Boost Cognition, Reduce Delinquency: Movement Based Groups for Adolescent Boys Max Parrella, Samantha Cossen, and Michael Awopileda IASWG 2020

Abstract

This poster will focus on the outcomes of a small group for at-risk, adolescent boys at a Midwest suburban high school focused on cognition and physical exercise. The poster explores the positive impact of physical exercise on the human brain, provides examples of social emotional activities and groups to increase cognition, and discusses an example of a movementbased social emotional small group for adolescent boys.

Background

Over the past decade K-12 education has been a major focus of policy makers, researchers, and educators due to the increased behavioral referral rates and suspensions seen at all grade levels (Welsh & Little, 2018). Suspensions and behavior referral rates have been shown to negatively impact the academic success of students including: high dropout rates, decreased GPA and/or being transferred to an alternative school environment (Bergh & Cowell, 2013). However, there is substantial evidence that both exercise/movement and exercise training positively impacts children's cognition, executive functioning, memory and fluid intelligence (Tomporowski et. Al. 2015). This poster explores both of these ideas by focusing on a movement-based group for adolescent boys to decrease behavioral referral rates in a midwestern suburban high school.



Dean Referrals

Churchauch	01 060-000	0206
Student	Q1 Offenses	Q2 Offenses
AK	7	1
AH	4	0
IS	3	3
AM	2	1
RD	3	0
JW	1	0
ΟΤ	1	0
AVG.	3	0.714285714
Percent Decrease:	76.20%	

Sample

Participants include 7 male students at a suburban midwestern high school, three of whom are mandated by the dean of the school to attend. The other four students voluntarily joined the group because they believe they struggle with anger or other emotional outbursts that result in significant consequences.



Methods

- The group curriculum utilized physical activities which require movement or, at the very least, standing for the duration of the 45 minute session
- The group ran for 7 weeks during one quarter of the school year
- Check-in/check-out: Two happiness ratings were provided by each student, one before and one after each session.
- The number of dean offenses from each student were collected and averaged during the academic quarter before the group began and offenses were then logged from the quarter during which the group occurred.



Results:

• 76% decrease in dean referrals during the quarter which the group ran compared to previous quarter Check-in/check out results: Almost every session, students recorded a higher happiness level after session (check-out) than before session (check-in). Furthermore, overall happiness ratings increased over time (avg. happiness for the first 4 sessions was at or below 8 while the last 3 sessions avg. was above 8) Overall, the movement-based group increased students happiness levels and decreased behavioral referrals

Conclusion

Behavioral referrals are an increasing problem in education. Exercise and movement has been shown to improve cognition and happiness, while reducing impulsive behaviors.

This movement-based group was created as an intervention for seven adolescent males struggling with impulsive behavior and high dean referral rates. Based on increased happiness and reduced behavior incidents, the intervention was hugely successful.