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Advancing understanding of digital well-being at the intersection of technology and leisure

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ABSTRACT

As new technologies emerge and are inserted within peoples' lives each day, scholarly examination of the intersections between these innovations and leisure is increasingly vital. Researchers and their methods must continue to advance, in order to better anticipate and inform theory, industry, and society. This closing article of the Journal of Leisure Research special issue on technology, innovation, and leisure (TIL) provides a brief targeted bibliometric review of recent Web of Science (WoS) indexed research related to TIL, identifying research co-occurrence trends for 111 recent articles. These trends, along with commonalities within keyword co-occurrence clusters, and contributions from the seven special issue articles, informed ten proposed areas of TIL research priority that will often interact and overlap: Technology enhanced travel behavior; Psychology of social networks/media; Game-based educational innovation; Aging and digital leisure; Health and well-being technological design; Gender considerations; ICT attitudes, adoption, and literacy; Youth and adolescent technology and leisure; Social aspects of technology and leisure in urban settings; and Digital leisure DEI. Specific research needs within these ten areas are identified, based on the insights and recommendations of the special issue contributors.

KEYWORDS

Web of Science (WoS); keyword co-occurrence trends; technology, innovation, and leisure; targeted bibliometric review; VOS viewer

Our introduction to this special issue focused on the interweaving of technology, innovation, and leisure (TIL), drawing attention to the benefits and challenges associated with current practices (Devine & Gale, 2023). The globalization of internet, smartphone, social media, over-the-top (OTT) media services, and other emerging technology, have, are, and will continue to completely revolutionize how people view leisure, experience leisure, spend their leisure time, and engage in leisure around the world (Femenia-Serra & Neuhofer, 2019; Lancioni et al., 2016, 2020; Montoya & Hertel, 2018). Examining the intersection of technology and leisure has been of interest to scholars for several decades (López Sintas et al., 2015; Mokhtarian et al., 2006; Roberts, 2006). Practitioners also require a better understanding of how technology can innovate their programs and reach. For example, the global Healthy Parks, Healthy People movement has identified several important ways that technologies, like wearable devices and remote sensing, might influence healthier environmental and leisure habits (Parks Victoria Australia & USNPS, 2015). Technology initially designed for people with disabilities has made its

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way into the mainstream of societies for the benefit of many and can be considered universally designed technology. For instance, text communication using a cellular phone stemmed from communication devices for people who are deaf and hearing impaired (Rockman, 2018). With new technologies emerging and being inserted within peoples' lives each day, scholarly examination of the intersections between these innovations and leisure is more important than ever. It is critical that scholars develop an awareness of how TIL intersect, and how their interrelations affect and are affected by humans and societies. Researchers and their methods must continue to advance, to better anticipate and inform theory, industry, and society (Guia & Jamal, 2020; Marston et al., 2020; Payntar et al., 2021; Tuomi et al., 2020; Tussyadiah et al., 2018). Thus, to close out the special issue, we offer a brief targeted bibliometric review of recent Web of Science (WoS) indexed research related to TIL, before summarizing the insights and future research needs that emerge from the seven articles of this special issue.

Recent TIL research advances

Following the protocols and advice of bibliometric scholars, our targeted bibliometric study and visualization analysis of recent TIL research examined WOS Core Collection (WoSCC) publications and conference proceedings, during the past five years (2019-2023). An "all fields" search for the combined set of terms: TIL (Falagas et al., 2008; Lin et al., 2022; Yin et al., 2022). This search, conducted on August 20, 2022, returned 404 items, which were subsequently reviewed at a title, keyword, abstract level to rule out duplications and articles which were not related to the combined search terms. One hundred and eleven articles were retained as the final dataset for targeted bibliometric review, involving a total of 416 authors, from 227 institutions, in 41 countries, and 86 publication sources.

We employed VOSviewer (version 1.6.10) to visually analyze network maps that allowed us to understand the level of collaboration between authors and institutions, the influence of particular works, the world regions focusing on this research area, and co-occurrence of keywords (van Eck & Waltman, 2010, 2014, 2017, 2022). For the co-occurrence of keyword analysis, we employed three manners of visualization: a network visualization map, a keyword density map, and a temporal map. These maps represent the co-occurrence of keywords and connections between the concepts. Labels and circle/oval sizes indicate the item weight within the dataset, while connection line thickness the link strength between keywords. The distance between items in the visualization indicates the relatedness of the items in terms of co-occurrence.

In general, the dataset showed low levels of co-occurrence between authors and institutions. Only nine of the 429 authors had published more than a single article, and none had appeared with more than two articles. Sixty-eight of the authors had received more than 10 citations for their articles. For these authors we developed a visual map showing the total strength of the citation links they had with other authors. Most were not connected; the largest set of connected items consisted of nine items (Figure 1).

Trends were similar at a country level. Of the 41 countries represented in the dataset, only 15 countries had research with a combined total of 10 citations or more, with China and England ranking most highly (Table 1).
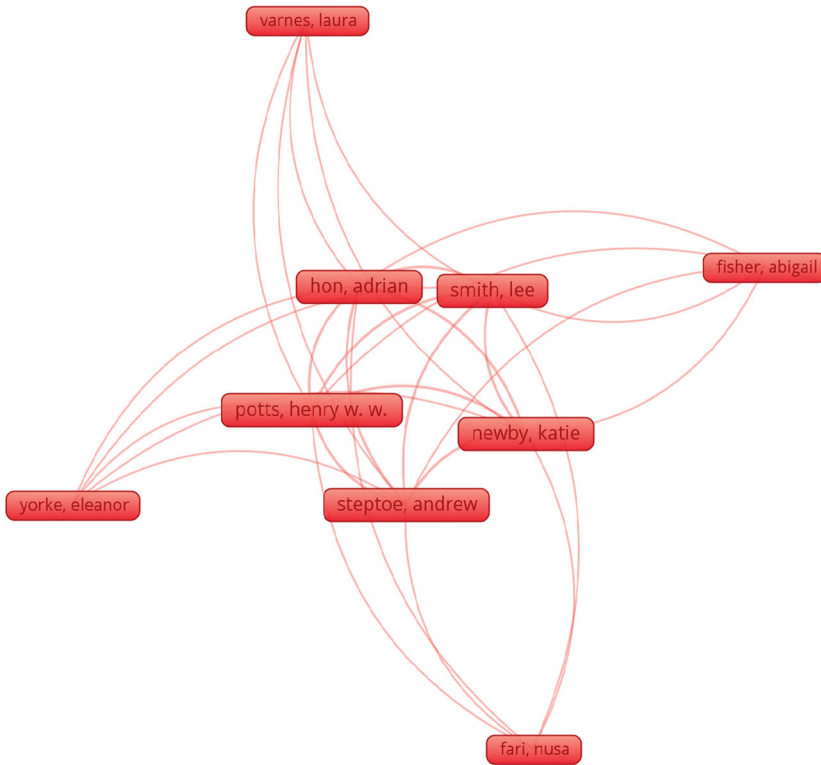
Figure 1. Author citation links for the nine linked authors within the dataset of recent TIL research from WOS Core Collection (WoSCC) publications and conference proceedings, during the past five years (2019-2023).

Table 1. Highest ranking countries based on total citations.

N°	Country	Documents	Citations	Total link strength
1	China	26	153	0
2	England	23	151	1
3	Netherlands	5	68	1
4	USA	11	59	0
5	Austria	4	37	0
6	Finland	2	34	0
7	Spain	13	27	0
8	Italy	5	26	0
9	Germany	1	25	0
10	Greece	4	23	0
11	Israel	4	19	0
12	Malaysia	1	18	0
13	Romania	2	14	0
14	Denmark	3	13	0
15	Belgium	2	10	0

Of the 86 publication sources included within our review, 15 had published more than one of the 111 articles [World Leisure Journal (5), Sustainability (4), Managing Sport and Leisure (4), 12th International Conference of Education, Research and Innovation (4); Innovation In Aging (3), Leisure Studies (2), JMIR Serious Games (2), International Journal of Human-Computer Studies (2), Technology in Society (2),

Leisure Sciences (2), Advances in Tourism (2), Technology and Systems (2), Computational Intelligence and Neuroscience (2), Advances in Design And Digital Communication (2), Educational Gerontology (2), Sensors (2)]. Similarly, 15 of the publication sources met a minimum threshold number of 10 citations for their published items (Table 2).

These results suggest that TIL research is currently dispersed within a wide range of journals and fields, with little consolidation or integration across disciplines, researchers, geographies, or journals. While the total number of the authors within our dataset was considerable (429 total/3.86 average per article), most authors (98%) had only participated on one article, suggesting that the field is still quite exploratory and dispersed.

Keyword map analysis and clusterization facilitated a better look at recent research areas of interest. Of the 428 keywords involved in the studies, 119 were used more than once. These words, and their linkages, were visually mapped to facilitate network and clusterization analysis (Figure 2), density analysis (Figure 3), and temporal trends (Figure 4). Overall, the closeness of terms and breadth of connections suggests high levels of connectedness and relatedness (Figure 2). Nevertheless, a total of 9 concept clusters emerged in the network visualization map, that were linked through 1287 connections.

Cluster 1 (red, lower right corner) included 22 keywords. Keywords with five or more occurrences included: behavior (25 occurrences), tourism/travel (10), cellphone data/use/technology (7), experiences (7), artificial intelligence (5), and satisfaction (5). Other keywords in this cluster included augmented/virtual reality, smart technology, challenges, destination, disability, visitor, big data, intentions, loyalty, management, market, mode choice, patterns, place attachment, services, and visual impairment. Cluster 2 (green, middle right) included 19 keywords, with five or more occurrences for: internet (10), social networks/media (9), emotions (6), culture (5), and networks (5). Other keywords in this cluster included sustainability, identity, mental health, recreation, rural, adults, alcohol-use, associations, built environment, care, depression, loneliness, places, and women/female.

Cluster 3 (blue, middle left) included 15 keywords. Keywords occurring five times or more included: innovation (16), games/gaming (11), perception (10), users/usability (10),

Table 2. Total citations by publication source, for all publications with a combined total of 10 or more citations.

| N°	Publication	Documents	Citations	Total link strength
1	Leisure Studies	2	44	1
2	IEEE Transactions on Intelligent Transportation Systems	1	33	0
3	Advances in Ergonomics in Design (AHFE 2018)	1	32	0
4	JMIR Serious Games	2	26	0
5	IEEE Transactions on Big Data	1	25	0
6	International Journal of Information Management	1	25	0
7	Annual Review of Sociology, Vol 45	1	24	0
8	World Leisure Journal	5	24	1
9	Applied Sciences-Basel	1	20	0
10	International Journal of Human-Computer Studies	2	19	0
11	European Journal of Innovation Management	1	18	0
12	Journal of Destination Marketing & Management	1	18	0
13	Sustainability	4	16	0
14	Travel Behaviour and Society	1	15	0
15	ACM Transactions on Accessible Computing	1	10	0
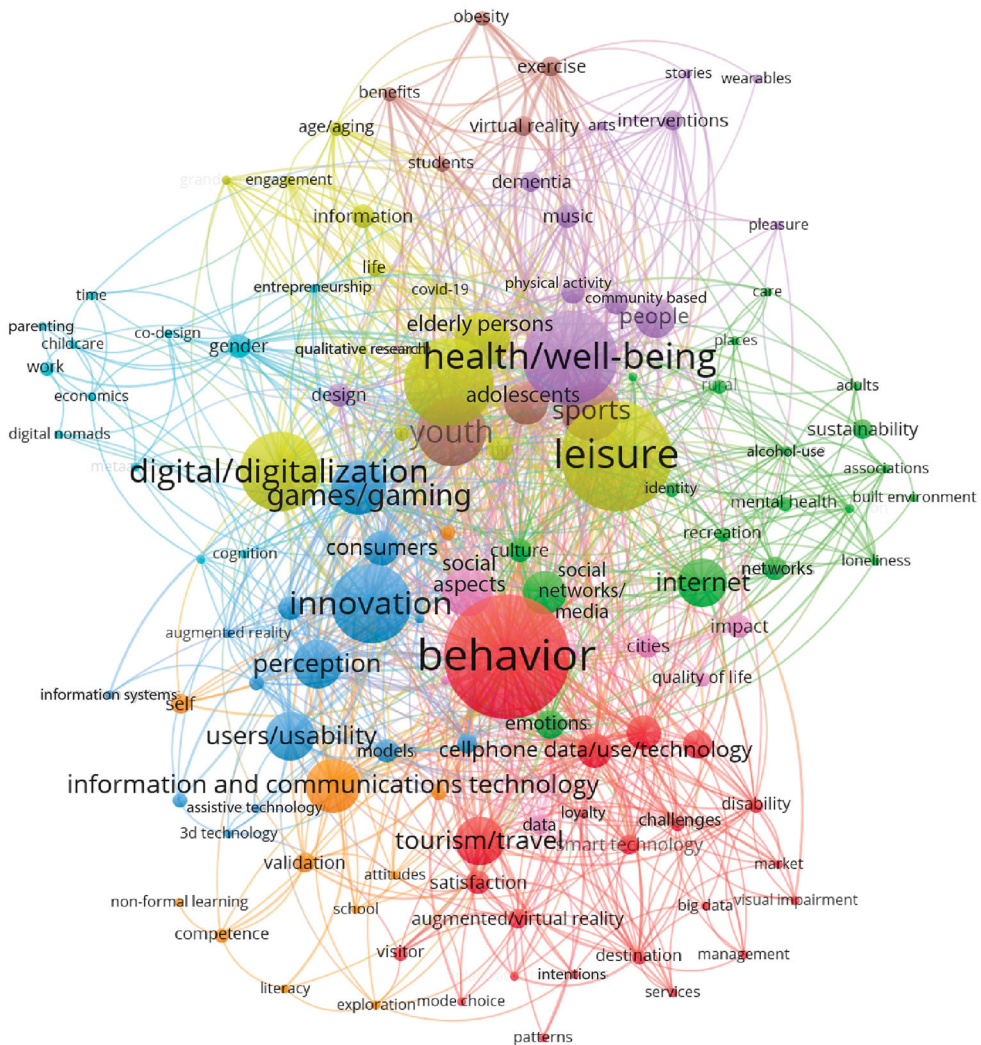
Figure 2. Network visualization map for recent TIL research from WOS Core Collection (WoSCC) publications and conference proceedings, during the past five years (2019-2023).

consumers (7), models (5), and service (5). Other keywords in this cluster included motivation, education, museums, 3D technology, assistive technology, augmented reality, college, and information systems. Cluster 4 (yellow, top right corner) included a total of 13 items; five of which occurred five or more times: leisure (22), technologies (18), digital/digitalization (16), elderly persons (11), information (5), and online (5). Other keywords in this cluster included age/aging, family, life, Covid-19, engagement, grandparents, and qualitative research.

Cluster 5 (purple, top right corner) included a total of 12 items, with six items occurring five or more times: health/well-being (19), people (8), community-based (5), design (5), music (5), and physical activity (5). Other keywords in this cluster included dementia, interventions, arts, pleasure, stories, and wearables. Cluster 6 (turquoise, middle left) included 12 concepts with only one item occurring five or more times: gender (5). The
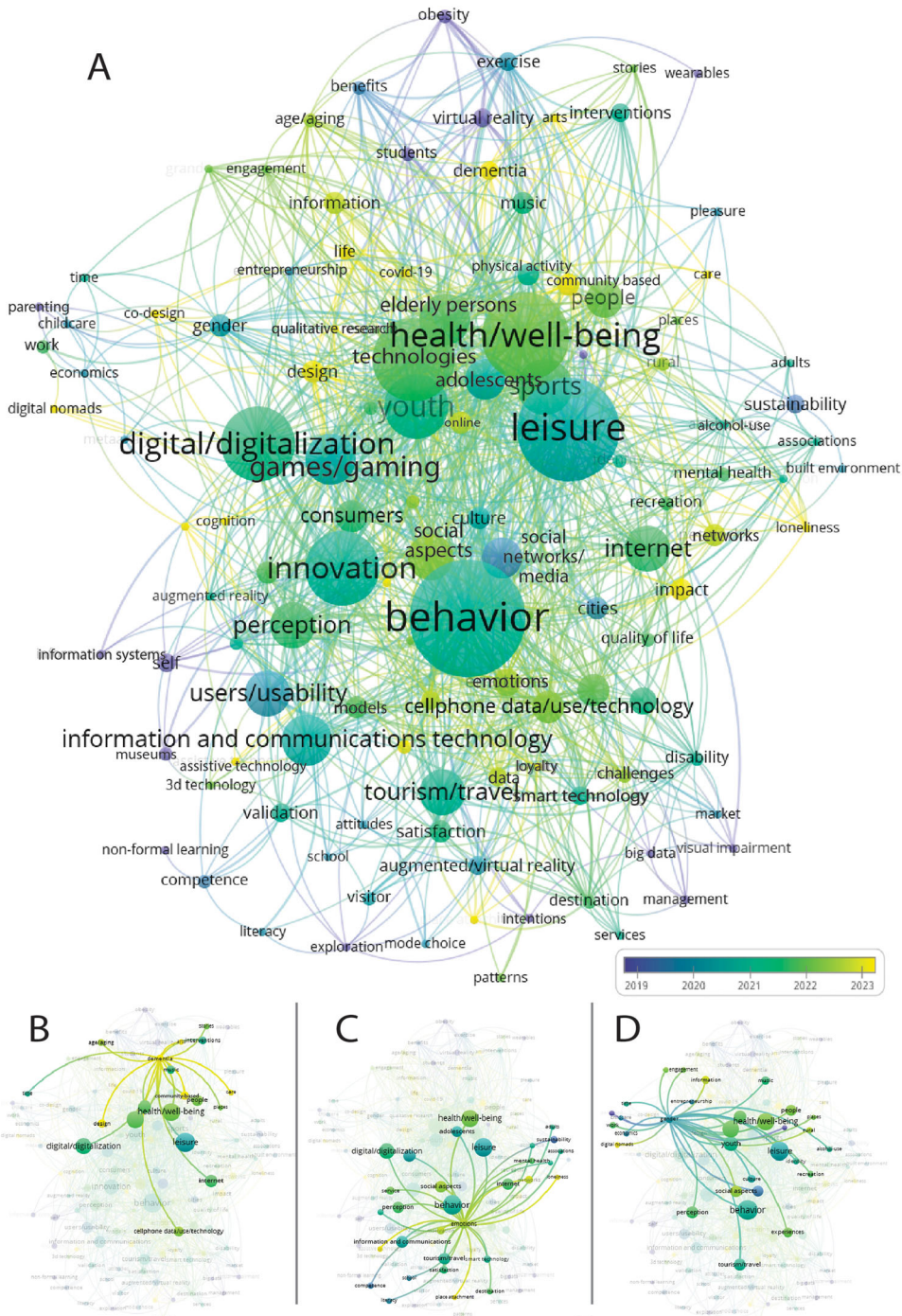
Figure 3. Keyword density map for recent TIL research from WoSCC publications and conference proceedings, during the past five years (2019-2023).

other keywords in this cluster included work, childcare, co-design, cognition, digital nomads, economics, entrepreneurship, gerontechnology, metanalysis, parenting, and time.

Cluster 7 (orange, bottom left corner) included 11 concepts; one keywords occurred more than five times: information and communications technology (ICT; 11). Other keywords for this cluster included self, validation, adoption, competence, risk, attitudes, exploration, literacy, non-formal learning, and school. Cluster 8 (pale magenta, top center) included 8 keywords, with three occurring more than five times: youth (14), sports (12), and adolescents (9). Other keywords in this cluster included exercise, virtual reality, benefits, obesity, and students. Cluster 9 (bright pink, dispersed) included 7

Figure 4. Temporal overlay map for recent TIL research from WoSCC publications and conference proceedings, during the past five years (2019-2023).

keywords, with three occurring five or more times: social aspects (10), cities (5), and impact (5). Other cluster concepts included data, quality of life, capacity, and China.

In the keyword density map (Figure 3), items are grouped according to their frequency and connections, with the largest words representing the concepts most frequently mentioned. These concepts are highlighted by red in the map, with similar concepts represented in close proximity. Less prominent concepts are indicated in yellow. The most dominant concepts included behavior, health/well-being, digital/digitalization, innovation, tourism/travel, internet, users/usability, youth, perception, sports, consumers, people, and culture.

Temporal analysis supports the interwoven nature of TIL research and the dominant role of key concepts, like leisure, games/gaming, digital/digitalization, and health/well-being, that have centered this area of research in recent years (Figure 4A). Keying in on specific keywords enables visual analysis of temporal trends and connections (Figure 4B–D). For example, Figure 4B suggests temporal trends centering on recent dementia research that connects with longer-term concepts, like leisure, internet, and digital/digitalization, with an evolving consideration of concepts relating to design, community-based, age/aging, arts, and care (giving). Figure 4C depicts a similar evolution of research focused on behavior related to leisure and technology, with recent consideration of social aspects, networks, emotions, loneliness, place attachment, and assistive technology. Finally, focus on the keyword, gender, suggests that this variable has been a consideration within the TIL research sample, throughout the five-year period (2019-2023). In 2019, before the Covid-19 crisis, associated keyword concepts included female/women, parenting, childcare, and social networks/media: During the pandemic, new concepts emerged, including health/well-being, experiences, engagement, work, recreation, and technologies. Most recent research suggests new concepts related to gender including consideration of the post-pandemic trend of digital nomadism.

The results of our targeted bibliometric study and visualization analysis of recent TIL research within WoSCC publications and conference proceedings during the past five years (2019-2023), helps contextualize and set the stage for a synthesis of the contributions and research needs identified within the seven articles of this Journal of Leisure Research special issue. Together, these seven articles offer new pathways for innovation for leisure scholars and practitioners across the globe, that can have an influence on social change and a better quality of life.

Insights that emerge from the seven articles of this special issue

The seven articles of this special issue enrich our perspective of this duality, supporting Vigo's (2019) observation about the radical changes that have taken place in leisure around the world over the past two decades as a result of new technologies, and the profound effects these technologies are having on culture, health, and experience.

Berberka et al.'s (2023) study, surveying tourism and recreation studies college majors across five Polish public universities (n = 457), provided a greater understanding of the role of mobile app use during leisure. This study demonstrated the impact of individual socio-demographic factors on the behavior of students in terms of physical activity (PA) with the use of applications. The methodological contribution is the use of the CHAID model as a basis for inferring the type of motivations in reference to SDT. Low

classification errors of chosen CHAID models and probability values confirm the advisability of adopting SDT as a theoretical framework in studying the motivation for using apps during leisure PA. The practical implications of the presented results are meaningful. The study results show that mobile applications have the potential to mobilize students to engage in and individually optimize PA, proving the importance of mobile applications in shaping the quality of leisure PA.

Harmon and Duffy's (2023) position piece reflected on smartphone use in leisure, arguing that leisure researchers must improve understanding about how smartphone use affects personal and community well-being, and differences in how these outcomes occur. They posited that smartphone use in leisure may undermine meaningful leisure engagement (Hopper & Iwasaki, 2017; Hutchinson & Nimrod, 2012; Iwasaki, 2017), calling for consideration of digital consciousness (Nguyen, 2021; Nguyen et al., 2022) and digital disconnection (Syvertsen & Enli, 2020; Vanden Abeele et al., 2022), as research advances conceptualization and understanding of digital well-being (Büchi, 2021).

Ho's (2023) qualitative examination of the online and offline leisure activities of 20 young married mothers in Taiwan, focused on Oldenburg's (1999) idea of third places—where people spend their free time outside the home and workplace—to conceptualize the complexity and structure of the digital connection. Their work revealed how some online communities serve some participants as places for shared leisure practice that reflects shared values and ideals (Arai & Pedlar, 2003; Camp & Dunlap, 2021). Ho's research provided a better understanding of the richness of meaning-making that the women interviewed generated through their participation in online communities. Specifically, analysis of participants' perceptions and shared experiences revealed that the intentionality and goals of members have a great effect on whether they participate in community activities, as does their perception of communities' sociability, usability, and their levels of emotional attachment.

Lamberti et al. (2023) employed a causal model to advance understanding of online and in-person leisure activity for youth within the context of the Catalonia autonomous community, representing the provinces of Barcelona, Girona, Lleida, and Tarragona, in Spain. Their investigation contributed to understanding the unequal social mechanisms underlying the relationships between Catalan youth internet use and in-person leisure activities, and the role played by gender and age in producing heterogeneity in that relationship. Specifically, their data indicated that activities classified within the entertainment domain—like videogaming, downloading movies and/or software, and watching videos—contributed most to increasing in-person leisure amongst Catalan youth; followed by social interaction/communication—chatting, social media, dating—, and information-seeking—news, TV, blogs and websites. Nevertheless, the positive and complementary relationship between internet use and in-person leisure found in the study was not homogenous; both age and gender affected this relationship. Gender differences were more accentuated amongst the 15-24 age group, underscoring the importance of equalizing access to online leisure activities and social programs that effectively reduce the restrictive effect of social norms on young women's online leisure behaviors.

Building on the Hierarchical model of Leisure Constraints (Crawford et al., 1991), Pizzo et al.'s (2023) conducted an online survey to compare constraints of 201 male and 201 female esports players in South Korea. They contributed new findings to assist

understanding of the influence of leisure constraints in a digital domain. Their research supported the utility of the Hierarchical model of Leisure Constraints (Crawford et al., 1991) model in assisting an understanding of digital leisure innovations and trends. Their results underscored continuing perceptions of esports as a male-oriented socio-cultural activity, drawing out the importance of intrapersonal and interpersonal constraint barriers faced by women in this popular tech-driven domain.

Sharaievska and Mirehie's (2023) qualitative study of 18 adult family members from across the United States expanded knowledge of how social media is used during family travel and its use influences the family travel experience, aligning several results with the Uses and Gratifications Theory (Whiting & Williams, 2013). These included information seeking social interactions, and entertainment uses, during the pre-trip period, social interactions and information sharing during the trip, and social interaction and information sharing post trip. Further, this research expands the Uses and Gratifications theory, by adding a new concept related to social media use during family travel, for documentation and keeping a record or archive of family experiences (Whiting & WIlliams, 2013). Also, this examination broadens the application of Family Process Theory, by adding new perspective on how contemporary families use family artifacts, through their preference to store artifacts on social media. Lastly, this research identified the potential for misrepresentation of reality during family travel as adding a contemporary view to Goffman's (1959) discussion of "impression management" within Dramaturgical Theory, based on the observation that study participants carefully curated—or could potentially curate—their family image in online spaces.

Joo and Nam's (2023) online survey of 300 Korean Subscription Video on Demand (SVOD) subscribers explored OTT services as a form of digital leisure activity during and after the COVID-19 pandemic, in order to understand how the pandemic may have catalyzed shifts in leisure behavior. Findings suggested that lifestyle, and digital leisure/entertainment preferences affected OTT usage during, and after, the COVID-19 pandemic. For example, during the pandemic and associated shut-downs, OTT services attracted people who normally preferred watching sports and seeing performing arts. Nevertheless, reading books was not replaced by OTT use. While demographic factors did not predict continued OTT usage intentions, some lifestyle factors—fashion-orientation; social activity—; OTT genre preferences—foreign films and dramas—; and entertainment preferences—online gaming behavior, performance arts patrons—indicated a significantly greater likelihood for continued use of OTT. In a rapidly transforming world, understanding how disruptive events interact with individual lifestyles, entertainment preferences, leisure technology preferences, and usage patterns is of increasing importance; thus, integrative research, such as this, help move knowledge and practice forward.

Toward an agenda for understanding digital well-being at the intersection of innovation, technology and leisure

Integrating the results of our targeted bibliometric study and visualization analysis with the insights and future research needs that emerge from the articles of this special issue, inform a rapidly evolving TIL research agenda. The research presented in this Journal

of Leisure Research special edition was largely exploratory in nature, considering the reach and implications of technology and leisure from a range of contextual circumstances, including demographic, geographic, experiential, lifestyle, and lifecycle. These tendencies also emerged within our targeted analysis of recent WoSCC research. Our sample suggested an overwhelming research presence in China and England, and much lower research incidence in other parts of Europe and countries within the global South. Important contextual considerations, like geographic and social differences in access to technology, infrastructure, and education, limit generalizability of TIL research; thus, region specific research makes important contributions to theory and helps to evolve the rapidly emerging research agenda. Future research will need to balance local context and the need to develop and validate broader theory. As well, future research must include a purposeful focus on diversity, equity, and inclusion (DEI) issues. Collaborations across institutions, countries, and publications, may catalyze new research innovation and integration across disciplines and cultures, resulting in a broader understanding of leisure-technology implications.

Based on the commonalities within the keyword clusters that arose in the targeted analysis, we propose nine key areas of TIL research priority (Figure 5), that will often interact and overlap: Technology enhanced travel behavior; Psychology of social

Figure 5. Ten key areas of TIL research priority.

networks/media; Game-based educational innovation; Aging and digital leisure; Health and well-being technological design; Gender considerations; ICT attitudes, adoption, and literacy; Youth and adolescent technology and leisure; and Social aspects of technology and leisure in urban settings. Further, the targeted analysis and several of the articles included in this issue suggest the importance of adding a tenth area: Digital leisure DEI.

This special collection of articles supports the need for research development in these ten areas in several manners, identifies the need for continued research about the ethics, and equity of leisure within a digital domain. For example, Pizzo et al. (2023) emphasized the need for diversity, equity, and inclusion (DEI) studies at the intersection of TIL, calling for a better understanding of digital leisure constraints and facilitators, from a sociocultural perspective, a geographic perspective, and across the gender spectrum, with concentration on marginalized groups. Some specific needs they identified include continued consideration of intrinsic factors—e.g., psychological disconnection and/or disassociation—; constraints derived from technological and equipment/medium related aspects; the toxicity that has arisen in esports and its relationship to the anonymity that accompanies competitive video gaming.

Berbeka et al. (2023) called for research to integrate considerations and approaches across three priority areas—Aging and digital leisure, Health and well-being technological design, Youth and adolescent technology and leisure. They suggested that the Theory of Planned Behavior may help inform a better understanding of autonomous physical activity motivations across lifestages and their relation to expectations, needs, and usage of mobile applications during leisure. Sharaievska and Mirehie (2023) called for future Technology enhanced travel behavior research to explore family travel and the relationships between different family members and their use of social media. They identified several patterns between family travel and social media use that may update existing theory, calling for additional research to understand family use of social media for storage of family artifacts, and the "performance" of family identity, through their posts and pictures. Sharaievska and Mirehie (2023) also identified needs related with Digital leisure DEI, calling for research to explore the factors that increase vulnerability toward negative impacts of social media use during travel for some families.

Lamberti et al. (2023) identified concrete research needs associated with Digital leisure DEI, youth and adolescent technology and leisure, and Health and well-being technological design. Specifically, they called for continued refinement of their model, including replication in other countries and regions, and the inclusion of other gender categories (e.g., non-binary, transgender, queer). Additionally, they recommended expanding consideration of social indicators, beyond gender and age, to improve social characterization of internet use and its relationship with in-person leisure. Harmon and Duffy's (2023) critical essay identified intentional digital disconnection during leisure as a missing variable within most research on ICT attitudes, adoption, and literacy, and/or Health and well-being technological design. They challenged researchers to consider the role, function, and value of digital disconnection in leisure. Further, they called for researchers to include consideration of smartphone effects on personal and community well-being, concepts like digital burnout, and the conditioning role played by social use norms.

Ho (2023) offered future research needs related to Gender considerations and the Psychology of social networks/media, calling for future research to address differences in the leisure patterns of couples within households, focusing on understanding differences and commonalities in constraints and enablers, and how participation in online communities affects social life. Specifically, Ho (2023) called for the characterization of third places in the digital age, including more nuanced consideration of the specific intentions and goals associated with participation in online communities, and the ways in which collective identities are created within online communities and contribute to meaning making through leisure or participants.

Lastly, Joo and Nam (2023) focused research needs around Digital leisure DEI considerations and Social aspects of technology and leisure in urban settings. They recommended future research incorporate country-specific or group-centric vantage points about OTT use for a broad range of OTT platforms, emphasizing divergent conditions across countries that mandate a more nuanced research approach, tailored to specific geographies, contexts, and circumstances.

Conclusions

Vigo (2019) identified the radical changes that have taken place in leisure around the world over the past two decades as a result of new technologies, and the profound effects these technologies are having on culture, health, and experience. Some believe that technologies are enhancing leisure by making it possible to communicate faster, connect to remote areas and places, engage in health promoting leisure activities using technology, anticipate and correct sports injuries, enhance sports performance, and have virtual experiences that might not have otherwise been possible (Dębska et al., 2019; Dolesh, 2020; He et al., 2018; Moller et al., 2015). Others conclude that technology has impeded or diminished the leisure experience, highlighting what they consider an excessive amount of leisure time spent using technology and detrimental changes in how people interact during leisure and their direct interactions and sensory experiences with nature (Davies et al., 2012; Gaston & Soga, 2020; Madhav et al., 2017; Roberts, 2006).

Our objective for this Journal of Leisure Research special issue was to showcase the global reaches of TIL, its' impact on theory, practice, and lifestyles, and the critical need for continued research and expanded consideration of TIL issues and opportunities. Through a brief targeted bibliometric review of recent Web of Science (WoS) indexed research related to TIL, this article has summarized the insights and future research needs that emerged from the seven articles of this special issue, placing them in the context of ten TIL research priorities that interact and overlap. In particular, the articles included in this issue have reinforced the importance of examining digital leisure from the perspective of diversity, equity, and inclusion (DEI).

We would like to close with emphasis on several DEI components that emerge from the American Psychological Association's (APA) Equity, Diversity, and Inclusion Framework (2021). Thus, we propose that all TIL research, and especially Digital leisure DEI research, broaden consideration of a range of communities and groups—Black, Indigenous, and People of Color (BIPOC) communities; women; older adults; lesbian, gay, bisexual, and transgender persons; and individuals with disabilities. Future research

should seek to understand the perspectives and lived experiences of social identity groups that have or are marginalized or disenfranchised through TIL. In parallel, research must deconstruct the destructive biases, privileges, and social hierarchies (racism, sexism, classism, heterosexism, ageism, and ableism) that may or could contribute to TIL related inequities.

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