





PRESENTED BY ALVINA GUNARDI



















Research suggests that body movement, particularly through physical activity and exercise, can have positive effects on neurodevelopment and muscle growth in children. Here are some key findings

Neuro Development

Physical activity has been linked to enhanced cognitive function, improved academic performance, and better brain health in children. Regular exercise stimulates the release of growth factors, such as brainderived neurotrophic factor (BDNF), which supports the growth and survival of neurons and the formation of new connections in the brain. This can lead to improved learning, memory, attention, and overall cognitive abilities.



















Motor skills development

Engaging in various physical activities helps children develop and refine their motor skills, including both gross motor skills (such as running, jumping, and throwing) and fine motor skills (such as handwriting and manipulating objects). These skills are crucial for everyday tasks, sports performance, and overall physical coordination.

Muscle growth and strength

Contribute to muscle growth and strength in children. Through regular movement and resistance training, muscles adapt by increasing in size (hypertrophy) and becoming stronger. This is beneficial for overall physical fitness, posture, and the prevention of musculoskeletal conditions.







Bone health

Physical activities that challenge balance and coordination, such as gymnastics, dance, martial arts, or certain team sports, can improve children's proprioception (awareness of body position) and spatial awareness. These skills are essential for movement efficiency, injury prevention, and overall body control.

Psychological well-being

Physical activity has been shown to have positive effects on children's mental health and emotional well-being. Exercise releases endorphins, which promote feelings of happiness and reduce stress and anxiety. Regular physical activity can also improve self-esteem, self-confidence, and social skills through interactions with peers and team collaboration.





Sportsmanship and values

aim to instill important values like teamwork, discipline, perseverance, and sportsmanship. Coaches and parents encourage fair play, respect for opponents and officials, and handling both wins and losses graciously.

It's important to note that the type, intensity, and duration of physical activity can vary depending on the child's age, abilities, and interests

Encouraging a variety of activities and providing a supportive and safe environment are key factors in maximizing the benefits of body movement for neurodevelopment and muscle growth in children.







Cognitive development

It has been linked to enhanced cognitive abilities in children. Doing art or engaging in musical activities can improve memory, attention, problemsolving skills, and spatial-temporal reasoning. It has also been associated with better performance in subjects such as mathematics and language.

Language and literacy skills

Exposure to music and art, including drawing, singing and listening to songs, has been shown to support the development of language and literacy skills in children. The experiences help children develop phonological awareness, vocabulary, and auditory discrimination, which are important for reading and language comprehension





It has a powerful effect on emotions and can help children express and regulate their feelings. Singing, doing art, dancing, and participating in group music-making activities promote social interactions, cooperation, and teamwork. It also provides an avenue for self-expression, creativity, and building self-confidence

Motor skills

Playing musical instruments involves fine motor skills, such as finger dexterity and hand-eye coordination. Learning to play instruments or engaging in rhythmic activities like dancing can improve children's motor skills and coordination.



Academic performance



Studies have found positive correlations between music education and academic achievement. Learning music involves discipline, perseverance, and the development of study habits that can transfer to other areas of academic pursuit. Additionally, music education can foster a love for learning, boost self-esteem, and provide a sense of accomplishment.

Cultural awareness and appreciation

Exposure to different styles of music/art from various cultures exposes children to diversity and fosters cultural awareness and appreciation. It promotes an understanding and respect for different traditions, customs, and musical expressions.

Executive function and brain plasticity



Music/Art training has been associated with improved executive function skills, including attention, working memory, and cognitive flexibility. Learning and practicing music and art can enhance brain plasticity, leading to structural and functional changes in the brain.





How does Saint John's provide support?

- Varieties of sports and artistic/musical activities are offered both in intra and extracurricular settings, collaborating with professionals.
- Experienced teachers with licensed coaches and excellent mentorship skills are present.
- Saint John's provides many opportunities for performances and competitions.
- · Complete and supportive facilities are available.
- There are varsity and Dream teams for talented individuals



Resources



- 1. Academic Journals: Research articles published in academic journals provide valuable insights into the effects of sports and music on child growth and development. Some relevant journals in the field include the Journal of Sports Sciences, Journal of Applied Sport Psychology, Journal of Research in Music Education, and Psychology of Music.
- 2. Research Databases: Online databases such as PubMed, Google Scholar, and JSTOR contain a wealth of scholarly articles, research papers, and studies on the subject. You can search for specific keywords, such as "sports and child development" or "music and cognitive development," to find relevant research articles.
- 3. Educational and Research Institutions: Universities and research institutions often conduct studies on the impact of sports and music on child development. Exploring the websites of renowned institutions that specialize in sports science, child development, or music education can provide access to their research findings and publications.
- 4. Books and Literature Reviews: Books written by experts in the fields of sports science, child development, and music education may offer comprehensive overviews of research in these areas. Additionally, literature reviews published in academic journals or book chapters can summarize and synthesize existing research on the subject.
- 5. National and International Associations: Organizations dedicated to sports, music, or child development, such as the American Academy of Pediatrics, American Psychological Association, and National Association for Music Education, often publish position statements, guidelines, and research summaries related to their respective domains.



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