

Improving Motor Skills Of Autism Affected Children

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Abstract

The Article's Primary Objective Is To Examine The Motor Skills Of Individuals With Autism Spectrum Disorder (Asd) In Our Community In Order To Aid In The Identification And Sustain Of Affected Families. Motor Behaviour Is The Earliest Observable Symptom Of Autism Spectrum Disorder. There Is The Sustainable Development Of The Developmental Significance Of Impaired Motor Function In Asd And Its Relationship To Social Skills. Impairment Of Motor Function Demands Increased Attention, Depleting Available Resources For Handling Environmental Stimuli As Well As Learning. This Knowledge Suggests That Perhaps The Trainable Motor System May Be A Key To Improving Outcomes For Children With Asd. The Author Highlights Social Interaction, Verbal And Non-Verbal Communication, Motor Abilities, And Issues Facing Children With Autism And How To Promote The Motor Ability In Asd To Overcome The Day To Day Activity Difficulties. Moreover, In This Research We Focus More On Motor Skills Of Autism Children By Reviewing The Literature.

Keywords: Social Interaction, Verbal And Nonverbal Communication, Gross Motor Skill, Fine Motor Skill.

Introduction

Autism Is A Neurological Developmental Disorder, Affecting Approximately 1 In 110 Births, Thought To Get A Genetic Basis, Influencing The Brain's Ability To Process As Well As Interpret Various Types Of Information. Deficits Can Generally Fall Into Three Broad Categories, Which May Arise From Compulsive Behavior, Drug Or Alcohol Use, Or Financial Mismanagement. Autism Is A Cognitive Disorder In That Symptoms Commonly Appear By Age Three, And It Will Last For Life. The Quality Of Life For Children With Autism Is Negatively Affected By Their Condition(Dankert,2003). Autism Causes Significant Communication Difficulties Because Of Students' Childhood Experiences. Children Are Not Ready To Express Themselves As Early As Age 2. Infants Are Less Likely To Look At You When You Approach Their Crib, And They Are Also Less Likely To Be Excited And Engaging When You Approach It. As The Baby Grows, Different Types Of Typical Play, Such As Spontaneous Make-Believe Play And Interacting With Others, Decrease Or Disappear Noticeably(Marr,2003). They Have A Hard Time Understanding And Empathizing With Others' Thoughts. In Order To Effectively Discern Subtleties Such As Body Language, Gestures, Tone Of Voice, Sarcasm, And Idioms, We Must Struggle To Perceive Them. Some Students Demonstrate "Stereotypical Behaviour," Which Means They Prefer Stereotypical Interests And Behaviours That Imply They Have The Disorder(Narmadha,2020). Autism Was First Described In The 1940s By Leo Kanner, A Us-Based Pediatrician, When He Observed Several Children Who Exhibited Autism-Like Behaviours. As The Designation Of Autism As A Pervasive Developmental Disorder Gained Popularity Over 80 Years Ago, It Has Recently Been Substantiated By Two New Studies That Identified Autism As Existing In More Children Than Previously Estimated. The American Psychiatric Association(Apa) Has Partnered With The Center For Mental Health To Identify Mental Disorders In Both Children And Adults. The Apa Has Discovered Five Subtypes Of Pervasive Developmental Disorders(Gowen,2013).

Impairments Of Children With Autism

Autism Is A Neurological Disorder That Affects Language, Social Behaviour, Attention, Motor, And Emotional Abilities. Autism Has Now Been Viewed As A More

Common Disorder Than Down Syndrome, Cystic Fibrosis, And Various Childhood Cancers. Children With Autism Are Diagnosed Early On, And Their Parents And The Rest Of The Family Are Significantly Impacted. However, Most Working Professionals Who Work With Children With Autism Know That There Is No Cure; Therapies That Promise A Cure Either Lack Scientific Background Or Overstate Their Effectiveness.

Autism Children Are Not Unusual, And Special Education Services Are Required. However, They Have Three Specific Deficits. They Are,

1. A Qualitative Social Interaction Impairment Manifested By Specific Social Interaction Impairments In Facial Expression, Body Posture, And Gestures. This Also Contributes To Low Social And Emotional Empathy.

2. Qualitative Communication Impairments Result In Slower Spoken Language Development Or Complete Immaturity.

3. Restricted Repetitive And Stereotyped Patterns Of Behaviour, Interests, And Abnormal Activities In Intensity Or Focus.

Autistic Children Who Have Trouble Focusing And Coordinating Their Movements Struggle In School. The Motor Balance Is Mainly Significant When Learning To Solve Mathematical And Logical Relationships. They Must Coordinate The Activity Of The Motor With The Activity Of The Mind(Fournier,2010).

Motor Skills Of Children With Autism

Autism Spectrum Disorder (Asd) Affects Motor And Fine-Motor Skill Acquisition As Well As Gross Motor Skill Acquisition In Children. As A Result, Children With Autism May Struggle To Meet More Challenging Motor (Holding A Pencil, Writing Letters And Numbers, Cutting With Scissors, Tying Shoes) And Gross Motor (Walking, Running, Athletic Coordination) Developmental Milestones Before They Are Able To Communicate. Delays Like These Can Affect A Child's Ability To Function Normally In School And At Home(Srinivasan,2015). The Consequences May Include Frustration, Anxiety, Low Self-Esteem, And Apprehension About Learning A New Skill Or Task.

Due To Their Fine And Gross Motor Skills Issues, Kids With Autism Have Issues In Academic Environments. Consider, For Example, Students Who Are Unable To Complete Tasks Efficiently With A Pencil. Students Could Have Difficulty Cutting With Scissors, Opening Lunch Containers, Or Tying Their Shoes.

A Child's Poor Coordination Can Negatively Affect Both Their Social And Motor Skills. Specific Sports Activities, Such As Basketball Or Baseball, Can Make Peers Tease Or Mock Children With Autism. This Behaviour Can Lead Others To Believe That Children With Autism Are Physically Weak. Daily Tasks That Are Simple For Children With Typical Motor Development, Such As Buttoning A Shirt, Snapping Snaps, Or Zipping A Coat, Are Quite Challenging For Those With Delayed Motor Development, Who Have Less Time To Practise, And That Leads To Stress Within The Family. The Most Efficient Method Of Handling Complications Related To Autism Is To Increase And Expand Motor Skills(Lloyd,2013). All Public School Students May Enroll In An Occupational Therapy Programme At No Charge.

As Is Often The Case In Occupational Therapy, Various Techniques And Exercises Are Utilised In Order To Improve The Fine And Gross Motor Development Of Children Diagnosed With Autism. Parents Can Also Employ Home-Based Methods That Teach Children Specific Behaviours And Ways Of Thinking. It Is Essential To Begin Offering Support To Young Children With Autism To Provide Them With The Opportunity To Work

On Their Fine Motor And Gross Motor Skills Earlier To Help Ensure Better Functioning In All Aspects Of Life.

Dimensions Of Motor Skills

Children With Autism Disorder May Have A Significantly Heightened Capacity For Complex Motor Functions, Which Occur In The Form Of Six-Dimensional Environments. They Are:

Gross Motor Skill

Childhood Motor Learning Typically Includes The Acquisition Of Gross Motor Skills. Even By The Age Of Two, Many Other Children Have Mastered The Skill Of Standing, Walking, Climbing Stairs, And Running. These Skills Are Built On, Enhanced, And Controlled Throughout Childhood And Adulthood. When A Gross Amount Of Movement Is Used, This Happens. They Develop From Head To Toe. The Typical Child Will Learn Control Of The Head, Trunk, And Then Walking. Playing Outside Has Been Proven To Improve Gross Motor Skills In Children(Ulrich,2000).

Fine Motor Skill

Fine Motor Skill Is The Ability To Coordinate Small Muscles In Complex Movements That Frequently Require Eye-Hand Coordination. Humans Demonstrate Their Manual Dexterity Through Tasks That Are Controlled By The Nervous System. Fine Motor Skills Contribute To Intelligence Development And Continue To Improve Throughout A Person's Development(Esposito,2013).

Language Skill

Many Autistic Children Show Decreased Interest In People Within The First Year Of Life. Other Things Might Be Distracting Them. They Do Not Get As Many Opportunities To Improve Their Language Skills Because They Spend So Much Time Communicating With Other People.

Self-Help Skill

Self-Help Skills Are One Of The First Abilities Children Develop In Order To Assist Them In Planning And Sequencing Task Performance, Arranging Necessary Materials, And Developing The Finely Tuned Physical Control Required To Perform Daily Tasks. One Of The Functions Of Self-Help Skills Is To Catalyze School-Related Tasks As Well As Life-Long Skills. In Most Cases, Self-Help Skills Can Only Be Completed By The Individual Or In A One-On-One Setting, And It Is Often Unacceptable For Others To Assist. This Requirement Is Explicitly Set For Preschools And Schools And Mandates That Young Children Be Potty Trained Before Enrolling. When It Is Challenging To Hone Self-Help Skills, It Also Becomes A Significant Factor For Several Other Activities In Life. As A Result, It Becomes Challenging To Have Sleepovers At Friends' Or Family's Houses, To Attend School Or Preschool Field Trips, And It May Put Kids At Risk Of Becoming The Odd One Out At Birthday Parties If They Are Not Comfortable Eating And Using The Bathroom On Their Own. They May Also Experience Bullying Or Other Social Challenges(Gokulan,2020).

Social Skill

Social Skills Are Essential For Individuals With Autism Because They Help With Their Social And Academic Integration, Get Along With Others, Develop Interests, And

Cultivate Friendships. While These Skills Also Aid In Familial Relations, They Also Help Children By Providing Them With A Sense Of Belonging. One's Ability To Cope Socially With Peers And With Adults Is Directly Related To How One Deals With Others And Superiors. This May Lead To Developing Various Skills In Children, Including Learning And Conversation Skills, Emotional And Problem-Solving Skills.

Cognitive Skill

Most People Believe That Children Diagnosed With Autism Show A Unique Set Of Cognitive Strengths And Weaknesses. For Example, They May Be Better At Decoding And Understanding People's Feelings And Thoughts, But They Also Have More Difficulty Controlling And Managing Their Behaviour. Additionally, They Have An Above-Average Ability To Notice Minute Details And Remember Large Amounts Of Information About A Specific Subject. Cognitive Challenges Are Most Often Associated With The "Theory Of Mind" And Cognitive Functions, Like Managing Executive Functions.

Stay Consistent

The Process Of Improving Motor Skills Is Commonly Hindered In Children With Autism Because It Also Delays Cognitive, Social, And Communication Abilities. This Makes It More Difficult To Attain Both Fine And Gross Motor Functioning. However, When Therapy Is Employed Consistently, The Physical Abilities Of The Child Can Increase. As Individuals With Autism Get Better At Developing Motor Skills, They May Become Better Able To Benefit From Such Interventions. As One Can Tell From This Example, Understanding The Child's Motor Challenges Is Critical In Helping Them Become More Physically Fit, Whether It Be With Strength And Endurance, Gross And Fine Motor Ability. They Are Also Affected By Issues Related To Movements, Such As Poor Posture, Balance, Coordination, And Motor Planning. Movement Difficulties Are Common In Autistic Spectrum Kids, And Those Deficiencies In Essential Motor Skills Are Linked To More Severe Social Communication Issues.

Assume The Person's Motives. In That Case, The Brain Must Form Numerous Connections Between Various Areas Of The Brain, Particularly The Ability To Use Sensory Information From The Environment And The Body To Anticipate What Will Happen Next, Plan Actions, And Then Adjust The Actions As Necessary. This Is Typically The Case With Pre-Schoolers Who Have Not Learned Much Or Had Time To Practice. The Thesis Of These Individuals Is That They Are Motivated To Take On New Challenges, Seek Out Novel Ways To Achieve Their Goals, Are Optimistic About Their Abilities, And Improve Rapidly Over Time Due To Consistent Practice. This Instills A Sense Of Self-Efficacy In Them And Demonstrates That They Are Capable Of Completing The Task.

Children With Autism Spectrum Disorder And Those With Developmental Coordination Disorder Acquire New Motor Skills In Unique Ways. These Differences May Exist Because Children With Autism And Children With Down Syndrome Develop Their Neural Connections Differently. The Formation Of Connections Between Different Parts Of The Brain Is Required To Develop New Motor Skills And Learning. Sensory Data Is Observed From The Body, Such As The Skin, Joints, Muscles, And Vestibular System. Additionally, It Seeks Input From The Environment, Such As Sight And Hearing, Regarding Any Plans, Goals, And Emotions. This Data Is Used To Forecast What Will Happen Next, To Develop Strategies For Achieving Goals, To Carry Out The Strategies, And To Assess How The Results Can Be Improved: Did I Meet My Goals, Did I Meet My Objectives, And What Needs To Be Changed To Assist The Next Person Better?

Due To Differences In How Their Brains Are Wired, Children With Autism Often Struggle To Learn Skills That Require Information Integration And Thus Learn Through Less Efficient Pathways. Additionally, They May Require Additional Practice And Guidance As They Develop New Motor Skills. However, All Children With Autism Can Improve Their Motor Skills If The Appropriate Environments Are Provided.

Anxiety And Attention Issues Are Frequently Encountered Issues That Can Limit Mobility.

To Have Reasonable Motor Control, You Must Go Through The Experience. The Vast Majority Of Typically Developing Children Devote Considerable Time And Effort To Practice And Advance Their Learning And Movement Skills Daily. The Main Concept That Pervades Their Work Is About Continually Seeking Alternative Approaches To Achieve A Goal, Keeping An Optimistic Attitude Despite Failure, And Learning From Mistakes. A Child Who Invests Considerable Time And Effort In The Process Of Trial And Error Learns To Leverage His Or Her Senses To Realise Their Objectives And Adjust Their Actions To Their Aspirations.

Difficulties With Movement Provoked By Joint Hypermobility

Although No Scientific Study Has Been Done To Estimate The Prevalence Of Generalized Joint Hypermobility (Gjh) In Autistic Children, It Appears To Be Quite Common, Based On The Personal Observations Of The People Who Have Encountered It. GjH Is A Phrase That Describes How Flexible A Child's Joints Are. The Joint Capsule And Ligaments Are More Pliable (Easier To Stretch) Than The Average Person. However, The Overall Muscle Structure Is Also Impacted, With A Tendency Toward Weakness (Sometimes Mistakenly Called Low Muscle Tone). Because Hypermobile Joints Are Less Stable Than Normal Joints, The Child's Body Requires Stronger Muscles To Support It. Strength Training, On The Other Hand, Improves Both Joint Stability And Muscle Strength.

Hypermobility Of The Joints And Its Impact On Motor Function

Hypermobility Of The Joints Has A Number Of Detrimental Effects On The Development Of Motor Control. Due To The Inherent Instability Of The Joints, Additional Muscle Work Is Required To Maintain Proper Posture And Movement Control. Children With Joint Hypermobility May Have Trouble Sitting Upright At A Table, Hypermobile Finger Joints May Impact Pencil Grip When It Comes To Drawing And Handwriting, And Leg Weakness Can Impede The Amount Of Walking A Child Can Do, The Speed At Which They Can Walk, The Number Of Stairs They Can Climb, The Ability To Use The Climbing Frame, And Hanging From Monkey Bars.

Additionally, Children With GjH Frequently Have Tight Hip And Shoulder Muscles. When Someone Sits Comfortably, The Chair Or Cross-Legged Position Influences How The Hips And Lower Back Are Aligned. It Also Influences Shoulder Movement Requirements For Handwriting And Drawing.

Insomnia And Hypermobility Of The Joints

Children With Hypermobile Joints And Tight Hip Muscles Frequently Experience Leg Pain After Exercise Or During A Growth Spurt. In Addition, Children With Autism Frequently Exhibit A Greater Proclivity For Adverse Responses To Discomfort, Which Can Make Night Pain Associated With Exercise Extremely Bothersome. Continue Reading About Hypermobility-Related Night Pain.

The Muscular Tone Is Deficient.

The Issue With The Term "Low Muscle Tone" Is That It Functions As A Bit Of A Catch-All. It Appears To Have A Range Of Interpretations Among Individuals. Generally, It Is A Catch-All Category Into Which Any Movement Difficulty Can Be Thrown Without Addressing The Underlying Causes Of The Child's Difficulties. Frequently, The Underlying Cause Of Low Muscle Tone Is Joint Hypermobility. This Distinction Is Critical Because It Has An Impact On The Remedial Activities That Are Selected. Exercises That Improve Strength And General Fitness Help Alleviate Movement Difficulties Caused By Joint Hypermobility.

Initiatives To Enhance Motor Development In Autistic Children

There Are Many Ways To Promote The Motor Activities Which Is Highly Relevant To The Learning Process Of Children With Autism. They Are:

- I. I. Teaching Remedial Exercises That Are Created To Help Pupils Overcome Specific Problems With The Formation Of Words, The Proper Spacing Between Words, And A Pencil Grip.
- ii. Writing Options Can Be Provided For The Child As He Or She Grows Older, Such As Providing A Portable Word Processing Device With A Keyboard On It.
- iii. By Having The Child Work On Basic Fine Motor Skills By Playing Games With Lacing Cards, Stacking Blocks, Putting Together Nuts And Bolts, And Stringing Beads, They Can Build Up Fine Motor Skills.
- iv. Another Thing To Focus On Is The Development Of Strength In The Hands And Fingers, And Having The Child Search For Beads Hidden In Putty, Squeezing And Placing Clothespins On The Edge Of A Box Or Jar, Squeezing On Exercise Balls, And Using The Thumb And Forefinger To Burst The Bubbles On Plastic Bubble Wrap.
- v. To The Extent That Assistance Is Offered During Tasks Such As Buttoning, Holding Utensils, And Tying Laces Will Be Eliminated As The Child Learns How To Do It Independently.
- vi. Moreover, As It Relates To Children, Providing Them With Play Equipment Like Ladders, Balance Beams, And Jungle Gyms Allows Them To Do Supervised Physical Activities Like Climbing Steps And Running Up Ladders.
- vii. Research Showed Increased Hand And Leg Coordination, Such As Swimming And Dancing, Among Those Who Used Such Activities.
- viii. Practicing Sports Skills Such As Catching, Throwing, Or Kicking Balls Will Help One To Improve Hand-Eye Coordination.
- ix. Additionally, Working On Crab Walks, Hopping Like A Frog, And Wheelbarrow Walking With The Child Are Great Ideas For Boosting Creativity.
- x. The Child Jump Over A Rope With Several Evenly Spaced Curves Increases The Child's Muscle Endurance. If Your Child Intends To Jump, It Is A Good Idea To Advise Them Not To Grab The Rope Or The Balance While In The Air.

Conclusion

Challenges In Motor Skill Acquisition Are Not Considered Primary Symptoms Of Asd, And There Is No Requirement For Assessing The Motor Skill Level In The Diagnostic Process. However, There Are Quite A Several Children With Asd Who Have Significant Difficulties. Test Mab-2 Is A Good Instrument For Determining The Stage Of Motor Difficulties, And It Is Suitable For Use On Children With Asd Who Can Complete The Subtest And The Entire Test. We Must Ensure That Children In Our Care Have Their Motor And Movement Skills Checked And Monitored. If We Want Our Charges' Lives To Be Similar To Everyone Else's, This Is An Essential Component Of Their Comprehensive Rehabilitation.

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