



**Leisure Activity Impacts and Optimization**  
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### **Abstract**

This study investigated the well-being impacts of leisure engagement on individuals and sought to identify factors that influence the benefits of participation. Relevant peer-reviewed literature was analyzed to explore implications for optimizing leisure participation. The study found that demographic characteristics, personality traits, and prior health conditions impact the well-being and satisfaction effects of leisure. Additionally, considering these factors in the intentional selection of activities significantly enhances satisfaction and well-being. Those who participate in leisure should take a balanced approach and engage in multiple activities to assist in leisure optimization. Future research should further explore the factors that influence leisure optimization to identify strategies for improving well-being.

Keywords: Leisure, leisure optimization, well-being, activities

### **Leisure Activity Impacts and Optimization**

Leisure is the time free from work or obligatory duties during which individuals may engage in activities of their choice for relaxation and enjoyment. Numerous studies have been dedicated to identifying the ways leisure engagement promotes physical, cognitive, emotional, and social well-being. Distinct activities have differing impacts, and many personal factors contribute to the well-being impacts of leisure. This study seeks to identify some of these factors and position them in a theoretical framework that provides individuals with a starting point for selecting exceptionally beneficial activities. By summarizing and interpreting key literature, this study will identify patterns and associations in previous research and explore their potential implications.

### **Literature Review**

The impact of leisure activities on sundry aspects of health (physical, mental, emotional, social, etc.) can be observed through various research methods (Fancourt et al., 2021). This literature review examines nine studies centered on three different methods for conducting and examining research, which include literature reviews, primary research studies, and secondary research studies. The data collection methods present in the chosen pieces consist of quantitative systematic reviews (Carruthers & Hood, 2004; Fancourt et al., 2021), longitudinal surveys (Chang et al., 2014; Lee et al., 2018; Matz-Costa et al., 2016), questionnaires (Dirzyte et al., 2022; Pressman et al., 2009), assessment scales (Avunduk, 2021; Dirzyte et al., 2022; Padhy et al., 2015; Pressman et al., 2009), and physical data measures (Pressman et al., 2009). Upon reviewing these articles, the three methodological themes and implications for future research surfaced.

### **Literature Reviews**

First, syntheses of available literature are key resources that incorporate cross-sectional and multi-dimensional studies to identify comprehensive theoretical frameworks and assist in the operationalization of constructs. In the article, "How leisure activities affect health: a narrative review and multi-level theoretical framework of mechanisms of action," Dr. Daisy Fancourt et al. (2021) identified 600 mechanisms of action that contribute to the impact of leisure activities on health. These impacts are explained through psychological, biological, social, and behavioral processes and synthesized into a Multi-level Leisure Mechanisms Framework that divides impacts into micro-levels (individual), meso-levels (group), and macro-levels (societal) (Fancourt et al., 2021).

Dr. Cynthia Carruthers and Dr. Colleen Hood (2004) compiled various findings in the field of therapeutic leisure that summarize the major factors of leisure on mental health, particularly as it relates to eudaimonic or psychological well-being. To maximize the already significant

impact of leisure on happiness and mental health, this synthesis evaluates and confirms leisure studies specialists' assorted findings that therapeutic recreation intervention should focus on the three-fold aspects of experiencing pleasure: thoughts, feelings, and behaviors (Carruthers & Hood, 2004).

### **Primary Research Studies**

Another resource type that is crucial to the discussion of leisure activities in its provision of new data and consequently emergent ideas is the primary research study. In a series of four quantitative studies, Dr. Sarah Pressman et al. (2009) used the Pittsburg Enjoyable Activities Test (PEAT) and physiological, psychosocial, and health behavior measures to determine the correlation between leisure activities and their multifaceted implications for health. The study revealed that increased participation in enjoyable activities is linked with decreased blood pressure, cortisol, body mass index, waist circumference, and depression (Pressman et al., 2009). Perceptions of better physical function and higher levels of positive psychosocial states are also associated with higher PEAT scores (Pressman et al., 2009).

In her administration of the Leisure Satisfaction Scale (LSS) and Social Media Addiction Scale (SMAS) to 193 participants, Dr. Yesim Avunduk (2021) explored the relationship between leisure satisfaction and social media addiction across varying age groups. The study revealed that a negative significant relationship exists between leisure satisfaction and social media addiction and demonstrated discrepancies in leisure satisfaction between age groups and gender, and discrepancies in social media addiction between age groups (Avunduk, 2021).

Dr. Aiste Dirzyte et al. (2022) utilized the Satisfaction with Life Scale, Psychological Capital Questionnaire, and Mindful Attention Awareness Scale to assess 586 participants, evaluating the associations between different leisure activities and mindfulness, psychological capital, and life satisfaction. Dirzyte and her colleagues found that different activities of leisure produced different effects on mindfulness, psychological capital, and life satisfaction (Dirzyte et al., 2022). Specifically, spending time with family and television avoidance were significantly associated with increased life satisfaction, mindfulness, and psychological capital (Dirzyte et al., 2022). It was also reported that leisure preferences differed among men and women and that certain activities had more of a psychological impact on one gender versus the other (Dirzyte et al., 2022).

In the study, "Leisure motivation and well-being among adolescents and young adults," Dr. Meera Padhy et al. (2015) applied a between-subjects design consisting of two independent groups, one of adolescents and one of young adults. The participants were administered the Leisure Motivation Scale, which assesses motivation for engaging in leisure activities based on both intrinsic motivation and external motivation, as well as the Warwick-Edinburgh Mental Well-being Scale (Padhy et al., 2015). An analysis of the results found that young adults had higher motivation for leisure than adolescents and demonstrated a correlation between higher intrinsic and external leisure motivation and increased well-being among both age groups (Padhy et al., 2015).

### **Secondary Research Studies**

Secondary research studies that analyze existing data to produce novel contributions to a field are paramount factors in determining relationships between leisure and variegated aspects of health, predominantly in the retired and/or elderly population. Dr. Po-Ju Chang et al. (2014) applied a latent variable model using data gathered by the U.S. Health and Retirement Study (HRS) concerning 2,695 participants between the ages of 50 and 96 to identify the mediating variable between relationships and health. The HRS conducts interviews and administers a

psychosocial questionnaire on a regular basis, and the data from the years 2006 and 2010 were used to assess self-reported social relationships, psychological well-being, physical health, and leisure activities (Chang et al., 2014). The study concludes that leisure activities are the missing link between social relationships and health, asserting that older individuals with better social relationships are more likely to spend time in leisure activities, which leads to increased health (Chang et al., 2014). It was found that both psychological well-being and physical health were improved where regular engagement in leisure activities was present (Chang et al., 2014).

Applying a similar approach, Dr. Yura Lee et al. (2018) utilized data from the Health and Retirement Study from the years 2004, 2006, and 2008, and its supplementary Consumption and Activities Mail Survey to test the associations between mental cognition, retirement, and leisure activities. The results of this data analysis led to the conclusion that mental cognition is higher among older adults who work than in those who are retired and found that engagement in mental activities among retired individuals greatly reduces cognitive decline (Lee et al., 2018).

Additional research by Dr. Christina Matz-Costa et al. (2016) similarly used eleven years' worth of data from the Health and Retirement Study and the biennial Consumption and Activities Mail Survey. The study explored four domains—use of body, use of mind, social interaction, and benefit to others—then identified the indirect effects of these different activity domains on emotional and physical health (Matz-Costa et al., 2016). Social interaction and emotional benefit to others were found to positively impact emotional health, and use of body and physical benefit to others positively affected physical health (Matz-Costa et al., 2016). The most significant impacts on physical and emotional health occurred in older individuals who engaged in all four activity domains (Matz-Costa et al., 2016).

### **Implications for Future Research**

Different leisure activities produce varying effects on individuals and social relationships (Chang et al., 2014; Dirzyte et al., 2022). Practicing leisure activities with intentionality can positively influence individual health (emotional, mental, physical) and social relationships (Chang et al., 2014; Matz-Costa et al., 2016). However, there is insufficient evidence to conclusively posit the specific leisure activities that produce the desired impacts on individual health and social relationships across all populations (Dirzyte et al., 2022). Due to limitations in participant and study quantity and diversity, conclusions regarding the impacts of distinct leisure activities on health and relationships must consider the empirical generalizability of cross-sectional and intersectional analyses.

### **Conclusion**

Leisure activity practices are crucial elements in the pluralistic aspects of health and social relationships. The practical implications of leisure activities on manifold facets of life are salient in the leisure studies discussion in one form or another across age groups, ethnicities, genders, and myriad other factors.

### **Research Questions**

1. What are leisure activities?
2. What is the overall impact of leisure activities on health and well-being?
3. How do different types of leisure activities affect various aspects of health?
4. How do age, personality traits, and demographics influence leisure preferences and their effectiveness?

### **Methodology**

This research study aimed to use previous research to develop a theoretical framework for the optimization of leisure that accounts for the demographic, personal, and biological

differences of individuals. Few thorough studies have been singularly committed to exploring this topic, but inferences can be drawn from research centering on the broader fields of leisure and recreation. Both quantitative and qualitative data gathered from existing literature contributed to this secondary research study. Data were collected from peer-reviewed scientific journals sourced from the following databases and platforms: Taylor and Francis, Sage Journals, ResearchGate, Google Scholar, PubMed Central, and ScienceDirect. Each study included in this report was a primary research study, secondary research study, or literature review. Every source was published in a prominent journal after the year 2003, but some data used in the studies were collected prior to this year. This study employed content analysis to identify and categorize relevant information present in the qualitative data and interpreted any quantitative data to extract meaningful patterns and associations that contribute to a comprehensive understanding of the research topic. Though there were some temporal and material limitations to this study, the methodology applied considered both qualitative and quantitative data and contributed to an extensive comprehension of key factors influencing leisure optimization.

### Findings

Leisure has been described as “the principal driving force underpinning the human desire to render life meaningful ... or to give it a sense of passion, pleasure, and purpose” (Blackshaw, 2016). According to Fancourt et al. (2021), leisure activities are often considered volitional, non-work activities that bring pleasure to the participant. They include hobbies like artistic pursuits, enjoyable learning, reading, watching television, listening to or playing music, exercising, and playing sports. Leisure may also include activities like socializing, shopping, volunteering, and joining clubs. Additionally, leisure encompasses participation in religious activities, political parties, trade unions, environmental groups, libraries, cultural events, and community groups.

Since it has been established that leisure can take manifold forms and is an active component in life satisfaction, it follows that the impacts of leisure activities are numerous and varied. Indeed, abundant studies show that physical, emotional, cognitive, social, and psychosocial health can be improved through the practice of leisure.

#### **Physical, Psychosocial, and Emotional Impacts**

Some of the most salient impacts of leisure are physical, psychosocial, and emotional. To determine the physiological and psychosocial benefits of practicing leisure, a study by Dr. Sarah Pressman (2009) and accompanying researchers used four separate studies from the Pittsburgh Mind Body Center spanning a total of six years. The study consisted of 1,399 participants, 74% of which were women, all of whom belonged to differing educational, income, and age categories. Pressman’s study measured leisure activity frequency with the Pittsburgh Enjoyable Activities Test (PEAT), and psychological attributes with the Profile of Mood States Scale, the Center for Epidemiological Studies Depression scale, and the Life Engagement test. Social engagement was measured using the Social Network Index, stress caused by events was measured using the Life Events Scale, and physical health/activity was measured using the Paffenbarger Activity Questionnaire, the Pittsburgh Sleep Quality Index, the Short-Form Health Survey, and a variety of physical measurements. Through statistical analysis, Pressman’s team determined the association between PEAT scores and physiological function, psychosocial characteristics, health behaviors, and stress reduction. Higher PEAT scores were found to have physiological impacts including decreased blood pressure, cortisol, body mass index, and waist circumference, among other benefits. Psychosocially, higher scores were associated with

greater positive affect (vigor, well-being, calm), as well as higher life satisfaction and life engagement, and lower levels of depression and negative effects. Better sleep and exercise outcomes, and decreased negative impact of stressful life events on mood are also associated with higher PEAT scores (Pressman et al., 2009).

A comparable study from Dr. Christina Matz-Costa (2015) sought to determine the extent to which activities that require use of body, use of mind, social interaction, and/or benefit to others mediate the link between activity profiles and health. The study analyzed eleven years' worth of data from the Health and Retirement Study (HRS) and the biennial Consumption and Activities Mail Survey (CAMS), identifying the indirect effects of the different activity domains on physical and emotional health among the aging population. To measure emotional health, the team used an adapted version of the Center for Epidemiologic Studies–Depression (CES-D) Scale provided in the RAND HRS data file. To determine the physical health of the participants, the study utilized a 22-item frailty index adapted from Yang and Lee's (2010) original measure. Activity Engagement was measured using a 28-item questionnaire, and a scale adapted from questions on the CAMS was used to determine use of body, use of mind, social interaction, and benefit to others. Use of body and benefit to others was found to be positively associated with physical health. A positive correlation was also found between emotional health and social interaction and benefit to others. Additionally, where all four activity domains were present, a more potent effect on physical and emotional health was identified (Matz-Costa et al., 2015).

### **Cognitive and Emotional Impacts**

Leisure has been known to produce remarkable cognitive and emotional benefits in those who engage in activities regularly, most noticeably in older adults. A study by Yura Lee, PhD, Iris Chi, DSW, and Lawrence Palinkas, PhD (2019) concentrated on the cognitive impacts of mental, physical, social, and household varieties of leisure engagement. The study aimed to determine if leisure could replace employment as a preventative for mental decline among aging individuals. Four years of data from the HRS and CAMS with a total participant count of 2,827 were used in this study. Three domains of cognitive function, (1) memory, (2) working memory, and (3) attention and processing speed were assessed using results adapted from the HRS's Telephone Interview for Cognitive Status. Results from the CAMS which assessed the frequency of leisure activity participation were used to determine weekly leisure time across the mental, physical, social, and household domains. Physical, social, and household activities were found to have no significant bearing on older adults' cognition. However, the study discovered that the negative association between retirement and cognition can be attenuated by engagement in mental activities such as reading newspapers, reading books, playing cards or games, solving puzzles, doing arts and crafts, listening to music, singing or playing music, and praying or meditating. Therefore, there exists a significant positive association between mental leisure engagement and cognition (Lee et al., 2019).

A consequential study by Dr. Aiste Dirzyte (2022) and colleagues further illustrated the intrinsic link between leisure practices and mental and emotional health. Dirzyte's study examined different types of leisure preferences, including, (1) time spent with family, (2) time spent with friends, (3) time spent in nature, (4) participating in events, (5) watching TV, and (6) book reading. Previous research had established that different qualities present in participants, such as values, personality, gender, cultural background, etc., could be used as predictors for leisure preferences. This study aimed to determine whether psychological variables (psychological capital, mindfulness, and life satisfaction) and leisure preferences can be used as predictors for each other. The study consisted of 586 participants, all employed adults residing

in Lithuania. They were assessed using the five-item Satisfaction with Life Scale (SWLS), the twelve-item Psychological Capital Questionnaire (PCQ-12), and the fifteen-item Mindful Attention Awareness Scale (MAAS). Leisure preferences were determined using a simple questionnaire. Statistical analyses revealed that television avoidance, event attendance, and family interaction were associated with higher scores on at least two of the psychological variables. Therefore, these activities can be considered predictors of the related variables. Participants who preferred spending time with family, particularly, yielded high scores across the board for psychological capital, mindfulness, and life satisfaction, which are all key elements in mental and emotional health. The other leisure preferences were considerably less significant in their associations with the psychological constructs (Dirzyte et al., 2022).

### **Social Impacts**

For years, researchers have explored the relationship between aging and social connectedness; recently, leisure has been commended as a tool to help older individuals maintain social engagement and prevent the loneliness that often accompanies retirement. A 2013 study from researcher Vera Teopoeel assessed number of social gatherings, number of close relationships, satisfaction with social contacts, feeling of social connectedness, and loneliness as five dimensions of social connectedness among aging adults. The study used data from the Longitudinal Internet Studies for the Social Sciences (LISS) panel, collected through a questionnaire administered to 5,910 randomly selected members of the Dutch-speaking population of the Netherlands, ages 16 and above. The data included information relating to leisure activity engagement and the five dimensions of social connectedness. The ten activities included in the data were volunteering, cultural activities, vacations, sports, television, radio, books, hobbies, shopping, and computer use. An analysis of the data revealed that older people have fewer social contacts and participation in leisure activities but they have more satisfaction and connection with contacts as compared to younger people. The leisure activities that were most strongly associated with the social connectedness of older individuals were cultural events, book reading, and hobby engagement. Though engagement in the ten measured activities accounted for only 2-11% of the variance in social connectedness, this percentage is significant considering the countless social, economic, and situational influences that contribute to social connectedness (Toepoel, 2013).

Social relationships and health are uncontestedly connected, a finding that has led researchers to search for the mediating factor between them. Dr. Po-Ju Chang (2014) led a study examining the relationship between leisure activities and social and physical health in older adults. Seeking to determine whether leisure engagement could be the mediating factor between social activity and increased health, this study applied a latent variable model using data gathered by the U.S. Health and Retirement Study (HRS) concerning 2,695 participants between the ages of 50 and 96. The HRS conducts interviews and regularly administers a psychosocial questionnaire, and the data from the years 2006 and 2010 were used to assess self-reported social relationships, psychological well-being, physical health, and leisure activities. The study concludes that leisure activities are the missing link between social relationships and health, asserting that older individuals with better social relationships are more likely to spend time in leisure activities, which leads to increased health. It was found that both psychological well-being and physical health were improved where regular engagement in leisure activities was present (Chang et al., 2014).

Acknowledging that leisure activities can act as a mediator for social relationships and health, the question remains: how does this relationship operate? In answer to this question, a

systematic review led by Tiphonie Gonnard (2023) explored the positive impacts of social relationships fostered by physical or cognitive group activities in older adults. Using research from 20 studies related to leisure activities and physical, cognitive, psychological, and social quality of life, Gonnard's team compiled the positive impacts identified in each. For social quality of life in particular, the team identified several ways in which social relationships and leisure activities were associated. Individuals who participated in group activities reported having a sense of increased social support, more opportunities for social interaction, expanded size of social networks, and higher perceived social well-being. One study found that social interaction mediated by leisure activities led to perceptions of strengthened friendships and greater social connectedness. Additional research found that participants believed that the social aspect of participating in an activity was more important than completing the activity itself. Moreover, a study examining social relationships in the context of group physical activity found that the social component of group exercise positively influences the affective responses to the exercise. The relationship between social well-being and leisure engagement is cyclical: when people engage in leisure for the activity's sake, they continue their participation because the activity fosters a sense of belonging and connection, allowing them to reap the physical, cognitive, emotional, and social benefits of leisure engagement (Gonnard et al., 2023).

### **Most Effective Activities**

Leisure engagement of any kind facilitates improved health, but some specific activities can be more beneficial than others. Master of Public Health Eleanor Watts (2022) and her research team investigated which leisure time physical activity types most reduced all-cause, cardiovascular, and cancer mortality in older adults. They used data from 272,550 returned questionnaires from the National Institutes of Health (NIH)–AARP Diet and Health study in the years 1995 and 1996, and a follow-up questionnaire between 2004 and 2005. The activity types included in the study were as follows: (1) jogging or running; (2) cycling (including riding a stationary bike); (3) swimming laps; (4) other aerobic exercises (eg, aerobics class, using exercise machines); (5) playing tennis, squash, or racquetball; (6) playing golf; and (7) walking for exercise. Information about the respondents, including but not limited to weight, age, sex, ethnicity, frequency of activity engagement, and health history was recorded. The study found that moderate activity levels (between 7.5 and 15 metabolic equivalent of task (MET) hours per week) were associated with the greatest reduction in mortality for any type of activity. Activity levels lower than 7.5 MET hours per week and higher than 22.5 MET hours per week were found to have the opposite effect. Racquet sports and running were associated with the greatest reduction in all-cause mortality risk, while racquet sports lowered cardiovascular mortality risk, and running reduced cancer mortality risk. Walking provided greater benefits for women, whereas running was more beneficial for men. Swimming lowered mortality risk for individuals with a BMI below 25 but did not affect those with a higher BMI. Golf reduced mortality risk among non-college graduates but showed no effect on college graduates. Overall, running and racquet sports had the most significant impact on mortality reduction, though demographic factors influenced which activities were most beneficial (Watts et al., 2022).

Amid the abundant literature related to leisure and aging, few discuss the particular activities with the most profound impact on older individuals. In response to this deficiency, a research study led by Xiaoguang Zhao (2023) used a sample population of 7,689 participants from China to investigate how specific leisure activities contribute to successful aging. Successful aging is defined as the maintenance of physical, cognitive, and emotional health as one grows older. The team administered various scales that reported self-rated health,



self-rated psychological status or mood, cognitive function, activities of daily life, and physical activity. The leisure activities included in the study were gardening work, reading newspapers or books, raising domestic animals or pets, playing cards or mahjong, watching TV or listening to the radio, and participating in social activities. The study found that older adults who participated in any activity were likely to age successfully. Those who engaged in two or more activities had the highest odds of successful aging. Gardening, reading, playing games and socializing had strong associations for all groups, although some social activities were less strongly associated with successful aging for women. Raising pets had positive implications for adults over 80, but had no significance for adults under 80. Passive activities like listening to the radio or watching TV were beneficial for all groups but to a lesser extent than active leisure engagement (Zhao et al., 2023).

The activities with which the elderly occupy themselves can have differing impacts on mortality. A research study led by Dorota Weziak-Bialowolska (2023) explored the prospective associations of mind-stimulating leisure on health, well-being, and longevity. The team used data from 19,821 middle-aged and older adults from 15 countries participating in the Survey of Health, Ageing, and Retirement in Europe (SHARE). The leisure activities considered in this study were divided into three categories: relaxed solitary leisure (e.g., reading books, magazines, or newspapers); serious solitary leisure (e.g., word or number games); and serious social leisure (e.g., playing cards or chess). Relaxed leisure is cognitively engaging, as is serious leisure, the difference being that serious leisure is problem-solving oriented. As a relaxed and solitary activity, reading was found to be beneficial in terms of lowered depression and loneliness, reduced risk of chronic pain and limitations in activities of daily living, and improved emotional well-being and cognitive time orientation. The team found that serious and solitary activities are associated with lowered depression and all-cause mortality risk, increased energy and optimism, and improved cognitive time orientation. Serious and social activities were found to lower loneliness and the risk of Alzheimer's disease and depression by 39% and 10% respectively. Engagement in serious and social activities was also associated with reduced pain and mobility limitations and increased optimism and energy (Weziak-Bialowolska et al., 2023).

### **Personality and Leisure Preferences**

An individual's leisure preferences contribute to the activities they find most effective, and personality can play a part in determining this relationship. Lynn A. Barnett (2013) authored a study that considered personality and demographic qualities as predictors of leisure preferences. This experiment included 638 student volunteers from two large Midwestern universities, who completed a 240-item questionnaire to assess their personality based on the Big Five dimensions: extraversion, openness to experience, conscientiousness, agreeableness, and neuroticism. The participants also completed a survey that identified 27 leisure activity options and considered the underlying motivators for these activities, including new experiences, challenges and skills, intrinsic rewards, social interaction, feel-good, and active engagement. Barnett found that personality was the most significant indicator of leisure preferences. Extraversion was associated with social gatherings, team sports, having adventures, attending events, traveling, and leading clubs or organizations. Openness to experience was associated with artistic activities, traveling, cultural experiences, engaging in discussions, reading fiction, and learning new skills. Conscientiousness was associated with structured exercise, engaging in long-term projects, volunteering, pursuing self-improvement, playing strategy-based games, and practicing goal-setting activities. Agreeableness was associated with volunteering, helping others, engaging in group discussions, playing games,

enjoying nature, and caring for animals. Neuroticism was associated with solitary hobbies, artistic expression, watching nostalgic movies, practicing stress-relieving activities, engaging in conversation with close friends, and avoiding unpredictable activities (Barnett, 2013).

### **Impact of Technology on Leisure Benefits**

The persistent digitization of leisure has been shown to have both advantages and drawbacks. A 2016 study led by Laura Rojas de Francisco investigated how the digital age has impacted social leisure. To collect the relevant data, the researchers conducted interviews with 30 participants aged 17-58 with varying educational and occupational statuses. The team applied narrative, thematic, and qualitative analysis to the personal narratives collected during interviews. The categories of social interaction mediated by technology identified were instant messaging, video chats, emails, and online gaming. Each medium was found to enhance traditional socialization, complementing face-to-face leisure by strengthening existing bonds, arranging meeting details, and providing opportunities for network expansion. Despite these findings, research exists that suggests digital leisure may not be as beneficial as traditional leisure for emotional and physical well-being (Rojas de Francisco, 2016).

Investigating this supposition with a focus on one of the most popular uses of technology, Yesim Avunduk (2021) authored a study that explored the relationship between leisure satisfaction and social media addiction among university students. Avunduk administered the Leisure Satisfaction Scale (LSS) and the Social Media Addiction Scale (SMAS) to 193 volunteers at Gelişim University and analyzed the results of these tests. The LSS measured satisfaction in terms of the psychological, educational, social, relaxation, physical, and aesthetic effects of leisure. Social media addiction was assessed in terms of functional deterioration (reduced ability to complete daily tasks), control difficulty and deprivation (lack of ability to control social media use), and social isolation. The study showed that a negative significant relationship exists between leisure satisfaction and social media addiction. In other words, participants whose scale results revealed the least addiction to social media scored higher in the measured aspects of leisure satisfaction. Viewing the relationship from another perspective, it may be observed that those participants who were more satisfied with their leisure were less likely to be addicted to social media (Avunduk, 2021).

Emotional health is not the only facet of well-being negatively associated with leisure time spent on digital devices. A study by Jacob Barkley and Andrew Lepp (2016) investigated the impact of cell phone use on physical and sedentary activity, and cardiorespiratory fitness in a sample of U.S. college students indicates another danger of the increasing digitization of leisure. The team surveyed a random sample of students (N=305) to gain self-reported information about their cell phone use (texting, calling, gaming, surfing, other apps, etc.), 49 of whom were selected for the next phase and assessed for physical fitness. The participants were surveyed for information about their exercise behaviors and then interviewed about their leisure time physical activity and cell phone use. They then participated in a progressive treadmill exercise test to exhaustion that assessed cardiorespiratory fitness. Taking factors like sex, self-efficacy for physical activity, and body fat percentage into account, the findings indicated that high-frequency cell phone users had lower cardiorespiratory fitness than low-frequency users. According to the data, high-frequency users were more likely to spend time in sedentary activities and typically experienced cell phones as barriers to physical activity. Their low-frequency counterparts, on the other hand, generally engaged in more physical activities and some viewed cell phones as motivators for exercise (facilitating connection with physically active peers). Thus, cell phones were found to serve dual purposes in the relationship between

usage and physical activity, though it appears that the frequency of use is a determinant of engagement in physical activity (Barkley & Lepp, 2016).

Life satisfaction is another consideration when determining the impacts of technological leisure. A study led by Edward Shih-Tse Wang (2008) provided additional insight into the effects of the growing digitization of leisure, specifically in the context of online gaming and web surfing, and their relationship to leisure satisfaction and life satisfaction. The research team collected 134 completed surveys from a random sample of adolescents in Taiwan who filled out the Leisure Satisfaction Scale (LSS) and the Satisfaction With Life Scale (SWLS). The leisure satisfaction dimensions included psychological, edificatory, social, relaxation, physiological, and aesthetic. The data revealed that adolescents reported that gaming is positively associated with the physiological and aesthetic dimensions of satisfaction; they added that gaming improved their energy and health and contributed to their enjoyment of leisure, thereby positively influencing their life satisfaction in these realms. The study also found that excessive web surfing negatively impacts life satisfaction, harming academic performance, interpersonal relationships, and general well-being. Web surfing may also encourage unhealthy habits. Gaming was found to have a negative impact on edification (e.g., self and social understanding), especially among adolescents who played games with violent, sexual, or discriminatory content, potentially impeding their development and harming life satisfaction. The study concluded that those who wish to reap the reported physiological and aesthetic benefits of online gaming should take a balanced approach, avoiding excessive engagement and negative content to achieve optimal leisure and life satisfaction (Wang et al., 2008).

### **Discussion**

Leisure's manifold impacts on the broader aspects of health are undeniable, and its positive association with enhanced well-being is salient in academic studies and the reports of individuals alike. The practice of intentional leisure, especially that of an active nature, leads to heightened physical health that frequently manifests itself in lowered body mass index, waist circumference, and mortality risk (Pressman et al., 2009; Watts et al., 2022). Participating in mentally stimulating activities, ranging from reading a book to playing a game of chess, improves cognition and prevents cognitive decline. Engagement in activities that are relaxing or yield high leisure satisfaction is beneficial on an emotional and psychological level. Practicing leisure alongside a friend or group strengthens social bonds and enhances the well-being effects of leisure (Gonnard et al., 2023). The different types of leisure activities produce varying impacts on individuals, and personality and preexisting health conditions may influence which activities are most beneficial.

### **Interpretations**

Demographic characteristics, personality type, and prior health often predict leisure satisfaction and expected health benefits. As a result of this correlation, it is essential that one accounts for these factors when considering leisure participation. For example, physical fitness, gender, and age should be considered before engaging in active leisure, while personality and accessibility should be noted before participating in passive activities (Barnett, 2013; Watts et al., 2022). This is especially evident in the discussion of older adults' and retirees' engagement in leisure. Leisure is strongly associated with successful aging as it attenuates cognitive decline, reinforces social relationships, improves emotional health, and advances physical fitness. Members of the older population are able to enhance their well-being by taking advantage of opportunities to engage in leisure and optimizing these opportunities to ensure they participate in the most beneficial activities (Matz-Costa et al., 2015; Weziak-Bialowolska et al., 2023). It is

important to note that participation in multiple activities is a major contributor to successful aging.

The synergistic property of leisure is a critical component in the consideration of optimal leisure engagement. When two or more activities are combined or participated in simultaneously or consecutively, the impact of engagement in a singular activity is enhanced. This feature of leisure is visible in the cyclical effect of combined physical activity and social interaction. Because activities foster social connectedness, individuals continue to participate and reap the well-being benefits of leisure. Similarly, engaging in mentally stimulating activities in a social setting (e.g., playing cards with friends) yields greater benefits than engaging in either mental or social activities alone (Weziak-Bialowolska et al., 2023). Participating in leisure that extends across all domains (use of body, use of mind, social interaction, and benefit to others), produces more positive impacts than participation in a single domain (Matz-Costa et al., 2015). The synergistic interplay of different domains is a key consideration for leisure optimization.

The dose-response relationship is another factor that should be taken into account for leisure enhancement. For some activities, both insufficient and excessive participation often leads to suboptimal outcomes. This nuance is particularly evident in the relationship between exercise and mortality risk. The ideal amount of physical activity is between 7.5 and 15 metabolic equivalent of task (MET) hours per week. Engaging in fewer than 7.5 MET hours may yield minimal health benefits while exceeding 15 MET hours could produce outcomes adverse to well-being (Watts et al., 2022). Overindulgence is also a concern in digital leisure. Excessive engagement in social media, video games, or web browsing leads to decreased leisure satisfaction and negative well-being effects. Conversely, an appropriate dose of these activities is generally harmless (Lepp et al., 2016; Wang et al., 2008). Ultimately, an understanding of a suitable balance between the frequency and duration of leisure engagement is essential to the pursuit of leisure optimization.

### **Implications**

Most individuals have full authority over a relatively small amount of their time, due to work, school, or family obligations. The scarcity of leisure time makes it all the more precious. The prudent person will consider how to optimize the expenditure of their time to produce the most profound effects on their physical, cognitive, emotional, and social well-being. Research has identified numerous factors influencing leisure preferences and activity effectiveness, highlighting the importance of considering demographic, personal, and physical differences when selecting appropriate leisure activities (Barnett, 2013; Watts et al., 2022; Zhao et al., 2023). While research studies assist in determining how personal characteristics are related to leisure impacts, individuals should experiment with different activities to discover which activities and combinations of activities are most beneficial for them. Furthermore, those seeking to make the most of their leisure time should consider the synergistic effects of leisure and the importance of balanced engagement. The findings of this study support existing theories (Gonnard et al., 2023; Pressman et al., 2009; Weziak-Bialowolska et al., 2023); however, they contribute a theoretical framework for determining the optimal activities for an individual and emphasize a balanced approach to leisure.

### **Limitations**

One limitation of this study is the author's limited temporal and financial resources, which contributed to an inability to review all the relevant literature available. The author was unable to access many worthwhile articles because some prominent journals restrict retrieval for institutional and financial reasons. These deficiencies may result in findings less adequate than

would otherwise exist. Another limitation presents itself in the abundance of leisure research on the aging population and the insufficient studies on people of all ages. Because a large portion of the research in this article relates to older adults, the implications for younger adults and children must often be inferred, which may lead to erroneous assumptions. Studies that specifically discuss geriatric individuals should not be viewed as representative of any other group beyond a reasonable empirical generalization. Finally, the self-reported nature of much of the data (surveys, questionnaires, scales) creates room for inaccurate responses and misleading information.

### Recommendations

Further studies researching the impact of leisure across all ages could provide increasingly conclusive evidence for the positive associations between participation and well-being for larger populations. This study highlights the insufficiency of the quantity of available literature that discusses the factors that contribute to an individual's leisure preferences and outcomes. Researchers should continue to dedicate time and resources to the study of effective leisure management and optimization.

Individuals should consider how the results brought to light in this study contribute to their comprehension of leisure and their intentions to make the most of their free time. They should choose activities by accounting for their demographic characteristics, personality, health, and known leisure preferences. Individuals should take a balanced approach to leisure and keep in mind that participation in multiple activities has enhancing effects on the impacts of leisure. It is essential that individuals recognize the importance of leisure's role in moderating every aspect of well-being.

### Conclusion

Purposeful engagement in leisure activities contributes to physical, cognitive, emotional, and social well-being. Intentionally choosing activities that foster leisure satisfaction and align with demographic, personal, and biological characteristics enables individuals to experience enhanced well-being impacts. Moreover, taking a balanced approach to leisure and participating in multiple activities promotes leisure optimization. The findings of previous research studies provided a valuable foundation for the implications discussed in this dissertation and facilitated the production of an innovative theoretical framework. Further research should continue to assess and develop this framework to supply individuals with additional guidance in the worthy pursuit of leisure optimization.

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