

Efficacy of Yoga Practice among Teenagers with Autism Spectrum Disorder

Introduction

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder characterized by social impairments and restricted or repetitive activities, interests and behaviors. (APA, 2013)

As the prevalence of ASD increases, new avenues of intervention are explored, such as yoga therapy.

Few studies have demonstrated improvement on behaviors of children with ASD, following yoga sessions (Kenny, 2002; Koenig et al., 2012; Rosenblatt et al., 2011).

None of these studies address the benefits of yoga practice on social behaviors of teenagers with ASD.

In this study, social behavior consists of a set of positives interactions among individuals in the same class. More precisely, it is the expected behavior of a student in response to the request of his teacher

Objective

Exploring the effects of yoga sessions on the expected behaviors of the students with ASD regarding their teacher's demand.

Hypothesis

The social behavior of students should improve after attending a yoga class.

Method

- Participants :12 students with ASD (12 to 15 years old)
- Yoga : 9 sessions of 30 min/once a week
- Observation of the behaviors :Two sessions in class per week (20 min before/after yoga classes). The behaviors were coded based on an observation grid.

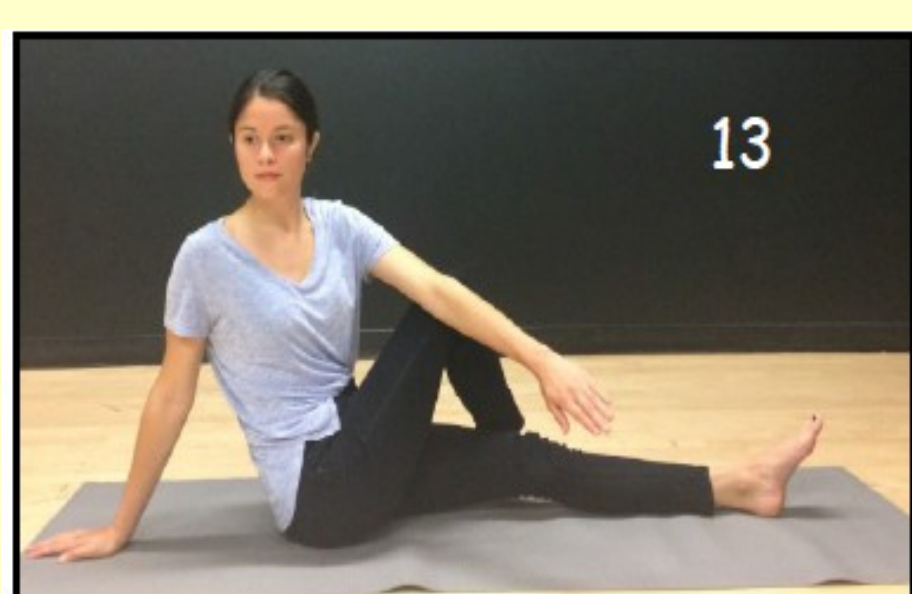
Two categories of behaviors were coded during the observations in class :

Social behaviors

The student is paying attention to the task that is given by the teacher. i.e. : writing a sentence

Non-social behaviors

The student is not paying attention to the task that is given by the teacher. i.e. : doing mouth sounds



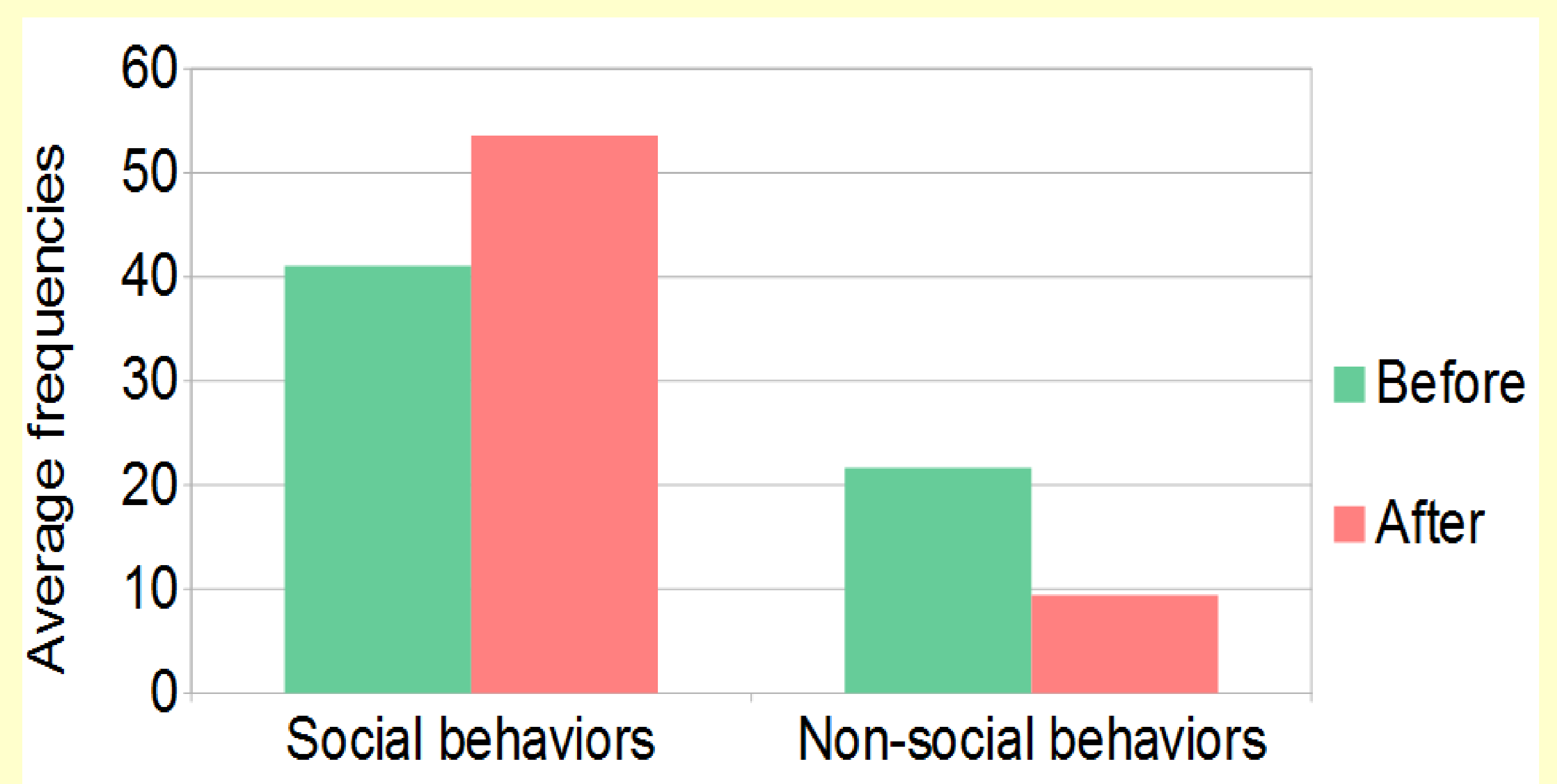
References

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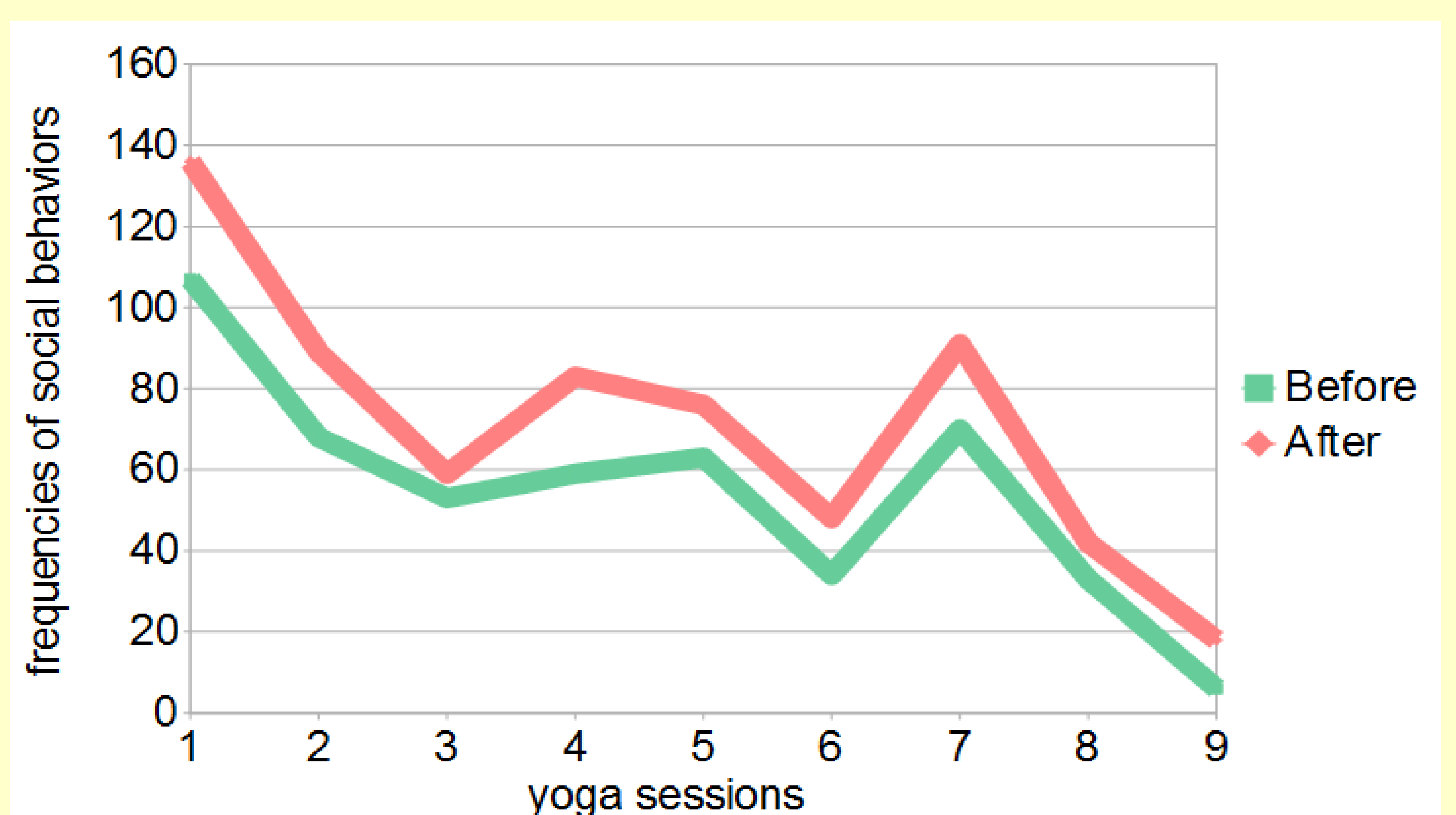
Results

Increase of the frequency of social behaviors before the yoga sessions (M=41,08) compared to after the yoga sessions (M= 53,58), $t(11) = -3,81$, $p < 0.05$. Decrease of the frequency of non-social behaviors after the yoga sessions (M=9,42) compared to the pre-session data (M=21,67), $t(11) = 3,66$, $p < 0.05$.

Graphic 1 : Comparaison of the average frequencies of social behaviors and non-social behaviors for each period of time



Graphic 2 : Comparaison of the frequencies of social behaviors observed in class before and after each yoga session



Conclusions

- Yoga is a useful practice for children with ASD as demonstrated by (kenny, 2002; Koenig et al., 2012; Rosenblatt et al., 2011).
- This study shows that yoga as a benefic effect on social behaviors of teenagers with ASD as their attention to the task increases after attending a yoga class.
- These findings are relevant as ASD is caracterized by impairments on social behavior (APA, 2013). Also, these results demonstrate that yoga practice could be a new avenue in class by helping students with ASD maintaining their attention to the task.