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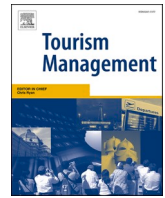
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Progress in research on tourists with mental disorders: A critical review and the way forward

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ABSTRACT

The global rise in mental disorders presents new challenges for tourism, an industry inadequately prepared to accommodate tourists with such conditions. Despite increasing scholarly interest in recent years, the study of tourists with mental disorders remains fragmented and underdeveloped. This work critically reviews 38 academic papers on this focal subject, published from 2004 to 2024, employing systematic narrative analysis. It identifies ten themes that map out the existing research across three stakeholder groups: tourists and caregivers, tourism providers, and governments and third parties. The literature synthesis offers an insightful and comprehensive overview of the current state of scientific knowledge in the field. Subsequently, an Inclusive Tourism Management Model is established, integrating the roles and responsibilities of various stakeholders, delineating challenges, and recommending strategies to ensure accessible and enriching tourism experiences for these tourists. Upon unveiling research gaps, this work proposes 13 research questions to guide theoretical, practical, and methodological advancements.

1. Introduction

In recent years, mental disorders have become a leading cause of the health-related burden worldwide (Santomauro et al., 2021). People with mental disorders often experience notable disruptions in their cognitive processes, emotional regulation, or behavior, reflecting underlying abnormalities in mental, biological, or developmental aspects (American Psychiatric Association, 2013). According to the World Health Organization (WHO, 2022), nearly 12.5% of the world population suffer from a mental disorder, like depression, anxiety, bipolar disorder, schizophrenia, and post-traumatic stress disorder (PTSD). The COVID-19 pandemic further exacerbated numerous determinants of poor mental health, leading to a 26% increase in anxiety and a 28% rise in major depressive disorders (WHO, 2022). The American Psychological Association (2023) reported that the prevalence of mental illness among adults aged 35 to 44 increased from 31% in 2019 to 45% in 2023. Furthermore, projections indicate that the number of people living with dementia is expected to exceed 139 million by 2050, with an annual increase of 7.7 million individuals worldwide (WHO, 2021). This trend has multifaceted consequences for individuals with mental disorders, their caregivers, and society as a whole. Therefore, mental disorders are

recognized as prominent global health challenges, and effectively preventing and treating them becomes crucial in efforts to enhance public well-being (Zheng, Wen, et al., 2023).

Tourism has been recognized as a valuable intervention to enhance well-being, because tourism activities not only provide short-term emotional benefits (Su et al., 2020) and stimulate brain functions (Wen et al., 2022), but also contribute to long-term mental health by altering the tourist's life philosophy (Buckley, 2020) and improving their overall sense of life satisfaction (Chen & Li, 2018). However, existing research on the well-being benefits of tourism has predominantly focused on the needs, expectations, and behaviors of tourists who are physically healthy and neurotypical (Buckley, 2023; Yu et al., 2021). Insufficient attention has been paid to studying tourists with mental disorders, despite their constituting an emerging market for the tourism industry (Zheng, Wen, et al., 2023). This oversight is particularly concerning given that these tourists face unique challenges in accessing and benefiting from tourism products and services. These challenges range from stigmatization, exclusion, and discrimination that such individuals often face, to specific ones related to the tourism sector, such as accessibility, accommodation, and supportive services (Park et al., 2024). Moreover, recognizing the fluctuating needs and capabilities of these

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tourists highlights the necessity of designing and delivering tourism experiences that are as inclusive as possible, while taking into account their travel eligibility as well as economic and practical constraints (Gillovic et al., 2021; Hu et al., 2024). Consequently, there is a critical need for more research efforts to understand tourism phenomena centered on tourists with mental disorders. Such investigations can provide important insights and practical implications to enhance the well-being of these vulnerable individuals through tourism (Zheng, Wen, et al., 2023).

Despite starting to garner growing scholarly interest in recent years (Ali et al., 2023; Levi et al., 2019; Wen et al., 2022), the study of tourists with mental disorders remains relatively underdeveloped (Wen, Zheng, Hu, et al., 2023; Zheng, Wen, et al., 2023), Zheng, Wen, et al., 2023 due in part to the fragmented literature. First, the diverse range of mental disorders, each characterized by distinct needs and experiences, leads to a disjointed research landscape (Sadlon et al., 2021; Sedgley et al., 2017). Second, this field stands at the intersection of different disciplines, including but not limited to tourism, public health, psychology, and social work (Buckley, 2023; Hu et al., 2024). Each domain can have its particular methodologies and focal areas, which may lead to fragmentation. Third, previous studies have addressed various fragments of the broader subject and demonstrated scattered focuses such as travel eligibility (Hu et al., 2024), constraints (Park et al., 2024), responsibilities of caregivers for children with ASD (Sedgley et al., 2017), airport service adaptations (Chiscano, 2021), accessible website design (Dattolo et al., 2016), and dementia-friendly destination infrastructure (Connell & Page, 2019). Although there has been limited research that integrates the literature on specific mental health conditions, such as the review by Jepson et al. (2024) on neurodiversity and its application to tourism, no research to date has provided a clear and comprehensive synthesis of the scientific knowledge from studies on tourists with various mental disorders. This gap persists despite growing calls for research to develop a holistic understanding of the opportunities and challenges in managing the experiences of vulnerable tourists (McKercher & Darcy, 2018; Park et al., 2024; Zhao et al., 2023).

As a synthesis of literature on tourists with mental disorders is both opportune and necessary, this study adopts a stakeholder approach (Freeman & McVea, 2001) to critically review the literature, propose an inclusive tourism management model, identify gaps, and explore a future research agenda centered around these tourists. Building upon previous critical review studies (Wut et al., 2021; Zhan et al., 2024), we employ a systematic narrative analysis approach. This method enables us to critically assess and synthesize findings from prior studies, in order to generate directions for future research. We choose different stakeholders as units of analysis for the critical review, because this allows for a multifaceted exploration of tourism management for tourists with mental health issues. Acknowledging the interdependence of the tourism ecosystem, where each stakeholder plays an important role in shaping tourism experiences, this approach enables us to capture the perspectives of these key groups, thus providing a more comprehensive and nuanced understanding of how to effectively manage tourism experiences for individuals with mental disorders. Furthermore, it ensures that the needs of all parties involved are considered, thereby increasing the study's applicability and relevance.

By critically reviewing 38 selected papers, our study identifies ten key themes in existing research related to three stakeholder groups, namely, tourists and caregivers, tourism providers, and governments and third parties, establishing a new narrative for current research progress that lays the groundwork for future research endeavors. This critical analysis advances the field by systematically mapping out extant research and proposing 13 research questions to guide future scholarly discourse in this emerging yet important area. Moreover, the literature synthesis underscores the need for an integrated approach involving various stakeholders in tourism management for tourists with mental disorders. Although previous research has implied the importance of such an approach, attempts to establish a holistic framework have been

rare. Our study develops an Inclusive Tourism Management Model, which integrates the distinct roles and responsibilities of key stakeholders, delineates challenges, and recommends strategies to ensure that tourism experiences are accessible and enriching for these tourists.

2. Tourists with mental disorders

Tourists with mental disorders refer to individuals who experience mental health conditions, such as autism, dementia, anxiety disorders, depressive disorders, and intellectual disabilities, and engage in travel or tourism activities (American Psychiatric Association, 2013; Hu et al., 2024). These tourists encounter distinctive concerns and challenges during their travels, due to the impact of their mental health conditions on cognitive, emotional, linguistic, and social abilities, which can hinder their tourism experiences (Zhao et al., 2023; Zheng, Wen, et al., 2023). Furthermore, they face challenges in regulating emotions, maintaining clear thinking, expressing themselves coherently, and establishing meaningful relationships (Hu, Wen, Zheng, & Wang, 2023). While research on this subject has been limited, some studies have focused on experiences related to specific mental disorder conditions such as autism, depression, dementia, intellectual disability, and PTSD (Christou & Simillidou, 2020; Connell & Page, 2020; Gillovic et al., 2021; Jepson et al., 2024). These studies have investigated the impact of mental health conditions on travel experiences, highlighting the need for creating tourism destinations that accommodate the diverse needs of tourists with mental disorders and their caregivers (Gladwell & Bedini, 2004; Zheng, Jiang, et al., 2023). Additionally, these studies underscore the importance of ensuring accessibility and providing supportive amenities, which are critical in enhancing the well-being of tourists with mental health issues (Cooper & Buckley, 2022; Hu, Wen, Zheng, & Wang, 2023).

Previous research has also examined the difficulties encountered by tourists with mental disorders, revealing that these often result in social withdrawal and other obstacles, which make it challenging for them to visit specific places or engage in certain tourism activities (Connell & Page, 2019; Sedgley et al., 2017). Moreover, these tourists may confront additional stressors during travel that can potentially trigger mood fluctuations, worsen preexisting conditions, or even precipitate the onset of new mental health issues (Cooper & Buckley, 2022; Felkai et al., 2020; Gordon et al., 2004). The presence of prejudice from others, discriminatory services, and limited accessibility to destinations and hospitality facilities can further diminish the overall travel experience for these individuals (Gillovic et al., 2024; Sedgley et al., 2017).

Despite these challenges, with proper preparations, such as meticulous trip planning, traveling with caregivers for support, seeking medical advice and guidance from healthcare professionals, and utilizing assistive technologies, these individuals can travel safely and benefit from tourism activities (Ali et al., 2023; Wen, Zheng, Jiang, et al., 2023). Tourism has been acknowledged as a significant approach to enhancing the well-being and life quality of individuals grappling with mental disorders, serving as a nonpharmacological intervention for managing these conditions (Wen, 2023). Actively promoting the involvement of this group in tourism activities not only fosters their inclusion, but also contributes to the advancement of accessible tourism practices and the realization of broader goals related to inclusivity and sustainability within the tourism industry.

3. Methodology

Systematic narrative analysis was chosen as the critical reflection synthesis approach in this review to ensure rigorous literature selection and collection, while also enabling in-depth insights into research contextual backgrounds and facilitating a comprehensive analysis of the research topic (Mohsin et al., 2023). It is a qualitative research method that systematically reviews, appraises, and synthesizes existing literature to construct a coherent narrative about a particular topic (Kruse

et al., 2017; Serovich et al., 2008). This method relies on the researchers' expertise to identify and assess a body of literature, summarize what is already known, identify critical unresolved questions, and draw out prioritized future research directions (Tasci, 2021). This approach includes several steps: defining the research question and research scope, conducting a thorough literature search with defined inclusion and exclusion criteria, extracting relevant data and information from the selected studies, synthesizing key themes and patterns, identifying gaps, and suggesting future avenues of research (Mohsin et al., 2023; Tasci, 2021). To ensure replicability and transparency, this critical review adheres to a process in accordance with the recommended guidelines for systematic literature reviews (e.g., Liberati et al., 2009; Lyu et al., 2023) and draws upon previous critical reviews in tourism research (e.g., Demeter et al., 2023; Huang et al., 2023).

To ensure the maximum coverage of relevant literature, keywords including "mental disorder", "psychological disorder", "intellectual disabilities", "intellectual disorder", "anxiety", "depression", "dementia", "autism", "mood disorders", "substance use disorders", "impulse control disorders", "eating disorders", "schizophrenia", "psychotic", "bipolar disorder", "post-traumatic stress disorder", "disruptive behavior", "dissocial disorders", "neurodevelopmental disorders", and "attention deficit hyperactivity disorder" were employed (Huang et al., 2019; Zheng, Jiang, et al., 2023). Additionally, keywords related to the tourism industry, including "tourism", "travel", "hospitality", "hotel", "restaurant", "accommodation", "airline", "holiday", and "vacation", were utilized to filter the literature.

We searched papers in three academic databases: Web of Science, Business Source Complete, and Scopus. Keyword combinations were searched in the "Title, Keywords, and Abstract" fields of these databases. No filter was employed to restrict the publishing date (Demeter et al., 2023; Lyu et al., 2023). The selection of papers for further analysis followed these criteria: (1) inclusion of peer-reviewed journal articles published in English, (2) relevance to tourism contexts and focus on tourism-related issues, (3) inclusion of tourists who live with mental disorders, and (4) exclusion of duplicate papers identified within different databases.

A total of 14643 articles were retrieved from the Web of Science, Business Source Complete, and Scopus by the end of January 2024. After removing duplicate articles and excluding non-English and non-peer-reviewed publications, 6947 articles remained for further screening. The screening process entailed evaluating the title and abstract of each article. Articles unrelated to the tourism context were excluded. A thorough analysis of the articles was then carried out to assess the eligibility of the remaining articles. Studies that merely mentioned 'mental disorders' without further investigation were excluded. Similarly, articles focusing on general disabilities rather than specifically on mental disorders were excluded. Research that investigated non-clinical mental problems and suboptimal health, exemplified by travel anxiety, COVID-19 related anxiety, and non-clinical depression symptoms, were also excluded (Zamanzadeh et al., 2023; Zenker et al., 2021). Additionally, the reference lists of eligible articles were cross-checked. Ultimately, 38 articles were included in the review (see Web Appendix A), with the earliest one published in 2004. To ensure accuracy, each researcher independently identified potentially relevant articles and cross-verified the findings. Any disagreements between the researchers were discussed and resolved to reach a consensus on the final selection of articles.

Building upon previous critical review studies (Wut et al., 2021; Zhan et al., 2024), thematic analysis was employed as the analytic technique to critically review and synthesize findings from prior research, as well as to generate implications for future research. Specifically, each researcher thoroughly reviewed each article and conducted thematic synthesis (Blomstervik & Olsen, 2022). Extensive discussions were organized between the researchers, allowing for an inductive examination of the identified themes and a summary of the key findings.

4. Findings

Research on tourists with mental disorders emerged in 2004, possibly due to a broader recognition of the need for accessibility and inclusivity in travel (Gordon et al., 2004). A significant proportion of the papers reviewed were published in 2023 (11 papers), followed by 2021 (6 papers). This trend signals a recent and growing academic interest in examining tourism for individuals with mental disorders (see Fig. 1). The increase in research in this area is a response to the heightened attention to mental health concerns, which were exacerbated by the stress, depression, and anxiety associated with the COVID-19 pandemic (Moreno et al., 2020). Furthermore, it reflects a rise in destigmatization and societal awareness of mental health issues (Hecht et al., 2022), which has promoted more open conversations on how various stakeholders in the tourism sector can cater to people with mental health conditions. Key journals contributing to this research field include *Tourism Management*, *Annals of Tourism Research*, and *Journal of Travel Medicine*, each publishing four articles (see Table 1).

The application of theoretical frameworks in the reviewed papers is relatively sparse. Only a few papers employed theoretical models to guide their investigations, such as the ethics of care (Gillovic et al., 2024), the social model of disability (Jepson et al., 2024), technology adoption models (Ali et al., 2023), and value co-creation theory (Chiscano, 2021). This highlights a significant gap in the literature and underscores the need for further research to incorporate diverse theoretical perspectives to provide a more in-depth and comprehensive understanding of tourism experiences for individuals with mental disorders.

While the majority of the reviewed papers (57.9%, 22 papers) are empirical studies, followed by perspective articles (31.6%, 12 papers) and literature reviews (10.5%, 4 papers), there is a noticeable imbalance in the methodological approaches adopted. Among the empirical studies, qualitative methods were predominantly used (81.8%, 18 papers), particularly interviews (39.5%, 15 papers). Quantitative research designs were employed in five papers (13.2%), including one that utilized a mixed-methods approach combining interviews and surveys (Dattolo et al., 2016). These findings indicate a strong inclination toward exploratory research in this field, which may be attributed to the challenges associated with recruiting large samples and collecting data from individuals with mental disorders. Furthermore, the reliance on qualitative methods and limited use of quantitative and experimental approaches constrains the ability to test causal relationships and generalize findings.

Compared with the approaches to mental disorders in the broader literature, the reviewed tourism studies offer unique perspectives that align with and differ from those found outside the field of tourism. Specifically, research in clinical medicine primarily focuses on patients and employs clinical methodologies to explore the causes of mental disorders, their complications, and to identify intervention strategies that aid in recovery (e.g., Choi et al., 2022; Park et al., 2023). Although the tourism literature acknowledges its therapeutic potential in alleviating symptoms of mental disorders and explores the impacts of travel activities on individuals with mental disorders (e.g., Gillovic et al., 2021), it also considers other stakeholders, such as hospitality service providers (Wen et al., 2023) and caregivers (Lehto et al., 2018). Studies in both tourism and healthcare address the needs and experiences of caregivers. Research in the healthcare field mainly focuses on caregivers' mental well-being and overall life satisfaction (Cohen et al., 2020; Suntai et al., 2021). In contrast, tourism studies examine caregivers in their dual roles as tourists and caregivers, exploring their expectations, attitudes, and behaviors while traveling (e.g., Sedgley et al., 2017).

In this research, we adopt a stakeholder-centric approach (Freeman & McVea, 2001) to analyze and synthesize the literature. This approach draws upon stakeholder theory that indicates the varied importance of different stakeholders and their implications for organizational strategy

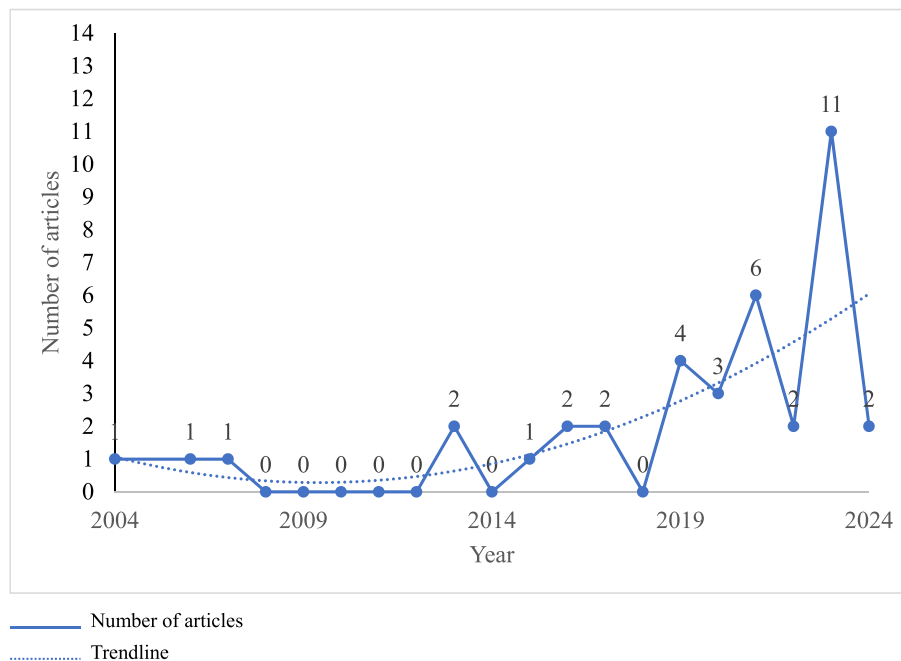


Fig. 1. Number of articles on tourists with mental disorders from 2004 to 2024.

Table 1

List of journals and number of articles in each journal on tourists with mental disorders.

Academic journal	# of articles
Annals of Tourism Research	4
Journal of Travel Medicine	4
Tourism Management	4
Journal of Travel Research	3
Current Issues in Tourism	2
International Journal of Contemporary Hospitality Management	2
International Journal of Travel Medicine and Global Health	2
American Journal of Tourism Management	1
Anatolia	1
Annals of Tourism Research Empirical Insight	1
Autism-Open Access	1
BJPsych Bulletin	1
European Journal of Tourism Research	1
Event Management	1
Information Technology & Tourism	1
International Journal of Environmental Research and Public Health	1
International Journal of Tourism Research	1
International Journal on Advances in Life Sciences	1
Journal of Hospitality & Tourism Research	1
Journal of Hospitality and Tourism Management	1
Journal of Leisure Research	1
Journal of Social Work	1
Psychiatric Bulletin	1

(Jawahar & McLaughlin, 2001). As a strategic management perspective, the stakeholder approach involves understanding the relationships between groups and individuals who impact, and are impacted by, tourism activities (Todd et al., 2017). This approach is particularly appropriate for managing tourism experiences for individuals with mental disorders, as it recognizes the distinct roles and responsibilities of each stakeholder, including tourism providers, caregivers, policymakers, and the tourists themselves, in creating an inclusive and accessible tourism environment (Connell & Page, 2019; Freund et al., 2019). Furthermore, tourism services are interdependent, with each stakeholder playing a critical role in shaping the experiences of tourists (Sugathan & Ranjan, 2019). Thus, the stakeholder approach ensures that all their perspectives are integrated into developing an inclusive tourism management model. Additionally, this approach aligns the goals of different stakeholders,

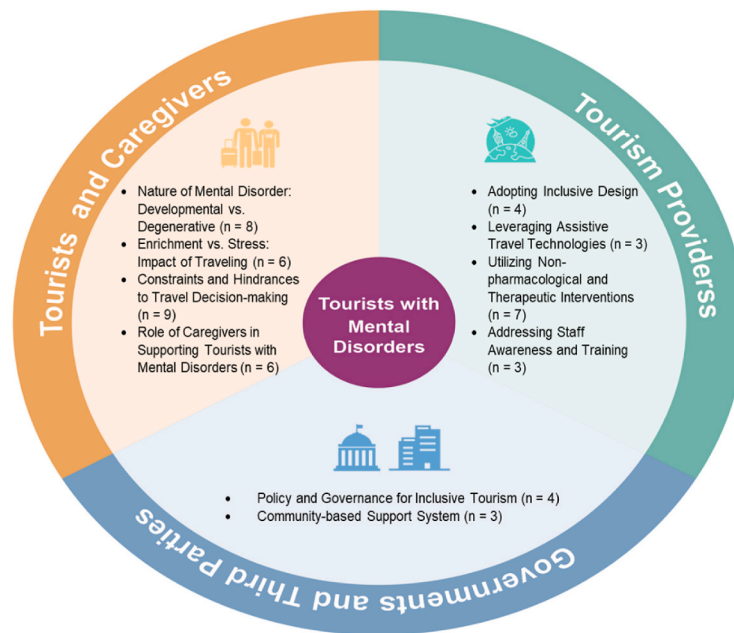
thereby reducing potential conflicts among them and fostering collaboration in facilitating an inclusive decision-making process (Khazaei, Elliot, & Joppe, 2017).

The stakeholder approach has been widely applied in tourism settings. For example, Waligo et al. (2013) drew insights from eight stakeholder groups (e.g., tourism providers, employees, residents) to develop a multi-stakeholder involvement management framework for sustainable tourism. Todd et al. (2017) identified primary (e.g., staff, volunteers, board members) and secondary stakeholders (e.g., government and civic bodies, tourists and visitors) and their roles in managing customer experiences in event tourism. Serravalle et al. (2019) utilized the stakeholder approach to analyze how various stakeholders, such as visitors, the community, and external stakeholders, engage in value creation through augmented reality in museums. More recently, Karadayi-Usta (2024) classified sustainable medical tourism stakeholders into four groups (i.e., dependent, autonomous, influential, and leading) to help achieve sustainability in this industry. In addition to tourism research, the stakeholder approach has been applied in various disciplines, such as international business management (Khojastehpour & Shams, 2020), sustainability accounting (Hörisch et al., 2020), transaction cost economics (Valentinov & Roth, 2024), and supply chain management (Balci & Surucu-Balci, 2021). These studies indicate that the involvement of key stakeholders is instrumental in planning and implementing inclusive management practices.

Accordingly, this research identifies and analyzes core themes across three primary stakeholder groups: tourists and caregivers, tourism providers, and governments and third parties (see Fig. 2). Prior studies, categorized by prominent research themes within these stakeholder groups, are discussed and critically assessed in the following sections to develop a comprehensive understanding of the current state of research in this field.

4.1. Tourists and caregivers

Understanding the perspectives of tourists with mental disorders and their caregivers is critical for fostering a more inclusive tourism experience. The majority of articles selected for this review focus on the roles and experiences of tourists and caregivers. Despite being a key stakeholder group, the needs and challenges of these tourists and their



Note: The total frequency of themes exceeds 38 because some articles address multiple subthemes.

Fig. 2. Core themes, subthemes, and number of articles.

Note: The total frequency of themes exceeds 38 because some articles address multiple subthemes.

caregivers are frequently overlooked in the design of tourism destinations and experiences. Addressing their unique requirements not only enhances accessibility for tourists with mental health conditions, making travel more enjoyable for them and their caregivers, but also improves their overall well-being. Additionally, it promotes equity and diversity within the tourism industry. Our critical analysis of 29 articles included in the review identifies four research themes for this stakeholder group.

4.1.1. The nature of mental disorders: developmental vs. degenerative

Representatively, [Hu et al. \(2024\)](#) provided a guidepost for navigating the different levels of travel eligibility for tourists with various mental disorders, including major depressive disorder, generalized anxiety disorder, schizophrenia, and dementia. They contended that the wide-ranging symptoms and severities across these disorders make universal travel suitability guidelines impractical. Such complexity is evident in previous research focused on understanding the travel experiences and motivations of tourists with pervasive developmental disorders (PDD) such as autism spectrum disorders (ASD), and those with degenerative disorders such as dementia.

Pervasive developmental disorders are cognitive and neuro-behavioral disorders that appear in early childhood and are characterized by impairment in numerous areas of development ([Sedgley et al., 2017](#)). Research on tourists with developmental disorders has primarily focused on ASD, a neurodevelopment disorder featured by deficit or neurodiversity in communication and social interaction. Previous studies have found the well-being effect of tailored tourism activities on tourists with ASD ([Hamed, 2013](#)) and highlighted the unique challenges faced by children with ASD and their families in high-stress settings like airports ([Chiscano, 2021](#); [Conde et al., 2023](#)). The significant impacts of tourism on those with intellectual disabilities were also noted in the literature ([Gillovic et al., 2021, 2024](#)). [Freund et al. \(2019\)](#) advocated for the development of inclusive tourism models to better accommodate the needs of tourists with ASD and their families. This standpoint was substantiated by [Conde et al. \(2023\)](#), who argued that without proper changes, tourism practices not only limit the enriching experiences for

tourists with developmental disorders but also reinforce social exclusion.

Research on tourists with degenerative disorders, such as dementia and certain forms of psychosis, is emerging. Limited studies in this area offer insights into the complex challenges faced by these individuals. For instance, [Sadlon et al. \(2021\)](#) identified travel stressors inherent to individuals with dementia. Previous research has also attempted to address the management strategies tailored to their mental health conditions. [Felkai et al. \(2020\)](#) recommended a coordinated travel medical approach for meeting the needs of psychotic patients during international air travel. [Wen et al. \(2023a,b\)](#) discovered that hotel guests diagnosed with early-stage dementia often deliberately conceal their medical history and conditions to avoid discrimination and conflict with others. They pointed out a lack of knowledge among hotel managers regarding the management of the tourism experience for individuals with dementia, suggesting that approaches grounded in positive psychology could enhance their experiences.

It is evident that the nature of mental disorders, whether developmental or degenerative, highlights these tourists' distinctive needs and challenges. While existing research on tourists with developmental disorders focuses on sensory and communication barriers and proposes solutions like inclusive tourism models, research on tourists with degenerative disorders emphasizes their need for safety, familiarity, and supportive care. These differences underscore the importance of tailored approaches to enhance the travel experiences of those with developmental and degenerative disorders. However, current research does not offer specific guidelines for accommodating their varied needs in tourism settings.

4.1.2. Impacts of traveling: enrichment vs. stress

Travel presents a double-edged sword for individuals with mental disorders, serving both as a source of enrichment and a potential trigger of stress. Previous research has highlighted the enrichment effect, suggesting that tourism not only offers therapeutic benefits, positively influencing self-esteem and providing a meaningful departure from daily routines, but also enhances social inclusion and quality of life for

these vulnerable tourists (Gillovic et al., 2021; Hamed, 2013). Wen et al. (2022) is one of the few to address the nexus between travel and the medical treatment of dementia. They argued that a variety of tourism activities, such as hedonic experiences, long-term holidays, mindfulness tourism, group tours, family trips, interactions with tourism hosts, and virtual reality tourism, can provide enriching experiences for tourists with dementia. Prior research also indicates that, to effectively engage individuals with mental disorders in the enriching benefits of tourism, meticulous travel planning is essential. This includes recognizing the challenges related to their conditions, selecting destinations that accommodate their needs, and carefully choosing transportation, accommodations, and activities that minimize stress, support routine, and encourage social interaction (Hamed, 2013).

Conversely, travel can also induce stress for those with mild and severe mental disorders alike. For instance, depending on the severity of their condition, individuals with autism may regard specific aspects of travel as distressing (Neo & Flaherty, 2019). In addition, certain aspects of a vacation might exacerbate the mental state of those with major depressive disorders (Levi et al., 2019). Travelers diagnosed with early-stage dementia may experience stress, fueled by concerns about discrimination and by distrust in the adequacy of hotel-based medical facilities (Wen, Zheng, Jiang, et al., 2023). Moreover, the uncertainty of a travel itinerary, crowded destinations, sensory overload, and the highly stimulating activities of tourism may trigger emotional and behavioral disturbances in individuals with mental disorders (Dempsey et al., 2021). As a result, they are likely to shun public spaces such as restaurants, cafés, cinemas, and hotels, and tend to have less favorable evaluations of their holiday experiences.

These contrasting impacts of traveling underscore the necessity to balance the mental health benefits of tourism with the risks posed by disruptions to daily routines, unfamiliar environments, and the inherent demands of travel. To optimize the tourism experience for individuals with mental disorders, it is crucial to develop strategies that mitigate stress while maximizing the therapeutic potential of tourism.

4.1.3. Constraints to travel decision-making

Research delineates various constraints that adversely influence travel decision-making for individuals with mental disorders and their caregivers. Key factors affecting travel decisions comprise intrinsic constraints, socio-environmental barriers, and the unpredictability of the tourism environment (Neo & Flaherty, 2019; Seeman, 2016). The lack of adequately trained service providers further exacerbates these difficulties (Wen et al., 2023a,b). Specific constraints identified include dehydration risks, delirium from jet lag, acute confusional states, and the noisy in-flight environment as key challenges for individuals with dementia (Sadlon et al., 2021), logistic issues such as managing medical regimes for patients with psychosis (Felkai et al., 2020), and communication barriers affecting travelers with autism (Hamed, 2013). Family structural constraints and socio-economic factors also intensify travel challenges for these individuals (Zhao et al., 2023). According to Freund et al. (2019), intrinsic constraints, such as fear of not getting along with others and causing others' discomfort, together with the severity of the disability, predict accommodation choices for families of children with ASD.

Addressing the aforementioned constraints is essential for enabling tourists with mental disorders to benefit from travel opportunities. Support from close family members, protective measures, and positive parental adaptation are crucial for overcoming these travel constraints (Zhao et al., 2023). Amet (2013) demonstrated that co-vacationing with other families who have children with ASD can enhance comfort, coping abilities, and engagement in vacation activities, despite the inherent constraints of traveling. Dempsey et al. (2021) and Zhao et al. (2023) further highlighted the importance of both service and social support from family in ensuring a positive holiday experience for autistic tourists, presenting a fresh angle in research on accessible tourism and calling for subsequent studies to investigate autistic tourists' emotional

engagement and social interaction.

4.1.4. The role of caregivers

Caregivers are individuals who provide essential support and assistance to individuals with mental disorders during travel, ensuring their safety, well-being, and comfort. These caregivers can be formal - such as psychiatrists, social workers, and specialized travel companions - or informal, including relatives, peers, and friends (Hu, Wen, Phau, et al., 2023; Lehto et al., 2018). Given that tourists suffering from mental health conditions are more susceptible to travel restrictions and require additional assistance, caregivers' involvement and support are crucial in managing the practical aspects of travel and guaranteeing the welfare of these tourists (Sedgley et al., 2017). Furthermore, caregivers' perspectives on quality of life often intertwine with their concerns for those with mental disorders, merging individual and family views of life quality (Mactavish et al., 2007).

While Gillovic et al. (2024) have illuminated the relational and shared nature of caregiving, stressing the importance of a nuanced understanding of both the lived experiences and the dynamics between caregivers and adults with intellectual disabilities, this acknowledgement raises questions about ethics of care. Sedgley et al. (2017) delineated the intricate responsibilities of caregivers. Specifically, mothers of children with ASD must navigate emotional complexities of travel by employing strategies such as selecting suitable destinations and accommodation, and packing familiar items to maintain routines. Their research underscores the necessity for further studies to investigate the needs of caregivers of children with mental disorders in the tourism context.

Echoing these viewpoints, Dempsey et al. (2021) proposed that caregivers need to identify and manage various enablers and stressors during air travel to encourage tourism participation among young people with ASD. Yet, there remains a concerning paucity of empirical evidence regarding how these enablers and stressors are identified and managed in practice. Other studies have focused on helping caregivers improve caregiving capabilities by emphasizing the importance of social and leisure networks and taking holiday breaks (McConkey & McCullough, 2006), and exploring their travel information needs (Tomej et al., 2023).

Although research has highlighted that caregivers must navigate various challenges, from preparing for the unpredictable and unfamiliar facets of travel to addressing specific needs during the journey, few studies have examined the resources available for them to manage the emotional and practical aspects of tourism activities. Addressing this gap is essential to improve travel experiences for tourists with mental disorders and to reduce the burden on caregivers.

4.2. Tourism providers

Tourism providers play a pivotal role in ensuring that tourists with mental disorders have accessible, enjoyable, and supportive travel experiences. This requires a better understanding of the unique needs of these tourists and their caregivers and the implementation of appropriate measures across various stages of the tourism journey. Recent studies have highlighted various measures and strategies employed by tourism providers to manage the complexities associated with accommodating tourists with mental health issues. The thematic analysis of 19 papers reveals four pertinent themes.

4.2.1. Adopting inclusive design principles

Inclusive design involves creating environments and processes - from infrastructure to service delivery - that are accessible and accommodating for tourists with mental health conditions. Although a diagnosis of mental disorder often results in withdrawal from travel and leisure activities due to feelings of unwelcomeness, tourism providers can, through proper support, enhance their comfort and make their experience more inclusive (Connell et al., 2017). Two noteworthy

streams of research emerge in this regard.

One stream considers these tourists as a niche market and proposes inclusive design principles to meet their special needs. The pioneering work of [Gordon et al. \(2004\)](#) underscores the necessity of catering to this niche market by suggesting that airline companies offering 'fear of flying' courses before departure could reduce anxiety and enhance travel readiness for tourists with mental disorders. Subsequent studies extended this line of thinking and expanded the investigation of inclusive design principles into dementia-friendly tourism services and destinations. To meet the accessibility needs of tourism customers with 'hidden conditions' such as dementia, existing literature advocates for an interdisciplinary approach in designing dementia-friendly destination infrastructure (e.g., appropriate signage, accessible information) ([Connell & Page, 2019](#)). Moreover, research has discussed modifying service delivery and enhancing service encounters to ensure the comfort and safety for these tourists and their caregivers during travel. [Chiscano \(2021\)](#) used a value co-creation approach to assist airport managers in cost-effective service adaptations (e.g., communication aids, priority check-in and access, and ease of navigation) to improve the travel experience for families of children with ASD and foster a family-inclusive airport service design.

In contrast, another research stream interprets inclusivity through broader ethical considerations and advocates for inclusivity without segregation. This perspective holds that inclusive design principles should not distinguish people with mental disorders for particular attention that could potentially lead to stigmatization. This is because some individuals with mental disorders (e.g., early-stage dementia) may not view themselves as patients and prefer not to draw attention to their condition ([Wen et al., 2023a,b](#)). Instead of creating separate events, [Stewart et al. \(2022\)](#) highlighted the importance of adapting existing tourism events to be accessible and inclusive for those with dementia without segregating them from regular tourists. Criticizing existing research on tourism products designed for autistic users, [Jepson et al. \(2024\)](#) noted discrimination and broader human rights issues, calling for more respectful approaches to tourism offering design. These papers align with the model of transitioning to a dementia-friendly business as proposed by [Connell et al. \(2017\)](#). The ultimate stage, normalization, is marked by integrating the needs of people with dementia into the broader business environment, without targeting them as a niche market. At this stage, visitor spaces are designed to be universally accessible, and dementia awareness training for all staff is standard practice.

4.2.2. Leveraging assistive travel technologies

Despite the potential of assistive technologies, such as mobile apps and accessible websites, to aid tourists with mental disorders and their caregivers by facilitating travel decisions, reducing travel unpredictability, and enhancing the travel experience, research in this domain is relatively limited ([Jepson et al., 2024](#)). The exploratory study by [Ali et al. \(2023\)](#) established a conceptual framework that delineates the experiences, determinants, deterrents, and outcomes of technology use by tourists with intellectual disabilities during travel, offering practical implications for co-creating tourism experiences. The authors found that during the pre-trip stage, these technologies provide inspiration, aid in information search, and assist in travel planning. In-trip and at the destination, travel technology serves functional, social, and hedonic purposes, enhancing the enjoyment and ease of travel.

Interestingly, only a few studies have focused on developing assistive technology for tourists with mental disorders. These include designing more accessible tourism websites for tourists with ASD ([Dattolo et al., 2016](#)) and creating an inclusive mobile app to help autistic tourists and their caregivers gather destination information ([Cena et al., 2023](#)). Design features, such as sensory information, precise language, ample images and white spaces, and logical navigational structures and links, have been reported to be effective for such apps and websites ([Cena et al., 2023](#); [Dattolo et al., 2016](#)). However, the extent to which the utilization of assistive technologies can effectively remove barriers and

contribute to equitable rights and opportunities for these tourists warrants further investigation.

4.2.3. Utilizing non-pharmacological and therapeutic interventions

Existing literature suggests adopting both traditional and innovative non-pharmacological methods to accommodate tourists with mental disorders. In particular, research into the role of non-pharmacological and therapeutic interventions is emerging. Most recently, [Hu et al. \(2024\)](#) proposed that integrating medical science and social science into travel medicine can offer safety, health, and well-being, enhancing the quality of life for vulnerable tourists through non-pharmacological interventions. In a similar vein, [Flaherty et al. \(2021\)](#) advocated for 'travel psychiatry', which merges psychiatry and travel medicine, to improve the tourism experiences and safety of tourists with mental health issues. They recommended a comprehensive preventive strategy that encompasses the pre-travel, travel, and post-travel stages. This approach highlights the importance of proactive mental health management throughout the travel journey to maximize benefits and minimize risks for travelers with mental health conditions ([Zheng, Wen, et al., 2023](#)).

Beyond the overall strategies, extant literature also elaborates on specific non-pharmacological and therapeutic interventions. [Stewart et al. \(2022\)](#) explored how art events designed for tourists with dementia can enhance their well-being and developed the "senses framework" to guide art organizations in creating dementia-friendly events through relationship-centered collaboration with field experts and those with lived experiences. Likewise, [Wen \(2023\)](#) recommended innovative service approaches such as animal-assisted interventions that improve social functioning for dementia patients. These non-pharmacological interventions, rooted in theories like biophilia and human-animal bond, offer therapeutic benefits that traditional service models may not provide to tourists with mental disorders. Similarly, [Page et al. \(2015, 2023\)](#) recommended that tourism providers leverage nature and outdoors activities as sensory and emotional tools to effectively reduce marginalization and enhance the well-being of tourists with dementia. They advocated for a transformative approach to make tourism more accessible and engaging for those with dementia, highlighting the need to empower them through supportive initiatives that enhance their engagement with tourism and nature.

4.2.4. Staff training and awareness building

Since service staff are typically the primary point of contact during tourism encounters, enhancing staff training, building awareness, and developing comprehensive service and operational guidelines can significantly improve the travel experience for these tourists. Given that a lack of professional knowledge about mental disorders can diminish frontline employees' ability to provide tailored services, the necessity of staff training has been underscored in the literature ([Wen et al., 2023a, b](#)). Training that focuses on the specific demands of these tourists is viewed as a crucial approach to improving service quality. Similarly, [Connell and Page \(2020\)](#) advocated for raising awareness among staff and proposed initiatives to create a tourism environment where staff are better equipped to support tourists with mental disorders.

On the other hand, previous research has identified barriers to effective staff training and awareness building in accommodating tourists with mental health issues ([Jepson et al., 2024](#)). Notably, high staff turnover presents a significant challenge, as frequent changes in personnel make it difficult to maintain a consistently trained workforce and discourage tourism providers from investing in comprehensive training programs. The lack of career development paths for service employees further exacerbates this issue because, without clear career advancement opportunities, they are less inclined to pursue additional training. Moreover, ethical and economic considerations pose dilemmas for tourism providers, as they need to balance profitability with social responsibility when providing inclusive tourism services. Such dilemmas may lead to the allocation of fewer resources for training and awareness programs.

4.3. Governments and third parties

Governments and third parties are crucial stakeholders in creating a supportive system for tourists with mental disorders. Specifically, governments can enact policies that reduce discrimination and enhance inclusivity at tourism destinations and service organizations. Third parties, including social support agencies and community groups, can improve the experience of vulnerable tourists by offering assistance, organizing activities, and providing consultations, thereby making tourism more accessible and engaging for everyone involved. Despite their importance, only a limited number of studies ($n = 7$) have discussed the role of government agencies and third parties in enhancing the overall travel experience of tourists with mental health issues. These studies are categorized into two thematic areas.

4.3.1. Policy and governance for inclusive tourism

Government agencies must address the needs of tourists with mental disorders due to their legal obligations, the imperative to reduce mental health stigma, and their responsibility to enact inclusive tourism practices (Jepson et al., 2024). However, current research on policy and governance for these tourists remains inadequate. A few scholars have underscored the significant gaps in policy development for niche tourism sectors like cannabis tourism and casino resorts (Bonny-Noach & Sagiv-Alayoff, 2020, 2021). These sectors present unique challenges, including aggravating mental health issues and the risk of legal complications related to substance use and gambling.

Existing literature has shown that the integration of health and safety guidelines in developing the tourism policy is critical for protecting vulnerable tourists, including those with mental disorders. Specifically, Bonny-Noach and Sagiv-Alayoff (2020) called for comprehensive policies that address the risks confronted by tourists with mental disorders, such as the potential for substance consumption to worsen mental health conditions and the legal uncertainties surrounding cannabis usage.

Contributing to this academic discourse, Zhao et al. (2023) outlined the key administrative support schemes required for tourists with autism. They proposed that advanced transportation policies that shorten travel times and reduce environmental interferences can decrease emotional and behavioral problems. Moreover, preferential policies, such as free tickets for transportation to destination attractions and government allowances for families with autistic tourists, can reduce financial stress and promote enjoyable travel experiences. These measures emphasize the role of governmental and administrative frameworks in facilitating accessible and inclusive tourism.

Although previous studies contend that robust tourism policies and key administrative measures support travelers with mental disorders, there is a paucity of research on policy development and implementation. In particular, effective policy development and implementation require collaboration and coordination between public and private entities. Jepson et al. (2024) acknowledged the role of government agencies in promoting these partnerships with private sectors, such as healthcare institutions, charitable organizations, tourism providers, and regulatory bodies. This collaborative approach is essential for creating inclusive tourism policies. However, there is a dearth of research exploring the dynamics of these partnerships and how decision-making and coordination are managed among government agencies and other stakeholders.

4.3.2. Community-based support systems

Existing literature on community involvement for tourists with mental disorders is limited, with no study explicitly focusing on this thematic area as a primary research objective. Nonetheless, previous studies have acknowledged the crucial role of community involvement by third-party entities, such as social media communities, volunteer groups, and other non-profit organizations, in creating supportive environments and promoting inclusive tourism practices. Specifically, Chiscano (2021) illustrated how initiatives driven by volunteers, like

awareness programs and open days, provide support to families with children suffering from ASD. In a similar vein, Stewart et al. (2022) emphasized the impact of relationship-centered collaboration between local arts organizations, healthcare professionals, and dementia-focused community groups in creating inclusive art events. Likewise, Zhao et al. (2023) highlighted that community support, including social media networks and volunteer-based initiatives, plays a key role in tackling travel constraints faced by individuals with autism. These studies lay the foundation for further scholarly works to empirically evaluate the efficacy of these support schemes and address challenges in their practical implementation.

5. The Inclusive Tourism Management Model

Based on an in-depth review of the current state of the literature, it is evident that previous research has primarily focused on specific stakeholders and addressed isolated aspects of managing tourism experiences for individuals with mental disorders. However, the complexity and multifaceted nature of this issue necessitates a theoretically driven, holistic model that integrates the perspectives and responsibilities of key stakeholders. Such a model ensures effective coordination among various stakeholders involved in managing the tourism experience, allowing for systematically addressing the opportunities and challenges in meeting the needs of tourists with mental disorders, thereby enhancing their overall well-being. Given the lack of a holistic framework and the need for orchestrating a coordinated management strategy (Felkai et al., 2020; Freund et al., 2019), this study proposes an Inclusive Tourism Management Model based on a comprehensive review of the literature and insights from related areas (Farrell et al., 2024; Tuli et al., 2023; Wilcock et al., 2021).

In developing the Inclusive Tourism Management Model, we draw upon the Bio-Psycho-Social model (Engel, 1977), the Principles of Universal Design (Story, 2001), and the Social Model of Disability (Shakespeare, 2006). These theories are selected for their relevance in addressing the multifaceted nature of managing tourism experiences for individuals with mental disorders.

The Bio-Psycho-Social model (Engel, 1977) suggests that mental health conditions stem from a complex interplay of biological, psychological, and social factors, which affect functioning at individual (impairments in body function), institutional (limitations in activities), and social (restrictions on participation) levels (Zajadacz, 2015). This theory is critical for developing personalized interventions to tackle the diverse challenges faced by these tourists.

The Principles of Universal Design (Story, 2001) underpin the creation of tourism environments accessible to all with no need for adaptation, irrespective of their abilities or disabilities. By incorporating these principles, tourism providers can accommodate the specific needs of different tourists and remove barriers to access, allowing tourists with mental disorders to navigate their travel experience with ease and comfort (Dodds & Palakshappa, 2022).

The Social Model of Disability (Shakespeare, 2006) asserts that it is social conditions, such as exclusion and coercion, rather than physiological deficits, that prevent individuals with disabilities from participating in tourism. This model addresses the societal barriers that these tourists encounter and advocates for policy changes to create supportive environments for them (Song & Park, 2023).

Together, these theories form a robust foundation for the Inclusive Tourism Management Model, offering a comprehensive framework for improving the overall travel experience and well-being of tourists with mental disorders. This model comprises four key elements - stakeholder collaboration and coordination, individualized needs analysis, inclusive tourism environment design, and continuous interventions and support - that collectively relate to the key stakeholders involved in managing the tourism experience (see Fig. 3). These elements work in tandem to overcome the challenges faced by tourists with mental disorders and their caregivers, resulting in enhanced inclusivity and accessibility. In

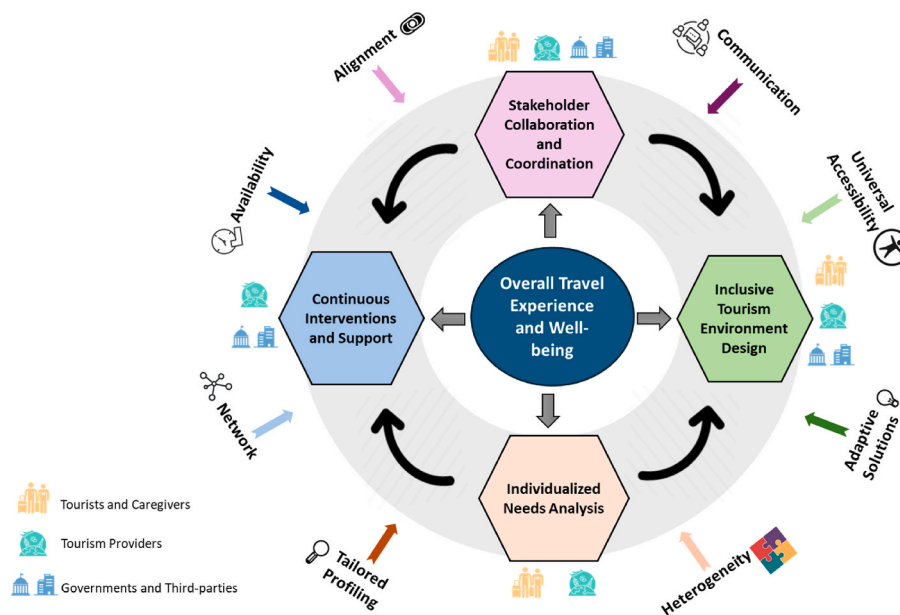


Fig. 3. The inclusive tourism management model.

the following, we explain each element with the key challenges and potential resolutions.

5.1. Stakeholder collaboration and coordination

Stakeholder collaboration and coordination emphasize fostering effective partnerships among various stakeholders to ensure the seamless provision of tourism experiences across different stages of the customer journey (Gedecho & Kim, 2024; Zheng et al., 2023a,b). The key challenge in this aspect is to align the diverse goals of various stakeholders. To address this, effective communication channels and collaborative frameworks must be established. This facilitates continuous dialogue among stakeholders, leading to the achievement of shared goals and the delivery of inclusive tourism experiences.

5.2. Individualized needs analysis

Individualized needs analysis involves comprehensive assessments to identify and profile the unique demands of different tourists, including those with mental disorders and their caregivers (Park et al., 2024). This approach is essential due to the inherent heterogeneity of this market, which necessitates personalized tourism services. The primary challenge lies in accurately mapping the diverse needs, which requires a nuanced understanding of each individual's travel eligibility and constraints (Hu et al., 2024; Wen et al., 2023a,b). Through tailored profiling, tourism providers, governments, and third parties can create detailed profiles that capture each tourist's health conditions, stressors, preferences, challenges, and required support. This targeted approach enables stakeholders to tailor tourism services, activities, and interventions effectively, thereby ensuring that the tourism experience for those with mental disorders is accessible, respectful, and enriching.

5.3. Inclusive tourism environment design

Inclusive tourism environment design integrates the principles of universal design to create accessible settings, infrastructure, and services that accommodate the expectations and demands of a broad range of tourists (Connell et al., 2017; Page & Connell, 2024), while taking into account economic and practical constraints. A major challenge in achieving this lies in ensuring universal accessibility, where the tourism

environment must be adapted to meet diverse needs without segregating or stigmatizing any group. By implementing adaptive solutions with flexible and customizable features, tourism environments can be modified to enhance overall accessibility and inclusivity (Scuttari et al., 2021).

5.4. Continuous interventions and support

Continuous interventions and support involve developing targeted strategies, such as assistive travel technologies, personalized travel planning, and open days focused on mental health, for both these tourists and their caregivers throughout the travel journey (Buckley, 2023; Lin & Li, 2024). However, ensuring the availability of these interventions and support mechanisms across different stages of the travel journey and within diverse tourism settings is challenging. An integrated support network, involving healthcare professionals, tourism providers, third-party organizations, and government bodies, is essential to offer continuous and seamless care and support for them.

In summary, the Inclusive Tourism Management Model involves integrating universal design principles to ensure accessibility, conducting individualized needs assessments to tailor services, and fostering stakeholder collaboration and coordination to provide continuous support and interventions. While this model offers a comprehensive approach to managing tourism experiences, it also highlights significant gaps in the existing literature. Bridging these gaps is critical for the successful implementation of the Inclusive Tourism Management Model and will help create seamless and supportive tourism experiences for individuals with mental disorders.

6. The way forward

Tourists with mental disorders represent a significant yet underexplored market within the tourism industry (Zheng, Jiang, et al., 2023). Despite the growing recognition of their importance, academic research on this vulnerable population remains limited and fragmented. Based on our critical analysis of the extant literature and guidance of the Inclusive Tourism Management Model, we identify future research directions across three stakeholder groups: tourists and caregivers, tourism providers, and governments and third parties. In the following section, we propose a comprehensive research agenda from the perspectives of these

stakeholders (Fig. 4). This future research agenda also underlines the necessity to address ontological, epistemological, ethical, and methodological considerations. These considerations are fundamental in ensuring more inclusive tourism management practices for tourists with mental disorders.

6.1. Tourists and caregivers

Expanding tourism research to include diverse mental health conditions. Current studies predominantly focus on the travel experiences and specific needs of tourists with autism, dementia, and intellectual disabilities (e.g., Chiscano, 2021; Gillovic et al., 2021; Sadlon et al., 2021). Although this focus aligns with the growing awareness of these conditions (Connell & Page, 2019; Sedgley et al., 2017), it overlooks other prevalent mental health issues, such as major depressive disorder and generalized anxiety disorder, which affect a substantial proportion of the population (Hu et al., 2024). Given that depression and anxiety rank among the most prevalent mental health disorders worldwide, especially following the COVID-19 pandemic (WHO, 2022), it is critical to explore the unique challenges they present for tourism activities. Specifically, psychiatric research has demonstrated that individuals with major depressive disorder may experience fatigue, lack of interest, low motivation, and negative self-esteem, while those with generalized anxiety disorder may experience heightened arousal and feelings of fear (Wang et al., 2022). Considering the potential of tourism in alleviating mental health issues (Hu et al., 2024), expanding research to include these mental health conditions would aid in the individualized needs analysis aspect of the Inclusive Tourism Management Model. Furthermore, it offers valuable insights for designing inclusive environments for tourists with diverse mental disorders.

RQ1. What are the travel needs, motivations, and challenges of tourists with major depressive disorder and generalized anxiety disorder?

Creating personalized travel plans. Existing studies indicate the dual impact of travel, revealing its potential to be both an enriching and a stressful experience for tourists with mental disorders (Gillovic et al., 2021; Hamed, 2013). To effectively address this, personalized travel planning is essential, allowing tourists to maximize the enriching aspects of travel while minimizing the associated stress. Such an approach

resonates with the development of individualized treatment plans for patients in healthcare (Roy & Ulrich, 2017), and echoes the concept of customization in marketing that emphasizes aligning products and services with consumer preferences (Chandra et al., 2022). Personalized travel planning addresses individualized needs analysis in the Inclusive Tourism Management Model, as it facilitates a better understanding of the tourist’s mental health profile, including the nature and severity of the disorder, stressors, challenges, and preferred activities. It also contributes to inclusive tourism environment design in this model by involving the selection of appropriate transport modes and accommodations that offer a sense of safety and routine, as well as the creation of flexible schedules. Future studies could use netnographic analysis and travel diaries as research tools to gather insights into how these tourists develop tailored travel strategies.

RQ2. How do tourists with mental disorders and their caregivers develop personalized travel planning, and how does personalized travel planning enhance the enriching benefits of tourism?

Understanding constraints across travel stages. Understanding and addressing the constraints confronted by tourists with mental disorders has attracted academic attention in the recent past (Dempsey et al., 2021; Felkai et al., 2020; Park et al., 2024; Zhao et al., 2023). Despite this, existing research often assumes that travel constraints are uniform across various stages of the tourism journey. However, the pre-travel, during-travel, and post-travel stages are each characterized by distinct expectations, experiences, and challenges (Eletxigerra et al., 2021; Fennell, 2017). For example, at the pre-travel stage, these tourists usually undergo heightened anxiety and stress from planning the trip (Dempsey et al., 2021). During travel, they encounter constraints such as sensory overload and unpredictability (Neo & Flaherty, 2019). Finally, the post-travel stage presents constraints such as reintegration into daily routines. This is in line with the concept of the customer journey in marketing, which underscores diverse customer needs in the pre-purchase, purchase, and post-purchase stages (Lemon & Verhoef, 2016). Future research could undertake ethnographic methods and in-depth interviews to understand these stage-specific travel constraints, thereby aiding the provision of continuous interventions and support within the Inclusive Tourism Management Model.

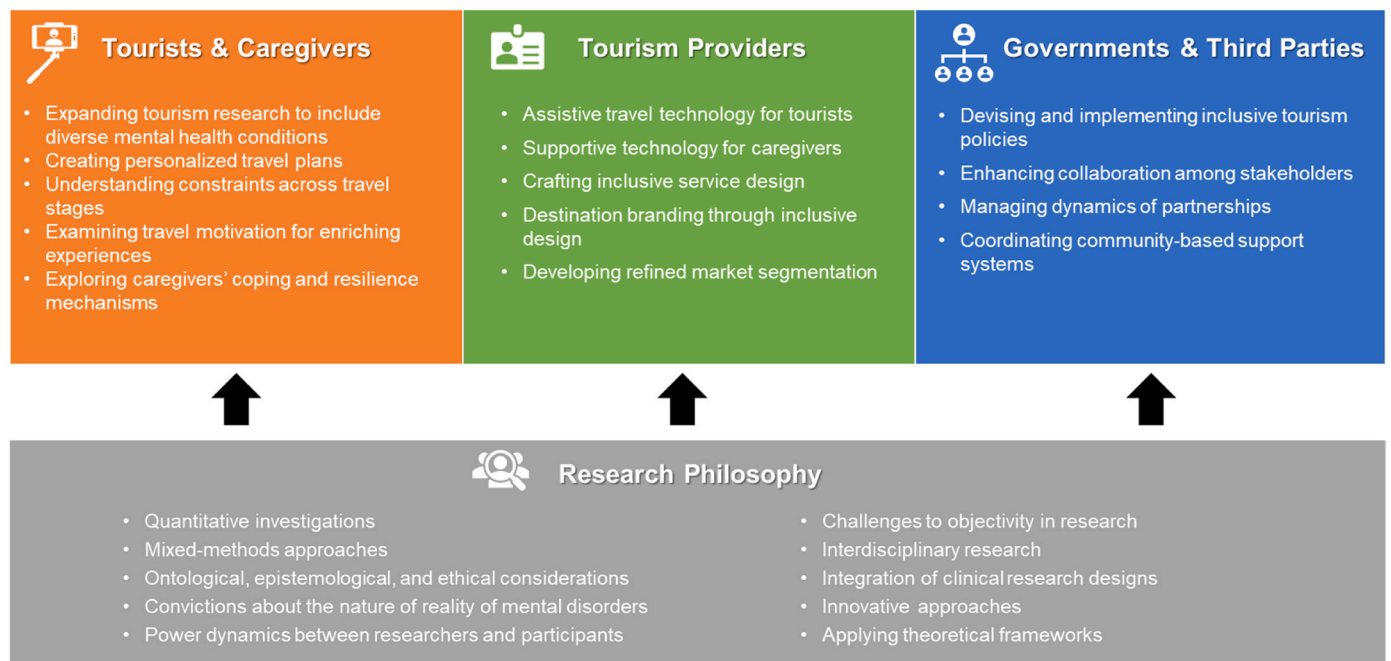


Fig. 4. Key areas of future research.

RQ3. How can various constraints faced by tourists with mental disorders at different travel stages be systematically identified and addressed to enhance the overall travel experience?

Examining travel motivation for enriching experiences. A few studies have highlighted the enriching potential of tourism, such as social inclusion, psychological well-being, and personal growth for tourists with mental disorders (Gillovic et al., 2021; Hu et al., 2024). However, there is a lack of research on the motivations that drive these tourists to pursue enriching travel experiences. Since traditional tourism theories may not fully capture their motivations, future research could incorporate theories from other disciplines, such as restorative environments theory from environmental psychology (Ouellette et al., 2005) and salutogenic theory from public health (Antonovsky, 1979), to gain in-depth insights into the unique motivations driving these tourists to seek therapeutic travel experiences. As motivations reflect the driving forces behind tourist behaviors, addressing this research question can shed light on individualized needs analysis in the Inclusive Tourism Management Model. Empirical research methods such as structural equation modeling (SEM) and fuzzy-set qualitative comparative analysis (fsQCA) can be particularly valuable for this purpose, as they allow for a detailed examination of how different motivations and their combinations shape the travel experience.

RQ4. How do various motivations influence the decision of tourists with mental disorders to pursue therapeutic and enriching travel experiences?

Exploring caregivers' coping and resilience mechanisms. Caregivers play an integral part in the travel experience of individuals with mental disorders. Researchers have emphasized that caregiving is a complex responsibility that involves managing both the practical aspects of traveling and the emotional needs of the care recipient (Dempsey et al., 2021; Gillovic et al., 2024; Sedgley et al., 2017). This results in caregivers experiencing considerable stress as they must navigate the unpredictability of travel while ensuring the well-being of those they care for (McConkey & McCullough, 2006). Although caregiver stress has attracted scholarly attention in various domains (Cohen et al., 2020; Suntai et al., 2021), there is a deficiency of research on the resilience of caregivers and how they cope with travel-related stressors. Future research could employ coping theory from medical sociology (Folkman & Lazarus, 1980) to explore how caregivers assess and respond to stressful travel situations. Additionally, by examining the lived experiences of caregivers, tourism researchers can gain an in-depth comprehension of their coping mechanisms. Such understanding offers insights into individualized needs analysis and informs the design of inclusive tourism environments within the Inclusive Tourism Management Model, ensuring that both caregivers and those they care for can benefit from the therapeutic potential of traveling.

RQ5. What coping mechanisms do caregivers employ to manage stress associated with traveling and how do these strategies impact their resilience?

6.2. Tourism providers

Designing assistive and supportive travel technologies. Previous research has examined the role of assistive travel technologies, including accessible mobile apps and websites, for aiding tourists with mental disorders (Ali et al., 2023; Cena et al., 2023; Dattolo et al., 2016). Despite these initial efforts, further research is required to understand their role in ensuring an enriching travel experience for these vulnerable tourists. This is important for implementing the Inclusive Tourism Management Model in the digital age, as it facilitates continuous interventions and support through technology and equips the tourism environment with customizable and adaptable features. We identify two areas of research opportunity: assistive travel technology for tourists and supportive technology for caregivers.

For tourists with mental disorders, assistive travel technology can significantly enhance their travel experience (Ali et al., 2023; Cena et al., 2023; Dattolo et al., 2016). For example, Waymap offers precise navigation assistance for those who suffer from cognitive impairments, while Sensory Friendly Solutions offers accessible and sensory-friendly environments for individuals with autism. Future research could draw upon foundational frameworks in the field of information systems, such as the technology acceptance model and the unified theory of acceptance and use of technology (e.g., Dwivedi et al., 2019), to understand tourists' attitudes, motivations, and perceptions toward these technologies and the barriers to their adoption. Incorporating insights from human-computer interaction (e.g., Al-Samarraie et al., 2023), *in press* studies should explore how these assistive travel technologies can be designed to be more emotionally intelligent and offer empathetic interactions.

RQ6. How can assistive travel technologies be designed to enhance emotional intelligence and empathetic interactions, thereby improving the travel planning and experience for tourists with mental disorders?

Supportive technologies, informed by advances in health informatics and telemedicine (Sapci & Sapci, 2019), can play a pivotal role in reducing the emotional burdens faced by caregivers of tourists with mental disorders. For example, wearable technologies, like those offered by CarePredict, can remotely monitor the well-being of the care recipient. Future research should investigate the needs of caregivers when managing tourists with different mental health conditions in various travel contexts (e.g., airports, hotels, tourist attractions). Additionally, it would be worthwhile for subsequent works to explore the development of supportive technologies that harness the connectivity and data analytics inherent in health informatics (Peng et al., 2020) to reduce caregivers' stress and enhance their ability to effectively manage travel-related challenges.

RQ7. How can supportive travel technologies be developed to meet caregivers' needs across various travel settings and what features should be incorporated to effectively reduce their stress and enable them to manage travel-related challenges for tourists with mental health conditions?

Crafting inclusive service design. Previous research suggests that designing an inclusive service environment can accommodate the needs of tourists with mental disorders (Chiscano, 2021; Connell & Page, 2019). This involves considering various servicescape elements such as lighting, colors, spatial layout, and sensory inputs to cater to them. Research in environmental psychology indicates that biophilic design (e.g., vegetable walls) can help alleviate stress and promote relaxation (Li et al., 2022). Prior studies in the marketing discipline have examined therapeutic servicescape and Hobson's choice servicescape for managing customer anxiety (Bujisic et al., 2017; Rosenbaum et al., 2020). However, there is a dearth of research on how tourism servicescape elements impact travel-related stress and the well-being of tourists with mental disorders. Answering this research question aids in the design of tourism environments within the Inclusive Tourism Management Model.

RQ8. How do specific elements of the servicescape influence the travel experiences of tourists with mental disorders?

Destination branding through inclusive design. While existing literature suggests that creating inclusive tourism positively influences destinations (Connell & Page, 2019; Page & Connell, 2024), limited research has examined how inclusivity and accessibility impact destination image and branding, which play a key role in destination selection and tourists' evaluations (Ruiz-Real et al., 2020). Prior studies indicate that various destination attributes, such as facilities, attractions, and safety and security, determine destination image (Hunter, 2016; Jiang et al., 2016). Accordingly, it would be fruitful for future research to integrate brand management theories from the marketing discipline (Keller, 2020) to investigate how attributes of inclusive design, such as ease of access to

mental health support and convenient navigation, enhance destination image and increase destination brand equity. To help tourism destinations develop more compelling branding strategies, research should also explore the factors that influence the effectiveness of destination branding for tourists with mental disorders. The relevant research findings will provide valuable insights into tourism environment design in the Inclusive Tourism Management Model.

RQ9. How do various attributes of inclusive design shape destination image and branding among tourists with mental disorders?

Developing refined market segmentation. Evidently, most studies on tourists with mental disorders (e.g., dementia, ASD) have emphasized their differences from neurotypical tourists, positioning them as a special ‘niche market’ that requires deliberate attention in tourism management (e.g., [Chiscano, 2021](#); [Conde et al., 2023](#); [Connell & Page, 2019](#); [Gordon et al., 2004](#); [Hamed, 2013](#); [Hu et al., 2024](#); [Sadlon et al., 2021](#)). However, it is worth noting that some individuals with mental disorders may not want special accommodations, fearing that such attention could potentially lead to discrimination, stigmatization, and even social exclusion ([Wen et al., 2023a,b](#)), which in turn could worsen their well-being. Previous research has made initial attempts to achieve inclusivity without segregation ([Connell et al., 2017](#); [Jepson et al., 2024](#); [Stewart et al., 2022](#)). Nevertheless, in-depth exploration and comprehensive research focusing on this issue is necessary. Inspired by the psychographic and behavioral factors in market segmentation from the marketing domain ([Tan et al., 2021](#)), future studies could delve into the cognitive, affective, and behavioral characteristics of individuals with mental disorders to develop a more nuanced approach to market segmentation, considering the type and stage of the mental disorder, self-identification with the patient role, and attitudes toward disclosing their mental health condition and receiving special care during travel. In line with the literature in ethics and sociology, it is important to understand whether and how special attention toward tourists with mental disorders in tourism management leads to stigmatization. To foster a more inclusive tourism environment, determining design principles that improve social acceptance and a sense of belonging for different segments within this tourist market is also critical.

RQ10. How do tourists with mental disorders differ in their cognitive, affective, and behavioral characteristics, and which inclusive design principles can improve social acceptance and a sense of belonging for different segments within this tourist market?

6.3. Governments and third parties

Devising and implementing inclusive tourism policies. Governments are instrumental in supporting tourists with mental disorders by developing and implementing policies that foster inclusive tourism environments ([Bonny-Noach & Sagiv-Alayoff, 2020](#); [Jepson et al., 2024](#); [Zhao et al., 2023](#)). As highlighted in the Inclusive Tourism Management Model, managing tourists with mental health conditions represents a multifaceted challenge that requires the involvement and coordination of various stakeholders, such as healthcare professionals, public health and social services institutions, tourism providers, and third parties. To nurture stakeholder cooperation and ensure continuous interventions in this model, future research should explore how government policies can enhance collaboration among these stakeholders to support inclusive tourism in different contexts (e.g., destinations, sports events, and hotels). By integrating findings from public administration and policy studies ([Wang et al., 2018](#)), an examination of the partnership dynamics between government agencies and various stakeholders can shed light on the formulation and enactment of policies that promote inclusive tourism practices.

RQ11. How can governments devise and implement policies and administrative measures for effective collaboration with various stakeholders to enhance inclusive tourism management?

Coordinating community-based support systems. Third-party entities, such as mental health advocates, social media influencers, and charitable organizations, can offer essential support to tourists with mental disorders by helping manage stress and enhancing their travel experience ([Chiscano, 2021](#); [Zhao et al., 2023](#)). Given the paucity of research on community-based support systems, a promising avenue for research lies in investigating how third-party entities can devise and deliver impactful support programs and in identifying factors that influence the effectiveness of such programs. These may include online mental health resources, community outreach initiatives, travel health consultations, and peer support networks. The literature in social work and philanthropy would provide useful lenses for such an investigation (e.g., [Hoang et al., 2019](#)). Insights gained would foster continuous interventions and support in the Inclusive Tourism Management Model. To enhance stakeholder collaboration and coordination in this model, an additional area of inquiry involves examining how third-party entities can collaborate with tourism providers and governments to effectively integrate these support mechanisms, thereby ensuring they are accessible to tourists with mental disorders at different stages of the tourism journey.

RQ12. How can third-party organizations develop and coordinate effective community-based support systems to enhance the travel experience for tourists with mental disorders across various stages of the tourism journey?

6.4. Research philosophy

Employing interdisciplinary and diverse methodological approaches. The existing body of research predominantly exhibits an exploratory nature and relies heavily on traditional qualitative methods to understand the tourists’ needs and motivations, as well as to identify interventions for managing their travel experiences ([Wang et al., 2020](#); [Zheng, Wen, et al., 2023](#)). Considering that research outcomes generated by qualitative approaches typically lack replicability and predictability, there is a need to enhance the research landscape by placing greater emphasis on quantitative investigations ([Dolnicar et al., 2024](#)). Additionally, it would be beneficial for future research to employ mixed-methods approaches, given their advantages in validation and corroboration ([Taheri & Okumus, 2024](#)). Echoing the developments in other domains such as psychology, sociology, marketing, and public health, this shift will allow researchers to identify patterns, trends, and associations, leading to a more comprehensive and objective understanding of the phenomena under investigation. Data collection and analytical techniques also assist with the individualized needs analysis, the improvement of collaborative networks among stakeholders, and the evaluation of the effectiveness of policies and programs, thereby enabling ongoing refinement of the overall Inclusive Tourism Management Model.

The methodological challenges in researching tourists with mental disorders are rooted in essential issues in research philosophy. As a fundamental aspect of academic research, research philosophy substantially influences the research design and research process ([Tribe et al., 2015](#)). We call for scholars to clearly articulate the ontological, epistemological, and ethical considerations when conducting research on this vulnerable population. Drawing on literature from public health, researchers’ convictions about the nature of mental disorders influence how they conduct investigations among tourists with such conditions. Researchers should also be conscious of their own biases and presumptions about mental disorders and assess how these subjectivities may affect their interpretation of findings.

In line with scholarly practice in public health, psychology, sociology, and medical research, tourism academics should adhere to ethical guidelines, such as informed consent, participant well-being, anonymity, and privacy, for protecting research participants and maintaining research integrity. Furthermore, as people with mental disorders are susceptible to coercion ([Beames & Onwumere, 2022](#)), researchers

should be mindful of the power dynamics between themselves and these tourists. It is worth noting that, due to their health conditions, capturing the genuine perceptions and feelings of tourists with mental disorders necessitates a deeper comprehension of their perspectives. This potentially challenges the traditional conceptions of objectivity in research and warrants further scholarly attention.

Considering the power of interdisciplinary research in generating comprehensive insights and paradigms that transcend subject boundaries to advance tourism research progress (Jiang et al., 2022), and given the breadth and complexity of phenomena related to tourists with mental disorders, we advocate for integrating clinical research designs from epidemiology and clinical medicine, such as randomized controlled trials and case-control studies, along with other innovative approaches from neuroscience and informatics, such as psychophysiological measures and big data analytics, in tourism research. Moreover, there is a need to bridge the gap between theoretical assumptions and empirical evidence regarding potential tourism interventions for individuals with mental disorders. To this end, collaborative studies involving clinical experiments and partnerships with travel medicine clinicians can contribute to the development of evidence-based interventions in this domain (Hu et al., 2024). In addition, further investigations will benefit from applying theoretical frameworks from other disciplines such as consumer psychology, organizational behavior, and management to explore research questions pertaining to tourists with mental disorders (de Souza Bispo, 2016; Mura & Wijesinghe, 2023).

RQ13. How can interdisciplinary and diverse methodological approaches be employed to develop an in-depth understanding of tourists with mental disorders and to create effective interventions and support mechanisms to enhance their tourism experiences and well-being?

7. Conclusion

Responding to recent academic calls in the tourism discipline (Wen, Zheng, Hu, et al., 2023), this research critically reviews 38 selected papers on tourists with mental disorders published between 2004 and 2024. The annual publication of papers in this field saw a sharp increase in 2023, indicating growing attention to mental health concerns post-pandemic. Our work reveals key insights from the existing literature across three primary stakeholder groups involved in managing tourism for individuals with mental disorders: tourists and caregivers, tourism providers, and governments and third parties. Specifically, we synthesize and discuss ten research themes that represent the current state of knowledge. These include the nature of mental disorders (developmental vs. degenerative), impacts of traveling (enrichment vs. stress), constraints to travel decision-making, and the role of caregivers in the tourists and caregivers group; adopting inclusive design principles, leveraging assistive travel technologies, utilizing non-pharmacological and therapeutic experiences, and staff training and awareness building for tourism providers; as well as policy and governance for inclusive tourism and community-based support systems for governments and third parties. Based on a critical synthesis of the literature and insights from related areas, we establish an Inclusive Tourism Management Model that incorporates the perspectives of various key stakeholders as a holistic framework to ensure seamless, accessible, and supportive tourism experiences. Guided by this model, we identify gaps within the existing research landscape and, in response, provide a roadmap for future academic works that highlights 13 research questions.

7.1. Key implications

This research stands as a pioneering attempt to synthesize the fragmented literature on tourists with mental disorders and to propose a future research agenda that paves the way for future scholarly works in

the focal field. Through critical analysis using a stakeholder-centric approach, it clearly maps out the entirety and diversity of existing knowledge by identifying and discussing core themes in the literature. As such, the research provides an insightful and comprehensive understanding of the present state of scholarly discourse in this field. Upon evaluating the existing literature, the research pinpoints specific directions where further investigation is needed, underscoring opportunities for theoretical, practical, and methodological advancements in the field. The research questions posed here lay the groundwork for future research by addressing the identified gaps in this underdeveloped area (Wen, Zheng, Hu, et al., 2023; Zheng, Wen, et al., 2023), leading to the generation of new knowledge in the management of tourism for tourists with mental disorders and thus pushing the boundaries of tourism scholarship.

Meanwhile, this research offers valuable insights for tourism industry practitioners and policymakers by highlighting the importance of understanding tourists with mental disorders and the complexities involved in catering to this market. These insights can guide managerial decisions related to destination development, service design and innovation, and tourist engagement. The Inclusive Tourism Management Model serves as a practical framework for various stakeholders, especially tourism providers, governments, and third-party entities, to identify critical areas for creating enriching and supportive tourism experiences for tourists with mental disorders. It also outlines their roles and recommends strategies for navigating key challenges in stakeholder collaboration and coordination, individualized needs analysis, inclusive tourism environment design, and continuous interventions and support. This lays the foundation for tourism industry practitioners and policymakers to develop effective measures to overcome these challenges, thereby improving the overall travel experience and well-being of these individuals.

7.2. Research limitations

There are some limitations to be noted in the study. Firstly, we included only peer-reviewed journal articles in English from the three most reputed academic databases (Web of Science, Business Source Complete, and Scopus) in the critical review. To broaden the scope, we suggest that further research consider articles in other languages and include supplementary literature sources such as books, conference proceedings, and dissertations. To account for indexing variations and minimize selection bias, future studies should expand the range of academic databases. Secondly, we utilized a thematic-focused strategy to analyze the existing literature on tourists with mental disorders. Given the challenges of collecting empirical data from this population (Zheng, Wen, et al., 2023), future literature reviews can adopt a method-centric lens, aiming to reveal potential advancements in integrating interdisciplinary research paradigms in empirical research about tourists with mental disorders.

CRediT authorship contribution statement

Yangyang Jiang: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Project administration, Methodology, Investigation, Funding acquisition, Conceptualization. **Cenhua Lyu:** Writing – original draft, Visualization, Methodology, Investigation, Data curation, Conceptualization. **M.S. Balaji:** Writing – review & editing, Visualization, Validation, Investigation.

Impact statement

In response to the global increase in mental disorders, this work synthesizes existing literature on tourists with such conditions. It comprehensively maps the current knowledge landscape and proposes a future research agenda to guide theoretical, practical, and methodological advancements. The findings enlighten industry practitioners and

policymakers about the unique needs of these tourists and the complexities involved in catering to this market. Derived from the critical review of literature, the Inclusive Tourism Management Model offers a holistic and practical framework for tourism providers, governments, and third-party entities to identify key areas for creating enriching tourism experiences for these tourists. These areas encompass stakeholder collaboration and coordination, individualized needs analysis, inclusive tourism environment design, and continuous interventions and support. This model clarifies stakeholder roles and recommends strategies to tackle the associated challenges, setting a foundation for industry practitioners and policymakers to develop effective measures that improve the well-being of these individuals.

Declaration of interest

None.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.tourman.2024.105083>.

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