015) Evaluation of Motor skills of kindergarten children by applying the Peabody Motor Development Scale according to the variables of age and gender in Jeddah, Journal of Qualitative Education Research and Studies, Zagazig University, Issue (1), Volume 2, July 2015, pp. 2-38.- https://jsezu.journals.ekb.eg/article_237654.html

[7] Abdul Nabi. Ra'eda. (2023). Motor skills and their relationship to social skills in a sample of children with autism spectrum disorder, Journal of the Faculty of Early Childhood Education, Cairo University, Volume 44, Issue 1 - Serial Number of Issue 1, May 2023, Page 1009-1034

[8] Al-Ajmi. Misfru & Al-Shirawi, Maryam. (2020). Differences in feelings of psychological loneliness and depression among children with high and low social skills with mild intellectual disabilities. Arab Childhood Magazine, Kuwait, Issue 76, September 2018, pp. 62-87About Down Syndrome | National Down Syndrome Society (NDSS)". Ndss.org. Retrieved 03-28-2023. https://ndss.org/about

[9] Abu Bakr. Suad. (2019): Individual differences between males and females in social skills; Journal of the College of Education, University of Benha, Issue (117), Volume (1), January 2019.

[10] Al-Hadidi. Mona. (2004). Training Program for Disabled Children. 1st ed., Amman: Dar Al-Fikr for Printing, Publishing and Distribution. Jordon.

[11] Al-Hussein. Asma. (2006). Developmental Psychology; Dar Al-Zahraa for Printing and Publishing, Riyadh, Kingdom of Saudi Arabia.

[12] Al-Khudaydi. Mona (2020). The effectiveness of a training program based on sensory integration in developing social competence among female students with mild intellectual disabilities, Arab Journal of Disability and Giftedness Sciences, Vol. 4, No. 10, January 2020, pp. 173-202.https://search.shamaa.org/FullRecord?ID=257327

[13] Abdul Fattah.H.(2015). Intellectual Disability. Dar Al-Zahraa for Printing and Publishing, Riyadh, Kingdom of Saudi Arabia.

[14] Beblawi. Ihab. (2013): Community disability Categories -Reasons- Prevention (. Edition 1,

[15] Riyadh: DarAl-Zahra. Saudi Arabia.
[16] Cheung. W. H (2022). A Longitudinal Analysis of the Relationships Between Social, Communication, and Motor Skills Among Students with Autism, Journal of Autism and Developmental Disorders Article, Published: 22 October 2021, Volume 52, pages 4505–4518,
[17] Calnington. Cliff. (2016). Down Syndrome, Jarir Bookstore, Riyadh, Saudi Arabi
[18] Dictionary of Merriam Webster (2023). Definition of mental retardation.
[19] https://www.merriam.webster.com/thesaurus/mental%20deficiency
[20] Daniel J. Reschly, et al. (2002). National Academies of Sciences, Engineering, and Medicine. 2002. Mental Retardation: Determining Eligibility for Social Security Benefits. Washington, DC.
[21] Definition from Workplace Testing (2021): What are Motor Skills? WorkPlaceTesting.com. Retrieved 2021-11-03.
[22] Free Wikipedia (2023): https://ar.wikipedia.org/wiki
[23] Gianluca. Borghini. (2024) The Correlation between Motor Skill Proficiency and Academic Performance in High School Students, Journal of Domingo Jesús Ramos-Campo 1, Vicente Javier Clemente-Suárez 2,3, 2024 Jul 12;14(7):592. doi: 10.3390/bs14070592
[24] Galang. Baqiyudin & Nurhasan. Suroto. (2012). Improving The Gross Motor Skills of Mentally Retarded Children; Journal of Educational Research & Social Sciences, 2774-5406. galangbaqiyudin16070946002@mhs.unesa.ac.id
[25] Hansen. B; Cardenas. et al (2013). "Health and disease in adults with Down syndrome". Tidsskrift for den Norske Laegeforening. 133 (3): 290–94. doi:10.4045/tidsskr.12.0390. PMID 23381164
[26] Hockey; Hickey& E; Summar, K. L. (2012). "Medical update for children with Down syndrome for the pediatrician and family practitioner." Advances in Pediatrics. Elsevier B.V. 59 (1): 137–157. doi: 10.1016/j.yapd.2012.04.006. ISSN 0065-3101. PMID 22789577.
[27] Human Rights Which. (2024). Mental Retardation.
[28] Housen. Suzanne. et al (2016). The interrelationships between motor, cognitive, and language development in children with and without intellectual and developmental disabilities, Research in Developmental Disabilities, Volumes 53–54, June–July 2016, Pages 19-31, https://www.sciencedirect.com/science/article/abs/pii/S0891422216300129
[29] Ibrahim. Al-Maghazi. (2023). Effect Use Intelligence Strategies in Teaching Studies social and environment To Developing some geographical concepts and fine motor skills among sixth grade students Primary People with intellectual disabilities who are capable of learning, Journal of the College of Education Asio1, Vol. 2, No. 39, January 2023, pp. 59-94.
[30] Ibrahim. Rania (2020). Peer learning as an approach to improving some social skills among mentally disabled children who are capable of learning in integrated kindergartens, Journal of Scientific Research in Education, Ain Shams University, Issue 21, Vol. 3, 2020, pp. 374-405.
[31] Julie. Advocate. (2024). Social Skills Training, Pending Medical Review; Last updated: Sep 25th, 2024, https://www.mentalhealth.com/library/social-skills-training#content-disclaimer.
[32] Jado. Saleh, Muhammad. (2007). Developmental Psychology, Childhood and Adolescence, Dar Al-Masirah, Amman, Jordan.
[33] Jack. S.g. (2023). Encyclopedia of Child Behavior and Development, Mild Mental Retardation https://link.springer.com/referenceworkentry
[34] Kliegma. Robert M. (2011). "Down Syndrome and Other Abnormalities of Chromosome Number". Nelson textbook of pediatrics (19th ed.). Philadelphia: Saunders. pp. Chapter 76.2.ISBN978-1-4377-0755-
[35] Kirstin. Macdonald, et al (2018). Relationships Between Motor Proficiency and Academic Performance in Mathematics and Reading in School-Aged Children and Adolescents: A Systematic Reviewing J Environ Republic. https://pmc.ncbi.nlm.nih.gov/articles/PMC3661895/
[36] Latash. M. L. (2000). Motor coordination in Down syndrome: the role of adaptive changes. In D. J. Weeks, R. Chua & D. Elliott (Eds.) Perceptual-motor behavior in Down syndrome. Pp 199-224. Champaign, IL: Human Kinetics.
[37] Lindblad. Da & Fernell. Elisabeth. (2023). Mild intellectual disability; Gillberg Neuropsychiatry Centre, https://www.gu.se/en/gnc.
[38] Lubans. Morgane. et al (2010). Fundamental movement skills in children and adolescents: Review of associated health benefits. Sports Med. 2010; 40:1019–1035. doi: 10.2165/11536850-

[39] Muhammad. Al-Hassan. Alawi (1994): Sports Psychology (Ninth Edition), Dar Al-Maare for Printing and Publishing, Egypt.
[40] Mohammadi. Ahmed. (2024). The effect of an electronic educational program on developing verbal communication skills among a sample of children with mild mental disabilities accompanied by communication disorders in the Jazan region, Journal of Humanities, Qena University, Volume 33, Issue 64, July 2024, Page 13.-43https://qarts.journals.ekb.eg/article_362628.html
[41] Mohammed, Naima (2016). Scale design diagnostic for communication disorder social(pragmatist) in children and its relationship to some variables Demography, Journal of Special Education, Ain Shams University, Volume 5, Issue 16,July 2016, Page 164-218,10.21608/MTKH.2016.168556
[42] Nasser. Baqer. (2019). A study of the differences in the level of basic motor skills among primary school students in the state of Biskra, Journal of Sports Creativity, University of Biskra, Algeria, Volume No. (10) / Issue No. (02) repeated Part (03) - 2019 / Page: 56 - 75.
[43] Yahya. Khawla, Ahmed. (2014). Motor skills for people with mental disabilities. Journal of Special Education and Rehabilitation, Vol. 2, No. 5. Publisher: Special Education and Rehabilitation Foundation. Date: 2014.
[44] Osman. Ibrahim Osman. (2009). Scientific Research Methods in Education; Publications of the Open University of Sudan.
[45] Patterson. D. Jul (2009). "Molecular Genetic Analysis of Down syndrome". Human Genetics. 126(1): 195–214. doi:10.1007/s00439-009-0696-8. PMID 19526251. S2CID 10403507.
[46] Reikerås. Elin. et al (2020). Relations between motor skills and language skills in toddlers and preschool-aged children Journal for Research in Arts and Sports Education, Vol. 4 | No. 2 | 2020 | pp. 47–67, University of Stavanger; 2University of South-Eastern Norway. https://jased.net/index.php/jased/article/view/2417/4974.
[47] Reid. G. & Block, M. E. (1996). Motor Development and Physical Education. In B. Stratford & P. Gunn (Eds.) New approaches to Down syndrome. Pp 309-340. London: Cassell.
[48] Rashmi. Rai. (2024). What Is Mental Retardation? Health insurance, https://www.careinsurance.com/blog/health-insurance-articles/what-is-mental-retardation
[49] Sacks. B, & Buckley, S. (2003). What do we know about the movement abilities of children with Down syndrome? Down Syndrome News and Update, 2(4), 131-141.
[50] Sohar. Mohamed. (2014). development Initiatives Vitality and social those with needs Private, Elzhara Library, Cairo: Egypt.
[51] Shoman. Nermin. (2022). An Interactive Activity Program to Teach Some Basic Motor skills and Develop Social Communication and Joint Attention in Children People with Autism spectrum disorder; Scientific Journal of Sports Sciences Faculty of Physical Education, Alminia University, Issue 8, Second Edition, December 2022, pp. 318-353
[52] Singh A. Uijtdewilligen L., (2011): activity and performance at school: A systematic review of the literature including a methodological quality assessment. Arch. Pediatr. Adolesc. Med. 2012; 166:49–55. doi: 10.1001/archpediatrics.2011.716
[53] Sara. E. (2024). Encyclopedia of Child Behavior and Development; Springer. Volume 1-AD. https://link.springer.com/referencework/10.1007/978-0-387-79061-9
[54] The National Academies Press. https://www.hrw.org/reports/2001/ustat/ustat0301-01.htm
[55] Vuijk, Pieter, Jelle. (2010). Motor performance of children with mild intellectual disability and borderline intellectual functioning: Journal of Intellectual Disability Research, November 2010, 54(11):955-65, DOI:10.1111/j.1365-2788.2010. 01318.x
[56] Valla. Lisbeth (2020): Motor skills and later communication development in early childhood: Results from a population-based study, Journal of Child Care Health Dev, . 2020 Jul;46(4):407-413, doi: 10.1111/cch.12765. Epub 2020 Mar 26, https://pubmed.ncbi.nlm.nih.gov/32191337
[57] Will. Elizabeth & Jane. E Roberts (2021). Motor Influences on Communication, Comparisons between Down Sy Elizabeth syndrome and Fragile X Syndrome, Published in final edited form as: Am J Intellect Dev Disabil. 2021 Nov, https://pmc.ncbi.nlm.nih.gov/articles/PMC8764748/.
[58] Vuijk. Pieter, Jelle. (2010). Motor performance of children with mild intellectual disability and borderline Intellectual Functioning, Journal of Intellectual Disability Research, November 2010, 54(11):955-65, DOI:10.1111/j.1365-2788.2010.01318.

[59] Weijerman. M. E& Winter, J.P. (2010)."Clinical practice. The care of children with Down syndrome". European Journal of Pediatrics. 169 (12): 1445–52.doi:10.1007/s00431-010-1253-0.PMC2962780.PMID20632187.

[60] Wilkie, Flint A. O. M& Buckle, V. J., Winter, R. M., Holland, A. J., McDermid, H. E. (1995). The detection of sub telomeric chromosomal rearrangements in idiopathic mental retardation. Nature Genet. 9:132-140.