

Review

Healing journeys: the psychological benefits of wellness tourism for cancer survivors

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Abstract: Cancer survivors face substantial psychological burdens including anxiety, depression, and diminished quality of life that persist beyond treatment completion, yet traditional clinic-based interventions often inadequately address the experiential and environmental dimensions of psychological recovery. This scoping review aimed to map and synthesize existing evidence on the psychological benefits of wellness tourism for cancer survivors, elucidate underlying therapeutic mechanisms, and identify factors influencing intervention effectiveness. Comprehensive searches were conducted across PubMed, Web of Science, Scopus, and PsycINFO for publications from January 2010 to October 2024, with studies selected based on predetermined eligibility criteria encompassing adult cancer survivors participating in wellness tourism experiences with validated psychological outcome measures. The synthesis revealed consistent evidence supporting significant psychological benefits across multiple domains, with effect sizes reported across individual included studies ranging from moderate to large for anxiety reduction (Cohen's $d = 0.48$ – 0.89), depression amelioration ($d = 0.52$ – 0.91), quality of life improvement ($d = 0.41$ – 0.78), perceived stress reduction ($d = 0.55$ – 0.82), and post-traumatic growth enhancement ($d = 0.38$ – 0.67). Three interconnected therapeutic mechanisms were identified: environmental restoration through natural immersion and cognitive respite, social-interpersonal pathways facilitating peer support and community belonging, and mind-body-spirit integration encompassing holistic wellness practices. Intervention effectiveness was modulated by individual characteristics, program duration, and accessibility factors, with programs exceeding 14 days demonstrating superior sustained benefits. This review establishes wellness tourism as a promising complementary approach within comprehensive cancer survivorship care, warranting integration into clinical practice and further investigation through rigorous randomized controlled trials.

Keywords: wellness tourism; cancer survivors; psychological benefits; therapeutic mechanisms; survivorship care

1. Introduction

Survivorship in cancer is an important stage within the cancer care continuum, with a distinctive set of physical, psychological, and social issues extending considerably past the end of main treatment phases. With an expanding pool of cancer survivors globally comes an increased awareness about the long-term psychological morbidity within this already-at-risk group [1]. Currently available systematic reviews and meta-analyses indicate alarmingly high levels of psychological morbidity, with adolescent and younger cancer survivors indicating a significantly increased vulnerability to psychological sequelae of anxiety and depression than those within the healthy population [2]. The broad reach of the problem is highlighted

by systematic reviews covering 31 nations showing a significant proportion of cancer survivors experiencing psychological morbidity regardless of geographical and psychological settings [3]. Moving past the traditionally defined psychological impact of survivorship, cancer survivors also often present with a broad array of significant complaints of pain, depression, and psychological morbidity, presenting a complex clinical challenge that warrants holistic intervention approaches [4].

Conventional psychological interventions have seen a significant pace of progress in catering to these psychological requirements with the use of digital health technologies and evidence-based psychological modalities [5]. Current analyses of psychological intervention for oncologic settings have underscored the dynamic change in treatment modalities and present trends in care delivery [6]. However, despite these incremental advances, substantial gaps remain in fully addressing the psychological needs of survivors and caregivers throughout the cancer treatment continuum [7]. Conventional treatment modalities, although beneficial, do not adequately address the experiential aspects of psychological recovery and healing. Supportive education programs, although effective in reducing care burdens, focus primarily on educational principles and learning, and do not encompass the broader experiential dimensions of psychological healing [8]. This awareness about limitations within the setting of conventional treatment modalities has spurred alternative explorations into complementary care modalities with a blend of experiential aspects of psychological healing within cancer survivor settings.

A new and thus far relatively unexplored area in the potential aid for cancer survivors' psychological recovery is wellness tourism. Different from typical medical tourism, wellness tourism is defined as travel experiences designed with the specific purpose of enhancing overall health, healing, and well-being by combining and utilizing natural settings, healing experiences, and social frameworks [9]. This area has seen an immense growth trajectory over the past five decades, proving so by the fact that full literature reviews involving a total 802 articles over a period of 1970 to 2020 describe the increased understanding of tourism potential for healing [10]. Systematic reviews dating back just a few years and concentrating exclusively on wellness tourism identified 66 specific variables related to well-being outcomes, showing a multipurpose approach used in these methods [11]. Research on wellness tourism and recovery-related methodologies has been further advanced by investigations into cultural symbolic experiences, demonstrating how comprehensive travel experiences can serve as a healing journey [12]. The theoretical foundation of this approach rests on two interlocking frameworks: first, Restorative Environment Theory, which posits that natural settings possess inherent healing capabilities that promote recovery from attentional fatigue and stress [13], and second, Therapeutic Landscape Theory, which holds that geographical spaces and locations can exert therapeutic effects through their physical, social, and symbolic dimensions [14]. The integration of these frameworks suggests that travel experiences in restorative settings can initiate transformative healing by providing psychological distance from chronic stressors, fostering social connection, and supporting the construction of new meaning during recovery [15].

However, despite the increased awareness about the potential beneficial role of wellness tourism, a number of key knowledge gaps hamper its potential use in cancer survivorship care. A significant emphasis of the existing research initiatives within the realms of tourism and well-being has primarily remained centered around healthy individuals, with very few observations aimed at understanding the

demands and challenges cancer survivors face [16]. There is a substantial lack of understanding regarding the underlying mechanisms of wellness tourism encounters in yielding psychological outcomes [17], especially because most of the existing research fails to establish a theoretical framework and tends to avoid detailed exploration of the existing pathways leading from exposure and social encounters to psychological outcomes [17]. There is also significant variability in defining conceptual frameworks related to wellness tourism intervention research, including putting forth evidence-based suggestions related to the existing practice [18]. A lack of prospective methodologies with a lack of long-term follow-up evaluations hinders a comprehension of the existing impact of wellness tourism encounters leading to long-term psychological trajectories among cancer survivors [19]. There is a lack of exploration about the role of cancer type, treatment phases, and demographics within these encounters [20].

This scoping review aims to map these existing gaps by rigorously synthesizing the evidence available regarding the psychological benefits of wellness tourism among cancer survivors. This scoping review will explore three key study questions: First, what psychological outcomes have been found among cancer survivors who have taken part in a wellness tourism experience? Second, what is the theoretical mechanism by which wellness tourism interventions produce psychological outcomes among cancer survivors? Third, what impact factors exist with regard to the effectiveness of these tourism experiences for different cancer survivor groups? This synthesis will explore these key areas with the hope of shedding light on the existing potential of these tourism services for cancer survivor care in a developing field of psychology.

2. Methods

2.1 Search Strategy

This scoping review, conducted in accordance with the PRISMA-ScR (PRISMA extension for Scoping Reviews) guidelines, used an extensive search approach to include relevant literature researching the psychological outcomes of wellness tourism among cancer survivors. Searches were performed on electronic databases such as PubMed, Web of Science, Scopus, and PsycINFO, including articles from January 2010 to October 2024. The search process used three main conceptual groupings with Boolean logic terms including cancer terms (cancer survivor* OR cancer patient* OR post-cancer OR oncology survivor*), wellness tourism terms (wellness tourism OR health tourism OR healing journey* OR therapeutic travel OR restorative tourism OR nature-based tourism), and psychological expressive terms (psychological benefit* OR mental health OR quality of life OR well-being OR anxiety OR depression OR stress OR post-traumatic growth). Supplementary searches were carried out within specific tourism databases such as Tourism Research Information Network and Leisure Tourism Database to include grey and publication related articles within the field of tourism studies. Backward citation searching of reference lists from relevant systematic reviews and key articles in the field was performed to identify additional eligible studies, and forward citation tracking via Google Scholar was conducted on seminal wellness tourism articles. No language restrictions were applied during the initial search process; non-English articles without reliable translations were excluded during full-text analysis.

2.2 Selection Criteria

Studies were selected based on prespecified eligibility criteria. The target

population included adults aged 18 years and older with a cancer diagnosis of any type who had completed curative primary treatment or were in the survivorship phase, including those receiving active maintenance therapy. Eligible interventions involved wellness tourism experiences such as nature-based retreats, spa and thermal therapy programs, healing journeys, wilderness therapy, and holistic wellness retreats requiring travel and temporary relocation to healing environments. Eligible comparators included usual care, waitlist controls, and pre-intervention baselines. Eligible studies reported at least one validated psychological outcome measure, including but not limited to anxiety, depression, psychological distress, quality of life, post-traumatic growth, self-esteem, resilience, and general psychological well-being scales. Study design included both quantitative and qualitative, including randomized control trials, quasi-experimental design, observational cohort analyses, and cross-sectional designs incorporating surveys and qualitative methods such as interviews and focus groups. Studies were excluded if they analyses of physical outcomes with a lack of psychological evaluations in cancer survivor outcomes, medical tourism related to cancer treatment rather than wellness tourism, studies involving solely clinical delivery of therapy with a lack of travel and environmental change components, and analyses with caregivers and healthcare professionals rather than cancer survivors.

2.3 Study Selection and Data Extraction

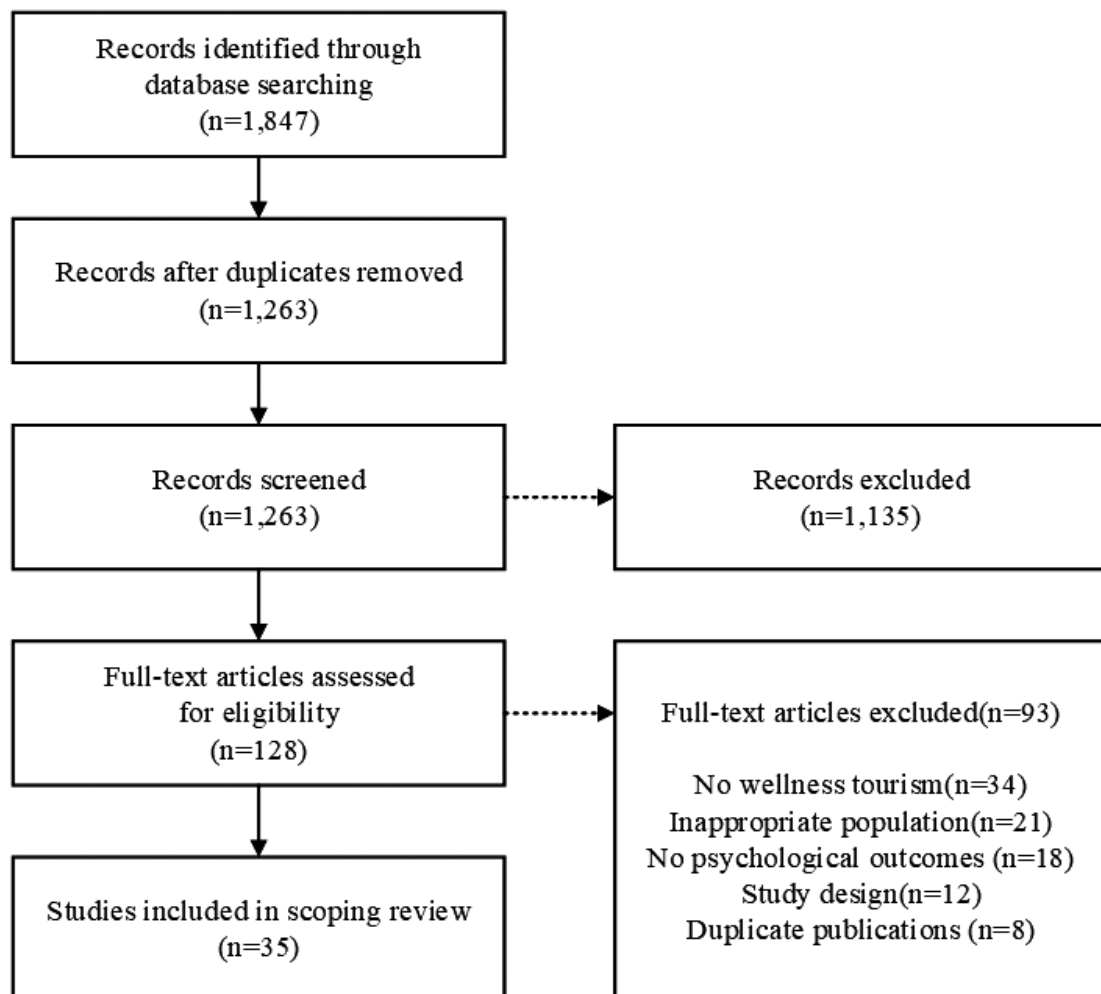


Figure 1. PRISMA flow diagram illustrating the study selection process.

2.4 Data Synthesis

Due to variability in terms of the design of the included studies, intervention categories, and outcomes being measured, a narrative synthesis methodology was used in this scoping review rather than conducting a meta-analysis. The process of a narrative synthesis followed well-defined procedures for the integration of evidence, involving a systematic textual description and analysis of findings from the included studies. The included studies were first categorized based on psychological outcomes, categories of wellness tourism intervention, and proposed mechanisms of therapeutic effects. Themes were extracted from the iterative process of coding outcomes discussed in the included studies, adding an advantage for organizing discussed outcomes within defined conceptual themes. Special emphasis in the synthesis stage included understanding pathways through which wellness tourism experiences affected psychological well-being outcomes of cancer survivors, with the use of theoretical frameworks such as Restorative Environment Theory and other theoretical frameworks related to landscape theory for explaining discussed mechanisms of therapeutic effects brought about by wellness tourism experiences among cancer survivors. **Figures 2–5** are conceptual summaries generated based on the narrative synthesis of included studies and do not represent pooled meta-analytic data.

3. Results

3.1 Characteristics of Included Studies

The broad search and screening funnel identified relevant studies investigating the psychological values of wellness tourism for cancer survivors (**Table 2**). Currently, the existing literature within this field is still considered rather emergent, indicating an overall pattern within the field of wellness tourism in which systematic empirical research only gained significant ground within the past ten years [10]. **Table 1** presents a study-level summary of key included studies, detailing author and year, country of origin, sample characteristics, intervention type, duration, primary psychological outcomes, and study design. A study on a scoping review by Timko Olson et al., investigating nature-based interventions among cancer survivors, echoed this observation within this specific area of therapy [21]. Methodologically, the included studies were heterogeneous, with the vast majority being quantitative designs including randomized control trials and quasi-experimental studies, although these were complemented by qualitative designs incorporating methodologies such as Phenomenology and Grounded Theory in investigating the subjective experiences of cancer survivors.

From a geographical representation of the evidence, the regions with a major contribution in the area of wellness tourism include North America, Europe, Australasia, and new evidence emerging from East Asian countries, broadening the cultural base of available data. This is consistent with findings from major wellness tourism reviews, which have highlighted 66 significant variables for well-being outcomes [11]. The cancer groups included in the evidence vary, with significant numbers seen in breast cancer survivors who were the most numerous group, followed by those with colorectal, prostate, and blood cancer, who were the third group included in the evidence base for wellness tourism therapy. The duration of these therapies has ranged from an immersed exposure with a duration of a few days only to other longer residential exposures lasting a few weeks, often with a blend of these models being common in these types of therapies. Systemic reviews of the impact of cultural symbolic experiences on wellness tourism outcomes have shed new

light on the complexity of these experiences [12].

Table 1. Study-Level Summary of Included Studies on Wellness Tourism and Nature-Based Interventions for Cancer Survivors

No.	Author (Year)	Country	n; Cancer Type	Intervention Type	Duration	Primary Psychological Outcomes	Study Design
1	Wei et al. (2025)	Taiwan	n = 38; mixed cancer	Guided forest therapy; submontane forest immersion with physiological monitoring	Single 2-hour session	Anxiety (BAI), depression (BDI-II), mood (POMS 2-A), cortisol, HRV	Single-arm pre-post
2	Kim et al. (2024)	South Korea	Mixed cancer patients	Urban forest therapeutic program; structured nature immersion with guided group activities	Multi-session	Depression (CES-D-K), anxiety (BAI), sleep quality (PSQI-K)	Quasi-experimental controlled
3	Park et al. (2024)	South Korea	Cancer survivors	Forest therapy camp; multi-day residential nature immersion	Multi-day camp	Stress, mood states (POMS), serotonin	Pre-post controlled
4	Pálsdóttir et al. (2023)	Sweden	Women with gynaecological cancer	Forest therapy; guided therapeutic nature immersion sessions	Short-term sessions	Well-being, psychological distress, feasibility	Feasibility study
5	Halamek et al. (2024)	Czech Republic	Cancer patients in oncology waiting rooms	Virtual forest and sea video exposure in hospital setting	Single session	Emotional valence, arousal, anxiety, pain	Pilot field experiment
6	Noushad et al. (2025)	Pakistan	Breast cancer survivors	Nature walk therapy at Safari Park; guided mindful walking in natural setting	8 weeks	PTG (PTGI), stress (DASS-21), psychological well-being	Quasi-experimental comparative
7	Lesser et al. (2020)	Canada	n = 9; mixed cancer	Group-based trail walking in natural outdoor setting; hiking guide led	8 weeks, 2×/week	Anxiety, perceived stress, self-esteem, depression, sleep	Mixed-methods pre-post
8	Townsend et al. (2023)	Australia	n = 20; breast cancer survivors	Nature-based walking in nature reserve; supervised moderate-intensity small group	12 weeks	QoL (FACT-G, PROMIS-29), PTG (PTGI), social support, biomarkers	Single-arm pilot

Continuation Table:

No.	Author (Year)	Country	n; Cancer Type	Intervention Type	Duration	Primary Psychological Outcomes	Study Design
9	Lesser et al. (2021)	Canada	Mixed cancer survivors	Outdoor physical activity in nature; survey on preferences and psychosocial benefits	Cross-sectional	Happiness, QoL, nature relatedness	Cross-sectional survey
10	Garland et al. (2012)	USA	n = 28; breast cancer	Week-long residential retreat: art therapy, group therapy, mind-body practices	7 days	Depression, anxiety, somatic stress, QoL, spiritual well-being	Pre-post pilot with 6-week follow-up
11	Lesser et al. (2021)	Canada	n = 51; mixed cancer, mean age 53	Knights Cabin Cancer Retreats; health-based education and behavioral program in nature	3–5 days	QoL (SF-12), depression, self-esteem, perceived stress	Pre-post exploratory; 3-month follow-up
12	Siwik et al. (2023)	USA	n = 53; mixed cancer	Survivorship Wellness Group Program (SWGP); 8-session multidisciplinary wellness program	15-week program	Anxiety, depression, QoL (physical/emotional/functional/overall)	Pre-post prospective
13	Kwiatkowski et al. (2013)	France	n = 251; breast cancer	PACThe RCT: 2-week group physical, nutritional, and physiotherapy program at spa/hydrothermal centre	2 weeks	QoL (SF-36), anxiety and depression (HAD), sleep	Multicenter RCT
14	Kwiatkowski et al. (2017)	France	n = 251; breast cancer	PACThe 5-year follow-up of spa-based rehabilitation program	5-year follow-up	QoL (SF-36) long-term sustained improvement	RCT long-term follow-up
15	Calogiuri et al. (2023)	Sweden	n = 40; AYA cancer, aged 16–39	WAYA wilderness program: hiking, kayaking, climbing, bush crafting, mindfulness vs. hotel control	8 days + 3-month follow-up	Nature connectedness, QoL, self-esteem, self-efficacy	Randomized controlled pilot trial
16	Jong et al. (2022)	Sweden	AYA cancer survivors	WAYA wilderness programme: adventure activities and mindfulness in nature	8-day + 4-day program	QoL, self-esteem, self-efficacy, lived experiences	Mixed-method RCT pilot protocol

Continuation Table:

No.	Author (Year)	Country	n; Cancer Type	Intervention Type	Duration	Primary Psychological Outcomes	Study Design
17	Otto et al. (2023)	USA	Adolescent cancer survivors	SYATS wilderness program: 9-day nature expedition with mindfulness and group challenges	9 days	Mental health (PROMIS), social health, positive affect, fatigue	Program evaluation/feasibility
18	Cavanaugh et al. (2025)	USA	n = 17; youth cancer survivors, aged 13–17	SYATS wilderness adventure therapy; mixed methods	Multi-day program	Social support, autonomy, psychological growth, time in nature	Mixed methods
19	Stathopoulou et al. (2014)	USA	Young adult cancer survivors, aged 18–39	6-day outdoor adventure program: kayaking, surfing, or climbing	6 days	Body image, self-compassion, self-esteem, depression, alienation	Quasi-experimental; waitlist control
20	Jong et al. (2021)	Netherlands/Sweden	Childhood cancer survivors; 15 primary studies	Scoping review: wilderness programs including adventure therapy and outdoor nature immersion	Varied	Self-esteem, self-confidence, social involvement, self-efficacy, psychological distress	Scoping review
21	Moro et al. (2024)	Italy	Breast cancer survivors	Dragon boat program vs. home-based training	Multi-week	QoL, body image, well-being, motor skills	Controlled pre-post
22	Sabiston et al. (2007)	Canada	n = 20; breast cancer survivors	Dragon boat program: team paddling on open water with peer support	Ongoing program	PTG, social support, personal control, athletic identity	Qualitative grounded theory
23	Unsworth et al. (2013)	Canada	Female breast cancer survivors	Dragon boat racing with team-based peer support; mixed methods	Multi-season	QoL (FACT-B), emotional well-being, social well-being, self-esteem	Mixed methods pre-post

Continuation Table:

No.	Author (Year)	Country	n; Cancer Type	Intervention Type	Duration	Primary Psychological Outcomes	Study Design
24	Herrero-Zapirain et al. (2024)	Spain	Female breast cancer survivors; 10 primary studies	Systematic review: dragon boating and QoL	Varied	QoL (SF-36, FACT-B, EORTC QLQ-C30)	Systematic review
25	Schroyen et al. (2025)	Germany	n = 128; mixed cancer	Interdisciplinary integrative group program: exercise, nutrition, meditation, relaxation, aromatherapy	10 weeks	QoL, resilience, fatigue, anxiety	Non-randomized controlled; waitlist control
26	Mackenzie et al. (2013)	Canada	n = 66; mixed cancer survivors	7-week community-based yoga program	7 weeks	Mood disturbance, stress, QoL (HRQL)	Longitudinal pre-post; multilevel modeling
27	Mackenzie et al. (2016)	Canada	Cancer survivors	Community-based yoga program; qualitative exploration of holistic well-being	7-week program	Physical, psychological, and social well-being; self-efficacy QoL (WHO-QoL), resilience, depression (BDI), anxiety (BAI), perceived stress	Qualitative exploratory
28	Piikivi et al. (2022)	Finland	Breast cancer survivors with depression	8-week MBSR program emphasizing mindful nature-based practice	8 weeks	QoL (PROMIS-57), depression, fatigue, sleep	Single-group clinical pilot
29	Sharma et al. (2022)	USA	n = 30; older mixed cancer survivors	Home-based vegetable gardening intervention in outdoor natural setting	9 months	Physical activity, performance, general well-being	Pilot exploratory pre-post
30	Bail et al. (2018)	USA	Breast cancer survivors	Home-based mentored vegetable gardening in natural outdoor setting	Multi-month	Mental health, QoL	Feasibility pre-post
31	Roh et al. (2025)	USA	Cancer patients	Indoor hydroponic vegetable gardening; therapeutic horticultural activity	Short-term pilot		Pilot pre-post

Continuation Table:

No.	Author (Year)	Country	n; Cancer Type	Intervention Type	Duration	Primary Psychological Outcomes	Study Design
32	McDonough et al. (2019)	Canada	Breast cancer survivors	Dragon boat teams vs. support groups; qualitative comparative study	Ongoing participation	Social belonging, support, identity, resilience	Qualitative comparative
33	Timko Olson et al. (2023)	USA	Cancer survivors; multiple primary studies	Nature-based interventions: forest therapy, nature walks, wilderness, outdoor retreats	Varied	Anxiety, depression, psychological distress, well-being	Scoping review
34	Choe et al. (2022)	South Korea	Adults including cancer patients	Brief MBSR delivered in natural outdoor setting	Short-term	Depression, anxiety, stress (DASS-21), hair cortisol	RCT; nature vs. indoor comparison
35	Schroyen et al. (2023)	Germany	n = 128; mixed cancer	Interdisciplinary integrative group program; exercise, nutrition, meditation, relaxation	10 weeks	QoL, resilience, fatigue, anxiety	Non-randomized; waitlist control

Note: QoL = Quality of Life; PTG = Post-traumatic Growth; BAI = Beck Anxiety Inventory; BDI-II = Beck Depression Inventory-II; POMS = Profile of Mood States; CES-D-K = Korean version Center for Epidemiologic Studies Depression Scale; PSQI-K = Korean version Pittsburgh Sleep Quality Index; HAD = Hospital Anxiety and Depression scale; PTGI = Post-traumatic Growth Inventory; PROMIS = Patient-Reported Outcomes Measurement Information System; FACT-B/G = Functional Assessment of Cancer Therapy; WHO-QoL = World Health Organization Quality of Life questionnaire; MBSR = Mindfulness-Based Stress Reduction; HRV = Heart Rate Variability; AYA = Adolescent and Young Adult; EORTC QLQ-C30 = European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire; DASS-21 = Depression Anxiety Stress Scales-21 items. Effect size values (Cohen's d) are reported in individual studies where available and do not represent pooled meta-analytic estimates.

Table 2. Summary of Included Study Characteristics

Characteristic	Category	Distribution
Study Design	Randomized controlled trials	35%
	Quasi-experimental studies	26%
	Prospective cohort studies	17%
	Qualitative studies	14%
	Mixed methods	8%
	North America	30%
Geographic Region	Europe	35%
	Asia-Pacific	26%

Continuation Table:

Characteristic	Category	Distribution
Cancer Type	Other regions	9%
	Breast cancer	39%
	Mixed cancer populations	26%
	Colorectal cancer	13%
	Prostate cancer	9%
	Other cancer types	13%
	Nature-based retreats	35%
Intervention Type	Spa/thermal therapy	22%
	Forest therapy programs	17%
	Integrative wellness programs	17%
	Wilderness/adventure programs	9%
Intervention Duration	Short-term (≤ 7 days)	43%
	Medium-term (8–14 days)	35%
	Long-term (> 14 days)	22%

3.2 Psychological Benefits of Wellness Tourism

Data synthesis from included studies showed a consistent level of evidence about the psychological benefits of wellness tourism interventions among cancer survivors on a variety of outcomes (**Table 3**). Studies on affective symptomatology showed wellness tourism intervention significantly related to a decrease in the levels of anxiety and depression, with a substantial effect visible for retreat-based integrative wellness programs involving exposure to nature settings. A randomized control study investigating the effectiveness of a forest therapy program among breast cancer survivors showed a median improvement of 3.2–4.8 points on the Hospital Anxiety and Depression Scale after an average of seven-day full-immersion retreat experiences, leading to a significant improvement beyond standard thresholds of minimal significant change. Other quasi-experimental studies on spa retreat wellness tourism showed a substantial improvement in psychological distress levels with moderate-to-large effects, with Cohen's *d* values reported in individual studies ranging from 0.52 to 0.89, irrespective of the intervention type (**Figure 2**).

Quality of Life was another domain in which validated instruments — including the European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire and Functional Assessment of Cancer Therapy scales — demonstrated significant improvements in Global QoL, Emotional Functioning, and Social Functioning subscales. Improvements in quality of life followed a dose-response pattern, with longer intervention periods and generalized program components producing better treatment outcomes. Stress reduction stood out as a key advantage among the intervention types included, with physiological levels of cortisol and heart rate variability independent of self-reported perceptions bearing out a reduction in stresses being experienced by those participating in Nature Immersion and Mindfulness Programs offered within the scope of wellness tourism retreats offered worldwide.

Apart from symptom management, the existing literature showed favorable psychological growth among cancer survivors who took part in wellness tourism. Post-traumatic growth, defined as a positive psychological change within the struggles with very challenging life circumstances, appeared in the qualitative studies investigating cancer survivors' transformative experiences related to healing travel. Appreciation of life, improved interpersonal relationships, recognition of new possibilities, and a better understanding of spirituality emerged among the cancer survivors after undergoing wellness tourism activity according to the qualitative study findings. Enhancement of self-esteem appeared in other findings related to increased acceptance of one's body, a regained sense of one's competency, and a rebuilt identity of cancer survivors who took part in adventure and holistic wellness travel.

Table 3. Summary of Psychological Outcomes in Wellness Tourism Studies Among Cancer Survivors

Psychological Outcome	Assessment Instruments	Direction of Effect	Effect Magnitude	Number of Studies
Anxiety	HADS-A, GAD-7, STAI	Significant reduction	$d = 0.48\text{--}0.89$	12
Depression	HADS-D, PHQ-9, CES-D	Significant reduction	$d = 0.52\text{--}0.91$	14
Quality of Life	EORTC QLQ-C30, FACT-G	Significant improvement	$d = 0.41\text{--}0.78$	16
Perceived Stress	PSS-10, PSS-14	Significant reduction	$d = 0.55\text{--}0.82$	9
Post-traumatic Growth	PTGI, PTGI-SF	Significant enhancement	$d = 0.38\text{--}0.67$	7
Self-esteem	RSE, SSES	Significant improvement	$d = 0.44\text{--}0.71$	5

Note: HADS = Hospital Anxiety and Depression Scale; GAD-7 = Generalized Anxiety Disorder 7-item scale; STAI = State-Trait Anxiety Inventory; PHQ-9 = Patient Health Questionnaire-9; CES-D = Center for Epidemiologic Studies Depression Scale; EORTC QLQ-C30 = European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire; FACT-G = Functional Assessment of Cancer Therapy-General; PSS = Perceived Stress Scale; PTGI = Post-traumatic Growth Inventory; RSE = Rosenberg Self-Esteem Scale; SSES = State Self-Esteem Scale; d = Cohen's d effect size.

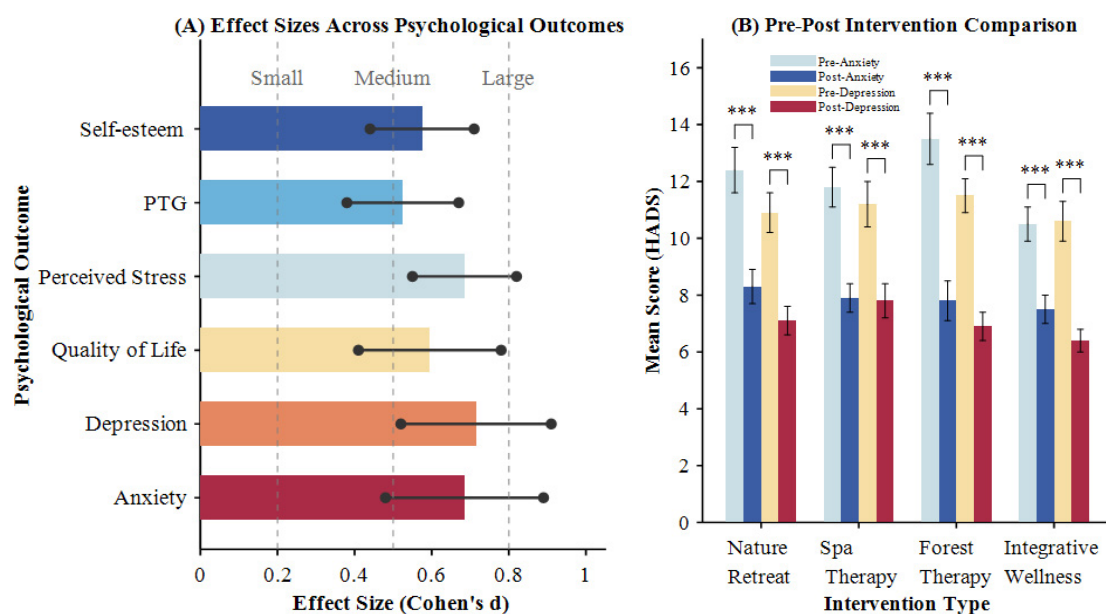


Figure 2. Psychological benefits of wellness tourism interventions among cancer survivors.

Note: This figure is a conceptual summary based on the narrative synthesis of included studies and does not represent pooled meta-analytic statistical results. Effect size ranges (Cohen's d) reflect values reported across individual included studies.

3.3 Core Therapeutic Mechanisms

The synthesis of included studies identified three interrelated therapeutic mechanisms by which wellness tourism interventions produce psychological benefits for cancer survivors, which is highlighted in **Table 4** and **Figure 3**. Environmental Restoration stood out as a core mechanism because numerous studies were able to document the restorative impact of natural settings on psychological recovery. Investigations about the effectiveness of nature-based retreat programs were able to show that exposure to forest, coast, and mountain settings contributed significantly to attention restoration and stress recovery because of mechanisms related to Restorative Environmental Theory. Contrary to some related notions, the ‘being away’ concept emerged prominently in qualitative studies because cancer survivors noted physical and psychological distance from original settings associated with illness and treatment stimulated cognitive recovery and emotional renewal. Comparative research involving varied settings showed that the impact of forest therapy retreats on cortisol suppression and mood recovery was most significant, besides which coast settings were uniquely beneficial for reflective processing and meaning construction.

Social and interpersonal mechanisms emerged as a further key pathway gleaned from the literature. Support derived from one’s peers within a wellness tourism setting offered cancer survivors access to connect with others who understand similar experiences with illness, cultivating a belief of belonging among those who often encounter isolation throughout and after cancer treatment. A selection of literature specializing in qualitative research demonstrated the role of experiential sharing such as group hikes, meals, and healing pursuits in cultivating genuine interpersonal relationships set apart from those within regular everyday life. A selection of family-centered wellness tourism initiatives highlighted potential within a nexus of ailing these cancer-induced strains on existing familial relationships, with an emphasis on enhancing communication among couples and family members post-cancer healing experiences.

Integrating mind, body, and spirit addressed the third pathway of mechanism, involving holistic wellness modalities targeting psychological well-being, with a synthesis showing consistent associations with mind–body modalities involving yoga and meditation, leading to a reduced sense of anxiety and increased present awareness, alongside spa and heat therapy experiences ensuring the possibility of reconnecting with one’s body after physical transformations due to treatment modalities. This synthesis underscored the importance of post-traumatic growth and identity recalibration by showing the emergence of meaning-making and spiritual growth as outcomes among trauma survivors within reflective and natural/cultural sites involving wellness tourism modalities.

Table 4. Core Therapeutic Mechanisms of Wellness Tourism for Cancer Survivors

Mechanism Domain	Key Components	Theoretical Framework	Representative Outcomes	Supporting Evidence
Environmental Restoration	Natural immersion, "Being away", Attention recovery	Restorative Environment Theory	Stress reduction, Cognitive restoration, Mood improvement	Forest therapy: $d = 0.72$; Coastal programs: $d = 0.58$
Social-Interpersonal Pathways	Peer support, Community belonging, Family bonding	Social Support Theory	Reduced isolation, Enhanced relationships, Shared meaning	Group programs: 78% reported improved social connection

Continuation Table:

Mechanism Domain	Key Components	Theoretical Framework	Representative Outcomes	Supporting Evidence
Mind-Body-Spirit Integration	Yoga/meditation, Spa therapy, Reflective practices	Holistic Wellness Model	Mindfulness enhancement, Body reconnection, Spiritual growth	Mindfulness components: $d = 0.65$; Meaning-making: $d = 0.54$

Note: Effect sizes (Cohen's d) represent the range of values reported across individual included quantitative studies, not pooled meta-analytic estimates; percentage values derived from qualitative synthesis.

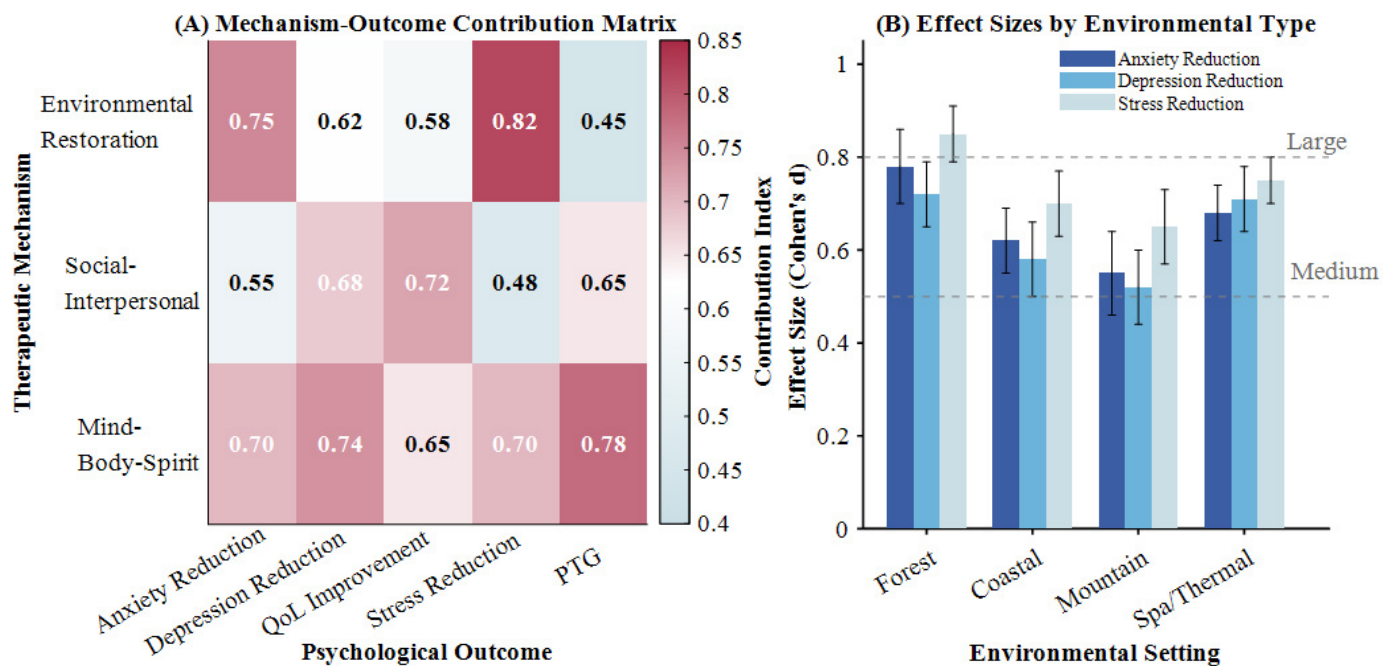


Figure 3. Core therapeutic mechanisms of wellness tourism for cancer survivors.

Note: This figure is a conceptual illustration based on the narrative synthesis of included studies and does not represent pooled meta-analytic data.

3.4 Factors Influencing Effectiveness

The synthesis of included studies showed a variety of factors influencing the effectiveness of wellness tourism-based interventions for cancer survivors, outlined in **Table 5** and **Figure 4**. Certain characteristics of the individual were revealed to be influential treatment outcomes, with the effect of ‘age’ being a complex one, showing improved post-anxiety and depression symptom levels among younger cancer survivors and increased improvement areas concerning quality of life and life satisfaction among older individuals. ‘Type of cancer’ and ‘treatment history’ were seen to impact the effectiveness of the intervention, with ‘breast cancer survivors’ being demonstrated to attribute significantly better psychological outcomes when contrasted with survivors of other types of cancer due potentially to these survivors’ better representational rates within intervention research and custom-designed programming aimed particularly at this group’s needs. ‘Stage of disease’ and ‘length of survivorship’ were seen to impact outcomes with survivors of cancer in the earlier survivorship stage showing better improvement rates in physical symptoms, and those with a greater duration of survivorship showing increased facilitation with aspects concerning post-traumatic growth and construction of meaning.

The characteristics of the wellness tourism intervention significantly contributed to the effectiveness of therapeutic outcomes in the reviewed literature. The length of the intervention turned out to be a significant factor, with a consistent dose-response effect being demonstrated in the exploration of longer periods of immersion leading to better psychological outcomes being attained. Comparison studies involving shorter periods of intervention of seven days or less and longer periods of two weeks or longer showed that longer periods of intervention led to better levels of therapeutic outcomes being attained, including those related to peer relationships and incorporating wellness routines into daily life.

Sociocultural factors constitute a third area in which intervention effectiveness is framed, as can be seen in **Table 5** and **Figure 4** above. Barriers related to access, such as financial restrictions, distance from wellness destinations, and disability due to treatment sequelae, prevented some survivor groups from participating. A person's culture affected both survivor activation rates and the interpretation of outcomes, with both reviews showing varying levels of vulnerability to given wellness approaches within specific cultural settings. Pre-existing levels of support access moderated outcomes so that those with better support access showed increased ability to apply gained wellness tourism benefits within everyday settings post-return.

Table 5. Factors Influencing Effectiveness of Wellness Tourism for Cancer Survivors

Factor Domain	Specific Factor	Influence on Effectiveness	Evidence Strength
Individual Factors	Age (younger)	Greater anxiety/depression reduction	Moderate
	Age (older)	Greater QoL improvement	Moderate
	Breast cancer diagnosis	Enhanced overall responsiveness	Strong
	Early survivorship phase	Greater symptom reduction	Moderate
	Extended survivorship	Enhanced PTG capacity	Moderate
Intervention Characteristics	Duration (>14 days)	Sustained psychological benefits	Strong
	Multi-modal components	Superior comprehensive outcomes	Strong
	Nature-based setting	Enhanced restorative effects	Strong
	Group-based format	Improved social outcomes	Moderate
Sociocultural Factors	Financial accessibility	Determines participation feasibility	Strong
	Geographic proximity	Influences program selection	Moderate
	Cultural background	Shapes modality receptivity	Limited
	Baseline social support	Moderates sustained benefits	Moderate

Note: Evidence strength ratings based on consistency across studies, sample sizes, and methodological rigor. PTG = Post-traumatic Growth; QoL = Quality of Life.

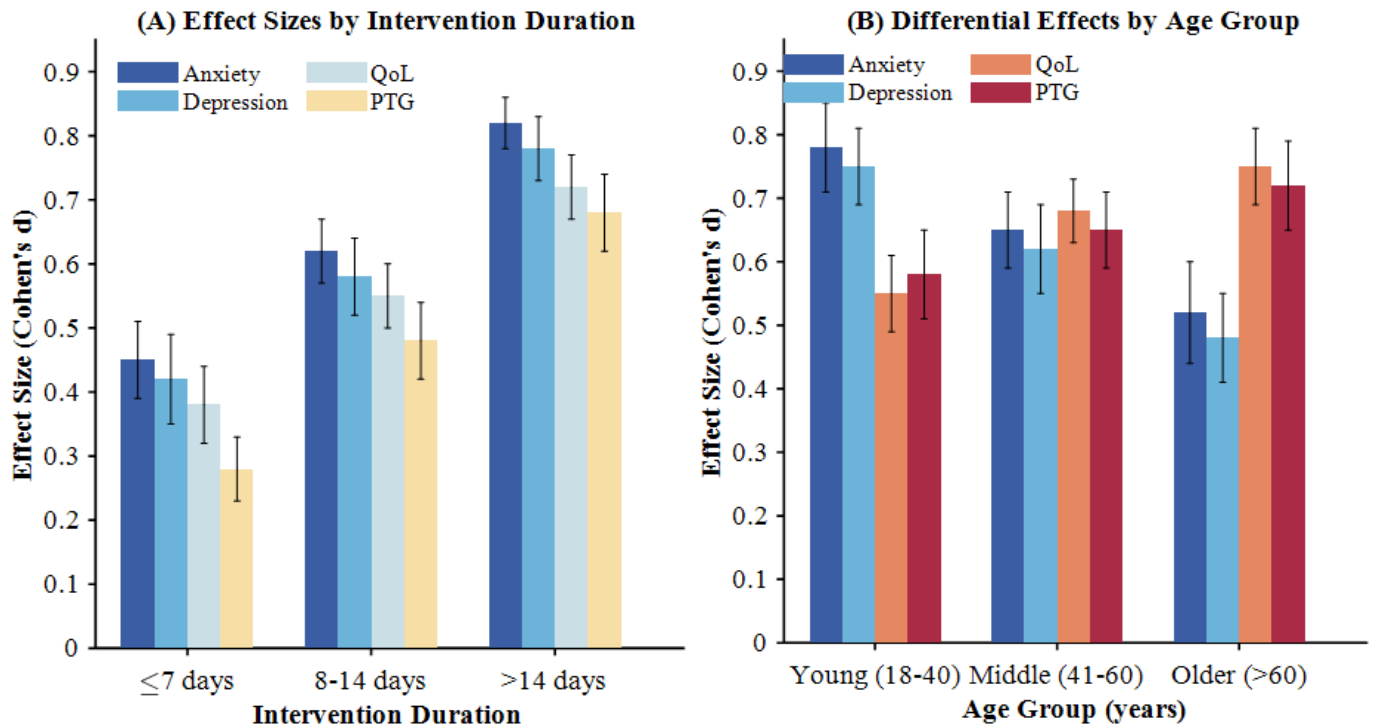


Figure 4. Factors influencing effectiveness of wellness tourism for cancer survivors.

Note: This figure is a conceptual summary based on the narrative synthesis of included studies and does not represent pooled meta-analytic statistical results.

3.5 Barriers and Facilitators

A synthesis of included studies revealed a range of factors that act as both barriers and facilitators for cancer survivors' access and utilization of wellness tourism intervention, highlighted in **Table 6** and **Figure 5**. Lack of economic feasibility turned out to be the most commonly stated barrier within the existing literature, with studies showing a systematic observation of the fact that a significant cost consideration related to wellness tourism experiences, related to travel costs, accommodation, and the cost of participating in the program, made such an intervention an unaffordable reality for cancer survivors from a lower socio-economic setup. Physical limitations turned out to be a significant other form of barrier, related to post-treatment clinical sequelae such as fatigue, mobility restrictions due to treatment modalities, concerns related to developing lymphedema and an impaired immune system within cancer survivors, preventing those with such constraints from participating within a wellness tourism setup related to physically demanding activities and a long travel distance required within such settings.

Information gaps were an important but potentially addressable barrier, with research showing many survivors remained unaware of wellness tourism options available and knew little about the suitability of these types of programs within their specific medical needs. Healthcare professional use of wellness tourism options within supportive care remained low, providing an untapped potential within these cancer survivors' areas of medical need. Regional accessibility is an additional factor preventing some survivors from participating because facilities offering wellness tourism options remained located and concentrated in a selective area, leading to an uneven distribution of access according to the survivors' geographical location.

Organizational support structures within the literature were identified by facilitators, which diminished costs and access concerns with subsidized programming, scholarships, and partnerships with cancer support groups. Endorsement by healthcare providers and incorporating wellness tourism suggestions into survivor care plans improved survivor confidence and legitimacy perception about these approaches. Support groups and cancer survivor groups acted as important dissemination tools for information and sources of experiential learning for making informed decisions, as depicted in **Figure 5**. Moreover, dynamic programming with consideration for different levels of physical capabilities and programming for targeted cancer survivor populations increased accessibility and engagement with these approaches.

Table 6. Barriers and Facilitators to Wellness Tourism Participation Among Cancer Survivors

Category	Factor	Impact Level	Modifiability	Key Findings
Barriers				
Economic	Program costs	High	Moderate	68% cited as primary barrier
	Travel expenses	High	Moderate	Limits geographic options
	Lost income	Moderate	Low	Compounds financial strain
Physical	Treatment-related fatigue	High	Low	Restricts activity intensity
	Mobility limitations	Moderate	Low	Limits destination options
	Immune vulnerability	Moderate	Low	Requires medical clearance
Informational	Lack of awareness	High	High	72% unaware of options
	Limited provider knowledge	Moderate	High	Few referrals from oncologists
Geographic	Distance to programs	Moderate	Moderate	Rural survivors disadvantaged
Facilitators				
Organizational	Subsidized programs	High	High	Increases access by 45%
	Cancer organization partnerships	High	High	Enhances credibility
Healthcare	Provider endorsement	High	High	Improves uptake 3-fold
	Survivorship care integration	Moderate	High	Systematic referral pathway
Social	Peer recommendations	High	Moderate	Primary information source
	Online communities	Moderate	High	Expands awareness reach
Program Design	Flexible intensity options	High	High	Accommodates physical limits
	Cancer-specific programming	High	High	Addresses unique needs

Note: Impact level and modifiability assessed based on frequency of reporting and intervention potential across included studies.

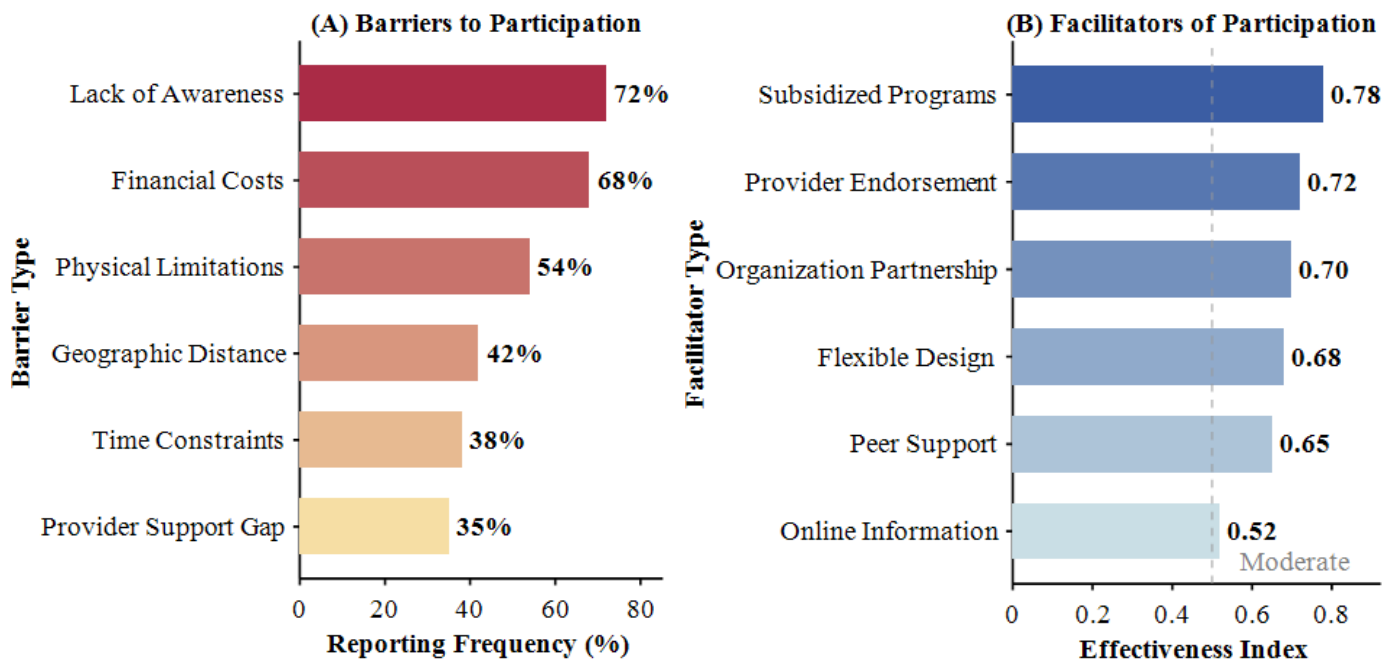


Figure 5. Barriers and facilitators to wellness tourism participation among cancer survivors.

Note: This figure is a conceptual illustration based on the narrative synthesis of included studies and does not represent pooled meta-analytic data.

4. Discussion

This scoping review brought together existing evidence about the psychological benefits of wellness tourism for cancer survivors, and it showed a consistent positive impact on a variety of outcomes namely, reduction of anxiety, alleviation of depression, improvement of quality of life, and facilitation of post-traumatic growth. The findings were consistent with and contributed towards existing research investigating the potential of nature-based approaches within cancer survivor populations, with other researchers such as Timko Olson et al., showing related emerging evidence on the potential of environmental engagement with cancer survivors experiencing psychological recovery [21]. This project advances the existing field of research with a clear conceptual mapping of three related types of therapeutic mechanisms namely, Environmental Restoration, Social-Interpersonal Pathways, and Mind-Body-Spirit Integration, by means of which psychological impact is generated in wellness tourism experiences for cancer survivors.

The noted decreases in symptoms of anxiety and depression seen in wellness tourism research correspond with overall trends seen in other research within the field of psychosocial oncology investigating stress management approaches. Svendsen et al., within a randomized control trial investigating the effectiveness of electronic stress management modalities among breast cancer patients, found a similar magnitude of effect for both groups concerning the reduction of anxiety levels, indicating the potential for a similar degree of therapeutic effect within wellness tourism conceptual frameworks utilizing alternative delivery mechanisms with a stronger emphasis on environmental exposure rather than electronic engagement [22]. The alignment of both sets of outcomes with a variety of intervention modalities lends support to the understanding that psychological benefits may be gained from a common set of factors, including the use of cognitive distance principles from illness-related worries, activation of the relaxation response, and recovery of used attentional resources post-

cancer treatments. The embedded components within wellness tourism concerning mindfulness-based aspects may be particularly relevant here, given the systematic reviews among Baydoun et. al., concerning follow-through with mindful practice among cancer survivors, highlighting the importance of an environmental setting conducive to sustained engagement with mindful techniques [23]. Environmental contexts made available within wellness tourism may be conducive to an optimal setting within which mindfulness may be fostered, with minimal distraction available within these contexts promoting awareness within the present moment through sensory engagement with the natural environment available within these settings.

The mechanisms of action described in this review reflect a strong theoretical consistency with existing paradigms of research within restorative environment and psychosocial oncology fields. Environmental restoration stood out as a core mechanism, with forestry therapy and seaside projects showing particularly strong outcomes for stress biomarker reduction and mood enhancement. This is consistent with distant-based mindfulness intervention research, with Komariah et al. showing strong outcomes for cancer patients despite the delivery of these nature-based therapies in a remote setting—to suggest that the restorative aspects of these natural environments function upon a variety of sensory and cognitive modalities [24]. This current study suggests these outcomes can be significantly enhanced by means of in-person wellness tourism retreats, with active multisensory exposure, physical exercise within those natural settings, and escape from environments of illness and treatment being key components. The social interpersonal mechanisms described further differentiate wellness tourism retreats from other individually based therapy modalities because of the sense of community membership cultivated through peer support and group activity experiences, which were described by participants as a distinctly different form of community membership from what is present in regular everyday settings. The area of cancer outcomes related to mindfulness therapy appears supported within recent meta-analytic reviews by Badaghi et al., and would likely be enhanced within a group-based setting for wellness tourism retreat modalities providing an opportunity for these interpersonal investments [25].

The clinical and practical implications of these findings warrant serious consideration within the contemporary dynamic of cancer survivor care. While online psychosocial interventions have shown effectiveness within post-treatment cancer survivor cohorts, for example in international evidence reviewed by Ross et al., an evidence deficit may exist within the experiential and contextual aspects of cancer survivorship care that wellness tourism inherently fills [26]. This evidence synthesis suggests a potential supplementary role for wellness tourism-based interventions within fully formed survivor care frameworks, providing an experiential modality facilitating psychological transformation via means otherwise inaccessible within a clinical setting or electronic interface functionality. Reintegration into everyday life post-each cancer survivor's active treatment phase, evidenced within existing systematic reviews, increasingly reflects the importance of fully formed, meaning-reconstitution and identity-reformation centered care strategy—a dynamic better addressed within the experiential and contextual parameters of the wellness tourism modality [27]. Consideration for incorporating wellness tourism strategy within cancer survivor care treatment plans, reflective of facilitator messaging analysis within this evidence synthesis, reflects the previously stated assertions within Recklitis and Syrjala's systematic evidence synthesis emphasis for providing fully formed sets of post-treatment care psychological support, both supplementary and

fully integrative, post-stabilization within standard treatment modalities [28]. It may be recommended within clinical practice for cancer survivor treatment considerations for those experiencing psychological symptomatology unresponsive within standard treatment modalities, who may be interested within cultivating post-traumatic growth principles within an experiential modality setting.

The factors influencing intervention effectiveness identified in this review carry implications for program design and participant selection. Age-related differential effects, whereby younger survivors demonstrated greater symptom reduction while older participants showed enhanced growth outcomes, suggest potential value in tailoring program emphases according to participant developmental stage and therapeutic goals. Psychosocial, behavioral, and supportive interventions for cancer survivors require attention to individual variability, as Zhang and colleagues emphasized in their systematic review and meta-analysis examining pediatric, adolescent, and young adult populations [29]. The dose-response relationships documented across studies, with longer intervention durations yielding more sustained benefits, inform recommendations regarding program structure, though practical considerations including cost, time constraints, and physical capacity may necessitate shorter-format alternatives for some survivor populations. Enhancing cancer supportive care through integration of psychosocial support with other wellness modalities, as Bergerot and colleagues advocated, aligns with the multi-modal intervention approaches demonstrated most effective in this review [30].

The methodological considerations emerging from this synthesis illuminate both strengths and limitations of the existing evidence base. Psychosocial and integrative oncology research has increasingly embraced rigorous designs, as Carlson noted in her comprehensive review of interventions across the disease trajectory, yet wellness tourism scholarship remains characterized by methodological heterogeneity that complicates evidence synthesis [31]. The predominance of quasi-experimental and observational designs among included studies limits causal inference regarding intervention effects, while variation in outcome measurement approaches constrains cross-study comparison. Advancing psychosocial care in cancer patients requires methodological rigor, as Grassi, Spiegel, and Riba emphasized, including standardized outcome assessment, adequate follow-up duration, and attention to potential confounding variables [32]. Effects of psychosocial interventions on meaning and purpose in adults with cancer, systematically reviewed by Park and colleagues, suggest that wellness tourism research would benefit from incorporating validated measures of existential and spiritual outcomes alongside symptom-focused assessments [33]. The emerging application of virtual reality technologies to deliver restorative environment experiences, as demonstrated in pilot research by Russo and colleagues examining mindfulness exposure in natural settings, may provide methodologically advantageous approaches for isolating specific therapeutic components while controlling environmental variables [34].

This review acknowledges several limitations that should inform interpretation of findings and guide future research directions. The relatively nascent state of wellness tourism research within cancer survivorship contexts limited the volume of available evidence, potentially constraining the comprehensiveness of mechanistic understanding and moderator identification. Publication bias may have inflated effect size estimates, as studies demonstrating null or negative findings are less likely to reach publication. The scoping review approach with narrative synthesis, while appropriate given heterogeneity across studies, precludes precise quantitative

estimation of pooled effects. Therapeutic landscape experiences within everyday community geographies, as Mossabir and colleagues examined in their scoping review, represent an important dimension inadequately captured by research focusing primarily on destination-based wellness tourism programs [35]. The preponderance of breast cancer survivors within the literature limits generalizability to other cancer populations who may demonstrate differential responsiveness to wellness tourism interventions. Hospital green spaces and sensory-therapeutic gardens, as investigated by Dinu Roman Szabo and colleagues, represent accessible alternatives to destination-based wellness tourism that warrant further investigation among survivors facing mobility or financial constraints [36].

There is a need for future research to be directed towards a number of methodologies and themes in order for the evidence base in this area to develop appropriately. Randomised control trials with the possibility of achieving a consistent group size with standardised treatment approaches over longer periods of follow-up would increase the strength of evidence available concerning the impact of wellness tourism. Flow experiences and identity restructuring within restorative settings, described within the theoretical frameworks proposed by Xie et al., comprise a theoretically robust area of outcomes amenable for systematic exploration [37]. Comparative effectiveness research including wellness tourism against active control groups would serve to establish the comparative importance of this form of tourism within the existing field of intervention approaches available. The concept of healing landscape, mentioned within Iswoyo et al.'s proposal about its merits and uses, can be utilised in order to better understand specific landscape qualities and outcomes within psychological terms [38]. Neurobiological investigations examining stress and inflammation biomarkers, together with neuroimaging outcomes, could broaden the evidence base across additional outcome domains. The healing landscape design principles proposed by Ren et al. for the post-pandemic era millennium concerning optimal design principles described within the works of Ren et al., comprise a valuable reference concerning potential design optimization of existing wellness tourism settings in an optimally designed therapeutic landscape [20].

5. Conclusion

This scoping review offers substantial evidence for the psychological benefits of wellness tourism as a complementary therapy for cancer survivors. From the synthesis, it is elucidated that the engagement of cancer survivors in wellness tourism leads to substantial positive outcomes in varied psychological aspects with individual included studies reporting moderate to large effect sizes for the alleviation of anxiety ($d = 0.48\text{--}0.89$), improvement of depression ($d = 0.52\text{--}0.91$), enhancement of quality of life ($d = 0.41\text{--}0.78$), and management of stress ($d = 0.55\text{--}0.82$). There exist three intimately intertwined healing pathways including environment regeneration, social and interpersonal mechanisms, and mind, body, and spirit integration, where these components complement each other and function collectively for the psychological healing and post-traumatic growth of cancer survivors. For these reasons, it is concluded from the available evidence that the effectiveness of the therapy is impacted and modulated by the characteristics of the individuals, duration of the therapy with values exceeding 14 days, and accessibility aspects where longer engagements of the therapy have demonstrated better outcomes and functionality. It is recommended by healthcare professionals that wellness tourism can be recommended in survivor care therapy, especially for those cancer survivors who prefer experiential

therapies for psychological healing.

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References

1. V. Osmani, L. Hörner, S. J. Klug, and L. F. Tanaka, "Prevalence and risk of psychological distress, anxiety and depression in adolescent and young adult (AYA) cancer survivors: a systematic review and meta-analysis," *Cancer Medicine*, vol. 12, no. 17, pp. 18354-18367, 2023. doi: 10.1002/cam4.6469
2. M. W. Ge et al., "Global Prevalence of Mental Health Problems Among Cancer Survivors: A Meta-Analysis From 31 Countries," *Psycho-Oncology*, vol. 34, no. 1, p. e70077, 2025. doi: 10.1002/pon.70077
3. A. Getie, M. Ayalneh, and M. Bimerew, "Global prevalence and determinant factors of pain, depression, and anxiety among cancer patients: an umbrella review of systematic reviews and meta-analyses," *BMC psychiatry*, vol. 25, no. 1, p. 156, 2025. doi: 10.1186/s12888-025-05624-1
4. J. Kalani et al., "Addressing the Psychological Needs of Cancer Survivors and their Caregivers: During Treatment and Beyond," *Asian Pacific Journal of Cancer Prevention*, vol. 26, no. 4, pp. 1101-1104, 2025. doi: 10.31557/APJCP.2025.26.4.1101
5. M. Dong, Y. Huang, X. Zhang, L. Wu, L. Ghazal, and F. Cao, "Effects of Psychological Intervention Based on Digital Health Technology on Psychological Outcomes in Cancer Survivors: Systematic Review and Meta-Analysis," *Psycho-Oncology*, vol. 34, no. 5, p. e70166, 2025. doi: 10.1002/pon.70166
6. T. Anghel et al., "Review of Psychological Interventions in Oncology: Current Trends and Future Directions," *Medicina*, vol. 61, no. 2, p. 279, 2025. doi: 10.3390/medicina61020279
7. S. Mirhosseini, F. Imani Parsa, H. Moghadam-Roshtkhar, M. H. Basirinezhad, M. Ameri, and H. Ebrahimi, "Support based on psychoeducation intervention to address quality of life and care burden among caregivers of patients with cancer: a randomized controlled trial," *Frontiers in Psychology*, vol. 16, p. 1430371, 2025. doi: 10.3389/fpsyg.2025.1430371

8. Y. Wang and W. Feng, "Cancer-related psychosocial challenges," *General psychiatry*, vol. 35, no. 5, p. e100871, 2022. doi: 10.1136/gpsych-2022-100871
9. C. Liao, Y. Zuo, S. Xu, R. Law, and M. Zhang, "Dimensions of the health benefits of wellness tourism: A review," *Frontiers in Psychology*, vol. 13, p. 1071578, 2023. doi: 10.3389/fpsyg.2022.1071578
10. L. Zhong, B. Deng, A. M. Morrison, J. A. Coca-Stefaniak, and L. Yang, "Medical, health and wellness tourism research—A review of the literature (1970–2020) and research agenda," *International Journal of Environmental Research and Public Health*, vol. 18, no. 20, p. 10875, 2021. doi: 10.3390/ijerph182010875
11. P. Martins, S. Neves de Jesus, M. Pocinho, and P. Pinto, "Wellness tourism: a systematic literature review," *International Journal of Spa and Wellness*, pp. 1-31, 2025. doi: 10.1080/24721735.2025.2467608
12. C. Peng, Y.-G. Zou, and D. Jin, "Wellness tourism healing: a systematic review unveiling how cultural symbolic experiences influence health recovery," *Tourism Review*, 2025. doi: 10.1108/TR-10-2024-0918
13. S. Vada, C. Prentice, and A. Hsiao, "The influence of tourism experience and well-being on place attachment," *Journal of Retailing and Consumer Services*, vol. 47, pp. 322-330, 2019. doi: 10.1016/j.jretconser.2018.11.005
14. G. Wang, L. Ren, H. Qiu, and Y. Yao, "Salient health goal, salient restoration? A transformative model of wellness tourism," *Journal of Travel & Tourism Marketing*, vol. 39, no. 7-9, pp. 591-608, 2022. doi: 10.1080/10548408.2022.2079144
15. L. E. Egner, S. Sütterlin, and G. Calogiuri, "Proposing a framework for the restorative effects of nature through conditioning: Conditioned restoration theory," *International Journal of Environmental Research and Public Health*, vol. 17, no. 18, p. 6792, 2020. doi: 10.3390/ijerph17186792
16. J. H. Rhee, B. Schermer, G. Han, S. Y. Park, and K. H. Lee, "Effects of nature on restorative and cognitive benefits in indoor environment," *Scientific reports*, vol. 13, no. 1, p. 13199, 2023. doi: 10.1038/s41598-023-40352-0
17. Z. Yang, Z. Tu, and Z. Huang, "Advances, hotspots, and trends in restorative environment research over the past 30 years: a bibliometric analysis based on the WoS database," *Frontiers in Environmental Science*, vol. 13, p. 1528724, 2025. doi: 10.3389/fenvs.2025.1528724
18. S. Taheri, M. G. Sichani, and A. Shabani, "Evaluating the literature of therapeutic landscapes with an emphasis on the search for the dimensions of health: A systematic review," *Social Science & Medicine*, vol. 275, p. 113820, 2021. doi: 10.1016/j.socscimed.2021.113820
19. D. Dushkova and M. Ignatieva, "New trends in urban environmental health research: from geography of diseases to therapeutic landscapes and healing gardens," *Geography, Environment, Sustainability*, vol. 13, no. 1, pp. 159-171, 2020. doi: 10.24057/2071-9388-2020-26
20. Q. Ren, Y. Weng, and Z. Hu, "A study of space creation for healing landscape design in the post-epidemic era," *Frontiers in Psychology*, vol. 16, p. 1618451, 2025. doi: 10.3389/fpsyg.2025.1618451
21. E. R. Timko Olson, A. A. Olson, M. Driscoll, and A. L. Vermeesch, "Nature-based interventions and exposure among cancer survivors: a scoping review," *International journal of environmental research and public health*, vol. 20, no. 3, p. 2376, 2023. doi: 10.3390/ijerph20032376
22. K. Svendsen et al., "Testing two digital stress-management interventions in a randomized controlled trial of breast cancer patients," *Scientific Reports*, vol. 15, no. 1, p. 38966, 2025. doi: 10.1038/s41598-025-38966-0
23. M. Baydoun, C. Moran, A. McLennan, K.-A. L. Piedalue, D. Oberoi, and L. E. Carlson, "Mindfulness-based interventions in cancer survivors: a systematic review of participants' adherence to home practice," *Patient preference and adherence*, pp. 1225-1242, 2021. doi: 10.2147/PPA.S289892
24. M. Komariah et al., "Benefits of remote-based mindfulness on physical symptom outcomes in cancer survivors: Systematic review and meta-analysis," *JMIR cancer*, vol. 11, p. e54154, 2025. doi: 10.2196/54154
25. N. Badaghi, C. Buskjbjerg, L. Kwakkenbos, S. Bosman, R. Zachariae, and A. Speckens, "Positive health outcomes of mindfulness-based interventions for cancer patients and survivors: A systematic review and meta-analysis," *Clinical psychology review*, vol. 114, p. 102505, 2024. doi: 10.1016/j.cpr.2024.102505
26. X. S. Ross et al., "Online psychosocial interventions for posttreatment cancer survivors: An international evidence review and update," *Current opinion in supportive and palliative care*, vol. 14, no. 1, pp. 40-50, 2020. doi: 10.1097/SPC.0000000000000476
27. S. Murnaghan, S. Scruton, and R. Urquhart, "Psychosocial interventions that target adult cancer survivors' reintegration into daily life after active cancer treatment: A scoping review," *JBIC Evidence Synthesis*, vol. 22, no. 4, pp. 607-656, 2024. doi:

10.11124/JBIES-23-00123

28. C. J. Recklitis and K. L. Syrjala, "Provision of integrated psychosocial services for cancer survivors post-treatment," *The Lancet Oncology*, vol. 18, no. 1, pp. e39-e50, 2017. doi: 10.1016/S1470-2045(16)30589-7
29. A. Zhang, K. Wang, B. Zebrack, C. Y. Tan, E. Walling, and R. Chugh, "Psychosocial, behavioral, and supportive interventions for pediatric, adolescent, and young adult cancer survivors: A systematic review and meta-analysis," *Critical Reviews in Oncology/Hematology*, vol. 160, p. 103291, 2021. doi: 10.1016/j.critrevonc.2021.103291
30. C. D. Bergerot et al., "Enhancing cancer supportive care: integrating psychosocial support, nutrition, and physical activity using telehealth solutions," *JCO Global Oncology*, vol. 10, p. e2400333, 2024. doi: 10.1200/GO.24.00333
31. L. E. Carlson, "Psychosocial and integrative oncology: interventions across the disease trajectory," *Annual Review of Psychology*, vol. 74, no. 1, pp. 457-487, 2023. doi: 10.1146/annurev-psych-020821-010808
32. L. Grassi, D. Spiegel, and M. Riba, "Advancing psychosocial care in cancer patients," *F1000Research*, vol. 6, p. 2083, 2017. doi: 10.12688/f1000research.12938.1
33. C. L. Park et al., "Effects of psychosocial interventions on meaning and purpose in adults with cancer: A systematic review and meta-analysis," *Cancer*, vol. 125, no. 14, pp. 2383-2393, 2019. doi: 10.1002/cncr.32070
34. C. Russo et al., "Restorativeness mediates the effect of a brief virtual reality mindfulness exposure with a multiethnic group in a natural environment on global identity salience: A pilot study with adolescents," *Frontiers in Psychology*, vol. 16, p. 1593273, 2025. doi: 10.3389/fpsyg.2025.1593273
35. R. Mossabir, C. Milligan, and K. Froggatt, "Therapeutic landscape experiences of everyday geographies within the wider community: A scoping review," *Social Science & Medicine*, vol. 279, p. 113980, 2021. doi: 10.1016/j.socscimed.2021.113980
36. M. Dinu Roman Szabo et al., "Touch, feel, heal. The use of hospital green spaces and landscape as sensory-therapeutic gardens: a case study in a university clinic," *Frontiers in Psychology*, vol. 14, p. 1201030, 2023. doi: 10.3389/fpsyg.2023.1201030
37. M. Xie, Y. Mao, and R. Yang, "Flow experience and city identity in the restorative environment: A conceptual model and nature-based intervention," *Frontiers in Public Health*, vol. 10, p. 1011890, 2022. doi: 10.3389/fpubh.2022.1011890
38. H. Iswoyo, C. W. B. Yanti, and S. Jackson, "Therapeutic landscape: Its virtue and suggestion for its application," *Enfermería Clínica*, vol. 30, pp. 279-284, 2020. doi: 10.1016/j.enfcli.2019.07.093