

Kinetic Kids: Effects of Physical Activity and Fine Arts on Children with Disabilities



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Introduction

- Children with disabilities often have complex emotional and behavioral difficulties.
- Exercise and fine arts programs have been shown to decrease stress and help manage mental health in children with disabilities.
- Kinetic Kids is an organization designed to allow children with disabilities to participate in a variety of extracurricular activities, encouraging physical and mental health development.
- The purpose of this study was to evaluate the impact of participation in a variety of programs (including Swimming, Dance, Musical Theatre, and Crossfit) on pediatric behavior and mental health.

Methods

- 48 Children of age ranges 7 to 17 signed up to be a part of the Crossfit, Swimming, Dance, and/or Musical Theatre programs at Kinetic Kids.
- Children participated in fitness or arts activities for 1 hour, once weekly, over a period of 6 weeks (Sept-Nov 2024). Activities were led by Kinetic Kids faculty and physical or occupational therapists.
- Children had a mix of physical and intellectual disabilities. Activities were properly accommodated to the children's needs and they were accompanied individually by volunteers.
- Parents of children completed the Pediatric Symptom Checklist (PSC) and the Strengths and Difficulties (S&D) questionnaire before the first session and after the last session of the 6-week program.
- Matched pre and post program results were compared.



Results

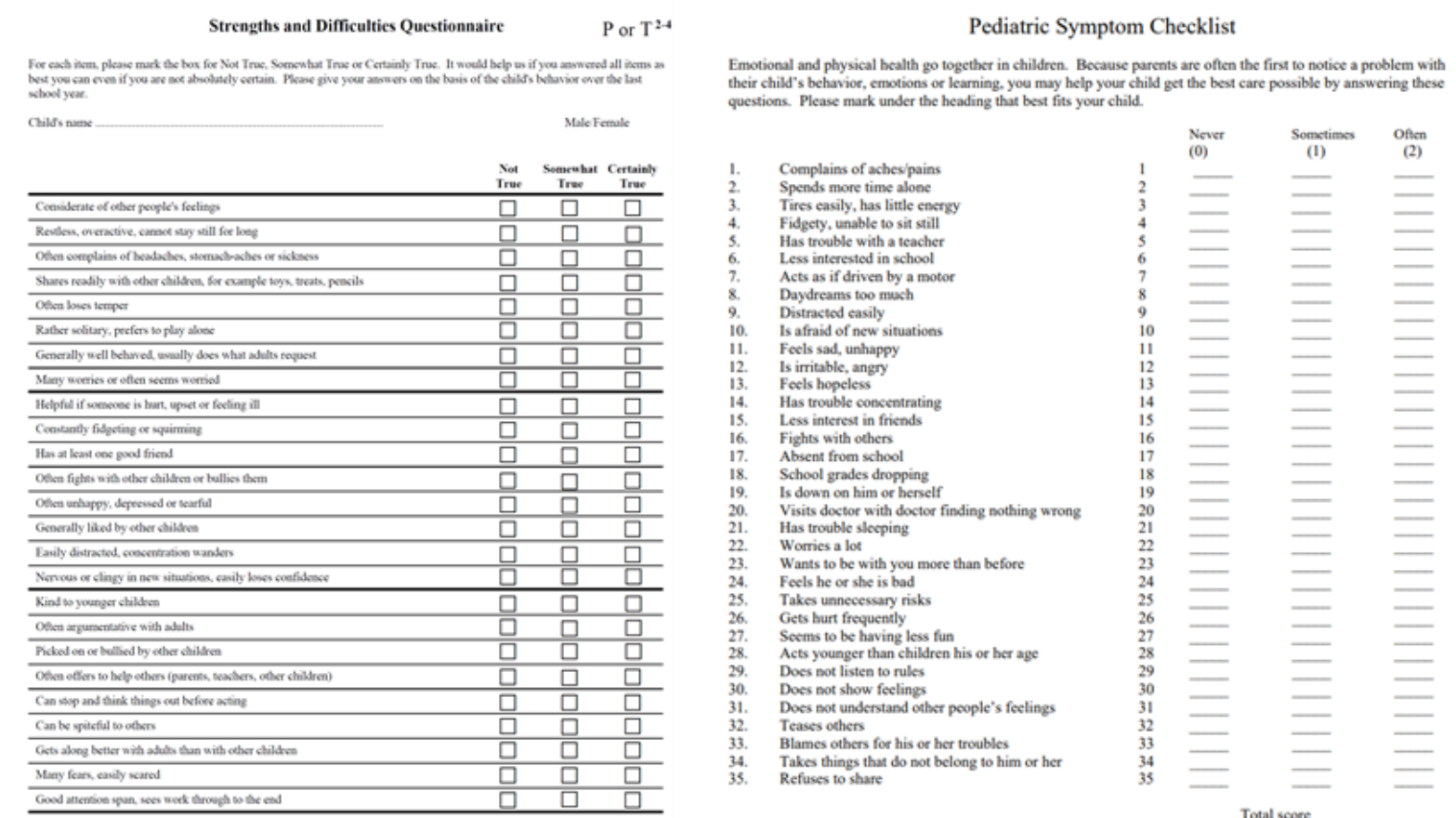


Figure 1: Example of blank SDQ and PSC surveys

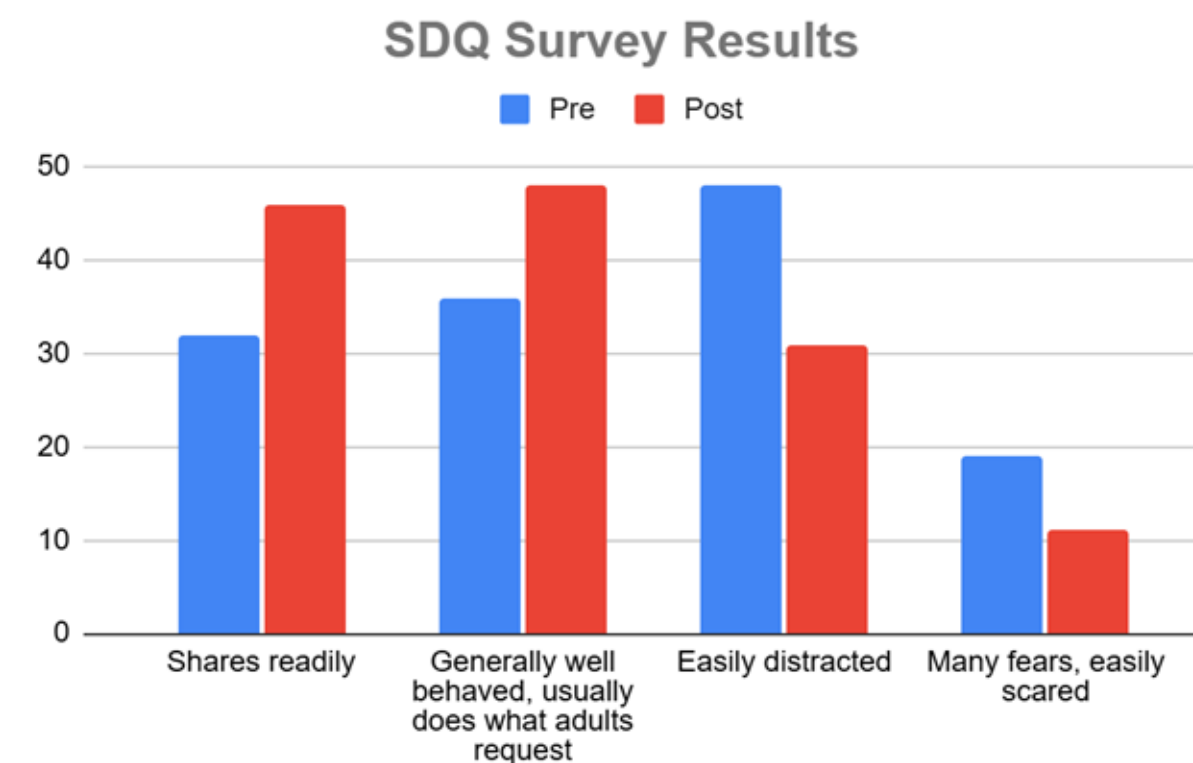


Figure 2: Selected results from SDQ pre and post survey results

- On SDQ (figure 2), *Shares readily*, and *Generally well behaved, usually does what adults request*, both increased after the programs. *Easily distracted* and *Many fears, easily scared*, decreased after the programs. Both are positive changes in behavior
- On PSC (figure 3), All traits decreased after the programs indicating positive change in behavior.

Results cont.

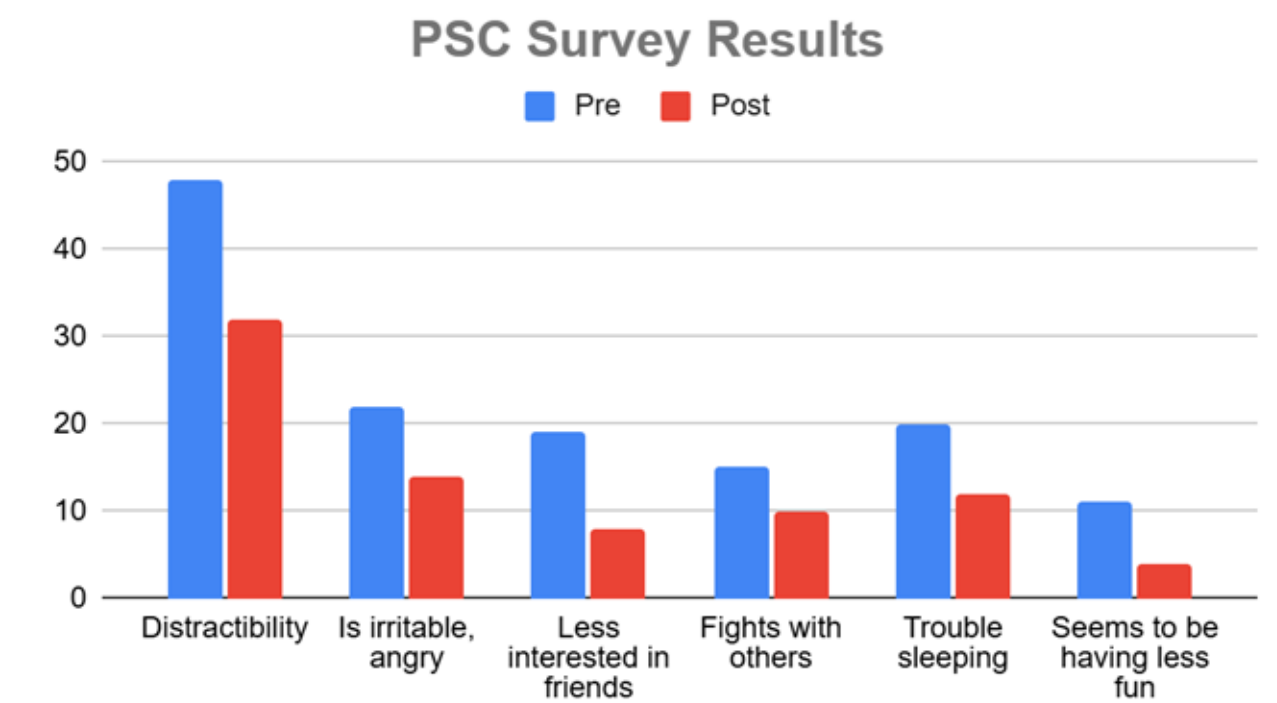


Figure 3: Selected results from PSC pre and post survey results

Conclusion

- Addressing behavior and mental health changes in children with disabilities across different ages presents challenges.
- In this study, both physical activity and fine arts programs showed overall benefit in SDQ and PSC after 6 weeks.
- The timeframe of this data collection coincided with the first months of children returning to school. This event could also have contributed to the positive trend seen in social and emotional behaviors.
- Further research is needed to evaluate the most beneficial programs for children and parents.

References

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- Lloyd, K. (2016). Benefits of art education: A review of the literature. *Scholarship and Engagement in Education*, 1(1), Article 6. Dominican University of California. <https://scholar.dominican.edu/seed/vol1/iss1/6/>