

Relationship between Coping Self-Efficacy and Perceived Social Support with Psychological Well-being among Cancer Patients: A Scoping Review

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ABSTRACT

Context: Cancer profoundly affects patients' psychological well-being, disrupting emotional stability, social roles, and sense of self. Understanding the psychosocial factors that influence psychological well-being is essential for developing effective supportive care interventions.

Aim: This scoping review systematically mapped the existing literature on the relationships among coping self-efficacy, perceived social support, and psychological well-being among cancer patients.

Methods: Following the Joanna Briggs Institute guidelines and Arksey and O'Malley's framework, a comprehensive search was conducted across EBSCO, Web of Science, ProQuest, and Google Scholar. Studies were included if they examined psychological well-being in adult cancer patients (≥ 18 years) using quantitative, qualitative, or mixed methods designs, and were published in English between 2020 and 2025. Quality assessment was conducted using the JBI Critical Appraisal Checklist for cross-sectional studies and the Mixed Methods Appraisal Tool. The PRISMA-ScR guidelines were followed for reporting.

Results: Twelve studies comprising 4019 cancer patients were included. Nine studies achieved high methodological quality. Cancer patients generally maintained moderate to high levels of psychological well-being, though considerable individual variability existed. Social support emerged as the most robust predictor of psychological well-being across all studies, demonstrating consistent positive associations across diverse cultural contexts (Iran, Thailand, Ukraine, United States). Cancer stage was negatively associated with well-being, while demographic factors, including gender, education, and time since diagnosis, showed limited direct associations. Evidence regarding coping self-efficacy was limited; only one study assessed self-efficacy as a distinct construct and found a positive correlation with psychological well-being, though this relationship did not remain significant in multivariate analysis. No studies were identified from Saudi Arabia or the Gulf region.

Conclusion: Perceived social support is a robust and consistent correlate of psychological well-being in adult cancer patients. The relationship between coping self-efficacy and psychological well-being remains underexplored and represents a critical gap in the literature, particularly in Arab populations. Future research should utilize cancer-specific coping self-efficacy measures, examine perceived changes in well-being following diagnosis, and extend investigations to underrepresented populations, including Saudi Arabia. Clinical interventions should prioritize strengthening social support networks and enhancing patients' coping resources.

Keywords: Psychological well-being, cancer patients, coping self-efficacy, perceived social support, scoping review

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1. Introduction

Cancer is not only a physical illness but also a profound psychological challenge that disrupts patients' emotional stability, social roles, and sense of self. As individuals navigate the complexities of diagnosis, treatment, and survivorship, psychological well-being (PWB) becomes a vital part of holistic care. Psychological well-being has been defined in various ways and encompasses the positive thoughts and feelings that individuals use to evaluate their

lives favorably. PWB includes multiple dimensions, such as autonomy, environmental mastery, self-acceptance, personal growth, positive relationships, and purpose in life (Ryff, 1989). These dimensions work together to help patients adapt and maintain a meaningful life despite their illness.

Among the key psychological resources influencing PWB is coping self-efficacy, defined as an individual's belief in their ability to manage difficult situations (Bandura, 1977). In the context of cancer, coping self-

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efficacy reflects the patient’s confidence in handling emotional distress, physical symptoms, and social disruptions. Higher levels of coping self-efficacy have been consistently associated with reduced anxiety and depression, improved emotional regulation, and enhanced overall well-being (Onyedibe et al., 2021; Karataş et al., 2023).

Equally important is perceived social support, which refers to individuals' subjective beliefs about the availability and adequacy of support from family, friends, and healthcare professionals. Social support has been widely recognized as a protective factor that buffers psychological distress and promotes resilience. It not only directly improves mental health outcomes but also mediates deeper psychological processes, such as meaning-making, post-traumatic growth, and psychological hardiness (Applebaum et al., 2014; Haj Hashemi et al., 2021; Barcaccia et al., 2023).

2. Significance of the study

Cancer represents a growing public health challenge in Saudi Arabia, with approximately 28,000 new cases diagnosed annually and a 5-year prevalence exceeding 82,000 individuals (Bray et al., 2024). This growing burden necessitates comprehensive approaches that address not only medical treatment but also patients' psychological needs. Despite this, a comprehensive synthesis of the relationships between coping self-efficacy, perceived social support, and psychological well-being among cancer patients remains limited in the literature. Understanding these relationships is essential, as coping self-efficacy and social support are modifiable factors that can be targeted through nursing interventions to enhance patient outcomes. This scoping review therefore addresses a critical gap by mapping and synthesizing existing evidence on this topic, identifying future research priorities, and providing an evidence-based foundation for nurses and healthcare providers caring for cancer patients.

3. Aim of the study

This scoping review systematically maps the existing literature on the relationship between coping self-efficacy and perceived social support and psychological well-being among cancer patients. The following questions guide the review:

- What is the level of psychological well-being among cancer patients?
- What demographic and clinical factors are associated with psychological well-being among cancer patients?
- What is the relationship between social support and psychological well-being among cancer patients?
- What is the relationship between coping strategies, self-efficacy, and psychological well-being among cancer patients?

4. Subjects & Methods

4.1. Research Design

A scoping review methodology was adopted for this review because it is appropriate for mapping the existing Article number 3 page 2 of 15

literature on broad topics, identifying key concepts, and highlighting research gaps (Arksey & O'Malley, 2005). This review was conducted following the methodological framework proposed by Arksey and O'Malley (2005) and the Joanna Briggs Institute guidelines for scoping reviews (Peters et al., 2020). The review is guided by the PCC framework: P (population), C (concept), and C (context) as presented in Table 1.

Table (1): PCC framework

Component	Definition	Variables in this review
P (population)	The specific group being studied (who)	Patient diagnosed with any type of cancer, aged above 18 years.
C (concept)	The core phenomenon/topic being examined (what)	Psychological well-being as a primary outcome; factors examined include demographic characteristics, clinical variables, social support, and coping self-efficacy
C (context)	The setting, circumstances, or conditions where the phenomenon occurs (where/under what conditions)	Any healthcare or community setting in which adult cancer patients receive care or follow-up

4.2. Search Strategy

The search strategy was designed to find published studies using a two-step approach. First, a preliminary search of Google Scholar was performed to identify relevant articles on the topic. Keywords from the titles and abstracts of these articles were analyzed to develop a comprehensive search strategy. This strategy was then adapted for the selected databases of EBSCO, Web of Science, ProQuest, and Google Scholar. The search was completed in September 2025.

The keywords employed for database searches include "psychological well-being" OR "well-being" OR "psychological" AND "coping self-efficacy" AND "perceived social support" OR "social support" AND "cancer" AND "relationship". Boolean operators such as 'AND' and 'OR' were utilized to achieve more targeted results.

4.3. Inclusion and Exclusion Criteria

The PCC framework guided the inclusion eligibility criteria for this scoping review. The population of interest comprises adult cancer patients aged 18 years and above, regardless of cancer type, stage, or gender. The concept focuses on psychological well-being as the primary outcome. It examines associated factors, including demographic characteristics, clinical variables, social support, and coping self-efficacy, with no restrictions on geographical location, healthcare setting, or cultural context.

Eligible sources of evidence include quantitative, qualitative, and mixed-methods studies. Only original articles published in English with full text available were

included, and the review considered studies published between 2020 and 2025.

The exclusion criteria excluded studies that did not align with the review objectives, such as articles on other chronic diseases, studies involving pediatric cancer patients, and articles primarily focused on family caregivers. Furthermore, review articles, unpublished manuscripts, letters, reports, dissertations, book chapters, and conference abstracts were excluded.

4.4. Study Selection Process

The study selection process followed a two-step screening approach. All identified citations were imported into Rayyan AI (*Rayyan Systems Inc., 2023*), where duplicate records were automatically removed. In the first step, titles and abstracts were screened against the predefined inclusion and exclusion criteria. Records that clearly did not meet the criteria were excluded. In the second step, full-text articles of potentially relevant studies were retrieved and assessed for eligibility. Studies meeting all inclusion criteria were included in the final review. The primary researcher conducted the selection process, and any uncertainties regarding eligibility were discussed with the research team.

4.5. Data Extraction

Data were extracted from the studies included in the scoping review by the primary researcher using a structured data extraction table developed specifically for this review. The table includes sections: study title, author, country, year of publication, study methods (study design, sample size), study variables of interest and their measurement tools, and the key findings relevant to the review question.

4.6. Quality Assessment

Quality assessment of the included studies was conducted to evaluate the methodological quality of each study and to determine the extent to which each addressed study has the potential for bias in its design, conduct, and analysis. Eleven studies employing cross-sectional designs were appraised using the Joanna Briggs Institute (JBI) Critical Appraisal Checklist for Analytical Cross-Sectional Studies (*Moola et al., 2020*), which comprises eight criteria. One study employing a mixed methods design (*Hoogland et al., 2021*) was appraised using the Mixed Methods Appraisal Tool (MMAT) Version 2018 (*Hong et al., 2018*).

The critical appraisal was conducted independently by the primary researcher and verified by the research team. For cross-sectional studies, following the scoring approach used by *Loh et al. (2023)*, each fulfilled item was assigned 1 point. The quality percentage was calculated by dividing the number of "Yes" responses by the total applicable items and multiplying by 100. Studies were categorized as high quality ($\geq 67\%$), medium quality (34–66%), or low quality (0–33%). For the mixed-methods study, quality was assessed by meeting criteria across all three components (qualitative, quantitative descriptive, and mixed-methods integration).

5. Results

5.1. Search Results

The database searches retrieved 1,712 articles (Web of Science: 367, ScienceDirect: 330, ProQuest: 192, EBSCO: 150, Google Scholar: 673). After removing 309 duplicates, 1,403 records remained for title and abstract screening. This process resulted in 128 articles selected for full-text review. Of these, 98 were excluded for various reasons: 5 lacked full-text availability, 44 focused on intervention outcomes, 41 were not suitable for measuring psychological well-being (PWB), 8 focused on pediatric populations, and 18 focused on family caregivers. Ultimately, 12 articles met the inclusion criteria and were included in the final scoping review. The study selection process is illustrated in Figure 1 (PRISMA flow diagram).

5.2. Study Characteristics

This scoping review included 12 studies published between 2020 and 2025 that examined psychological well-being among cancer patients.

Geographical distribution: The included studies were conducted across diverse geographical regions. Four studies were conducted in Asia: Thailand (*Singtaweasuk et al., 2024*), China (*Yang et al., 2024; Yan et al., 2025*), and South Korea (*Park & Han, 2025*). Three studies were conducted in the Middle East: Iran (*Azadi et al., 2021; Masoumi et al., 2022*) and Morocco (*Haddou et al., 2024*). Two studies were conducted in Europe: Poland (*Krok et al., 2022*) and Ukraine (*Zaviazkina & Nefedova, 2024*). Three studies were conducted in the United States (*Hoogland et al., 2021; Kim et al., 2022; Lepley, 2022*). Notably, no studies were conducted in Saudi Arabia or populations within the Gulf region.

Study designs: All included studies employed quantitative, cross-sectional designs, with the majority utilizing correlational or predictive approaches. Several studies employed structural equation modeling (SEM) to examine complex mediating and moderating relationships. One study (*Hoogland et al., 2021*) utilized a mixed-methods design.

Sample characteristics: The total sample across all 12 studies comprised approximately 4019 cancer patients. Sample sizes ranged from 56 participants (*Hoogland et al., 2021*) to 1,106 participants (*Kim et al., 2022*). The mean age of participants varied considerably across studies, ranging from 25.1 years (*Kim et al., 2022*) to 72.45 years (*Hoogland et al., 2021*).

Cancer types: Breast cancer was the most frequently studied cancer type, examined in five studies (*Azadi et al., 2021; Masoumi et al., 2022; Singtaweasuk et al., 2024; Haddou et al., 2024; Zaviazkina & Nefedova, 2024*). Other cancer types included colorectal cancer (*Yan et al., 2025*), abdominal and pelvic cancers (*Krok et al., 2022*), skin cancer (*Lepley, 2022*), and childhood cancers (*Kim et al., 2022*). Three studies examined cancer patients without specifying cancer type (*Park & Han, 2025; Hoogland et al., 2021; Yang et al., 2024*).

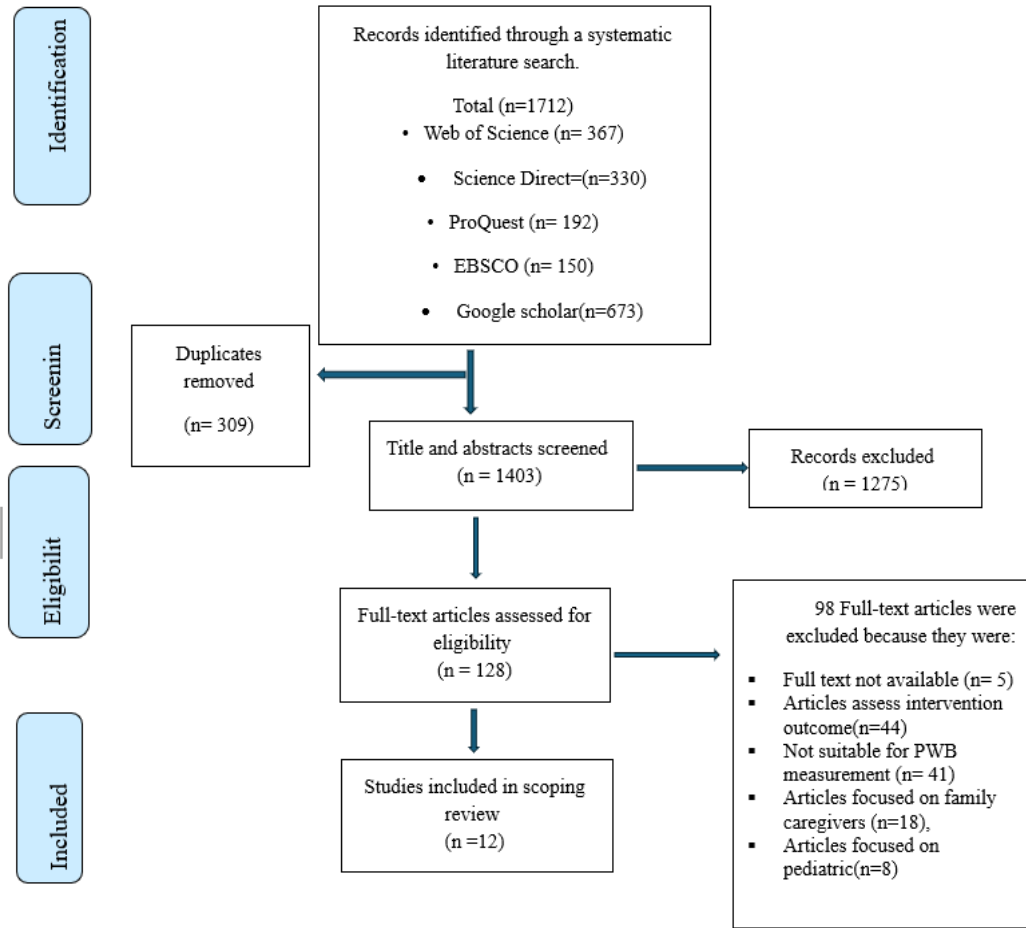


Figure (1): PRISMA. (Page et al., 2021).

5.3. Quality Assessment Results

Nine studies achieved high-quality scores ($\geq 67\%$), and two achieved medium-quality scores (62.5%). The mixed methods study (Hoogland et al., 2021) demonstrated high

methodological quality across all components. Quality assessment results are presented in Tables 2 and 3.

Table (2): Critical appraisal of included studies using the JBI checklist for analytical cross-sectional studies.

study	Q1**	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Score (8)	%	Quality
Azadi et al. (2021)	Y*	Y	Y	Y	U	N	Y	Y	6	75	High
Masoumi et al. (2022)	Y	Y	Y	Y	Y	Y	Y	Y	8	100	High
Zaviazkina & Nefedova (2024)	Y	Y	Y	U	Y	Y	Y	Y	7	87.5	High
Singtaeesuk et al. (2024)	Y	Y	Y	U	N	U	Y	Y	5	62.5	Medium
Kim et al. (2022)	Y	Y	Y	Y	Y	Y	Y	Y	8	100	High
Krok et al. (2022)	Y	Y	Y	Y	Y	Y	Y	Y	8	100	High
Yang et al. (2024)	Y	Y	Y	Y	Y	Y	Y	Y	8	100	high
Yan et al. (2025)	Y	Y	Y	Y	U	Y	Y	Y	7	87.5	High
Park & Han (2025)	Y	Y	Y	U	Y	Y	Y	Y	7	87.5	High
Haddou et al. (2024)	Y	Y	Y	Y	U	N	Y	Y	6	75	High
Lepley (2022)	N	U	Y	N	Y	Y	Y	Y	5	62.5	Medium

*Note: Y = Yes; N = No; U = Unclear; NA = Not Applicable

**Q1 = Inclusion criteria defined; Q2 = Subjects and setting described; Q3 = Exposure measured validly; Q4 = Condition measured with standard criteria; Q5 = Confounders identified; Q6 = Strategies for confounders stated; Q7 = Outcomes measured validly; Q8 = Appropriate statistical analysis.

Table (3): Critical appraisal of mixed methods study using MMAT version 2018.

Study	Qualitative					Quantitative Descriptive					Mixed Methods					Comment
	1.1	1.2	1.3	1.4	1.5	4.1	4.2	4.3	4.4	4.5	5.1	5.2	5.3	5.4	5.5	
Hoogland et al. (2021)	Y*	Y	Y	Y	Y	Y	Y	Y	CT	Y	Y	Y	Y	Y	Y	Met

Note: Y = Yes; N = No; U = CAN'T TELL

Qualitative criteria: 1.1 = Appropriate qualitative approach; 1.2 = Adequate data collection; 1.3 = Findings derived from data; 1.4 = Interpretation substantiated; 1.5 = Coherence between data sources

Quantitative descriptive criteria: 4.1 = Relevant sampling strategy; 4.2 = Representative sample; 4.3 = Appropriate measurements; 4.4 = Low risk of nonresponse bias; 4.5 = Appropriate statistical analysis

Mixed methods criteria: 5.1 = Adequate rationale for mixed methods; 5.2 = Components effectively integrated; 5.3 = Outputs adequately interpreted; 5.4 = Divergences addressed; 5.5 = Quality criteria adhered to

MMAT = Mixed Methods Appraisal Tool (Hong et al., 2018).

5.4. Main Findings

5.4.1. Psychological Well-being Levels among Cancer Patients

The reviewed studies revealed considerable variation in psychological well-being levels (PWB) across diverse cancer populations. These findings can be broadly categorized into high and moderate levels of PWB.

High PWB levels: Several studies reported relatively high levels of psychological well-being among cancer patients. Hoogland et al. (2021) found that older adult cancer survivors (n=56, ≥60 years) demonstrated the highest well-being, with a mean score of 6.05 (SD=1.18), representing 86% of the maximum possible score. Notably, these participants reported significantly better mental quality of life compared to age-adjusted population norms (p=0.0001). Similarly, Singtaweasuk et al. (2024) reported that breast cancer survivors in Thailand (n=123) achieved a mean PWB score of 83.19 (SD=8.85), corresponding to 77% of the maximum score. Yang et al. (2024) reported that advanced cancer patients (Stage III/IV, n=338) exhibited a mean subjective well-being score of 65.38 (SD=12.91), corresponding to 73% of the maximum score. Furthermore, Lepley (2022) reported that skin cancer patients (n=251) had a mean PWB score of 3.91 (SD=0.51), which accounted for 78% of the maximum score and indicated a high level of well-being.

Moderate PWB Levels: In contrast, other studies reported moderate levels of psychological well-being. Yan et al. (2025) found that colorectal cancer ostomates (n=319) had a mean PWB score of 69.83 (SD=17.33), representing 65% of the maximum score. Krok et al. (2022) observed that abdominal and pelvic cancer patients (n=333) had a mean PWB score of 3.59 (SD=0.61), representing a moderate level at 60% of the maximum score. Additionally, Masoumi et al. (2022) reported that breast cancer survivors (n=300) had a mean PWB score of 5.20 (SD=0.43), indicating a moderate-to-good level of psychological well-being. Kim et al. (2022) observed that 56.2% of young adult childhood cancer survivors (n=1106) achieved well-being scores indicative of flourishing. Azadi et al. (2021) reported that breast cancer patients in Iran (n=236) had a mean PWB score of 33.32 (SD=4.43), indicating moderate psychological well-being. Finally, the mental well-being score of 54.59 (SD=11.29) among 230 breast cancer patients (Haddou et al., 2024).

While these findings demonstrate that cancer patients generally maintain moderate to high levels of psychological well-being, considerable variability exists across individuals. Understanding the factors that contribute to this variability is essential for developing targeted interventions to enhance well-being. The following sections examine the relationships between psychological well-being and four key domains: Demographic characteristics, clinical factors, social support, and psychological resources, including coping strategies and self-efficacy.

5.4.2. Demographic and Clinical Factors

Age and Gender: The evidence regarding age and gender associations with PWB remains inconclusive. Haddou et al. (2024) found that older breast cancer patients (>50 years) reported significantly better mental well-being (M = 56.46, SD = 10.39) compared to younger patients (≤50 years) (M=52.99, SD=11.81) (p=0.020). Similarly, Krok et al. (2022) observed that age was positively correlated with PWB (r=0.18, p<0.01) among patients with abdominal and pelvic cancer. In contrast, Hoogland et al. (2021) found no statistically significant association between age and well-being (ρ=0.13, p=0.34) among older adult cancer survivors. Lepley (2022) found that age did not differ significantly in PWB among skin cancer patients (p>0.05). Also, Kim et al. (2022) reported that age was not associated with well-being.

Regarding gender, several studies demonstrated no significant relationship between gender and PWB. Yan et al. (2025) reported no significant difference in PWB scores between male (M=69.16, SD=17.28) and female (M=70.60, SD=17.42) colorectal cancer patients (t=-0.741, p=0.459). Lepley (2022) found that gender did not differ significantly in PWB among skin cancer patients (p>0.05). Similarly, Krok et al. (2022) found no significant gender differences in psychological well-being. Kim et al. (2022) reported that gender was not a significant predictor of well-being among young adult childhood cancer survivors (β=0.02, p>0.05).

Cancer Stage and type: Cancer stage emerged as a consistent predictor of psychological well-being across multiple studies. Haddou et al. (2024) found that patients with localized cancer reported significantly higher mental well-being (M=55.53, SD=10.93) compared to those with metastatic disease (M=50.40, SD=12.03) (p=0.008). Moreover, Lepley (2022) reported that cancer stage was a

significant negative predictor of PWB among skin cancer patients ($\beta=-0.179, p=0.001$).

Cancer type demonstrated a limited association with psychological well-being. *Yan et al. (2025)* found no significant differences in PWB between colon cancer ($M=70.00, SD=15.77$) and rectal cancer patients ($M=69.71, SD=18.40$) among ostomates ($F=0.149, p=0.882$). *Lepley (2022)* reported that the type of skin cancer did not show significant differences in PWB ($p>0.05$).

Duration Since Diagnosis and Treatment Modality: The duration since diagnosis generally showed no significant association with PWB. *Lepley (2022)* found that time since diagnosis was not significantly related to PWB among skin cancer patients ($p>0.05$). *Haddou et al. (2024)* similarly reported no significant differences in mental well-being based on disease duration (≤ 2 years vs. >2 years; $p=0.557$). *Kim et al. (2022)* also reported that years since diagnosis were not associated with well-being among adult survivors of childhood cancer.

Regarding treatment modalities, most interventions were not significantly related to PWB. *Lepley (2022)* found that chemotherapy, immunotherapy, excisional surgery, cryotherapy, Mohs surgery, and photodynamic therapy were not significantly associated with PWB ($p>0.05$). However, radiation therapy was associated with significantly lower well-being, which may reflect the cumulative physical and emotional burden of this treatment modality [$t(249)=0.324, p=0.020$].

Furthermore, *Haddou et al. (2024)* found no significant differences in mental well-being among breast cancer patients based on chemotherapy ($p=0.697$), radiotherapy ($p=0.186$), or hormone therapy ($p=0.675$). *Kim et al. (2022)* similarly reported that treatment intensity was not predictive of well-being among young adult childhood cancer survivors, indicating that survivorship experiences may be shaped more by psychosocial than purely medical factors.

5.4.3. Social Support and Psychological Well-being

Nine of the 12 included studies examined the relationship between perceived social support and psychological well-being. All nine studies reported a significant positive relationship, providing consistent and robust evidence across diverse populations and cultural contexts.

Five studies identified perceived social support as a direct significant predictor of psychological well-being. *Kim et al. (2022)* found that social support was a significant predictor of well-being among young adult childhood cancer survivors ($\beta=0.16, p<0.001$), with this relationship remaining significant even after controlling for depressive symptoms ($\beta=0.10, p<0.05$) suggesting that social support contributes to well-being independently of its effects on reducing negative affect. *Lepley (2022)* similarly identified social support as a significant predictor among skin cancer patients ($\beta=0.219, p<0.001$). *Masoumi et al. (2022)* and *Singtaweesuk et al. (2024)* reported comparable findings, with perceived social support predicting psychological well-being ($\beta=0.28, p<0.01$; $\beta=0.26, p<0.01$, respectively). *Park and Han (2025)* demonstrated that both receiving and providing social support significantly contributed to psychological well-being among elderly cancer patients.

Four studies found evidence for both direct and indirect (mediating) relationships between perceived social support and psychological well-being. *Yang et al. (2024)* found a strong positive direct effect of perceived social support on subjective well-being ($r=0.641, p<0.01$; $\beta=0.210, p<0.001$). Their regression analysis revealed that perceived social support directly predicted subjective well-being ($\beta=0.210, p<0.001$) and also demonstrated a chain mediation model in which social support mediated the relationship between family resilience and subjective well-being (indirect effect= 0.128 , accounting for 26.95% of the total effect).

Zaviatzkina and Nefedova (2024) reported a direct regression coefficient of 0.39 ($p=0.002$) between perceived social support and psychological well-being, while simultaneously showing that approximately 90% of this effect was mediated through reductions in anxiety and depression. *Yan et al. (2025)* found that social support had a significant positive direct effect on psychological well-being, and that depression mediated this relationship (mediating effect = 0.078, accounting for 9.0% of the total effect). *Azadi et al. (2021)* found that social support mediated the relationship between psychological hardiness and psychological well-being (accounting for 33% of the variance in PWB) and also served as a direct predictor in their structural equation model.

5.4.4. Coping Strategies, Self-Efficacy, and Psychological Well-being

Evidence regarding the relationship between coping self-efficacy and psychological well-being was substantially more limited. Only one study directly examined self-efficacy as a distinct construct in relation to psychological well-being. *Singtaweesuk et al. (2024)* found a significant positive correlation between self-efficacy and PWB ($r=0.34, p<0.01$) among breast cancer survivors in Thailand; however, self-efficacy did not emerge as a significant independent predictor when entered into a multiple regression model alongside social support and resilience.

Two additional studies examined related coping constructs. *Krok et al. (2022)* found that while all three coping strategies were significantly correlated with psychological well-being at the bivariate level (problem-focused $r=0.41$, emotion-focused $r=0.42$, meaning-focused $r=0.43$; all $p<0.001$), in the final structural equation model, only problem-focused and meaning-focused coping demonstrated significant pathways to PWB, while emotion-focused coping was removed due to non-significant effects when controlling for other variables. *Hoogland et al. (2021)* observed that older adult cancer survivors endorsed emotion-focused coping strategies more frequently than problem-focused strategies while maintaining high levels of well-being. Collectively, these findings suggest that coping strategies are associated with psychological well-being, but the specific role of coping self-efficacy as an integrated construct remains insufficiently examined.

6. Discussion

This scoping review synthesized findings from 12 studies examining the relationships among coping self-

efficacy, perceived social support, and psychological well-being among cancer patients. The reviewed studies revealed considerable variation in psychological well-being across cancer populations. Among studies using the 18 items of Thai version of psychological well-being scale, and 18-item Ryff Scale, *Singtaweasuk et al. (2024)* and *Lepley (2022)* reported high well-being among Thai breast cancer survivors and skin cancer patients, respectively, while *Yan et al. (2025)* found notably lower levels among colorectal ostomates. This discrepancy may be explained by the fact that ostomy patients face unique challenges, including altered body image, changes in daily routines, and social stigma that other cancer populations may not experience.

Comparing the two Iranian breast cancer studies, both *Masoumi et al. (2022)* and *Azadi et al. (2021)* reported moderate well-being. This consistency within the same cultural context suggests that cultural factors such as family support structures and religious coping commonly found in Iranian society may create a relatively stable psychological environment for breast cancer patients.

The relationship between age and psychological well-being yielded inconsistent findings across studies. While *Haddou et al. (2024)* and *Krok et al. (2022)* found that older age was associated with better well-being, *Hoogland et al. (2021)* found no such relationship. This apparent inconsistency can be explained by sample composition: *Haddou et al. (2024)* and *Krok et al. (2022)* compared patients across a wide age range, allowing age-related differences to emerge, whereas *Hoogland et al. (2021)* recruited only older adults, limiting age variability within the sample.

Cancer stage emerged as a consistent clinical predictor of psychological well-being. Both *Haddou et al. (2024)* and *Lepley (2022)* found that the advanced stage was associated with lower well-being, which is understandable given that advanced disease typically entails greater symptom burden, more aggressive treatments, and greater uncertainty about prognosis. However, this relationship is not deterministic. *Yang et al. (2024)* found that patients with advanced cancer could maintain relatively high well-being when supported by strong family resilience and social support systems, suggesting that psychosocial resources can buffer the negative psychological impact of disease severity. This observation is supported by broader meta-analytic evidence from *Faller et al. (2013)*, who analyzed 198 studies and demonstrated that psychosocial interventions can significantly improve quality of life and reduce distress, even among patients with advanced disease, reinforcing the importance of psychosocial support regardless of disease stage.

In contrast, time since diagnosis and treatment modality showed no significant associations with psychological well-being across multiple studies (*Lepley, 2022; Haddou et al., 2024; Kim et al., 2022*). This observation suggests that patients do not simply get better with time, nor does the type of treatment received determine psychological outcomes. Rather, how patients cope with their illness and the support they receive matter more than when they were diagnosed or what treatments they underwent. Consistent with these findings, a systematic review by *Brandão et al. (2017)*

concluded that individual differences in coping and social resources accounted for greater variance in psychological outcomes than disease- or treatment-related factors.

Social support emerged as the most robust predictor across all reviewed studies. Four studies using the MSPSS, *Masoumi et al. (2022)*, *Singtaweasuk et al. (2024)*, *Yang et al. (2024)*, and *Zaviazkina and Nefedova (2024)*, demonstrated consistent positive associations across Iranian, Chinese, Thai, and Ukrainian populations. This cross-cultural consistency suggests that the protective function of social support may be a universal human need rather than culturally specific. Regardless of cultural background, feeling cared for and supported by others appears to fundamentally enhance psychological adjustment to cancer.

The studies revealed important insights into how social support influences well-being. *Zaviazkina and Nefedova (2024)* found that social support worked primarily by reducing anxiety and depression, while *Yan et al. (2025)* found a similar but smaller mediating effect through lessening depression. Notably, *Zaviazkina and Nefedova (2024)* found that social support did not buffer the negative effects of distress on well-being. This distinction has practical implications: rather than expecting social support to protect patients from the impact of distress, interventions should focus on using supportive relationships to reduce distress levels directly. *Azadi et al. (2021)* and *Yang et al. (2024)* both showed that social support serves as a bridge connecting internal psychological resources to well-being outcomes. This finding suggests that personal strengths such as psychological hardiness or family resilience are not sufficient on their own; rather, these resources need to be activated and reinforced through supportive relationships to translate into actual well-being.

Krok et al. (2022) found that, while all three coping strategies were significantly correlated with psychological well-being at the bivariate level, only problem-focused and meaning-focused coping demonstrated significant pathways to PWB in the final structural equation model. In contrast, emotion-focused coping was removed because it was not significant after controlling for other variables. However, *Hoogland et al. (2021)* observed that older adults frequently used emotion-focused strategies yet maintained high well-being. This developmental pattern supports the application of socioemotional selectivity theory to understanding coping in cancer populations, which posits that as people age and perceive time as limited, they prioritize emotionally meaningful goals over future-oriented problem-solving (*Carstensen et al., 1999*).

Regarding self-efficacy, *Singtaweasuk et al. (2024)* found a positive relationship that became non-significant when resilience was included. This pattern suggests that believing in one's ability to cope may be necessary but not sufficient for well-being. Self-efficacy may contribute to building resilience, which then directly influences well-being, rather than affecting well-being independently. Similarly, *Seiler and Jenewein (2019)* found that resilience mediated the relationship between various psychological resources and quality of life in cancer patients, supporting our finding that resilience may be the more critical factor for well-being.

This review identified several important gaps: Limited research on coping self-efficacy as an integrated construct using cancer-specific instruments; no studies examining psychological well-being among cancer patients in Saudi Arabia or the Gulf region; no studies utilizing instruments specifically designed to capture perceived changes in well-being following cancer diagnosis; and limited integration of coping self-efficacy and perceived social support in relation to psychological well-being within a unified theoretical framework.

7. Conclusion

Cancer patients generally demonstrate moderate to high levels of psychological well-being. The highest levels were reported among older adult cancer survivors, while moderate levels were observed among patients with abdominal/pelvic cancers. Older age was consistently associated with better psychological well-being in mixed-age samples, explained by socioemotional selectivity theory. Clinically, advanced cancer stage and receipt of radiation therapy were associated with lower well-being, while longer time since diagnosis showed no consistent relationship. Social support demonstrated significant positive relationships with psychological well-being across all studies examining this variable. Problem-focused and meaning-focused coping strategies were significant predictors of psychological well-being. Self-efficacy showed positive correlations with well-being but did not emerge as an independent predictor when resilience was included, suggesting that resilience may be the more proximal factor influencing well-being.

8. Recommendations

These findings provide an evidence-based foundation for developing nursing interventions that target modifiable factors, particularly social support enhancement and adaptive coping strategies, to improve psychological well-being among cancer patients.

The findings have direct implications for nursing interventions. Clinical interventions should prioritize strengthening social support networks and enhancing patients' coping resources. Future research should utilize cancer-specific coping self-efficacy measures, examine perceived changes in well-being following diagnosis, and extend research to underrepresented populations, particularly in Saudi Arabia and the Gulf region, to address the identified geographical gap.

9. References

Applebaum, A. J., Stein, E. M., Lord-Bessen, J., Pessin, H., Rosenfeld, B., & Breitbart, W. (2014). Optimism, social support, and mental health outcomes in patients with advanced cancer. *Psycho-Oncology*, 23(3), 299–306. <https://doi.org/10.1002/pon.3418>

Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19–32. <https://doi.org/10.1080/1364557032000119616>

Azadi, R., Ahadi, H., & Hatami, H. R. (2021). The relationship of psychological well-being and psychological hardiness with the mediating role of social support in women

with breast cancer. *Quarterly of Horizon of Medical Sciences*, 27(1), 18–33. <https://doi.org/10.32598/hms.27.1.3093.2>

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215.

Barcaccia, B., Couyoumdjian, A., Di Consiglio, M., Papa, C., Cancellieri, U. G., & Cervin, M. (2023). Purpose in life as an asset for well-being and a protective factor against depression in adolescents. *Frontiers in Psychology*, 14, 1250279. <https://doi.org/10.3389/fpsyg.2023.1250279>

Brandão, T., Schulz, M. S., & Matos, P. M. (2017). Psychological adjustment after breast cancer: A systematic review of longitudinal studies. *Psycho-oncology*, 26(7), 917–926. <https://doi.org/10.1002/pon.4230>

Bray, F., Laversanne, M., Sung, H., Ferlay, J., Siegel, R. L., Soerjomataram, I., & Jemal, A. (2024). Global cancer statistics 2022: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer Journal for Clinicians*, 74(3), 229–263. <https://doi.org/10.3322/caac.21834>

Carstensen, L. L., Isaacowitz, D. M., & Charles, S. T. (1999). Taking time seriously: A theory of socioemotional selectivity. *American Psychologist*, 54(3), 165–181. <https://doi.org/10.1037/0003-066X.54.3.165>

Faller, H., Schuler, M., Richard, M., Heckl, U., Weis, J., & Küffner, R. (2013). Effects of psycho-oncologic interventions on emotional distress and quality of life in adult patients with cancer: Systematic review and meta-analysis. *Journal of Clinical Oncology*, 31(6), 782–793. <https://doi.org/10.1200/JCO.2011.40.8922>

Haddou, M. B., El Mouaddib, H., Haddou, Z. B., Khouchani, M., & Khoudri, N. E. (2024). Assessment of mental well-being and psychological distress in Moroccan breast cancer patients. *Dementia & Neuropsychologia*, 18, e20240145. <https://doi.org/10.1590/1980-5764-dn-2024-0145>

Haj Hashemi, F., Atashzadeh-Shoorideh, F., Oujian, P., Mofid, B., & Bazargan, M. (2021). Relationship between perceived social support and psychological hardiness with family communication patterns and quality of life of oncology patients. *Nursing Open*, 8(4), 1704–1711. <https://doi.org/10.1002/nop2.808>

Hong, Q. N., Fàbregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P., Gagnon, M.-P., Griffiths, F., Nicolau, B., O'Cathain, A., Rousseau, M.-C., Vedel, I., & Pluye, P. (2018). The Mixed Methods Appraisal Tool (MMAT), version 2018 for information professionals and researchers. *Education for information*, 34(4). <https://doi.org/10.3233/EFI-180221>

Hoogland, A. I., Jim, H. S. L., Schoenberg, N. E., Watkins, J. F., & Rowles, G. D. (2021). Positive psychological change following a cancer diagnosis in old age: A mixed-methods study. *Cancer Nursing*, 44(3), 190–196. <https://doi.org/10.1097/NCC.0000000000000766>

Karatas, T., Ayaz-Alkaya, S., & Özdemir, N. (2023). Fear, anxiety, and coping self-efficacy of individuals with cancer

- during COVID-19 and predictive risk factors: A descriptive and correlational study. *Seminars in Oncology Nursing*, 39(4), 151420. <https://doi.org/10.1016/j.soncn.2023.151420>
- Kim, Y., Ritt-Olson, A., Tobin, J., Haydon, M., & Milam, J. (2022).** Beyond depression: Correlates of well-being in young adult survivors of childhood cancers. *Journal of Cancer Survivorship*, 17(5), 1397–1404. <https://doi.org/10.1007/s11764-022-01186-z>
- Krok, D., Telka, E., & Zarzycka, B. (2022).** Modeling psychological well-being among abdominal and pelvic cancer patients: The roles of total pain, meaning in life, and coping. *Psycho-Oncology*, 31(11), 1852–1859. <https://doi.org/10.1002/pon.6043>
- Lepley, M. M. (2022).** Skin cancer patients' psychological well-being: Identifying the statistically significant predictors. *International Journal of High School Research*, 4(5), 64–72. <https://doi.org/10.36838/v4i5.11>
- Loh, Z. C., Hussain, R., Balan, S., Saini, B., Muneswarao, J., Ong, S. C., & Babar, Z. U. D. (2023).** Perceptions, attitudes, and behaviors of asthma patients towards the use of short-acting β 2-agonists: A systematic review. *PLOS ONE*, 18(4), e0283876. <https://doi.org/10.1371/journal.pone.0283876>
- Masoumi, S., Amiri, M., & Afrashteh, Y. M. (2022).** Self-compassion: The factor that explains a relationship between perceived social support and emotional self-regulation in psychological well-being of breast cancer survivors. *Iranian Journal of Psychiatry*, 17(3), 341–349. <https://doi.org/10.18502/ijps.v17i3.9734>
- Moola, S., Munn, Z., Tufanaru, C., Aromataris, E. C., Sears, K., Sfetc, R., Currie, M. J., Lisy, K., Qureshi, R., Mattis, P., & Mu, P.-F. (2020).** Chapter 7: Systematic reviews of etiology and risk. In E. Aromataris & Z. Munn (Eds.), *JBI Manual for Evidence Synthesis*. JBI. <https://doi.org/10.46658/JBIMES-20-08>
- Onyedibe, M. C. C., Ugwu, L., Nnadozie, E. E., & Onu, D. (2021).** Cancer coping self-efficacy mediates the relationship between mental adjustment to cancer and health-related quality of life in persons with cancer. *South African Journal of Psychology*, 52(3), 325–337. <https://doi.org/10.1177/00812463211061071>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., . . . Moher, D. (2021).** The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>
- Park, K. Y., & Han, S. (2025).** Well-dying and psychological well-being: The role of social support in end-of-life peace. *Psycho-Oncologie*. In press. 4140. <https://doi.org/10.18282/po4140>
- Peters, M. D. J., Marnie, C., Tricco, A. C., Pollock, D., Munn, Z., Alexander, L., McInerney, P., Godfrey, C. M., & Khalil, H. (2020).** Updated methodological guidance for the conduct of scoping reviews. *JBI Evidence Synthesis*, 18(10), 2119–2126. <https://doi.org/10.11124/JBIES-20-00167>
- Rayyan Systems Inc. (2023).** Rayyan: Intelligent systematic review platform [Computer software]. <https://www.rayyan.ai/>
- Ryff, C. D. (1989).** Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069–1081. <https://doi.org/10.1037/0022-3514.57.6.1069>
- Seiler, A., & Jenewein, J. (2019).** Resilience in cancer patients. *Frontiers in Psychiatry*, 10, 208. <https://doi.org/10.3389/fpsy.2019.00208>
- Singtaweesuk, N., Thanoi, W., Vongsirimas, N., Kesornsri, S., & Klainin-Yobas, P. (2024).** Factors predicting psychological well-being among survivors of breast cancer in a tertiary care hospital, Thailand. *Siriraj Medical Journal*, 76(5), 244–254. <https://doi.org/10.33192/smj.v76i5.267634>
- Yan, W., Gong, S., Zhu, Y., Wang, M., Li, Y., & Li, Q. (2025).** How social support affects psychological well-being in colorectal cancer ostomates: A moderated-mediating effects model. *Psycho-Oncologie*, 19(2), 3978. <https://doi.org/10.18282/po3978>
- Yang, Y., He, F., Li, D., Zhao, Y., Wang, Y., Zhang, H., Qiao, C., Cui, Y., Lin, L., & Guan, H. (2024).** Effect of family resilience on subjective well-being in patients with advanced cancer: The chain mediating role of perceived social support and psychological resilience. *Frontiers in Psychology*, 14, 1222792. <https://doi.org/10.3389/fpsyg.2023.1222792>
- Zaviazkina, N. V., & Nefedova, T. (2024).** Psychological well-being in breast cancer patients: The role of social support in managing anxiety and depression. *Wiadomości Lekarskie Medical Advance*, 77(9), 1704–1711. <https://doi.org/10.36740/wlek/192138>

Matrix table

Ser.	Author/country	Title	Aim	Study design	Sample	Data collection methods	Main findings
1	Azadi et al. (2021) Iran	The relationship of psychological wellbeing and psychological hardiness with the mediating role of social support in women with breast cancer	This study aims to determine the relationship between psychological wellbeing and psychological hardiness with the mediating role of social support in women with breast cancer.	Correlation study based on Structural Equation Modeling (SEM)	246 patients with breast cancer.	-Psychological well-being: Ryff Scales of Psychological Wellbeing (RSPWB). -Hardiness: Ahwaz Hardiness Inventory (AHI). -Social support: Berlin Social Support Questionnaire	-Breast cancer patients in Iran (n=236) had a mean PWB score of 33.32 (SD=4.43) using the 84-item Ryff Scale, indicating a moderate level of psychological well-being. -Social support has a significant effect on psychological hardiness ($p<0.05$). That is, social support can play a significant mediating role between psychological wellbeing and psychological hardiness. The impact of social support on psychological hardiness is significant and equal to 0.221, and the effect of social support on psychological wellbeing is significant and equal to 0.132 ($p<0.05$). -About 72% of hardiness can be explained by social support, and the mediating variable of social support can explain 33% of psychological wellbeing. Also, the coefficient of psychological hardiness based on psychological wellbeing mediated by social support is equal to 0.59 ($p<0.05$).
2	Park & Han, (2025) South Korea	Well-dying and psychological well-being: The role of social support in end-of-life peace	Firstly, how perceptions of well-dying influence psychological well-being; secondly, how both receiving and providing social support impact psychological well-being; and thirdly, whether social support moderates the relationship between well-dying perception and psychological well-being.	Cross-sectional study	Elderly individuals aged 65 and older diagnosed with cancer, 400 valid responses	-Psychological well-being: 18 items measuring psychological well-being, -Well-dying perception: 19 items assessing well-dying perception, -Received social support, provided social support: 25 items each evaluating received and provided social support	-Both receiving and providing social support significantly contribute to psychological well-being.

Ser.	Author/country	Title	Aim	Study design	Sample	Data collection methods	Main findings
3	Kim et al. (2022) California, United States	Beyond depression: Correlates of well-being in young adult survivors of childhood cancers	This study correlates of well-being with psychosocial and clinical factors in young adult cancer survivors (YACCS) above and beyond depressive symptoms.	Cross-sectional study	1106 young adult survivors of childhood cancer	<ul style="list-style-type: none"> - Well-being—The Mental Health Continuum – Short-Form Scale (MHC-SF). - Treatment intensity: The Intensity of Treatment Rating Scale 2.0 (ITR-2). - Self-rated health was assessed using one item from the SF-36. - Cancer-related posttraumatic growth: Post-Traumatic Growth Inventory (PTGI). - Social support—A single item was used to assess perceived social support. - Sense of adulthood. - Depressive symptoms: 20-item Center for Epidemiological Studies Depression Scale (CES-D). 	<ul style="list-style-type: none"> - The result showed that 56.2% of young adult childhood cancer survivors (n=1106) achieved well-being scores indicative of flourishing. - The study found that social support was significantly correlated with well-being ($r=0.33$, $p<0.001$) among young adult survivors of childhood cancer and emerged as a significant predictor of well-being ($\beta=0.16$, $p<0.001$) after controlling for demographic covariates. This association remained significant even after accounting for depressive symptoms ($\beta=0.10$, $p<0.05$), suggesting that social support contributes to well-being independently of its effects on reducing negative affect. - Clinical factors, such as treatment intensity, years since diagnosis, gender, and age, were not associated with well-being. - The result reported that gender was not a significant predictor of well-being among young adult childhood cancer survivors ($\beta=0.02$, $p>0.05$).
4	Haddou et al. (2024) Morocco	Assessment of mental well-being and psychological distress in Moroccan breast cancer patients	The study aimed to assess the mental well-being and level of psychological distress of breast cancer patients at the Mohammed VI University Hospital in Marrakech.	Cross sectional study	230 Moroccan breast cancer patients	<ul style="list-style-type: none"> - Mental well-being: Warwick-Edinburgh Mental Well-being Scale (WEMWBS) - Psychological Distress: Kessler Psychological Distress Scale (K10) 	<ul style="list-style-type: none"> - The mental well-being score of 54.59 (SD=11.29) among 230 breast cancer patients. - Older patients (>50 years) showed better mental well-being (56.46±10.39 vs. 52.99±11.81) than younger patients. - The result found no significant differences in mental well-being based on chemotherapy ($p=0.697$), radiotherapy ($p=0.186$), or hormonotherapy ($p=0.675$) among breast cancer patients. - No significant differences were observed in psychological outcomes based on type of surgery (mastectomy vs. lumpectomy) - No significant differences in mental well-being based on disease duration ≤ 2 years vs. >2 years; $p=0.557$). - A significant relationship was observed between the WEMWBS score and cancer stage ($p=0.008$). Patients with localized cancer had a higher WEMWBS score than patients with metastatic cancer (55.53±10.93 vs. 50.40±12.03; $p=0.008$).

Ser.	Author/country	Title	Aim	Study design	Sample	Data collection methods	Main findings
5	Masoumi et al. (2022). Iran	Self-compassion: The factor that explains a relationship between perceived social support and emotional self-regulation in psychological well-being of breast cancer survivors	- The study investigates the positive relationships among emotional self-regulation, self-compassion, and psychological well-being. - The second objective was to examine the mediating effects of self-compassion on these associations.	Cross-sectional design	300 cancer survivors.	- Psychological well-being: The Short Ryff Scale Psychological Well-Being (RSPWB). - Emotion regulation: Ross and John's Emotion Regulation Questionnaire. - Self-compassion: Neff's Self-compassion scale. - Perceived social support: Multidimensional Scale of Perceived Social Support (MSPSS).	- Breast cancer survivors (n=300) had a mean PWB score of 5.20 (SD=0.43), indicating a moderate-to-good level of psychological well-being. - The result reported that perceived social support predicted psychological well-being among cancer survivors ($\beta=0.28$, $p<0.01$).
6	Zaviazkina & Nefedova, (2024) Ukraine	Psychological well-being in breast cancer patients: The role of social support in managing anxiety and depression	-The study examine whether social support moderates the relationship between psychological well-being (PGWBI) and anxiety/depression (HADS) in breast cancer patients. - Determine whether social support enhances psychological well-being (PGWBI) by reducing anxiety and depression (HADS), thereby serving as a mediator in this relationship.	Cross-sectional study.	98 women with breast cancer	- Psychological well-being: The Psychological General Well-being Index (PGWBI). - Anxiety and depression: The Hospital Anxiety and Depression Scale (HADS). - Perceived social support: The Multidimensional Scale of Perceived Social Support (MSPSS).	- The results indicate that higher levels of social support, as measured by the Multidimensional Scale of Perceived Social Support (MSPSS), are significantly associated with increased psychological well-being (PGWBI). Specifically, the regression coefficient for MSPSS is 0.39 ($p=0.00162$), suggesting that for each one-unit increase in social support, psychological well-being improves by 0.39 units. Although the relationship between social support and psychological well-being is statistically significant, the model explains a relatively modest portion of the variance in psychological well-being, with Multiple $R^2=0.09878$ and Adjusted $R^2=0.0894$. - Moderation and mediation effect of social support on psychological well-being and anxiety/ depression relationship. - In summary, while social support does not moderate the impact of anxiety/depression on psychological well-being, it significantly enhances psychological well-being by acting as a mediator, reducing anxiety and depression among breast cancer patients.

Ser.	Author/country	Title	Aim	Study design	Sample	Data collection methods	Main findings
7	Singtaweek et al. (2024) Thiland	Factors predicting psychological well-being among survivors of breast cancer in a tertiary care hospital, Thailand	The study aimed at predicting the effect of stress, social support, self-efficacy, and resilience on psychological well-being in breast cancer survivor.	Predictive descriptive research design	123 cancer survivors	<ul style="list-style-type: none"> - Psychological well-being: 18-item Thai-version Psychological Well-Being Scale (PWES). - Stress: Thai version of the 10-item Perceived Scale (PSS). - Social support: The Thai version of the 12-item Multidimensional scale of perceived social support (MSPSS). - Self-efficacy: The Thai version of the 10-item General Self-efficacy Scale (GSES). - Resilience: Thai version of the 10-item Connor-Davidson resilience scale (CD-RISC). 	<ul style="list-style-type: none"> - Breast cancer survivors in Thailand (n=123) achieved a mean PWB score of 83.19 (SD=8.85), corresponding to 77% of the maximum score. - The results for psychological well-being, social support, self-efficacy, and resilience. PWB ($\chi=83.19$, SD=8.85), social support ($\chi=70.33$, S.D.=11.03), self-efficacy ($\chi=31.90$, S.D.=4.61) and resilience ($\chi=31.39$, S.D.=5.35). - The correlations between psychological well-being, stress, social support, self-efficacy, and resilience. It is revealed that PWB was positively correlated with resilience ($r=0.55$, $p<0.01$), social support ($r=0.44$, $p<0.01$), and self-efficacy ($r=0.34$, $p<0.01$). - Social support significantly predicting PWB ($\beta=0.26$, $p<0.01$) and demonstrating a moderate positive correlation ($r=0.44$, $p<0.01$). - The model summary by an enter model of multiple linear regressions showed that stress, social support, self-efficacy, and resilience could explain the variance of PWB by 44% (adj $R^2=0.43$, $F(4,118)=23.58$, $p<0.01$). Resilience had the strongest and significant effect on PWB ($\beta=0.33$, $p<0.01$), followed by stress ($\beta=-.27$, $p<0.01$) and social support ($\beta=0.26$, $p<0.01$). However, self-efficacy ($\beta=0.05$, $p>0.01$) did not affect PWB.
8	Hoogland et al. (2021) United States	Positive psychological change following a cancer diagnosis in old age: A mixed methods study	The study aimed to advance current understanding of positive psychology (i.e., posttraumatic growth, well-being) in older adults with cancer.	Mixed-method study (quantitative and exploratory qualitative)	56 cancer patients (aged above 60 years)	<ul style="list-style-type: none"> - Posttraumatic Growth: The 21-item Posttraumatic Growth Inventory (PTGI). - Well-being: The 8-item Flourishing Scale (FS). - Coping: The 28-item Brief COPE. - Quality of Life—The 12-item Short-Form Health Survey SF-12 (has both physical and mental components). 	<ul style="list-style-type: none"> - Older adult cancer survivors (n=56, ≥ 60 years) demonstrated the highest well-being, with a mean score of 6.05 (SD=1.18), representing 86% of the maximum possible score. Notably, these participants reported significantly better mental quality of life compared to age-adjusted population norms ($p=0.0001$). - The study found no statistically significant association between age and well-being ($\rho=0.13$, $p=0.34$) among older adult cancer survivors. - The study found that participants endorsed emotion-focused coping strategies more frequently than problem-focused coping. This pattern, combined with high levels of well-being observed in the sample, suggests that the effectiveness of coping strategies may vary across age groups and cancer populations. For older adults, emotion-focused approaches including acceptance, positive reframing, and religious coping may be particularly adaptive, aligning with the well-documented positivity effect in aging whereby older individuals prioritize emotion regulation over problem-solving goals.

Ser.	Author/country	Title	Aim	Study design	Sample	Data collection methods	Main findings
9	Yan et al. (2025) China	How social support affects psychological well-being in colorectal cancer ostomates: A moderated mediating effect model	- The study aims to explore the influence of social support on the psychological well-being (PWB) of colorectal cancer ostomates. It specifically examines how depression mediates the relationship between social support and PWB and explores if body image disturbances moderate this process.	Cross-sectional study	319 colorectal cancer patients.	- Social support: Perceived social support scale (PSSS). - Subject's body image status: Self-rating scale of body image (SSBI). - Depressive symptom: Self-rating depression scale (SDS). - Psychological well-being Scales of PWB (SPWB) by Ryff.	- The result found that colorectal cancer ostomates (n=319) had a mean PWB score of 69.83 (SD=17.33), representing 65% of the maximum score. - The result reported no significant difference in PWB scores between male (M=69.16, SD=17.28) and female (M=70.60, SD=17.42) among colorectal cancer patients (t=-0.741, p=0.459). - The result found no significant differences in PWB between colon cancer (M=70.00, SD=15.77) and rectal cancer patients (M=69.71, SD=18.40) among ostomates (F=0.149, p=0.882). - Pearson bivariate correlation analysis revealed significant associations among these variables: (1) social support was significantly positively with PWB; (2) depression showed a significant negative relationship with PWB. - The mediation of depression on the relationship between social support and PWB among CRC ostomates. Results indicated that depression mediated the relationship, with a 9.0% effect. This means that in addition to the level of social support of CRC ostomates directly affecting the patient's PWB, it also affects the patient's depression level, which in turn has an indirect impact on PWB. - The study concludes that social support exerts a positive influence on PWB and mitigates depressive symptoms among CRC ostomates. Depression operates as a mediator in the association between social support and PWB.
10	Yang et al. (2024) China	Effect of family resilience on subjective well-being in patients with advanced cancer: The chain mediating role of perceived social support and psychological resilience	The study investigates the connection between Chinese advanced cancer patients' subjective well-being and family resilience. It also looked at how psychological resilience and perceived social support might act as moderators.	Cross-sectional study.	338 patients with advanced cancer	- Family Resilience: The Family Resilience Questionnaire (FRQ). - Subjective well-being: General Well-being Schedule (GWB). - Social support: Perceived Social Support Scale (PSSS). - Psychological resilience: The Chinese version of the Connor-Davidson Resilience Scale 10-item (CD-RISC)	- Advanced cancer patients (Stage III/IV, n=338) exhibited a mean subjective well-being score of 65.38 (SD=12.91), corresponding to 73% of the maximum score. - Strong positive correlation between perceived social support and subjective well-being (r=0.641, p<0.01). Their regression analysis revealed that perceived social support directly predicted subjective well-being (β=0.210, p<0.001). - Perceived social support mediated the relationship between family resilience and subjective well-being (indirect effect=0.128, accounting for 26.95% of the total effect), representing the strongest mediating pathway. Additionally, a chain mediation effect was observed wherein family resilience influenced perceived social support, which in turn enhanced psychological resilience, ultimately improving subjective well-being (indirect effect=0.016, accounting for 3.36% of the total effect).

Ser.	Author/country	Title	Aim	Study design	Sample	Data collection methods	Main findings
11	Lapley (2022) United States	Skin cancer patients' psychological well-being: Identifying the statistically significant predictors	The study explores factors that are statistically significant predictors of skin cancer patients' psychological well-being.	Cross-sectional study.	Convenience sample of 470 skin cancer patients.	<ul style="list-style-type: none"> - Medical variables: Demographic variables - Personality types: The Big Five Personality Assessment - Nutrition assessment developed by the Vitality Group, a global organization that helps individuals live healthier. - Psychological well-being: Carol Ryff's 18-item psychological Well-Being Scale. - Social support: Perceived Support Scale developed by Krause and Borawski-Clark. - The exercise: The Global Physical Activity Questionnaire (GPAQ) - Patients' mindfulness: The Mindful Awareness Attention Scale (MAAS). - Open-ended question. 	<ul style="list-style-type: none"> - From 470 patients only 251 responses were complete and analyzes. - The result showed that skin cancer patients (n=251) had a mean PWB score of 3.91 (SD=0.51), representing 78% of the maximum score and indicating a high level of well-being. - The result reported that type of skin cancer did not show significant differences in PWB ($p>0.05$). - Factors were shown to be significant predictors of skin cancer patients' PWB social support ($\beta=0.219$, $p=0.000$), stage of skin cancer ($\beta=-0.179$, $p=0.001$). - Among demographic variables, age, gender, and ethnicity were shown by ANOVAs to not have significant differences in PWB ($p>0.05$). However, marital status was shown to be significant [$F(5, 242) = 2.341$, $p=0.042$]. married participants had the highest PWB, while widowed patients had the lowest PWB. - Analysis of the medical variables revealed that the amount of time since diagnosis, type of skin cancer, and response to treatment(s) did not show significant differences in PWB ($p>0.05$). - In terms of treatments received, chemotherapy, immunotherapy, cryotherapy, excisional surgery, Mohs surgery and photodynamic therapy were all insignificant as well ($p>0.05$). However, radiation treatment was significant to respondents' PWB [$t(249) = 0.324$, $p=0.020$]. - Patients who were treated with radiation experienced lower PWB than those who were not. - Qualitative response: Majority of responses were heavily focused on social support, whether it was from family, friends, or fellow skin cancer patients.
12	Krok et al. (2022) Poland	Modeling psychological well-being among abdominal and pelvic cancer patients: The roles of total pain, meaning in life, and coping	The study examines whether meaning in life and coping can be serial mediators in the relationship of total pain with psychological well-being in cancer patients	Cross-sectional study.	333 abdominal and pelvic cancer (APC) patients	<ul style="list-style-type: none"> - Pain: The Total Pain Questionnaire. - Meaning in Life: The Meaning in Life Questionnaire (MLQ) 10 items. - Coping: The Coping Questionnaire consists of 37 items and measures three coping strategies: problem-, emotion-, and meaning-focused. - Psychological well-being: Psychological Well-Being Scale (Ryff) 42-item. 	<ul style="list-style-type: none"> - Abdominal and pelvic cancer patients (n=333) had a mean PWB score of 3.59 (SD=0.61), representing a moderate level at 60% of the maximum score. - Age was positively correlated with PWB ($r=0.18$, $p<0.01$) among abdominal and pelvic cancer patients. The result found no significant gender differences in psychological well-being. - Coping strategies positively correlated with PWB: <ul style="list-style-type: none"> - Problem-focused ($r=0.41$, $p<0.001$); - Emotion-focused ($r=0.42$, $p<0.001$); - Meaning-focused ($r=0.43$, $p<0.001$) - Presence of meaning strongly correlated with PWB ($r=0.51$, $p<0.001$). Search for meaning NOT correlated with PWB ($r=-0.03$, $p>0.05$). - Final SEM: Problem-focused and meaning-focused coping \rightarrow PWB (significant); Emotion-focused removed (non-significant)