

# Review of: "The Psychological Impact of Leisure and Rehabilitation Activities in Children With Autism: A Delphi Approach"

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**Potential competing interests:** No potential competing interests to declare.

Thank you for having the opportunity to read this interesting paper on the beneficial effects that different types of activities have on children with Autism Spectrum Disorder (ASD). I commend the authors for aiming to foster happiness and care adapted to the specific needs of individuals with ASD. Children with ASD greatly differ in their emotional and sensory needs and capacity to deal with social environments and activities. Choosing leisure activities that are in accordance with individual characteristics and interests is expected to be more beneficial than a one-size-fits-all approach. The results of this study could promote individualized activity plans for these children.

Regarding the description and set-up of the study, I would like to make a few recommendations for further improvement. I hope you will find my comments useful.

## Language

The article contains spelling errors (and Italian), such as “di” in the abstract. Some sentences are not complete English sentences (e.g., the first sentence of the second paragraph of the abstract).

## Introduction

All topics relevant to the conducted research are introduced, but with respect to the description of ASD, I would like to make a few recommendations. I advise being mindful of the recent developments in this field, including the neurodiversity movement that would not wish to see ASD conceptualized as a disability or disease (in the discussion). A (neurodevelopmental) disorder would be the term that is in line with the DSM-5-TR (American Psychiatric Association, 2022). You might want to use the DSM-5 to clearly define autism (Autism Spectrum Disorder).

The information regarding ASD is described briefly and this population is characterized rather uniformly. Children with ASD do not all avoid social contact; these children differ widely regarding their social behavior. Some might be described as ‘active but odd’ (e.g., Zhao et al., 2024) and, in general, girls with ASD tend to show less solitary behavior than boys with ASD and are more concerned with fitting in socially (Kirkovski et al., 2013). Moreover, more studies on the social and emotional well-being of children with ASD have been conducted than those described in this introduction; I would add a few of these recent ASD studies in the introduction.

Furthermore, since sensory symptoms are considered part of the diagnostic criteria for ASD (DSM-5) and might be relevant to the leisure activities in which a child can and wishes to participate, I think the introduction could benefit from briefly mentioning these sensory symptoms as often being present in individuals with ASD and potentially limiting their participation in activities. As the discussion refers to the role of sensory symptoms as well, introducing these briefly in the introduction would help the reader understand the importance of focusing on these symptoms in relation to participation in activities.

At the end of the introduction, the author mentions being aware of leisure activities conveying feelings of, among other things, engagement and fun in children with ASD. I wonder how this was determined. Is this remark based on clinical opinions in care facilities or caretakers who work with children with ASD, or does this sentence refer to the results of a previously carried out study (that is currently not referenced)?

## Method

The method section would benefit from a clear structure with subheadings, for instance, “participants”, “material”, “procedure”, and “analysis”. The participants are described very briefly. I wonder how these participants were recruited and if they all work at the same institute or different institutes.

“Office Excel was used for the statistical analysis” → Consider explaining exactly which analysis was chosen and why.

Regarding the chosen scale; I was wondering if this scale or a similar scale has been confirmed as valid and reliable in previous research. If the psychometric quality is unclear because the scale was constructed especially for this study, I would explicitly mention that this is the case.

What exactly were the questions or instructions for the participants?

## Results

The figures are very clear and formatted consistently. It might be interesting to analyze whether the differences observed in the figures are significant or not. A few questions came to mind while reading the current results section. What is the difference between, for instance, “individual sports” versus indoor climbing, swimming, or exercising in the gym? How were these categories of activities chosen; is “individual sports” a summary of certain other types of physical exercise described in the study? Are the ratings given by the therapist the “general” reactions that they observe in the children?

## Discussion

Some statements lack a reference where I believe they are required. I would add more references to scientific sources if possible.

Given the limited space and the great number of activities that were studied, I understand decisions had to be made regarding what to focus on most. I do believe a summary of which activities are considered most suitable for reaching a certain goal would be helpful for the reader.

Indoor climbing appears to be mostly a solitary activity, besides the fact that someone needs to belay to ensure the safety of the climber. It is therefore not immediately clear from the description how climbing would benefit social interaction; maybe, if it is beneficial because of the one-on-one encouragement given to the climber, a logical step would be to introduce that type of support in the other activities. In theory, it is possible that it might not be indoor climbing per se, but rather the way this activity is organized at the institute, that currently leads to high scores for indoor climbing. Future research may be needed to distinguish between different explanations for the effectiveness of indoor climbing compared to other activities.

In the second half of the discussion, I became a bit confused due to the pilot study that is described; is this a different study than the Delphi study? It might be useful to divide the current article into a description of “study 1” (Delphi study) and “study 2” (the pilot) and briefly discuss the results for both studies separately.

Please also consider discussing recommendations for future research.

## References

American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.). <https://doi.org/10.1176/appi.books.9780890425787>

Chao, W., Li, Q., Zhang, X., Song, X., Zhu, S., Shou, X., Meng, F., Xu, X., Zhang, R., & Kendrick, K. M. (2024). Language skill differences further distinguish social sub-types in children with autism. *Journal of Autism and Developmental Disorders*, 54, 143-154. <https://doi.org/10.1007/s10803-022-05759-w>

Kirkovski, M., Enticott, P., & Fitzgerald, P. (2013). A review on the role of female gender in autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 43(11), 2584-2603. <https://doi.org/10.1007/s10803-013-1811-1>