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Leisure Styles in Adults: Changes Throughout the COVID-19 Pandemic

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Citation: Maciel, Marcos Gonçalves, Aurora Madariaga Ortuzar, José Clerton de Oliveira Martins, Luz Anegla Árdila Gutierrez, Elena Bendikova, Karina Lopes Assis, Renato Francisco Reis, Dessalegn Wase Mola, and Ricardo Ricci Uvinha. 2024. Leisure Styles in Adults: Changes Throughout the COVID-19 Pandemic. *Social Sciences* 13: 702. <https://doi.org/10.3390/socsci13120702>

Academic Editors: Chiung-Tzu Lucretta Tsai and Chung-Shing Johnson Chan

Received: 7 November 2024

Revised: 12 December 2024

Accepted: 18 December 2024

Published: 23 December 2024



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Abstract: This study explored changes in leisure styles among adults during the periods before (2019), during (2020–2022), and after (2023) the COVID-19 pandemic. A quantitative, cross-sectional, and exploratory design was employed using a non-probabilistic sample of 300 participants aged 18–60 years (mean age = 31.7 ± 10.8). Data were collected via an online survey using the Leisure Practices Scale, which measures engagement in artistic, manual, physical activity, intellectual, social, touristic, virtual, and contemplative practices. The results showed a significant increase in intellectual activities between the pre- and during-pandemic periods ($p = 0.05$), with the level of engagement remaining high in the post-pandemic period. Similarly, virtual activities demonstrated a significant increase in engagement between the pre- and during-pandemic periods ($p = 0.00$), returning to pre-pandemic levels afterward. Artistic ($p = 0.91$), manual ($p = 0.60$), and contemplative ($p = 0.52$) activities showed no significant changes, remaining stable across the analyzed periods. Significant reductions were observed in physical ($p = 0.00$), social ($p = 0.05$), and touristic ($p = 0.04$) activities during the pandemic, with the latter two returning to pre-pandemic levels afterward. These findings underscore the pandemic's differentiated impact on leisure practices.

Keywords: leisure; mental health; quality of life; health promotion

1. Introduction

Leisure practice is essential for personal and social development, significantly contributing to psychological well-being and quality of life. Recent studies highlight its role in stress reduction and health promotion (Bendiková and Dobay 2017; Bendiková et al. 2024), particularly during the recent health crisis (Morse et al. 2021; Bae and Chang 2023). During the COVID-19 pandemic, social distancing measures forced individuals to adapt their leisure activities, leading to a substantial shift toward the use of technologies and virtual environments. Social interactions and cultural events migrated to online platforms, maintaining connections and expanding reach. However, this digital transition has also brought challenges, such as social isolation and limited access to digital resources, which more severely affected socially vulnerable groups (Batista et al. 2022; Miranda 2020), influencing their leisure practices.

Various tools are used to identify the leisure practices individuals engage in. Among these tools, the Leisure Practices Scale, proposed by [Andrade et al. \(2018a\)](#), organizes leisure activities into eight categories: physical/sports activities (e.g., sports, walking, gym exercises); intellectual activities (e.g., reading, courses); manual activities (gardening, crafting); social activities (parties, family gatherings); artistic activities (theater, cinema, exhibitions); touristic activities (traveling, excursions); virtual activities (online gaming, internet browsing); and contemplative activities (nature appreciation, reflection). These categories, combined with individual preferences and socioeconomic factors, shape leisure styles ([Maciel et al. 2023](#)), which reflect cultural, social, and economic contexts. Analyzing these styles provides insights into how leisure practices influence identity, individual well-being, and population-level welfare.

The pandemic has significantly altered leisure styles. Physical activities have been adapted through online exercise programs, while social and artistic activities have migrated to virtual platforms ([Barre et al. 2020](#); [Hidalgo-Andrade et al. 2021](#)). Virtual activities expanded rapidly, demonstrating both the flexibility of digital leisure and the exclusion faced by those without adequate access ([Sivan 2020](#)). These changes illustrate how leisure styles adapt to changing circumstances, often shaped by structural inequalities ([Holanda et al. 2020](#)).

Achieving equity in leisure styles requires addressing barriers such as income disparities and limited access to technology. [Miranda \(2020\)](#) and [Sivan \(2020\)](#) emphasize that the digitalization of leisure, while offering new opportunities, has deepened inequalities, particularly for marginalized populations. Inclusive public policies must focus on expanding infrastructure, ensuring affordable access, and supporting community initiatives to bridge these gaps. By addressing these disparities, policies can promote inclusive leisure styles that foster collective well-being, especially during crises.

The transformative role of leisure during the pandemic reinforces this necessity, highlighting its importance in managing stress and maintaining mental health in adverse scenarios ([Batista et al. 2022](#)). Adaptations such as hobbies, home exercises, and tourism-related “microadventures” ([Mackenzie and Goodnow 2021](#); [Holanda et al. 2020](#)) demonstrated leisure’s potential to promote local connections and sustainable practices. These findings underscore the urgency of policies that ensure equitable access to diverse leisure practices, contributing to the construction of more resilient societies prepared for future global crises.

Considering the question, “What were the main changes in leisure styles before, during, and after the COVID-19 pandemic?”, this study aims to evaluate shifts in leisure practices among adults aged 18 to 60 years during three distinct periods: before (2019), during (2020–2022), and after (2023) the pandemic. By identifying the key transformations in engagement across various leisure categories, this analysis seeks to uncover patterns that can inform the development of public policies. These policies should promote equitable access to leisure, enhance health and well-being, and support societal resilience in the face of future global health crises.

2. Materials and Methods

This quantitative, cross-sectional, and exploratory study aimed to assess changes in leisure styles among adults across three distinct periods: before (2019), during (2020–2022), and after (2023) the COVID-19 pandemic. Data collection took place during July and August 2023, encompassing a diverse sample of participants.

The sample consisted of individuals aged 18 to 60 years. A non-probabilistic sampling approach was employed, utilizing the snowball sampling technique to recruit participants. By adopting an online questionnaire format, the study was able to expand its geographical reach beyond the Belo Horizonte metropolitan area, which refers to the capital city of the state of Minas Gerais, Brazil. This technique involved disseminating an online survey via social media, allowing initial participants to share the link with other potential respondents. The exclusion criterion was the incomplete filling out of the form, ensuring that only complete responses were considered in the analysis.

Data were collected through a structured questionnaire, which included sociodemographic information (age, gender, education level, marital status) and the “Leisure Practices Scale” developed and validated by [Andrade et al. \(2018a\)](#). This self-administered instrument measures the frequency and diversity of leisure activities in eight categories: (1) Artistic: going to the cinema, theater, music shows, participating in choir groups, attending art exhibitions and cultural centers, among others; (2) Manual: gardening, cooking, painting, doing crafts and woodworking, among others; (3) Physical activity/sports activities: going to the gym, playing soccer, walking, running, cycling, and martial arts, among others; (4) Intellectual: attending courses, reading, listening to/composing music, watching documentaries, among others; (5) Social: going out with friends, attending parties, visiting family members, going to church, among others; (6) Touristic: traveling, participating in excursions and tours, among others; (7) Virtual: browsing the internet and/or social networks, playing video games or virtual games, among others; (8) Contemplation: appreciating nature, the sunset, the moon, the stars, and beautiful landscapes. Disconnecting from tasks, relaxing, and reflecting, among others. This instrument uses a 10-point Likert scale, where the higher the number marked, the more positive the perception. The “Leisure Practices Scale” was methodologically validated by [Andrade et al. \(2018b\)](#) as a robust scientific instrument to investigate and measure adult involvement in different contents and modalities of leisure activities, providing a systematic and standardized analysis of leisure experiences.

The instrument instructs respondents as follows: “Mark with an X the number that best represents your involvement in these practices during your leisure time, considering: ‘0’ for when you ‘NEVER’ engage in the activity and ‘10’ for when you ‘ALWAYS’ engage in the activity”. The term “always” represents the highest point (10) on the scale, indicating maximum engagement in a given activity. By offering a clear reference point for the highest level of participation, the scale allows respondents to accurately indicate their frequency of involvement, ranging from zero (“never”) to ten (“always”).

The statistical analysis aimed to examine changes in leisure practices across the periods before, during, and after the COVID-19 pandemic. The non-parametric Cochran’s Q test was chosen for its suitability in comparing proportions within related samples, making it particularly appropriate for analyzing repeated measures of binary data from the same group of participants ([Cochran 1950](#)). To align with the study’s objectives and streamline the analysis, the original scores, collected using a 10-point Likert scale, were categorized into “low use” (scores ≤ 4) and “high use” (scores ≥ 5). This categorization reflects distinct levels of engagement, with lower scores indicating infrequent or absent participation, while higher scores represent regular and meaningful involvement in leisure activities.

The focus on “high use” proportions enabled the analysis to highlight significant behavioral trends over time. By applying a 5% significance level ($p < 0.05$) to compare these proportions across the three periods, the test effectively identified changes in leisure engagement. However, it is important to acknowledge that this binary categorization simplifies the complexity of the original ordinal scale, potentially omitting nuances of intermediate engagement levels. Despite this limitation, the chosen approach provides clear and interpretable results aligned with the study’s aim to explore broader patterns in leisure behavior.

The study was approved by the Research Ethics Committee of the University of the State of Minas Gerais under approval number 6.790.635. All participants were informed about the research procedures and provided formal consent through a digitally signed Informed Consent Form.

3. Results

A total of 300 individuals participated in the study, with a mean age of 31.7 ± 10.8 years. The sample comprised 41% men (123 participants), 58.33% women (175 participants), and 0.67% with unreported gender (2 participants). The sociodemographic data of the sample are described in [Table 1](#).

Table 1. Sociodemographic data of the sample.

Variables	Options	(%)
Sex	male	41.3
	female	58.7
Marital status	single	55.7
	married	30.7
	divorced	6.1
	widowed	0.7
	others	6.8
Education level	incomplete elementary school	1.7
	complete elementary school	1.3
	incomplete high school	2.0
	complete high school	14.3
	incomplete higher education	54.7
	complete higher education	14.7
	incomplete postgraduate education	1.3
complete postgraduate education	10.0	
Age (years)	18–30	40
	31–40	30
	41–50	20
	51–60	10

Table 2 provides an overview of the results for “high use” leisure practices across the periods analyzed, as measured by the Leisure Practices Scale (Andrade et al. 2018a). This table highlights the patterns of engagement in different activities, offering insights into the variations in participation levels before, during, and after the COVID-19 pandemic.

Table 2. Average percentage frequency of respondents who make high use of leisure practices.

Leisure Practices	Percentage (%) of “High Use” During the Analyzed Periods			p Value
	Before	During	After	
Artistic	34.8	30.7	34.8	$p = 0.91$
Manual	30.0	30.0	30.0	$p = 0.60$
Physical activity	46.0	25.0	46.0	$p = 0.00$
Intellectual	49.0	57.0	57.0	$p = 0.05$
Social	59.0	24.3	59.0	$p = 0.05$
Touristic	41.8	13.3	41.8	$p = 0.04$
Virtual	55.7	62.7	55.7	$p = 0.00$
Contemplative	38.3	40.7	40.7	$p = 0.52$

The results revealed distinct patterns of engagement in leisure practices across the periods analyzed (before, during, and after the pandemic), with some practices showing significant increases, others remaining stable, and others experiencing substantial reduction. Intellectual activities exhibited a statistically significant increase during the pandemic, with the proportion of “high use” rising from 49.0% before to 57.0% during ($p = 0.05$); a level that was maintained in the post-pandemic period. Similarly, virtual activities demonstrated a significant increase in engagement, rising from 55.7% before to 62.7% during the pandemic ($p = 0.00$). However, in both cases, no significant differences were observed between the periods before and after the pandemic, indicating that engagement levels returned to their pre-pandemic patterns.

In contrast, some leisure practices showed no significant changes in engagement over time. Artistic activities maintained consistent proportions of “high use” between the

periods before and after the pandemic, both at 34.8%, despite a brief reduction during the pandemic to 30.7% ($p = 0.91$). Manual activities also exhibited stability across all periods, with “high use” proportions remaining around 30.0% throughout ($p = 0.60$). Similarly, contemplative activities showed no significant variation, with “high use” proportions of 38.3% before, 40.7% during, and 40.7% after the pandemic ($p = 0.52$), reflecting a stable engagement pattern.

Conversely, several categories experienced significant reductions in engagement during the pandemic, followed by a return to pre-pandemic levels. Physical activities saw a sharp decline in “high use”, dropping from 46.0% before to 25.0% during the pandemic ($p = 0.00$), but this returned to 46.0% afterward. Social activities exhibited a similar pattern, with a significant reduction from 59.0% before to 24.3% during the pandemic ($p = 0.05$), fully recovering to 59.0% after. Likewise, touristic activities showed a significant drop in “high use”, from 41.8% before to 13.3% during the pandemic ($p = 0.04$), followed by a recovery to pre-pandemic levels post-pandemic. These findings reflect the considerable impact of social and mobility restrictions on activities requiring physical presence or interaction, contrasting with the resilience or adaptability observed in intellectual and virtual activities.

These results highlight the varied impacts of the pandemic on leisure engagement, with significant increases in individual and technology-driven practices, stability in certain categories, and sharp declines in activities dependent on social or physical interaction. Understanding these patterns is essential for designing strategies to support leisure behaviors that promote well-being during disruptive events.

4. Discussion

This study aimed to evaluate changes in leisure styles among adults during the periods before, during, and after the COVID-19 pandemic. Eight categories of leisure practices were assessed: artistic, manual, physical activity–sports, intellectual, social, touristic, virtual, and contemplative.

The results highlight an interface between intellectual and virtual activities. The increase in intellectual activities ($p = 0.05$) can be attributed to more time spent at home and the desire to continue personal and professional development during health restrictions. This significant rise occurred between the pre-pandemic and during-pandemic periods, with engagement levels remaining consistently high in the post-pandemic period. Activities such as reading, participating in online courses, and consuming educational content became important for coping with stress and promoting emotional well-being (Teodoro et al. 2020). Moyer (2007) emphasizes that reading offers significant educational benefits, essential for personal growth and resilience. Teodoro et al. (2020) found that most participants dedicated an average of 1 h and 15 min daily to intellectual activities during social distancing, reflecting the benefits of these activities.

Similarly, virtual activities increased significantly during the pandemic ($p = 0.00$) due to mobility restrictions and the need for social distancing. Digital platforms, social media, video calls, and streaming services became central to daily routines, keeping people connected and entertained. Consequently, many intellectual activities were mediated by digital technologies. Online course participation was facilitated by the availability of e-learning platforms, while e-books and audiobooks replaced limited access to physical libraries (Batista et al. 2022).

However, this digitalization also highlighted inequalities in resource access, benefiting those with better financial conditions and internet access, while other segments of the population faced significant limitations (Van Deursen 2020). This reflects disparities in access to virtual forms of leisure, where the lack of technological infrastructure and financial resources restricts participation in activities that could mitigate stress and promote well-being during the pandemic (Sivan 2020). Although the use of digital technologies helped reduce social isolation, excessive use can lead to digital fatigue and negatively impact mental health (Clemente and Stoppa 2020). In summary, the COVID-19 pandemic catalyzed significant changes in leisure styles, promoting an increase in intellectual and virtual

activities. These results underscore the importance of digital technologies in adapting to new living conditions and the need for policies that ensure equitable access to digital resources for all population segments.

Although the results related to artistic, manual, and contemplative activities remained stable throughout the investigated periods, a deeper analysis reveals that this stability may indicate a lack of significant and integrated engagement with these activities in daily life. The non-consolidation of these activities suggests they are sporadic or complementary practices rather than essential components of leisure styles. Activities such as going to the cinema, theater, concerts, gardening, cooking, and appreciating nature, while beneficial, did not establish themselves as integrated and consistent parts of people's lives. This secondary choice may be attributed to the perception that these activities are less performed or less accessible, especially when compared to other forms of leisure, such as intellectual and virtual activities, which gained prominence during the pandemic.

According to the Brazilian Institute of Geography and Statistics ([Instituto Brasileiro de Geografia e Estatística 2022](#)), Brazil has 5,570 municipalities, but only 29.6% have museums, and 23.3% have theaters and performance venues. Additionally, 14.9% of municipalities without cultural facilities require more than an hour of travel to access the nearest municipality with museums, with the situation being most severe in the northern region (70%) and less pronounced in the south (1.3%) and southeast (5.3%). In 2018, 39.9% of the Brazilian population lived in municipalities without cinemas.

Furthermore, according to the [Instituto Brasileiro de Geografia e Estatística \(2022\)](#), factors such as ticket costs, distance, and lack of public transportation exacerbate this situation, particularly in the north and northeast of the country, which have less cultural infrastructure. Specific groups, such as children and adolescents, face even worse scenarios: 43.8% of those under 14 live in areas without cinemas, and 35.9% without museums. The Black or "parda"¹ population is also disproportionately affected, with 44% living in municipalities without cinemas, compared to 34.8% among white people. These inequalities underscore the need for policies that expand access to cultural facilities across the country.

Studies conducted during the pandemic with university students in the city of Macapá, Amapá, in the northern region of Brazil, indicate that 64.9% of participants engaged in artistic activities such as watching movies and listening to music ([Montenegro et al. 2020](#)). However, visits to cinemas, theaters, and shows were limited by the health measures adopted.

The research "Leisure in Brazil: Representations and Realizations of Everyday Experiences" ([Stoppa and Isayama 2017](#)) reveals that manual activities are rarely practiced during the free time of Brazilians, with only 0.5% of men and 1.7% of women engaging in this type of leisure. However, 0.9% of men and 2.05% of women expressed a desire to engage in these activities, indicating a potential interest that has not translated into effective practice. This scenario may be attributed to a lack of encouragement and awareness about the benefits of these activities, as well as the absence of public policies and educational programs to promote them. This gap contributes to the low levels of practice observed over the periods analyzed.

To transform this reality, it is crucial to develop educational actions that promote manual activities as a valid and beneficial form of leisure. Awareness campaigns, workshops, and the inclusion of these activities in school and community programs could encourage more people to engage in manual activities.

During the COVID-19 pandemic, practices such as gardening, woodworking, crafting, and painting proved significantly beneficial for mental health and the well-being of practitioners. Studies conducted during the sanitary restrictions highlighted that increasing time dedicated to gardening was associated with a reduction in depressive and anxiety symptoms, as well as improved life satisfaction ([Bone et al. 2023](#)). These activities offered an effective way to cope with the stress caused by social isolation, providing a sense of purpose and connection with nature, which is essential for psychological well-being. Additionally, activities such as woodworking and crafting contributed to greater life satisfaction by offering a creative and productive outlet during a period of uncertainty and change.

Morse et al. (2021) emphasized that creative activities played a crucial role in maintaining mental health during the pandemic. These authors highlighted that participation in activities such as crafting, painting, and other forms of creative expression increased significantly, providing a way to express emotions and relieve stress. According to the authors, these activities helped keep the mind occupied and engaged, which is crucial to avoid feelings of despair that are common during long periods of isolation.

The stability of contemplative activities during the analyzed periods can typically be attributed to the lack of integration of these practices into the leisure styles of the studied population. In urban contexts where there is an absence of large, accessible natural spaces, such as parks and gardens, combined with urban planning that prioritizes real estate development over the preservation of green areas (Beatley 2011), opportunities for contemplative activities are reduced. During the pandemic, mobility restrictions and the closure of public spaces exacerbated this scenario, further limiting engagement in these activities (Neca and Rechia 2020).

After the pandemic, even with the lifting of restrictions, there was no significant increase in the use of these spaces among the studied sample. This reflects a persistent lack of habit in incorporating contemplative leisure into daily routines. Urban culture, which prioritizes productivity over leisure, combined with the absence of community programs that encourage the use of public spaces for contemplative activities, continues to perpetuate this trend (Gehl 2010; Louv 2008). According to Teodoro et al. (2020), the daily average time dedicated to contemplative activities during the pandemic was approximately 15.9 min. Studies indicate that moments of contemplation are essential for mental and emotional recovery, offering a necessary break from daily stress (Kaplan and Kaplan 1989).

Finally, the analysis of the stability of artistic, manual, and contemplative activities during the analyzed periods reveals the need for greater integration of these practices into the population's lifestyles. To achieve a healthy balance in leisure, it is essential to promote greater awareness of the benefits of these activities and to facilitate access and inclusion of these practices in daily routines. This could include public policies aimed at valuing the arts, developing community spaces for manual practices, and promoting initiatives that encourage contemplation and connection with nature.

The results of this study indicate a significant reduction in physical activities during the COVID-19 pandemic, exacerbating an already critical situation. In Brazil, according to the 2020 report of the Surveillance System for Risk and Protective Factors for Chronic Diseases by Telephone Survey (Ministério da Saúde 2021), the prevalence of physical inactivity in 2019 was 14.9%, with differences between men (14.1%) and women (15.5%). Regarding physical activity, 36.8% of adults engaged in physical activities during their leisure time, equivalent to at least 150 min of moderate-intensity activity per week. This practice was more common among men (44.2%) than women (30.5%).

The data from this study align with evidence from Wilke et al. (2021), who observed a substantial decrease in global physical activity levels during pandemic restrictions. These authors reported a 41% reduction in moderate to vigorous physical activity and a 42.2% decrease in vigorous physical activity, highlighting the severe impact of sanitary measures on physical activity practice. This decline was more pronounced among young people and the elderly, as well as those who were more active before the restrictions, suggesting that the closure of sports facilities and the need for social distancing created significant barriers to maintaining active lifestyles.

The study by Solomon-Moore et al. (2022) supports these findings, showing a decrease in autonomous motivation for planned physical activity during the lockdown in the United Kingdom. Marconcin et al. (2022) also reported a general reduction in physical activity levels during the first year of the pandemic, accompanied by an increase in sedentary behavior, which negatively impacted mental health. A comparative analysis by Líška et al. (2024) among university students in Poland, Slovakia, and the Czech Republic after the pandemic reinforces this trend of reduced physical activity. Even after restrictions were lifted, physical activity levels did not return to pre-pandemic levels. These studies

underscore the importance of developing strategies and public health policies to encourage the resumption of physical activities, aiming to mitigate the adverse impacts on physical and mental health observed during and after the pandemic.

Regarding social leisure activities, the data from this research indicate a significant reduction ($p = 0.05$), explained by the sanitary measures implemented. [Deshpande \(2022\)](#) demonstrates that time spent with friends decreased drastically at the beginning of the pandemic, recovering partially with the easing of measures but not returning to pre-pandemic levels, indicating a lasting effect of these restrictions on social interaction. This reduction in social activities significantly impacted mental health, as observed by [Silva et al. \(2020\)](#), who highlighted that the lack of social and recreational interactions increased stress and anxiety levels among adults.

In response to the restrictions, many people turned to home-based leisure activities to maintain mental well-being. [Teodoro et al. \(2020\)](#) revealed that activities such as watching movies, cooking, reading, and using communication technologies to maintain social contacts became common during social isolation, filling the void left by the inability to engage in external social activities. [Clemente and Stoppa \(2020\)](#) complement this information by showing that people's creativity in seeking new forms of entertainment at home was crucial for maintaining emotional balance during this social scenario.

These studies demonstrate that sanitary measures not only reduced social leisure activities during the pandemic but also had a lasting impact after the end of the stricter restrictions. The pandemic drastically altered these patterns, making adaptation to home-based leisure forms essential. The prolonged impact of social distancing measures and lockdowns underscores the need for strategies to promote mental health and well-being during sanitary restrictions.

The data from this research indicate a significant reduction in tourism activities during the pandemic ($p = 0.04$). This can be explained by the strict sanitary measures implemented to contain the spread of the virus, which resulted in the closure of tourist spaces and travel restrictions. These findings align with several studies that examined the impact of social restrictions on the tourism industry.

In Brazil, a study conducted in the city of Aracaju, in the northeastern region, investigated the pandemic's impacts on tourism businesses ([Holanda et al. 2020](#)). The results showed a significant drop in revenue for tourism businesses, with 58% reporting a reduction of more than 76% in revenue. Additionally, the study identified that the economic recovery of these businesses will heavily depend on effective public policies, such as tax reductions and the provision of low-interest loans to facilitate the resumption of tourism activities.

[Bravo et al. \(2022\)](#) analyzed the challenges faced by community tourism in Ecuador during the COVID-19 pandemic. The authors observed that conscious tourism, related to sustainable human development and "good living", became even more crucial in times of crisis. Sanitary movement restrictions and the closure of tourist destinations negatively impacted the sector, forcing a reevaluation of tourism practices to ensure the safety of tourists and local communities.

These studies show that the reductions in tourism activities during the pandemic directly reflect the globally adopted sanitary measures. Travel restrictions, the implementation of strict safety protocols, and the temporary closure of tourist destinations were essential to contain the spread of COVID-19 but also resulted in a significant decline in tourism activity. Adapting to these changes and developing new strategies to promote safe tourism will be crucial for the sector's recovery in the post-pandemic period.

5. Conclusions

This study examined the main changes in leisure styles among adults aged 18 to 60 years across three distinct periods: before, during, and after the COVID-19 pandemic. The results revealed a significant increase in intellectual activities between the pre- and post-pandemic periods and in virtual activities between the pre-pandemic and pandemic periods. In contrast, physical, social, and touristic activities experienced notable declines during

the pandemic, followed by a recovery to pre-pandemic levels in the post-pandemic phase. Meanwhile, artistic, manual, and contemplative activities remained stable throughout all analyzed periods.

These findings highlight the population's ability to adapt their leisure practices to the restrictions imposed by the pandemic, demonstrating resilience in times of crisis. The increase in intellectual and virtual activities reflects a continuous pursuit of personal development, entertainment, and stress relief in adverse contexts, reinforcing the role of digital technologies in maintaining well-being. However, the stability of artistic, manual, and contemplative activities suggests that these practices are not yet fully integrated into the population's leisure styles, remaining sporadic or complementary. This underscores the need for policies that encourage the appreciation of these practices as ways to promote health and well-being.

The reductions observed in physical, social, and touristic activities during the pandemic underscore the impact of social distancing measures and lockdowns on daily life and public health. The decline in physical activity and social interactions had direct repercussions on the population's physical and emotional well-being, emphasizing the importance of public policies that promote the safe resumption of these activities. Moreover, creating urban spaces that support outdoor and contemplative activities is crucial to offering more accessible and diversified leisure options.

The adaptation of leisure to home and virtual environments also brought challenges, such as inequalities in access to digital resources. This disparity highlights the need for interventions to ensure equitable access to technologies, enabling participation in virtual activities for historically excluded groups. Inclusive policies should prioritize expanding digital infrastructure and supporting vulnerable communities, thereby promoting the democratization of virtual leisure and reducing the inequalities exacerbated by the pandemic.

This study contributes to the field of leisure studies by providing a detailed analysis of changes in leisure styles and reflecting on how these transformations can inform future public policies. In global crisis scenarios, the observed adaptations can serve as a foundation for strategies that promote health, quality of life, and social resilience. Ensuring equitable access to different forms of leisure, encouraging the safe resumption of physical and social interactions, and creating conditions for the development of artistic and contemplative practices are essential steps to prepare society for future global emergencies.

However, some limitations of this study must be noted. The use of non-probabilistic sampling and online data collection may have limited the representativeness of the results, particularly by excluding individuals without internet access. Furthermore, the reliance on participants' recall of leisure activities across three distinct periods may have introduced recall bias, which could affect the accuracy of the responses. To address these limitations, future studies should adopt more representative sampling methods, longitudinal designs, and qualitative approaches to deepen the understanding of individual motivations and leisure experiences. Additionally, real-time data collection techniques or shorter recall intervals could improve the reliability of the findings.

In conclusion, the COVID-19 pandemic significantly influenced leisure styles, highlighting both the population's resilience in adapting to new conditions and the crucial role of digital technologies in maintaining well-being. However, disparities in digital access and disruptions to physical and social activities require inclusive policies that address these inequalities and promote diverse, equitable, and sustainable leisure opportunities for all.

Author Contributions: Conceptualization, M.G.M.; methodology, M.G.M., K.L.A. and R.F.R.; validation, M.G.M., K.L.A. and R.F.R.; formal analysis, M.G.M.; writing—original draft preparation, M.G.M.; writing—review and editing, M.G.M., A.M.O., J.C.d.O.M., K.L.A., R.F.R., L.A.Á.G., E.B., D.W.M. and R.R.U.; supervision, R.R.U. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by the Research Productivity Grant from the State University of Minas Gerais, Call 10/2022, awarded to the first author.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki and approved by the Ethics Committee of State University of Minas Gerais (protocol code 6.790.635).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The datasets presented in this article are not readily available because the data are part of an ongoing study. Requests to access the datasets should be directed to the corresponding author.

Conflicts of Interest: The author declares no conflict of interest.

Note

¹ The term “pardo” is used in Brazil by the Brazilian Institute of Geography and Statistics (IBGE) to identify one of the five “color or race” groups in the population classification. It refers to individuals who self-identify as “pardos”, encompassing a diversity of skin tones, generally associated with a mix of White, Black, and, in some cases, Indigenous ancestry. The “pardo” category is part of the broader classification that includes Black people and represents a significant portion of the Black population in Brazil.

References

- Andrade, Rubian D., Gisele Maria Schwartz, and Érico Pereira Gomes Felden. 2018a. Variáveis socioeconômicas e o envolvimento no lazer: Análise com a escala de práticas no lazer (EPL). *Licere* 21: 292–312. [CrossRef]
- Andrade, Rubian D., Gisele Maria Schwartz, Gisele Helena Tavares, Andreia Pelegrini, Clarissa Stefani Teixeira, and Érico Pereira Gomes Felden. 2018b. Validade de construto e consistência interna da Escala de Práticas no Lazer (EPL) para adultos. *Ciência & Saúde Coletiva* 23: 519–28. [CrossRef]
- Bae, Sou Y., and Po-Ju Chang. 2023. Stress, anxiety, leisure changes, and well-being during the COVID-19 pandemic. *Journal of Leisure Research* 54: 157–79. [CrossRef]
- Barre, Suzanne, Garret Stone, Janet McKeown, and Joanne Schroeder. 2020. Thinking about leisure during a global pandemic. *World Leisure Journal* 62: 306–10. [CrossRef]
- Batista, Fabiano E. A., Edwaldo S. dos Anjos Junior, and Mariana R. da Costa Neves. 2022. Lazer em tempos de pandemia da COVID-19: Uma revisão da literatura. *Licere* 25: 25–55. [CrossRef]
- Beatley, Timothy. 2011. *Biophilic Cities: Integrating Nature into Urban Design and Planning*. Washington, DC: Island Press.
- Bendíková, Elena, and Beáta Dobay. 2017. Physical and sport education as a tool for development of a positive attitude toward health and physical activity in adulthood. *European Journal of Contemporary Education* 6: 14–21. [CrossRef]
- Bendíková, Elena, Robert Rozim, and Laurentiu-Gabriel Talaghir. 2024. Changes in somatic indicators, body posture and health-oriented fitness among younger school-age female pupils. *Revista Românească pentru Educație Multidimensională* 16: 241–56. [CrossRef]
- Bone, Jessica K., Daisy Fancourt, Jill K. Sonke, Meg E. Fluharty, Randy Cohen, Jenny B. Lee, Anthony J. Kolenic, Heidi Radunovich, and Feifei Bu. 2023. Creative leisure activities, mental health and well-being during 5 months of the COVID-19 pandemic: A fixed effects analysis of data from 3725 US adults. *Journal of Epidemiology and Community Health* 77: 293–97. [CrossRef]
- Bravo, Lucia L., Nila P. Macías, and Zoe M. Valdés. 2022. Community-based tourism in Ecuador: Notes in times of pandemic. *Smart Tourism* 3: 1–11. [CrossRef]
- Clemente, Ana Cristina Fernandes, and Edmund Stoppa. 2020. Lazer doméstico em tempos de pandemia da COVID-19. *Licere* 23: 460–84. [CrossRef]
- Cochran, William G. 1950. The Comparison of Percentages in Matched Samples. *Biometrika* 37: 256–66. [CrossRef] [PubMed]
- Deshpande, Ashwini. 2022. The COVID-19 pandemic and gendered division of paid work, domestic chores and leisure: Evidence from India’s first wave. *Economia Politica* 39: 75–100. [CrossRef]
- Gehl, Jan. 2010. *Cities for People*. Washington, DC: Island Press.
- Hidalgo-Andrade, Paula, Clara Paz, Carlos Hermosa-Bosano, Javier García-Manglano, Charo Sádaba-Chalezquer, Claudia López-Madrigal, Cecilia Serrano, and Aurelio Fernández-Zapico. 2021. Psychological factors, leisure activities, and satisfaction during the COVID-19 pandemic: A Cross-Sectional Study in Eleven Spanish-Speaking Countries. *International Journal of Environmental Research and Public Health* 18: 11104. [CrossRef]
- Holanda, Francisco Sandro, Deni Santos Azevedo, and Monica Mari Liberato. 2020. Impactos da pandemia nos empreendimentos turísticos de Aracaju, Sergipe. *Turismo em Análise* 26: 209–26. [CrossRef]
- Instituto Brasileiro de Geografia e Estatística. 2022. *Síntese de indicadores sociais: Uma análise das condições de vida da população brasileira 2022 (Estudos e Pesquisas. Informação Demográfica e Socioeconômica, n. 49)*; Rio de Janeiro: IBGE. Available online: <https://www.observatoriodasmegacidades.net.br/sintese-de-indicadores-sociais-uma-analise-das-condicoes-de-vida-da-populacao-brasileira-2022/> (accessed on 12 September 2024).
- Kaplan, Rachel, and Stephen Kaplan. 1989. *The Experience of Nature: A Psychological Perspective*. Cambridge: Cambridge University Press.

- Líška, Dávid, Sebastian Rutkowski, Lenka Oplatková, Jakub Sýkora, Milan Pupiř, Jan Novák, Eva Urbářová, Anna Rutkowska, Alena Busch, and Alena Kobesova. 2024. Comparison of the level of physical activity after the COVID-19 pandemic in Poland, Slovakia and the Czech Republic. *BMC Sports Science, Medicine and Rehabilitation* 16: 47. [CrossRef] [PubMed]
- Louv, Richard. 2008. *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder*. New York: Algonquin Books.
- Maciel, Marcos G., Ricardo R. Uvinha, Luz A. A. Gutiérrez, and Aurora M. Ortuzar. 2023. leisure styles: Understanding the transformations of the past five decades. *International Leisure Review* 12: 41–60.
- Mackenzie, Susan H., and Jasmine Goodnow. 2021. Adventure in the age of COVID-19: Embracing microadventures and locavism in a post-pandemic world. *Leisure Sciences* 43: 62–69. [CrossRef]
- Marconcin, Priscila, André O. Werneck, Miguel Peralta, Andreas Ihle, Élvio R. Gouveia, Gerson Ferrari, Hugo Sarmento, and Adilson Marques. 2022. The association between physical activity and mental health during the first year of the COVID-19 pandemic: A systematic review. *BMC Public Health* 22: 209. [CrossRef] [PubMed]
- Ministério da Saúde. 2021. *Vigitel Brasil 2020: Vigilância de fatores de risco e proteção para doenças crônicas por inquérito telefônico: Estimativas sobre frequência e distribuição sociodemográfica de fatores de risco e proteção para doenças crônicas nas capitais dos 26 estados brasileiros e no Distrito Federal em 2020*; Brasilia: Ministério da Saúde.
- Miranda, Danilo S. 2020. Citizenship and leisure in pandemic times. *World Leisure Journal* 62: 303–5. [CrossRef]
- Montenegro, Gustavo M., Bruno da Silva Queiroz, and Mairna Costa Dias. 2020. Lazer em tempos de distanciamento social: Impactos da pandemia de COVID-19 nas atividades de lazer de universitários na cidade de Macapá (AP). *Licere* 23: 1–26. [CrossRef]
- Morse, Katherine F., Philip A. Fine, and Kathryn J. Friedlander. 2021. Creativity and leisure during COVID-19: Examining the relationship between leisure activities, motivations, and psychological well-being. *Frontiers in Psychology* 12: 609967. [CrossRef]
- Moyer, Jessica E. 2007. Learning from leisure reading: A study of adult public library patrons. *Reference & User Services Quarterly* 46: 66–79. Available online: <https://www.jstor.org/stable/20864750> (accessed on 12 September 2024).
- Neca, Bruno R., and Simone Rechia. 2020. Ficar em casa ou ocupar os espaços de lazer ao ar livre? Reflexões e possibilidades para uma apropriação segura dos diferentes espaços públicos de lazer em tempos de pandemia. *Licere* 23: 471–509. [CrossRef]
- Silva, Cinthia L., Luiz G. Bergamo, Dariadison Antunes, and Nathalia Sara Patreze. 2020. Os dias entre o teto e o chão da casa: Lazer e práticas corporais no contexto brasileiro em tempos da COVID-19. *Licere* 23: 57–92. [CrossRef]
- Sivan, Atara. 2020. Reflection on leisure during COVID-19. *World Leisure Journal* 62: 296–99. [CrossRef]
- Solomon-Moore, Emma, Jeffrey Lambert, Elisabeth Grey, Fiona Gillison, Nick Townsend, Betty Busam, Kyriakos Velemis, Christopher Millen, Fran Baber, and Tania Griffin. 2022. Life in lockdown: A longitudinal study investigating the impact of the UK COVID-19 lockdown measures on lifestyle behaviours and mental health. *BMC Public Health* 22: 1495. [CrossRef] [PubMed]
- Stoppa, Edmund A., and Hélder F. Isayama, eds. 2017. *Lazer no Brasil: Representações e concretizações das vivências cotidianas*. Campinas: Autores Associados.
- Teodoro, Ana Paula Evaristo Guizarde, Gustavo André Pereira de Brito, Laura Alice Rinaldi Camargo, Marcos Ruiz da Silva, and Antonio Carlos Bramante. 2020. A dimensão tempo na gestão das experiências de lazer em período de pandemia da COVID-19 no Brasil. *Licere* 23: 126–62. [CrossRef]
- Van Deursen, Alexander J. 2020. Digital inequality during a pandemic: Quantitative study of differences in COVID-19—Related internet uses and outcomes among the general population. *Journal of Medical Internet Research* 22: e20073. [CrossRef]
- Wilke, Jan, Lisa Mohr, Adam S. Tenforde, Pascal Edouard, Chiara Fossati, Marcela González-Gross, Celso Sánchez Ramírez, Fernando Laiño, Benedict Tan, Julian David Pillay, and et al. 2021. A Pandemic within the pandemic? Physical activity levels substantially decreased in countries affected by COVID-19. *International Journal of Environmental Research and Public Health* 18: 2235. [CrossRef] [PubMed]

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