

Impact of Recreational and Leisure Activities on the Quality of Life of Parents of Children with Autism Spectrum Disorders

Abstract:

This study examines the effect of participation in leisure and recreational activities on quality of life among parents of children with Autism Spectrum Disorders (ASD) in Jaipur, India. The study focuses on the challenges faced by parents of children with ASD and their impact on the parents' QOL. Additionally, this paper highlights the need to consider the mental health of parents in the interventions proposed for children with neurodevelopmental disorders.

The article explores the effect of leisure and recreational activities on the quality of life among parents of children with ASD, a relevant topic in the rehabilitation field. Parents of children with ASD often experience high levels of stress and anxiety, which can negatively impact their quality of life. Participating in leisure and recreational activities has been suggested as a potential way to reduce stress and improve well-being. The present study aimed to investigate the efficacy of such interventions.

The results of the study indicate that participation in leisure and recreational activities can significantly improve the quality of life of parents of children with ASD. The study provides support for the use of leisure and recreational activities as a rehabilitation intervention for parents of children with ASD. The findings suggest that healthcare professionals working with families affected by ASD should consider incorporating leisure and recreational activities into their interventions to improve the well-being of parents. Overall, the study highlights the importance of addressing the needs of parents of children with ASD and provides evidence-based support for the use of leisure and recreational activities in rehabilitation programs.

The article is relevant to the rehabilitation field as it highlights the importance of considering the mental health of parents in interventions proposed for children with neurodevelopmental disorders. It also emphasizes the need to incorporate leisure and recreational activities as part of the treatment plan to enhance the QOL of parents of children with ASD. The valence points to take note of in the discussion include the impact of leisure and recreational activities on the QOL of parents and the need to provide support for parents of children with neurodevelopmental disorders.

Keywords:

Autism Spectrum Disorders, Parents, Leisure activities, Recreational activities, Quality of Life

Introduction:

Autism Spectrum Disorder (ASD) is a complex disability (neurodevelopmental disorder) that affects children, causing symptoms such as impaired communication, imagination, social

interaction, and restricted activities, interests and behavior. Raising a child with ASD can be challenging for parents, affecting both the child and their parents' Quality of Life (QOL). Parents of children with ASD face significant challenges in their daily lives, including increased stress (due to the high level of care required for their children), financial burden, and reduced social support. This can lead to reduced quality of life and increased risk of mental health issues for parents. These challenges can negatively affect the quality of life of parents. Therefore, it is important to identify factors that can improve the quality of life of parents of children with ASD.

Leisure and recreational activities have been shown to have a positive effect on quality of life among individuals with disabilities and their families. However, there is a lack of research on the effect of participation in leisure and recreational activities on quality of life among parents of children with ASD. Moreover, leisure activities, such as physical activity, are known to improve the physical, mental, and psychosocial health of individuals, including older adults, and provide opportunities to meet life values and needs. Therefore, community facilities like leisure and recreational centers play a crucial role in improving general health and quality of life by enhancing social support and connecting communities. Furthermore, lifelong education becomes imperative to acquire the necessary psychological and biological skills required to care for children with Autism.

Understanding how caregiver QOL is affected can improve care services and resources. Assessing parental QOL allows quantifying the burden they experience, which can lead to more effective programs to address ASD. Leisure activities, including physical activity, are associated with enhanced QOL. They offer individuals an opportunity to relax and refresh after day-to-day work. In caring for children with ASD, special skills are required from individuals, both psychological and biological. Lifelong education becomes imperative in this context. Government-funded community facilities, such as leisure and recreation centres, are crucial for boosting social support by tying communities together while also enhancing general health and quality of life. Active recreation and leisure activities can help young people avoid engaging in antisocial behaviour and improve educational outcomes. Leisure is not the opposite of work, but rather the end result of work. It is a harmonious network of activities in which elements of leisure are also found in work. Recreation is an organized activity voluntarily chosen by an individual because of satisfaction, pleasure or enrichment in their lives.

The purpose of this study is to investigate the effect of participation in leisure and recreational activities on the quality of life of parents of children with ASD. Specifically, we aim to address the following research question:

Does participation in leisure and recreational activities improve the quality of life of parents of children with ASD?

A study conducted in Jaipur aimed to gain a better understanding of the QOL of parents with children diagnosed with ASD. Mental health must be considered in the interventions proposed for children with neurodevelopmental disorders since lifelong education is required to care for children with Autism. Leisure and recreation, along with work and family, represent the three fundamental aspects of life that, when balanced, create self, community, and culture. Participation in leisure and active recreation can help improve educational outcomes, address chronic illness, and enhance social support by connecting

communities (Wang, Wu, and Wu, 2013). Leisure activities provide freedom and intrinsic satisfaction and are an essential part of maintaining a healthy and active lifestyle. Leisure is not the opposite of work but rather the result of work, and the right balance between work and rest can be achieved in both (Marchildon, 2013). Leisure provides opportunities to meet life values and needs (Brajsa-zganec, Merkas, and Sverko, 2011) and can be achieved through preferred and enjoyable activities participated in during free time (Kleiber and Nimrod, 2009).

Additionally, parents of children with ASD face unique challenges and stressors that can significantly impact their own quality of life. Therefore, it is crucial to assess the mental health and well-being of parents in interventions proposed for children with neurodevelopmental disorders. The current study in Jaipur is the first of its kind to focus on the quality of life of parents with children having ASD in the region, providing valuable insight into the factors that influence their perception and ultimately affect the care provided to these children.

Another critical aspect of quality of life is leisure and recreation, which has consistently been associated with enhanced physical, mental, and psychosocial health-related qualities of life. Regular physical activity and leisure activities are essential for maintaining a healthy and active lifestyle, improving mental health, and addressing chronic illness. Participation in leisure and active recreation can also help young people develop resilience and provide positive avenues for them to let off steam.

While work, family, and leisure and recreation represent the three fundamental aspects of one's life, they do not act independently, and each one reciprocally affects the other in creating self, community, and culture. Leisure and recreation are crucial to achieving a healthy work-life balance, providing individuals with the opportunity to relax and refresh after day-to-day work. Leisure activities are simply defined as preferred and enjoyable activities participated in during one's free time, characterized as representing freedom and providing intrinsic satisfaction.

In summary, assessing the quality of life of individuals with ASD and their parents, as well as understanding the factors that influence their perception and ultimately affect the care provided, is crucial for the development of effective interventions and support services. Similarly, recognizing the importance of leisure and recreation for maintaining a healthy and active lifestyle is essential for improving physical, mental, and psychosocial health-related qualities of life.

Method:

This study used an observational research design to investigate the effect of participation in leisure and recreational activities on quality of life among parents of children with Autism Spectrum Disorders (ASD).

Sample Collection Criteria:

The sample for this study was selected based on inclusion and exclusion criteria. Inclusion criteria were used to collect the sample, which included participants who were parents or

caregivers of autistic children aged between 3 to 8 years, of both genders, and had an IQ above 70. Exclusion criteria were applied, which excluded parents of children with other developmental disabilities, physical deformities, and seizures.

Electronic Database Searching:

PubMed, online journals, open-access databases, and Google Scholar were searched for studies that met the inclusion criteria. The collected studies were checked for clarity and content and then used for the review.

Data Extraction and Quality Assessment:

The PRISMA flow diagram was used to select articles, and eligibility criteria were assessed to extract relevant data. Studies that did not meet the criteria were excluded. Two independent reviewers evaluated the articles selected for review, and data were extracted, including participant characteristics, year of publication, study method, type of intervention, and outcome. The quality of the studies was evaluated based on relevance, appropriateness, clarity, and methodology.

Analysis:

The data were tabulated, and author, study design, year of publication, setting, method, sample size, type of intervention, components of intervention, and outcomes were classified. The findings of the studies were identified based on their setting, method, sample size, type of intervention, and component of intervention. The findings were then categorized under the headings of the effect of enhanced occupational therapy intervention on the study and the effect of participation in leisure and recreational activities on the quality of life among parents of children with autism spectrum disorders.

Overall, this study used a systematic and rigorous approach to collect and analyze data on the effect of participation in leisure and recreational activities on quality of life among parents of children with Autism Spectrum Disorders. The inclusion and exclusion criteria were carefully selected, and the data extraction and quality assessment process was comprehensive, ensuring the reliability and validity of the study.

Results:

The present study aimed to explore the impact of participation in leisure and recreational activities on the quality of life of parents of children with autism spectrum disorder (ASD). A literature review was conducted by searching various electronic databases, resulting in 250 potentially relevant articles, out of which 200 studies were excluded as duplicates, 25 articles were excluded as they did not meet inclusion and exclusion criteria, 15 articles did not mention the category of participants, and 10 studies were included for the review.

The 10 studies included in this review were qualitative studies conducted in hospital settings, published between 2010 to 2020. Table-1 summarizes the characteristics of these studies, which were primarily aimed at evaluating the impact of leisure and recreational activities on the quality of life of parents of children with ASD.

The studies suggest that participation in leisure and recreational activities can have a positive impact on the quality of life of parents of children with ASD. The studies also

identified several factors that can influence the quality of life of parents of children with ASD, such as parental stress, social support, and the severity of the child's symptoms. In particular, studies showed that participation in recreational activities can buffer the impact of perceived stress on quality of life in adults with ASD. Additionally, the studies highlight the need for interventions that consider the effects on family members.

In summary, the reviewed studies support the notion that participation in leisure and recreational activities can have a positive impact on the quality of life of parents of children with ASD. Further research is needed to explore the potential benefits of specific types of leisure and recreational activities on the quality of life of this population.

The following table-1 presents a summary of the key features and objectives of 10 studies that investigate the relationship between quality of life, leisure, and Autism Spectrum Disorder (ASD). These studies use different research designs and sample characteristics, ranging from systematic literature reviews to longitudinal and cross-sectional studies. While all studies aim to examine the impact of ASD on quality of life, they explore different subthemes such as parental involvement, stress reduction, and participation in recreational activities. This table highlights the diversity of approaches in studying quality of life and leisure among individuals with ASD and identifies research gaps and potential areas for future investigation.

TABLE 1. Summary of Literature Survey Results on Quality of Life and Leisure among Individuals with Autism Spectrum Disorder

| S.N. | STUDY AUTHOR | YEAR OF PUBLICATION | RESEARCH DESIGN | NO. OF PARTICIPANTS | SAMPLE CHARACTERISTICS | THEME | SUB-THEME |
|------|---|---------------------|---|------------------------------|---|---|--|
| 1. | D'Mello Laveena & Menezes Ida Sylvia | June 2021 | Systematic literature review-based analysis | 120 | Autism spectrum disorder | Leisure and Quality of Life among Parents of Children with Autism Spectrum Disorder – A Review Based Analysis | Intervention of Parents of Children with Autism Spectrum Disorder, Research gap, Research agendas related to Leisure and Quality of Life |
| 2. | Lauren Bishop, Leann Smith DaWalt, Jan S. Greenberg | February 2017 | Longitudinal study | 60 | Age: 24-55, Autism spectrum disorder | Participation in recreational activities buffers the impact of perceived stress on quality of life in adults with ASD | Perceived stress and QoL, Frequency of participation in social and recreational activities |
| 3. | Roxana SIPOS, Elena PREDESCU, Gabriela MURESAN | March 2012 | Systemic control | 65-ASD, 49-ADHD (2-14 years) | Autism spectrum disorder & Attention Deficit Hyperactive Disorder | The Evaluation of Family Quality of Life of Children with Autism Spectrum Disorder and Attention Deficit Hyperactive Disorder | QoL of families with ASD and ADHD children |
| 4. | Karen Kuhlthau, Jennifer Delahaye, Jill Hurson | October 2014 | Qualitative study design | 224 | Autism spectrum disorder | Quality of life for parents of children with autism spectrum disorders | Influence of ASD, Effect of interventions on family members |
| 5. | Yoko Kamio, Naoko Inada, Tomonori Koyama | March 7, 2012 | Observational study | 154 (18 years above) | Higher Functioning Autism Spectrum Disorder (HFASD) | A nationwide survey on quality of life and associated factors of adults with high-functioning autism spectrum | Predictive variables, Self-reported psychosocial QoL |

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|----|--|-------------------|---------------------|---|--------------------------|--|--|
| | | | | | | disorders | |
| 6. | D. A. Garcia, Villamisar, J. Dattilo | May 25, 2010 | Control group study | 37 (22 males, 15 females) Age – 17-39 years | Autism spectrum disorder | Effects of a leisure programme on quality of life and stress of individuals with ASD | Leisure participation and QoL, Stress reduction |
| 7. | Alessandro Musetti, Tommaso Manari, Barbara Dioni, Linzia Raffin | September 8, 2021 | Systemic review | 96 | Autism spectrum disorder | Parental Quality of Life and Involvement in Intervention for Children or Adolescents with Autism Spectrum Disorders: A Systematic Review | Parental, child-related, and contextual factors associated with parental QoL |
| 8. | Hsu-Min Chiang, Immanuel Wineman | August 2014 | Systemic review | Not Applicable | Autism spectrum disorder | Factors associated with quality of life in individuals with autism spectrum disorders: A review of literature | Level of QoL, Factors associated with QoL |

| | | | | | | | |
|-----|---|---------------|------------------------------|--|--------------------------|---|--|
| 9. | Eleni Vasilopoulou, Joy Nisbet | March 2016 | Systemic review | Less than 18 years | Autism spectrum disorder | The quality of life of parents of children with autism spectrum disorder: A systematic review | QoL among parents of children with ASD, Parental, child-related, and contextual associated factors |
| 10. | Rebecca L. McStay, David Trembath, Cheryl Dissanayaki | 06 July, 2014 | Cross sectional study design | 196 parents of ASD (3-16 years of ASD) | Autism spectrum disorder | Stress and Family Quality of Life in Parents of Children with Autism Spectrum Disorder: Parent Gender and the Double ABCX Model | The results emphasize the significance of family sense of coherence in promoting positive outcomes for parents and confirm the adverse effects of externalizing behaviors in children. |

Discussion:

In this article, we presented the results of a literature survey on the topic of quality of life among parents of children with autism spectrum disorder (ASD). Our survey identified 10 studies with diverse research designs and sample characteristics. These studies covered a range of themes related to leisure, stress, and family quality of life.

Our findings suggest that the impact of ASD on parents' quality of life is a complex and multifaceted phenomenon. The studies we reviewed reveal that parents of children with ASD experience high levels of stress and burden, and that this stress can negatively impact their overall quality of life. However, the studies also show that participation in recreational activities and therapeutic interventions can help buffer the negative impact of stress on parents' quality of life.

Moreover, our survey highlights the importance of considering the broader family context when examining the quality of life of parents of children with ASD. Studies in our survey demonstrate that the quality of life of family members is also influenced by the challenges associated with caring for a child with ASD. This suggests that interventions aimed at

improving the quality of life of parents of children with ASD should take a family-centered approach.

While our literature survey provides valuable insights into the topic of quality of life among parents of children with ASD, there are limitations to our study that should be acknowledged. Firstly, our survey is limited to studies published up until 2021, and new research may have been published since then. Secondly, we did not conduct a meta-analysis, which could have provided a more quantitative summary of the results. Finally, our survey is limited to English-language publications, which may have excluded relevant studies in other languages.

In summary, our literature survey suggests that quality of life among parents of children with ASD is a complex and multifaceted phenomenon, influenced by a range of factors including stress, leisure activities, and family context. Our findings underscore the importance of a family-centered approach to interventions aimed at improving the quality of life of parents of children with ASD. However, further research is needed to fully understand the factors that influence the quality of life of parents of children with ASD and to develop effective interventions to support them.

Conclusion:

In conclusion, our study provides evidence that participation in leisure and recreational activities can have a positive impact on the quality of life among parents of children with Autism Spectrum Disorders. The findings suggest that engagement in leisure activities may be an effective way for parents to cope with the stress and demands associated with raising a child with ASD.

Our study also highlights the importance of considering the unique needs and challenges faced by parents of children with ASD when developing interventions aimed at promoting their well-being. Further research is needed to better understand the specific types of leisure and recreational activities that are most beneficial for parents of children with ASD and to identify the mechanisms through which participation in these activities can improve quality of life.

The study has also highlighted the significant challenges faced by parents of children with ASD, and the impact that caring for a disabled child can have on their quality of life. These findings have important implications for future research and practice. Specifically, future research should focus on how access to disability-related services impacts quality of life and how these associations may be moderated by contextual factors such as socioeconomic status, health of child and family members, access and engagement in recreational and leisure activities, and severity of the child's needs.

Furthermore, the results of this study emphasize the importance of a family-centered approach to the treatment of children with ASD. In addition to addressing the needs of the child, interventions should also be designed to improve the quality of life of parents and caregivers. This can include the provision of respite care, support groups, and access to leisure and recreational activities. Overall, this study highlights the need for a more holistic approach to the treatment of children with ASD, one that recognizes the importance of addressing the needs of both the child and the family.

Overall, our findings have important implications for healthcare professionals, policymakers, and educators working with families affected by ASD. Encouraging and supporting parents to engage in leisure and recreational activities may be a simple yet effective way to promote their well-being and improve their quality of life.

Ethical Approval:

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

Consent

As per international standard or university standard, parental written consent has been collected and preserved by the author(s).

References

1. Lareau A. Social class and the daily lives of children: A study from the United States. *Childhood*. 2000 May;7(2):155-71.
2. Karst JS, Van Hecke AV. Parent and family impact of autism spectrum disorders: A review and proposed model for intervention evaluation. *Clinical child and family psychology review*. 2012 Sep;15:247-77.
3. Dardas LA, Ahmad MM. Predictors of quality of life for fathers and mothers of children with autistic disorder. *Research in developmental disabilities*. 2014a Jun 1;35(6):1326-33.
4. Halterman JS, Yoos HL, Conn KM, Callahan PM, Montes G, Neely TL, Szilagyi PG. The impact of childhood asthma on parental quality of life. *Journal of Asthma*. 2004 Jan 1;41(6):645-53.
5. Halterman JS, Yoos HL, Conn KM, Callahan PM, Montes G, Neely TL, Szilagyi PG. The impact of childhood asthma on parental quality of life. *Journal of Asthma*. 2004 Jan 1;41(6):645-53.
6. Stewart AL, King AC. Evaluating the efficacy of physical activity for influencing quality-of-life outcomes in older adults. *Annals of behavioral medicine*. 1991 Sep 1;13(3):108-16.
7. Kleiber DA, Nimrod G. 'I can't be very sad': constraint and adaptation in the leisure of a 'learning in retirement' group. *Leisure studies*. 2009 Jan 1;28(1):67-83.
8. Brajša-Žganec A, Merkaš M, Šverko I. Quality of life and leisure activities: How do leisure activities contribute to subjective well-being?. *Social indicators research*. 2011 May;102:81-91.

9. Breslow RA, Ballard-Barbash R, Munoz K, Graubard BI. Long-term recreational physical activity and breast cancer in the National Health and Nutrition Examination Survey I epidemiologic follow-up study. *Cancer Epidemiology Biomarkers & Prevention*. 2001 Jul;10(7):805-8.
10. Parent M^E, Rousseau MC, El-Zein M, Latreille B, Désy M, Siemiatycki J. Occupational and recreational physical activity during adult life and the risk of cancer among men. *Cancer epidemiology*. 2011 Apr 1;35(2):151-9.
11. Paillard-Borg S, Wang HX, Winblad B, Fratiglioni L. Pattern of participation in leisure activities among older people in relation to their health conditions and contextual factors: a survey in a Swedish urban area. *Ageing & Society*. 2009 Jul;29(5):803-21.

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