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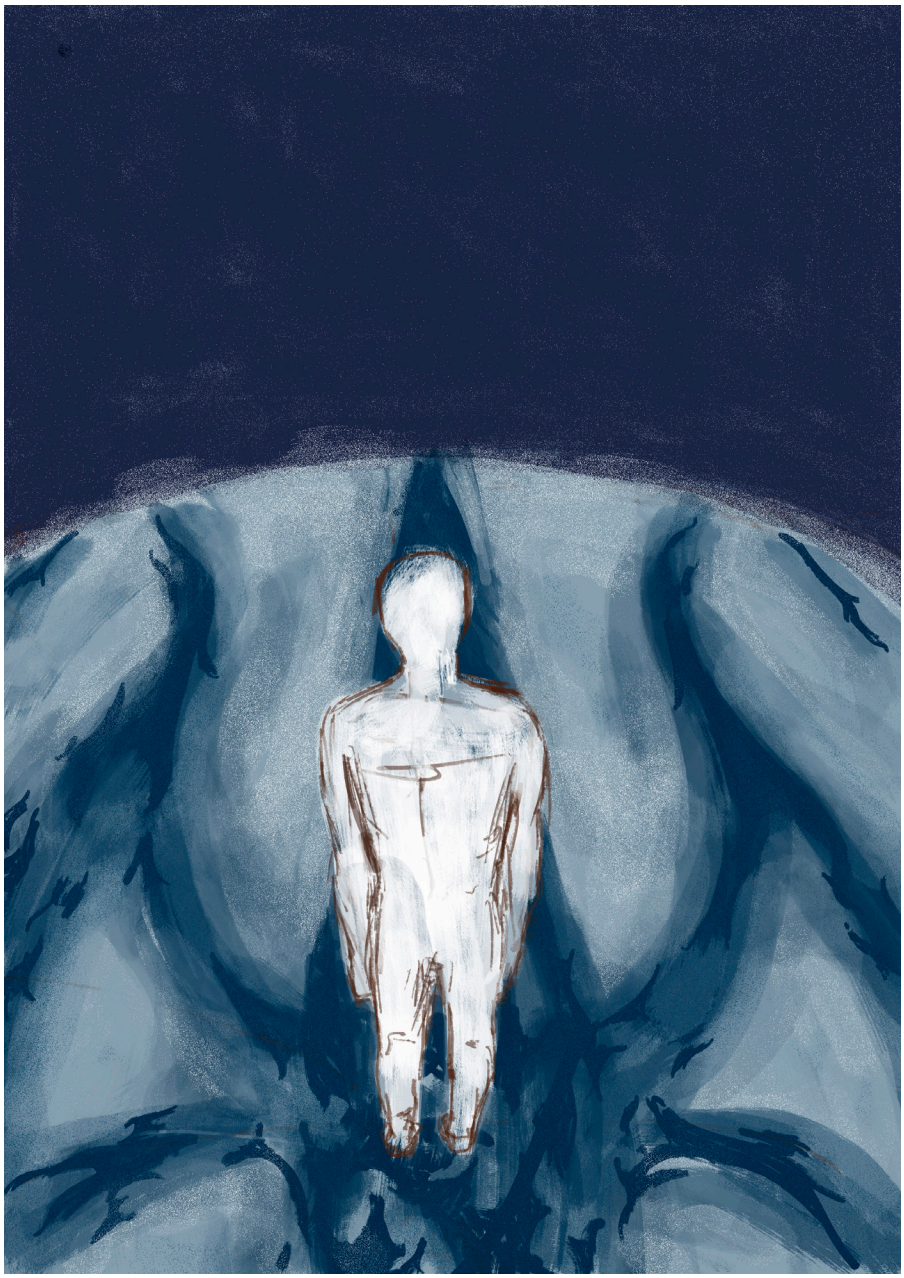
Bianca DeSilva, Dr. Timothy Strauman, Dr. Katherine Ramos

Volume 3, Issue 2

Article Synopsis

This paper investigates the psychological impact of identity and resilience on the distress experienced by older adults with cancer. To do this, we synthesized the literature surrounding this topic from the past two years (2022-2024). Findings indicate that mental health interventions such as Self-System Therapy (SST) can improve distress and address support needs for older adults with cancer.



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https://doi.org/10.55894/dv3.22

ABSTRACT

Older adults (65+) make up 60% of cancer diagnoses and 70% of deaths related to cancer (Marosi & Köller, 2016). Although this age group experiences significant distress, behavioral studies investigating distress tend to be overrepresented by younger populations, leaving a gap in the knowledge about the distress needs of older adults (Chang et al., 2020). To bridge this gap, Dr. Katherine Ramos and Dr. Timothy Strauman of Duke University's Psychology Department conducted a pilot study that found two major themes related to distress in older adults: identity and resilience. The purpose of this study is to investigate the psychological impact of identity and resilience on the distress experienced by older adults with cancer. Using the two qualitative themes, identity and resilience, the researchers of this study conducted a narrative synthesis of contemporary literature surrounding identity, resilience, and their psychological impact on distress in older adults with cancer. Following the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRIMSA) guidelines, the study found nine eligible articles. The study conducted a thematic analysis of the articles in this synthesis and found six themes: (1) reconstructing identity after diagnosis, (2) experiencing anxiety due to uncertainty of cancer outcomes, (3) needing to "push along" through a cancer diagnosis, (4) having access to social support increases resilience, (5) experiencing low resilience leads to demoralization, and (6) navigating cancer requires redefining oneself to confront cancer challenges. Future directions and clinical implications include adapting Self-System Therapy (SST) as a mental health intervention for older adults with cancer.

INTRODUCTION

Cancer remains a significant global health challenge and is one of the leading causes of death worldwide (Roser & Ritchie, 2019). Its impact is far-reaching and complex, affecting individuals, families, and healthcare systems. The incidence of cancer is particularly notable among older adults, specifically those aged 65 and older. This demographic accounts for approximately 60% of all cancer diagnoses. Moreover, about 70% of deaths caused by cancer occur in this age group (Marosi & Köller, 2016). This highlights a critical need for targeted research and intervention strategies.

Despite the high prevalence of distress among older adults, a notable gap exists in behavioral studies focusing on distress in older adults. Much of the existing research on distress is primarily concentrated on younger populations, leaving a void in understanding the specific needs and experiences of older adults (Chang et al., 2020). This oversight in the literature underscores the urgency for more age-specific studies that address the unique challenges faced by older adults.

To address this gap, Dr. Katherine Ramos and Dr. Timothy Strauman conducted a pilot study to understand the specific distress needs and sources of support for older adults with advanced lung cancer. Data from this study found five key themes: uncertainty, managing symptoms and side effects, identity, finding support, and resilience (Ramos & Strauman, 2022). This paper will concentrate on two of these themes: identity and resilience. Ramos & Strauman (2022) found that older adults with advanced lung cancer experience a significant

loss of identity after diagnosis. They also found that resilience emerges from a multitude of factors such as the support systems that the patient leans on and the active choice the patient makes to focus on the positive and live in the present moment. The purposes of this thesis are to examine these themes across cancer types more broadly, exploring their connections to distress among older adults with cancer. This study hopes to drive more mental-health oriented and comprehensive cancer supportive care in older adults.

Identity, or how one and others perceive themselves, has been profoundly affected in older cancer patients (Bilgrami, 2006). Many older adults with cancer expressed a shift in their self-view after being diagnosed with cancer, transitioning from seeing themselves as healthy individuals to identifying as patients grappling with a severe illness (Ramos & Strauman, 2022). This altered sense of self significantly influences their overall distress. Distress tends to increase as one becomes an older adult through factors such as a lower sense of control, widowhood, and declining levels of health. Cancer diagnosis exacerbates this increasing distress (Schieman et al., 2001). Understanding the relationship between identity and cancer distress in older adults can improve cancer care and reduce distress for this vulnerable population.

Another aspect of an older adult's altered sense of self due to their cancer diagnosis is how other's perception of them changes. Many older adults communicated that keeping their diagnosis private is very important, with only close family and friends informed about ongoing developments. They did not want others in their community to view them as a cancer patient or to be treated differently due to their diagnosis (Ramos & Strauman, 2022). As an individual diagnosed with cancer, the altered sense of self is reinforced by others unintentionally treating them like a dependent or unhealthy person.

Resilience, defined as the capacity to maintain stability in the face of adversity, is often misconstrued as an innate trait (Southwick et al. 2014). However, it is more accurately shaped by one's experiences, environment, and the quality of support systems, including financial resources, family, educational institutions, and their broader community (Pooley & Cohen, 2010). Support systems and facilitative environments can even prevent negative consequences of traumatic experiences by promoting positive growth, such as successful adaptation and coping to stress, following exposure to traumatic events (Ungar, 2013). If an individual with a cancer diagnosis lacks many of these support systems, their resiliency will most likely be low which may correlate with greater mental and physical burdens and subsequently exacerbate their distress (Sihvola et al. 2022).

By reviewing this literature from the past two years, this study creates a narrative analysis of distress experienced by older adults with cancer captured under the lenses of identity and resilience. This review puts forth the current knowledge on this topic to allow future researchers to understand what questions to explore. By focusing on these themes, this research hopes to contribute valuable insights to the field of oncology and gerontology, ultimately informing more effective and empathetic approaches to supportive cancer care for this vulnerable population.

METHODS

Selection Criteria

The inclusion and exclusion criteria for the review are depicted in the table below.

Table 1.

Inclusion Criteria	Exclusion Criteria
Participant age ≥ 50 years	Participant age < 50 years
Participant has cancer (any stage; disease agnostic)	Any other chronic disease
Outcomes related to resilience, identity, and self-concept	No focus on cancer patient
Qualitative, quantitative, behavioral trials, and supportive care interventions	Pharmacological, clinical (e.g., drug trials) or lab-based studies

Methodology

Referencing the eligibility criteria above, articles were searched for using the databases APA PsycArticles and APA PsycInfo under the EBSCOhost platform to conduct the initial three searches. For each search, the advanced search option was used to mark the options of peer-reviewed papers, age groups of aged (65 years and older) and very old (85 years and older), and a date range of 2022 to 2024. The first search included the terms "cancer" and "identity" yielding 27 articles sorted into the identity batch. The second search included the terms "cancer" and "resilience or resiliency or resilient" yielding 37 articles sorted into the resilience batch. The third search included the terms "cancer" and "self-esteem or self-concept or self-worth or self-evaluation or self-perception" yielding 27 articles sorted into the self-concept batch.

Next, the duplicates were eliminated from each batch of articles, removing 1 article from the identity batch, 1 article from the resilience batch, and 4 articles from the self-concept batch. After this, the first review of all the articles was conducted using the exclusion criteria. This resulted in removing 12 articles from the identity batch, 19 articles from the resilience batch, and 8 articles from the self-concept batch. Then, the second review of the articles was conducted using the inclusion criteria. This resulted in removing 4 articles from the identity batch, 13 articles from the resilience batch, and 12 articles from the self-concept batch.

After sorting through the articles using the inclusion and exclusion criteria, there were 10 articles in the identity batch, 4 articles in the resilience batch, and 3 articles in the self-concept batch. Next, an abstract review of each of the articles was conducted that sorted out articles that did not meet our relevant outcomes of identity, resilience, or self-concept. In this review the abstract and methods section were read. This resulted in 6 articles in the identity batch, 4 articles in the resilience batch, and 1 article in the self-concept batch. Finally, a full-text review was conducted that sorted out articles that did not meet the relevant outcomes. In this review, each article was read in full. This resulted in the final collection of 5 articles in the identity batch, 3 articles in the resilience batch, and 1 article in the self-concept batch with a total of 9 articles in our review. See Table 5.

With the final articles selected, a thematic content analysis was conducted to find the most recurring patterns and themes within the articles under the identified outcomes. Under the identity outcome three themes were found. Under the resilience outcome two themes were found. Under the self-concept outcome one theme was found. Through these themes a narrative analysis was created that demonstrates how these themes relate to their respective outcomes. See Figure 1. Consort Diagram.

Table 5. *Articles in final batch*

Identity Articles	Population of Study	Study Design	Variables/Outcomes
Ciaralli et al. 2021 *age range from 58-95	-older adult cancer survivors -60 years +	-data from older study -statistical analyses -differences between means -bivariate correlation analysis -three ordinary least-squares regression analyses -regression analyses	-perceived disability (1 item) -demographic and personal characteristics -# of comorbidities -level of reported functional difficultures (nagi 1976 index) - # of current non-cancer symptoms -# of treatment types -cancer stage -current cancer symptoms
Harmon and Kyle 2019	-cancer/ remission patients -M=67 yrs, Range: 58 yrs -73 yrs	-semi-structured interviews based upon prior informal discussion	-historical relationship to nature and leisure -diagnosis of cancer and accompanying treatment program -participation in hiking program -outlook for future
Martin et al. 2023 *note that two participants were in 40s	-those who had completed treatment for bowel cancer -M=63 yrs, Range: 42 yrs – 92 yrs	-interpretive descriptive qualitative methodology -inductive analytic approach	Themes -I had to heal myself -Life's too short -The person I've become
van der Kamp et al. 2022 *one participant is 47	-men w/ prostate cancer -M=62 yrs, Range: 47 yrs – 71 yrs	-narrative analysis	Themes -reconstructing identity -shifting relationship w/ prostate cancer -relationship w/ technology -uncertainty, incoherence and haunting

Yeung et al. 2022 Mean age is 68.75 SD=10.66	-rural patients w/ advanced cancer -M = 68.75 yrs; SD = 10.66	-qualitative descriptive design -semi-structured interviews w open ended questions	-demographic info -clinical and disease info Themes -fluidity in patients' emotions -religion/spirituality -social support -positive attitude -cognitive strategies -self-care -medication
Resilience Articles	**Population of Study**	**Study Design**	**Variables/Outcomes**
Chen et al. 2021	-Cancer patients in Taiwan -M=67.18 yrs; SD=10.82; Range = 42 yrs – 87 yrs	-Advanced Care Plan	-coping scale ways of coping checklist-revised -social support scale -resilience scale
Chien et al. 2022	-Prostate cancer survivors - age range from 46-84, median=69 and mean=68.82, SD=6.74	-cross-sectional -self reported questionnaires	-disease characteristics -physical symptoms (mandarin version of expanded prostate cancer index composite) -cancer specific self-efficacy (mandarin version of cancer survivors' self-efficacy scale) -psychological resilience (mandaring version of connor-davidson resilience scale) -demoralization (mandarin version of the demoralization scale)

Michael et al. 2022	-Cancer patients - age range 44-99, mean=71.8, SD=11.4	-video intervention vs standard -quantitative and qualitative	Themes -cancer patients ability to posture vulnerability w/ resilience Subthemes -acknowledging frailty w/ diverse adaptations to dependency -benevolence and reciprocation of family/friends caring -death anxiety, ambivalence and experiential acceptance of dying -honouring death through secular and sacred rituals
Self-Concept Articles	**Population of Study**	**Study Design**	**Variables/Outcomes**
Törnävä et al., 2021	Men w penile cancer surgery -age range 50-91	Interview or response letter -thematic analysis	Themes -cancer-modified me -everyday life defined by physical symptoms -sexual life defined by cancer -reshaped content of life

RESULTS

Under the following sections, the literature review identified nine articles that fit the parameters of the search across identity (n=5), resilience (n=3), and self-concept (n=1).

Identity

Identity is defined as how an individual and others perceive themselves (Bilgrami, 2006). Cancer and its treatment affect a patient's identity by altering their sense of self, shifting their identity from a healthy, independent self to an unhealthy, dependent self. Others around them, such as family and community members, also start treating them differently, bringing "cancer patient" to the forefront of their identity (Ramos & Strauman, 2022).

Within this first batch of five articles, studies primarily focused on how cancer affects the lives of older adults and the general experiences of being an individual with a cancer diagnosis. These studies used qualitative research designs that incorporated interviews. See Table 5 for more study details. After reviewing these five articles, three themes emerged: reconstructing identity after diagnosis, experiencing anxiety due to uncertainty of cancer outcomes, and needing to "push along" through a cancer diagnosis.

Reconstructing Identity After Diagnosis

Patients expressed that much of their current identities are lost and replaced with a "patient" identity (van der Kamp et al., 2022). Patients had different ways of reconstructing their identity to cope with this lost sense of self. Some patients wanted to suppress the "patient" identity by acting strong, independent, and resilient. These patients would hide their emotions and suppress their fears: "[*My daughter] used to say to me, 'how are you feeling?' and I used to think 'I can't be bothered talking about feelings*'" (Martin et al., 2023). This resulted in patients becoming more irritable, angry, and less empathetic. Patients cited annoyance at other's worries as they were perceived

as minor compared to their own experiences with cancer. Some of these patients communicated that they preferred their pre-diagnosis identity, with one participant admitting "she '*rather liked the person [she] was before*'" (Martin et al., 2023).

Other patients reestablished their sense of self by reconnecting with identities from their past. Patients communicated that as they aged and life became more monotonous and repetitive, they drifted away from who they used to be. However, being diagnosed with cancer disrupted the tediousness of life with intense negativity and a loss of self. This disruption allowed patients to reconsider what was important to their life and identity: "Cancer was a real wakeup call. '*Everything that was really important to me came back front and center*'" (Harmon & Kyle, 2022).

Patients came back, within the limitations of their current health, to activities, friendships, and anything else that used to give their lives value and meaning. Even with these imposed limitations, these past identities incurred feelings of nostalgia and a newfound appreciation for life (Harmon & Kyle, 2022; van der Kamp et al., 2022). A diagnosis of cancer takes away the implicit and unappreciated value of life by creating immense instability in its continuity. To regain a meaning of life, patients returned to former identities that shaped their core self and interlaced it with their "patient" identity to create a new intermingled self. van der Kamp et al. (2022) corroborates this finding: "We saw that reconstructing identity consists of memoirists referring to previous identities and connecting them to their current identity of being a […] cancer patient".

Experiencing Anxiety Due to Uncertainty of Cancer Outcomes

Cancer patients experience anxiety due to the uncertainty of cancer outcomes. This uncertainty comes from various reasons. Some patients' uncertainty stemmed from discrepancies between their subjective sense of health and their objective health. Patients did not always feel bad, citing that sometimes they would feel very good: "'*Because I feel good. So good that I sometimes wonder if I really have cancer*'" (van der Kamp et al., 2022). The contradiction in identity, between the mind and body, causes anxiety and feelings of uncertainty. Patient's uncertainty also stemmed from incongruency between multiple doctors' opinions and even between these opinions and test results. Patients worry about their current state of cancer, if the doctors and tests are accurate, and if their cancer will spread and worsen in the future. One participant wrote, "'*Realistically there was a myriad of what ifs lurking down the road, most beyond my control, to be resolved by the sometimes unsympathetic roll-of-the-dice. What if the tests were wrong and the cancer had actually spread? What if I made the wrong decision as to how I was to be treated?*'" (van der Kamp et al., 2022). This ongoing anxiety of current and future health leaves the patient in a continuous cycle of worry (van der Kamp et al., 2022).

For patients in remission, there is always a worry of cancer recurrence. This constant anxiety makes patients hypervigilant to their body functioning. Slight aches and pains would trigger immense anxiety and concern of relapse. Multiple participants exhibited this fear: "Even a minor '*little niggle*' (Julie) could prompt a rapid and intense anxiety response with the overwhelming thought '*Oh my god, is it back?*' (June)" (Martin et al., 2023). Patients referred to this constant worry as existential angst, making previously inconsequential matters drive feelings of anxiety. This anxiety became an unwelcome part of their new identity, with patients lacking confidence, a trait which they previously identified with having (Martin et al., 2023).

Needing to "Push Along" Through a Cancer Diagnosis

Patients discussed feeling the need to "push along" and keep fighting to survive through their cancer diagnosis. This feeling arose from a variety of reasons. Some patients wanted to identify as strong and resilient so they would "get on" with life, doing the best that they could. One patient stated "'*I think it's just the attitude. I just gotta keep pushin' myself and keep goin'. If I sit in the chair, that's gonna be the end*'" (Yeung et al., 2022). Many patients had internally driven expectations to remain positive by expressing their strength and resilience (Yeung et al., 2022). These expectations of remaining strong,

resilient, and positive can also be externally driven. External pressures include viewpoints of what makes a cancer survivor. Patients describe the constant advice from others to "remain positive" and "stay strong" in the face of cancer (Martin et al., 2023). If a patient could not adhere to this, it was a visual representation of the cancer winning. This pressure to remain positive and strong led patients to hide their true feelings. One anecdotal quote includes: "'*I'm pretty good at being able to put the face on and just go and do it, and then on the inside be falling to pieces, and sit in the car and have a really good cry*'" (Martin et al., 2023). While remaining positive and strong allows patients to "push along" through a cancer diagnosis, it also causes patients to mask their true feelings.

Patients in remission felt like they must "push along" due to the opportunity of life they had been given. Many expressed that others in their situation are dead and they are the lucky ones that are alive. Even if they have had many resulting complications, the patients communicated that it was better than being dead. One participant stated, "'*It could be better, but it could be a lot worse too, eh. I could be dead*'" (Martin et al., 2023). They felt like they were wasting this second chance at life if they did not "push along" (Martin et al., 2023).

Resilience

Resilience is defined as the capacity to maintain stability in the face of adversity (Southwick et al., 2014). Although resiliency is typically misunderstood as an innate trait, it is indeed shaped by one's experiences, environment, and the quality of support systems, including financial resources, family, educational institutions, and their broader community (Pooley & Cohen, 2010).

Within this second batch of three articles, studies primarily focused on the various factors that influence a cancer patient's resilience across both qualitative and quantitative research designs, primarily using self-reported questionnaires. See Table 5 for more study details. After reviewing these three articles, two themes emerged: having access to social support increases resilience and experiencing low resilience leads to demoralization.

Having Access to Social Support Increases Resilience

Overall, it was found that social support is significantly and positively correlated with higher use of problem-focusing coping strategies, which increases a patient's resilience because they can manage their distress on their own. Problem-focused coping is defined as an individual intentionally deciding to manage the source of stress in a troubling situation. Cancer patients with higher levels of social support made more use of problem-focused coping strategies, such as modifying a situation to make it less stressful, to manage the distress they experience due to their cancer diagnosis (Chen et al., 2021). Previous research found that patients with higher resilience display better active coping strategies, such as positive reappraisal and planful problem-solving (Lee & Kim, 2018; Popa-Velea et al., 2017). Since higher social support correlates with greater use of coping strategies and greater use of coping strategies is associated with higher resilience, it can be inferred that higher social support is correlated with higher resilience. Overcoming adversity is also a part of the experiences that shape an individual's resilience. Therefore, having concrete strategies like problem-focused coping allows cancer patients to overcome adversities related to their cancer diagnosis and increase their resilience.

Cancer patients also rely on social support for both physical and emotional needs. Many of the patients identified how their loved ones will manage household tasks such as cooking and cleaning, transportation, and even personal hygiene. When discussing this topic, one participant explained that "'*physical tasks like cleaning and gardening can be very difficult or impossible, but my family looks after me*'" (Michael et al., 2022). Patients also stated that spending time with family and friends allowed them to live a meaningful life. The care given by their loved ones produced a sense of being valued. Michael et al. (2022) affirmed this sentiment: "The reciprocation of care experienced within the patient-caregiver dyad engendered much hope for many. Rather than experience a state of dejection, caregivers' emotional and moral solidarity installed a sense of security". Patients also expressed their

indispensable reliance on their family and friends (Michael et al., 2022). The outcome of feeling valued from this care encompasses the experiences that shape one's resiliency, illustrating that social support is associated with resilience.

Experiencing Low Resilience Leads to Demoralization

Demoralization is the psychological state in which an individual feels hopelessness, despair, helplessness, meaninglessness, and a deprivation of goals (Chien et al., 2022). Chien et al. (2022) found "that survivors with higher psychological resilience experienced less demoralization", demonstrating that focusing on improving a patient's psychological resilience will reduce demoralization. Cancer-specific self-efficacy, the confidence an individual has in their abilities to self-manage health problems related to cancer and its treatment, was found as a protective factor for both psychological resilience and demoralization (Chien et al., 2022). Therefore, focusing on improving a patient's cancer-specific self-efficacy will improve psychological resilience, thus also reducing their demoralization. Improving cancer-specific self-efficacy would likely include teaching coping strategies and increasing access to resources (medication, tools, technology) that allow the patient to self-manage health problems (Chen et al., 2021; Chien et al., 2022). These coping strategies and resources encompass the support systems that shape an individual's resilience, demonstrating how focusing on improving cancer-specific self-efficacy would heighten a cancer patient's resilience and hence lower their levels of demoralization.

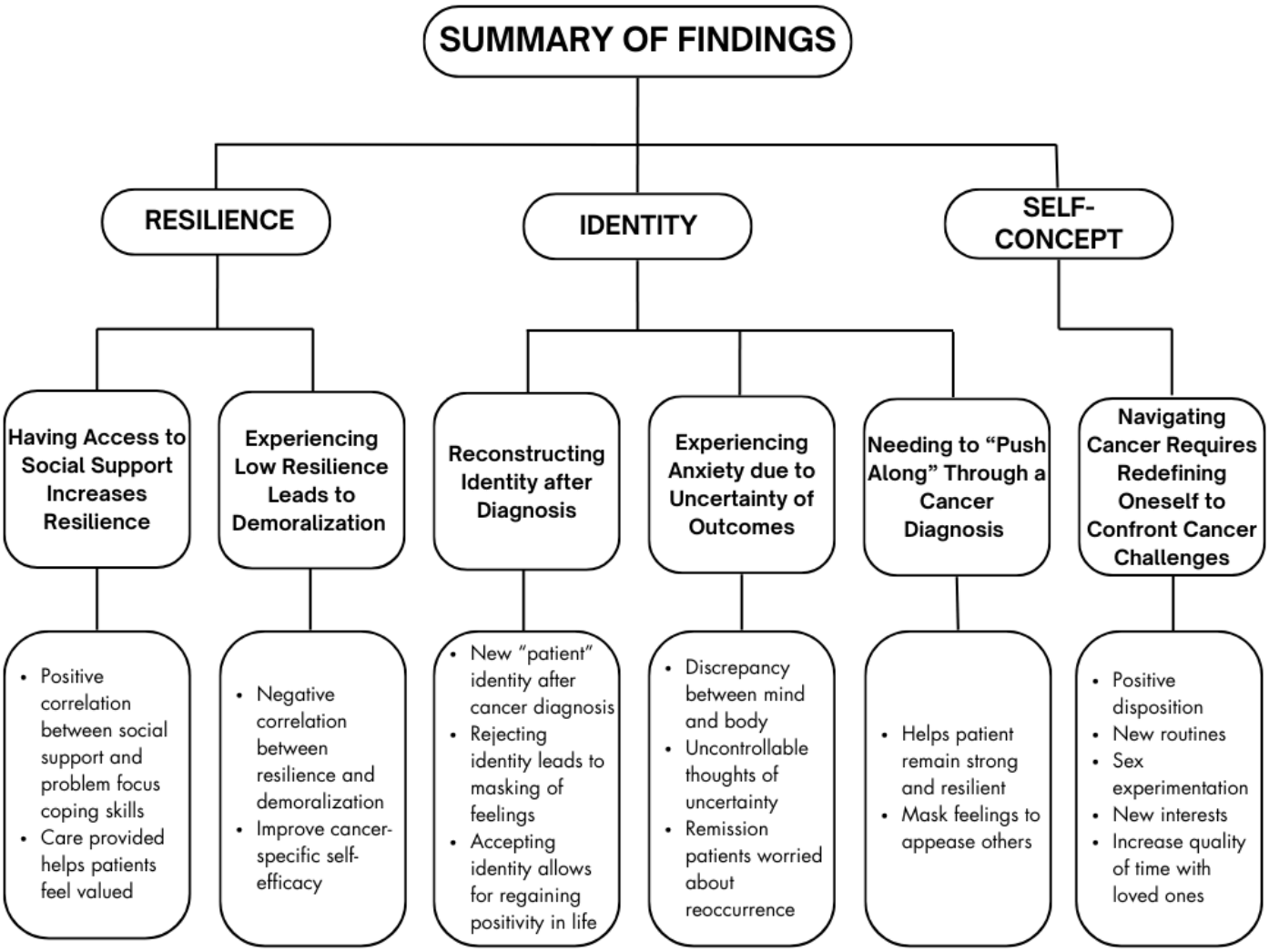
Self-Concept

While identity includes how others perceive an individual, self-concept is focused on how the individual cognitively perceives themselves (Kinch, 1963). Cancer and its treatment affect how a patient conceptualizes themselves, typically leading to a negative view of oneself based upon their limited autonomy and worsened health (Bhattacharjee, 2013).

Within this third batch there was one article, which focused on the various aspects of life impacted by cancer and how older adults adapted to these changes. The study design was qualitative using interviews to collect information. See Table 5 for more study details. After reviewing this article, one theme emerged: navigating cancer requires redefining oneself to confront cancer challenges.

Navigating Cancer Requires Redefining Oneself to Confront Cancer Challenges

Participants described many ways in which their lives have permanently changed after diagnosis and surgery. Even though the participants struggled with many challenges related to cancer, the participants were able to cope with new lifestyle changes by redefining their self-perception. To combat negative feelings such as shame, inadequacy, and stress, participants became more positive, vulnerable, humorous, and joyous. One patient expressed, "'*I have tried with light humour to replace difficulties; things were going forward when you look from a different perspective and look for humour in different events. That is the way to make life easier*'" (Törnävä et al., 2022). To cope with limited physicality due to daily pain, participants developed daily routines that allowed them to maintain their physical functioning. One participant articulated, "'*I cannot work as before, but I can take care of myself, cook, go shopping. I can go in for sports, go for small walks, ride a bike*'" (Törnävä et al., 2022). To adjust to a new sex life, participants were open to experimentation and redefined what was important to them in sex. One patient communicated, "'*Well, you can find all kinds of sex tools like strap-ons and whatever you can find now. Those have been good and everything else and, yes, we have always been like this with my wife*'" (Törnävä et al., 2022). To adjust to a new life, participants engaged in new interests that fit into their physical limitations and spent more time with family to increase meaning and joy in life. Törnävä et al. (2022) expressed the following: "Children and grandchildren were perceived as a mental resource that gives meaning to life and increases the joy of life". Although these participants dealt with many hardships due to their diagnosis, they positively adapted themselves to be able to confront these challenges and live a meaningful life (Törnävä et al., 2022).



DISCUSSION

The aim of this narrative synthesis was to review the current literature on older adults with cancer and determine the psychological impact of identity and resilience on their distress. This review was able to highlight and emphasize these psychological impacts through three relevant outcomes: identity, resilience, and self-concept. Through a thematic content analysis, this study proposed 3 themes under identity, 2 themes under resilience, and 1 theme under self-concept.

The three themes found under identity were reconstructing identity after diagnosis, experiencing anxiety due to uncertainty of cancer outcomes, and needing to "push along" through a cancer diagnosis. Older adults expressed that after diagnosis, all their previous identities vanished and were replaced with "patient". They either rejected this identity by acting strong, hiding their emotions, and suppressing their fears or accepted this identity by interweaving it with former valuable identities and lifestyles. The former became irritable and less empathetic, while the latter regained a meaning of life. This finding is corroborated in Szcześniak et al. (2020), which found that disease acceptance is positively correlated with meaning in life. Participants' anxiety of uncertainty was due to a contradiction between their subjective and objective health, lack of consensus between doctors and test results, and cancer recurrence, if in remission. Anxiety became an unwelcome facet of their post-diagnosis identity, contributing to the existing literature on the correlation between uncertainty and anxiety in older adults with cancer (Verduzco-Aguirre et al., 2020). Participants discussed the need to "push along" to get through cancer. However, for some this was an external

pressure that caused them to mask their true feelings. Rosedale (2009) had a similar finding in which breast cancer survivors withheld their cancer experiences and masked their feelings to appear resilient and strong.

The two themes found under resilience were having access to social support increases resilience and experiencing low resilience leads to demoralization. Higher levels of social support were associated with higher use of problem-focused coping which can help patients overcome adversities related to their cancer. Overcoming adversity is an important aspect of resilience, demonstrating, in accordance with previous literature, how access to social support is associated with increased resilience (Hu et al., 2018; Somasundaram & Devamani, 2016; Vartak, 2015). Having low resilience can lead to demoralization in cancer patients. To increase resilience, and therefore lower demoralization, improving cancer-specific self-efficacy should be focused on as this is a protective factor for both. Liu et al. (2022) had similar findings in which they found that kidney cancer patients with better cancer-related self-efficacy had greater resilience.

The theme found under self-concept is navigating cancer requires redefining oneself to confront challenges. Older adults with cancer had to make changes to *the self* to endure the challenges of cancer, such as becoming more vulnerable and positive, changing interests, and adjusting their allocation of time. By accepting and redefining oneself considering their diagnosis, they can navigate the obstacles of cancer while bringing positive change to their life. Previous research supported this finding such as Connerty and Knott (2013), which found that making lifestyle changes allowed cancer patients to experience positive change and growth in their lives.

These findings allow us to understand how identity and resilience psychologically impact older adults with cancer and the best practices to improve distress and mental health for these individuals. Older adults with cancer can regain meaning and an appreciation for life by accepting their "patient" identity and combining it with their past identities. Healthcare providers should be aware of and address the various uncertainties surrounding cancer and its treatment to reduce anxiety in cancer patients. Cancer patients need to balance their will to "push along" with their need to express their true feelings and emotions. This will allow them to remain strong and resilient while still being able to express their vulnerability. Cancer patients stand to benefit from leaning on their family, friends, and community as high levels of social support are correlated with higher resilience. Cancer patients could also benefit from being taught coping strategies and given access to resources (medication, tools, technology) to improve their ability to self-manage problems relating to cancer and its treatment (cancer-specific self-efficacy) as this is a protective factor against demoralization and improves resilience. Finally, to be able to confront the challenges related to a cancer diagnosis, patients may want to find opportunities to redefine themselves in many aspects of life, such as becoming more positive and humorous, developing or changing daily routines, engaging in new interests, and spending more quality time with loved ones. Patients will experience these changes as positive, and it will allow them to live a meaningful life.

Strengths and Limitations

While we tried to be comprehensive in our study, a formal meta-analysis could not be conducted due to the low number of eligible articles in our study. Given this low number, the diversity across study samples was also somewhat limited. We opted for a narrative synthesis instead, reviewing research articles from the past two years. By conducting a narrative synthesis within two years, we ensure our research is utilizing the most relevant information for our research question, particularly when a full meta-analysis is beyond the scope of our aims. Moreover, this approach allows us to identify emerging trends, summarize existing evidence, and provide practical insights to inform future research. The qualitative nature of our synthesis allows for more personalized and humanized narratives of living with cancer as an older adult. Some of the eligible studies had participants between the ages of 40 and 50, which deviates from the inclusion and exclusion criteria. However, we opted to include these studies because participants within 1 to 2 standard deviations away

from the mean ages were still within our age range of 50 years and older. Another limitation is the narrow breadth of our search, only using two databases and limited search terms. Even with this small scope, this review illustrates the most contemporary literature on this topic, giving researchers the most current knowledge to base their future studies.

Future Directions and Clinical Implications

Future research should focus on mental health interventions for older adults with cancer. While current research has identified mental health issues and what can lead to their improvement in older adults with cancer, mental health remains largely untreated among this older adult population, despite how common these problems are for this demographic (Carlson et al., 2004). Interventions should focus on how to implement the above findings on distress and mental health in older adults with cancer. Social support greatly increases resilience, but how do we increase social support for this population? Creating a new intermingled identity helps patients find meaning and value in life, but how do we facilitate this reconstruction of identity? "Pushing along" through a cancer diagnosis allows patients to remain strong and resilient, but it can cause patients to mask their true feelings. So, how do we both allow patients to express themselves while not allowing them to feel weak and helpless?

To bridge this gap, Dr. Ramos and Dr. Strauman developed a behavioral intervention tailored for older adults with advanced lung cancer. This behavioral intervention used Self- System Therapy (SST) to address the distress needs of this patient population. SST is an evidence-based psychotherapy originally used to treat depression that is grounded in Higgins' regulatory focus theory (Veith et al., 2003). This theory defines self-regulation as a distinction between a prevention focus, avoiding pain, and a promotion focus, approaching pleasure (Higgins, 1977). SST states that depression can be improved by moving away from a prevention based motivational system, which centers on loss aversion and fulfilling responsibilities to avoid negative outcomes, and towards a promotion based motivational system, which focuses on advancing towards goals and emphasizes gains. While SST was adapted for older adults with advanced lung cancer, this intervention could be more broadly adapted for older adults with any type of cancer to facilitate better mental health outcomes for this vulnerable population.

In conclusion, targeted interventions such as SST, which emphasize resilience and identity, show promising potential for significantly supportive care of older adults with cancer. The diverse needs of this demographic underscore the necessity for treatment approaches that are both flexible and inclusive. Moreover, involving care partners represents a valuable future opportunity to advance the field of supportive care in oncology and gerontology. By adopting these holistic strategies, we can enhance the well-being and quality of life for older cancer patients, ensuring that care is not only effective but also compassionate and comprehensive.

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APPENDIX

Figure 1. *Consort Diagram*

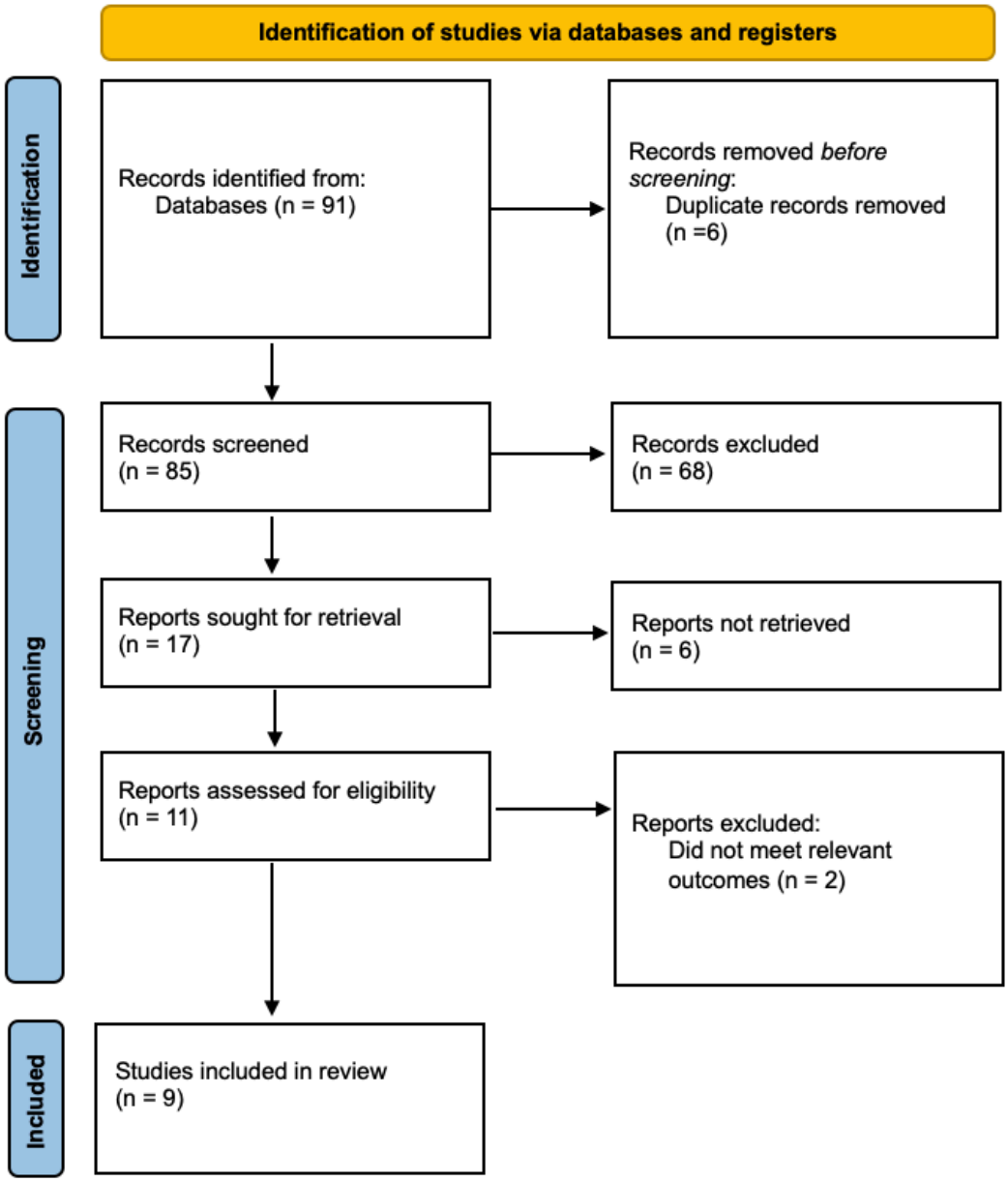

Table 2. *Articles that met exclusion criteria*

Identity Articles	Population of Study	Study Design	Variables/Outcomes
Allar et al. 2022	-patients between 50-75 years who has primary care visit w/in last two years	-retrospective review -multivariate logistic regression	-undergoing CRC screening -self reported race from census -tobacco use -insurance type -tobacco use -obesity -age -high risk of CRC -Marital status -severe mental health disorders -substance use disorder
Doherty et al. 2022	Those w/ cancer (or had cancer) who work -25+	-survey -descriptive stats -univariate logistic regression analyses -multivariate logistic regression analyses	-demographics -cancer type -cancer treatment type -time since diagnosis -health insurance type -employment -cost-related nonadherence
Gyldenvang et al. 2022	-patients -physicians -clinical nurse specialists	-qualitative and quantitative -questionnaire for patients -survey for physicians -two focus group interviews for clinical nurse specialists	-descriptive statistics for patient survey -descriptive stats for physician survey Themes from focus groups -advanced role in nurse-led consultations embraces patient-centered approach -autonomy enhances professionalism -thorough planning of nurse-led consultations provides a strong foundation

Identity Articles	Population of Study	Study Design	Variables/Outcomes
Helweg-Larsen and Tjitra 2024	Smokers n=277	-experimental design -2x2 factorial design	-concealment -ostracism -manipulation check -threat appraisal (questionnaire) -self reported stress (questionnaire -cognitive depletion (stroop color word inference test) -rejection sensitivity (smoking rejection sensitivity scale) -percieved risk of lung cancer (question) -positive cognitions about smoking (5 items) -self-exempting beliefs (8 items from self-exempting beliefs scale) -interest in smoking cessation website (3 items and seconds spent on site) -smoking cessations intentions (3 items) -self-efficacy (one item) -internalized stigma (six items from internalized stigma of smoking inventory)
Hoyt et al. 2023 (Do not have access thru duke online)	LBG and heterosexual cancer survivors	All of Us database	-physical health-related quality of life -mental health-related quality of life -social health-related quality of life

Identity Articles	Population of Study	Study Design	Variables/Outcomes
Malcarne et al. 2022	-latinos w chronic disease and associated risk -18-75 yrs	-used data from previous study -descriptive analyses	-scale of ethnic experience -simpatia scale -marianismo beliefs scale -sabogal familism scale -brief perceived ethnic discrimination questionnaire-community version -short acculturation scale for Hispanics -sociodemographic variables
Murray et al. 2022	Breast cancer patients -18 years +	-observational -combination of three questionnaires	-participant demographics -questionnaires (adapted versions of exercise identity scale, exercise avoidance scale, and gear of physical activity/exercise scale – breast cancer)
Park et al. 2021	-those w/ alzheimer's and related dementias -45-75 yrs	-questionnaire -self reported physical activity assessment -reviewing old data	-physical assessment questions (many variables) -demographic info -education -medical history -weight and height -smoking -dietary habits (food frequency questionnaire)
Robertson et al. 2022	Older women (65-74 yrs)	-Qualitative-semi-structured interviews -thematic content analysis	-All PLEXs (playful experiences) but control -Value derived from the challenges - Acceptability of the challenges
Santiago-Rodriguez et al. 2022	-sexual and gender minority individuals	-Descriptive analyses -multivariable logistic regression models	-cancer risk behaviors -cancer beliefs -sociodemographic variables -health care access

Identity Articles	Population of Study	Study Design	Variables/Outcomes
Simon et al. 2021	-patients at biobanks	-experimental design -intervention vs control	-understanding (QuIC measure) -confidence in understanding (adapted QuIC measure) -enrollment -demographics
Stephens et al. 2022	Hematology cancer patients -50-70 yrs	-qualitative -interpretive description -interviews	-unique cancer-self -invasion of cancer opposed to self -personification of cancer w/in self
Ussher et al. 2021	-oncology medical practitioners -nurses -allied health professionals -individuals working in leadership roles in cancer care, health and preventative agencies	-Online survey -semi-structures interviews -qualitative and quantitative	-attitudes towards lgbtqi cancer care -knowledge of lgbtqi health need -lgbtqi inclusive practice behaviors Qualitative themes -systemic barriers -consequences of barriers -improving care
Werner-Lin et al. 2022	-families and individuals w/ genetic risk (Li-Fraumeni syndrome in study)	-open ended interviews -modified grounded theory	-new awareness of material body -considering actionability -thresholds of embodiment, disembodiment, and quality of life
Willis et al. 2023	-copd individuals, native hawaiians and filipions	-telephone survey	-e-cig use -cig smoking -financial stress -second hand smoke exposure -bmi -respiratory disease

Identity Articles	Population of Study	Study Design	Variables/Outcomes
Zhang et al. 2022	Representative sample (n=2552) with Asians, Hispanics, and non-Black Hispanics oversampled	Online Survey	-Delaying/forgoing care -experienced racial discrimination -race-related cyberbulling experience -beliefs towards Coronavirus racial bias
Resilience Articles	**Population of Study**	**Study Design**	**Variables/Outcomes**
Anderson et al. 2022	Latina breast cancer survivors	-demographic and short form-36 surveys -semi-structured interviews -thematic analysis -descriptive coding -comparative methods	-quality of life assessment (SF-36) Themes -work adaptation -workplace resilience -family roles and support -maintaining QOL through BCRL self-management
Arefian et al. 2023	Women w/ breast cancer	-questionnaires -correlation -cross-sectional descriptive	-stress (perceived stress scale) -depression (beck depression questionnaire-2 -mindfulness (short form of Freiburg mindfulness questionnaire) -resilience (connor Davidson resilience scale) -spirituality (paloutzian and ellison's questionnaire) -pain (pain intensity measurement and pain interference assessment)
Bhatele et al. 2022	Individuals w/ parkinsons or alzheimers	-use dataset -confused	-confused -math and neuro heavy

Resilience Articles	Population of Study	Study Design	Variables/Outcomes
Boehmer et al. 2021	Colorectal cancer survivors of different sexual orientations	-self report questionnaire -follow-up -logistic regression	-receipt of follow-up surveillance procedures -clinical information (cancer site, stage at diagnosis, date of diagnosis) -self reported health -demographic info (most important is sexual orientation) -social isolation (loneliness scale) -emotional, information, tangilble/ instrumental support -perceived discrimination experiences -survivors coping styles (brief cope scales) -survivors resilience (resilience scale) -physician and practice level factors -survivorship care plans
Boyer et al. 2022	Patients w/ schizophrenia	-data analysis -differences-in-differences approach -multivariate patient-level logistic regression models	-difference in ppl with schizo cs ppl w/o mental disorders in the pre- vs during covid-19 periods in 90 day hospital non-covid-19 mortality -30-day hospital mortality -patient case mix
Caceres-Matos et al. 2023	Adults with chronic non-cancer pain 18+	-Cross-sectional -questions asked by researcher -data analysis	-impact of chronic non-cancer pain (PAIN_Integral Scale) -demographics

Resilience Articles	Population of Study	Study Design	Variables/Outcomes
Cerezo et al. 2023	Breast cancer patients	-correlation, association, relationship -questionnaire	-life satisfaction (satisfaction w/ life scale) -positive/negative affect (negative and positive affect scale/positive and negative affect scale) -emotional intelligence (short version of trait meta-mood scale) -resilience (connor-davidson resilience scale) -self esteem (self-esteem scale) -optimism (life orientation test-revised) -flourishing (flourishing scale) -depression, anxiety, stress (depressive, anxiety, and stress scale)
Chesak et al. 2023	Family caregivers of individuals w/ head and neck cancer	-intervention	-Feasibility -acceptability (was it worth it questionnaire) -effectiveness of intervention -stress (perceived stress scale) -self compassion (self-compassion scale-short form) -resilience (connor-davidson resilience scale) -anxiety symptoms (patient-reported outcomes measurement information system short form -mindfulness (mindfulness attention awareness scale)
Deshields et al. 2022	Cancer patients and caregivers	-questionnaire and self report measures	-national comprehensive cancer network distress thermometer -patient-reported outcomes measurement information system anxiety and depression measures -brief resilience scale

Resilience Articles	Population of Study	Study Design	Variables/Outcomes
Dong et al. 2023	Patients w/ bladder cancer	-cross sectional -self report questionnaires and scales	-disease related info -resilience (connor Davidson resilience scale) -uncertainty of disease (mishel uncertainty in illness scale) - trait coping strategies (medical coping modes questionnaire) - perceived social support (social support rating scale) -subjective satisfaction of family functions (family APGAR index) -hope in clinical (herth hope index) -
Dowling et al. 2022	Cancer patients in ireland	Qualitative longitudinal study -semi structured interviews -thematic analysis	-Distress (national comprehensive cancer network distress thermometer -resilience (connor-davidson resilience scale) Themes -being careful, keeping safe and feeling safe -shrinking supports, feelings isolated and being silenced -not missing out

Resilience Articles	Population of Study	Study Design	Variables/Outcomes
Dunn et al. 2021	Volunteers	Self report survey	-satisfaction w volunteering (satisfaction and personal fulfilment scale) -commitment (organizational commitment questionnaire) -psychological sense of connection (adapted scale) -event and cancer control motives (23 item scale by Won et al. 2010) -social norm (adapted others' expectations scale) -capacity to volunteer -satisfaction w community (1 item from Australian unity wellbeing index) -intention to return (8 item scale)
Gundogmus et al. 2022	Women w/ breast cancer	-relationship, correlation -psychometric properties investigation	-psychological development/growth following a traumatic experience (post-traumatic growth inventory) -psychological resilience (connor davison psychological resilience scale) -psychological resilience (brief resilience scale) - ptsd checklist for DSM-V -anxiety and depression in individuals w/ physical illness (hospital anxiety and depression scale)

Resilience Articles	Population of Study	Study Design	Variables/Outcomes
Hendrix et al. 2023	Firefighters	-intervention study	-depression -anxiety - stress -ptsd -substance use -suicide risk -willingness to attend couple's therapy -quality of life
Hirano et al. 2023	Healthy older adults	-fMRI -experiment -association -dataset	-power to live questionnaire -rosenberg self-esteem scale
Klainin-Yobas et al. 2022	Cancer survisors	-quasi experimental -8 week program -self-reported questionnaires and physiological measures	-psychological well-being (psychological-well being scale) -objective stress (peripheral skin temperature) -subjective stress, depression, and anxiety (depression anxiety and stress scale) -perceived relaxation (perceived relaxation scale) -mindfulness (mindful attention awareness scale) -resilience (connor-davidson resilience scale)
Leung et al. 2022	Chinese family care partners of older adults	-qualitative -interviews -theme analysis	-legislative and cultural norms/ constraints of family, work, and society -CFCP's perseverance to prevent disruptions w/ limited resources -quality of CFCPs' and older Adults' relationships and their trajectory of illness

Resilience Articles	Population of Study	Study Design	Variables/Outcomes
Levedahl et al. 2022	Ppl w/ systemic mastocytosis	-qualitative -semi structured interviews -content analysis	Themes -persistent presence of the disease -struggling against ignorance -an illness of wellness perspective
Liang et al. 2022	Chinese patients w/ an enterostomy	-cross sectional -descriptive -structural equation model analysis -questionnaires	-psychological resilience (10-item resilience scale) -stability of self-concept (self-concept clarity scale) -level of social support in China (social support rating scale)
Luo et al. 2022	Adults w/ colorectal cancer	-descriptive qualitative -interviews	Themes -seeking motivations to move forward -striving for normality -adapting and managing self -drawing on external supports -redefining self
Ma et al. 2023	Family caregivers of patients w cancer	-descriptive phenomenological -unstructured open-ended interviews -theme analysis (colaizzi's seven-step data analysis method)	Themes -feeling scared for the patient -living a life feeling trapped under covid-19 surveillance -feeling neglected and unseen -growing resilience and appreciation
Macia et al. 2022	Cancer patients	-correlational -questionnaires	-emotional control (courtauld scale of emotional control) -resilience (connor-davidson resilience scale) -detect diagnosable psychiatric disorders (general health questionnaire)

Resilience Articles	Population of Study	Study Design	Variables/Outcomes
Mulholland et al. 2023	Breast cancer survivors that went thru chemo -35-73 yrs	-correlation	-fMRI data -spontaneous functional time series -cortical thickness -APOE genotype (saliva) -depression, anxiety, and fatigue (clinical assessment of depression) -cognitive symptoms
Nielsen et al. 2022	Caregivers of adults w/ hematologic malignancies	Qualitative longitudinal study -semistructured interviews -thematic analysis	-committing to an unconditional mission while adjusting to a changeable caregiving role -being an invisible inseparable sufferer -balancing between sacrificing one's own needs and self-care
Santiago et al. 2022 (unsure)	Alzheimer's patients	-gene analysis	-swim analysis -pathway analysis -transcription factor analysis - protein-chemical interaction analysis
Shimizu et al. 2021	Family caregivers of patients with cancer after bereavement	survey	-pre-loss connor-davidson resilience scale -pre- and post-loss Patient Health Questionnaire-9 -post-loss Brief Grief Questionnaire -Posttraumatic Growth Inventory
Smith et al. 2022	Health care professionals	-qualitative online document -framework analysis	Themes -acceptability -fidelity of receipt -contextual fit
Tanriverdi and Turan 2023	Spouses of cancer patients	-descriptive study -online survey	-patient info form -resilience scale for adults -experiences in close relationships scale -hendrick sexual attitude scale

Resilience Articles	Population of Study	Study Design	Variables/Outcomes
Upenieks 2021	Cancer survivors	-dataset use -data analysis	-psychological distress -childhood religiosity -cancer diagnosis -age at diagnosis
Walston et al. 2023	-older adults	-dynamic stimulation tests -deep phenotyping of physical and cognitive function -I'm confused about study design (novel study design)	-baseline contributors -stressor characteristics -statis surrogate measures -dynamic stimulation indicator measures -resilience phenotype measures -clinical outcomes
Wen et al. 2023	Surrogates of terminally ill cancer patients	-longitudinal and observational	-decisional regret (decision regret scale) -decisional-regret trajectories (latent-class growth analysis)
Wong et al. 2022	Older adults -3 senior investigators in aging in study	-personal stories -future research	-NA
Self-Concept Articles	**Population of Study**	**Study Design**	**Variables/Outcomes**
Abbas et al., 2022	Cancer patients during chemotherapy	-therapy interventions (cbt)	-depression -anxiety -stress -death anxiety -satisfaction with life -self-esteem

Self-Concept Articles	Population of Study	Study Design	Variables/Outcomes
Bahnsen et al., 2022	-adults w/ sexual inactivity and dysfunctions	-dataset -correlation	-inter-personal sexual inactivity within the last year -sexual dysfunctions within the last year -hypoactive sexual desire disorder within the last four weeks -International index of erectile function -female sexual function index -self-rated health -physical and mental health problems
Boding et al., 2022	Women w/ ovarian cancer	Survey -responses analysed thematically	Themes -Failure and loss of femininity and womanhood -Internalising public perceptions of the self -altered relationships
Castro-Vazquez et al., 2023	Japanese urologists	Interviews	Themes -An onco-self -Onco-bipedagogy -onco-economics
Chui et al., 2022	Head and neck cancer patients	-cross-sectional -questionnaires -phone interviews	-return to work barrier scale -return to work facilitator scale -distress thermometer -numeric rating scale -karnosky performance status scale -demographic and clinical characteristics

Self-Concept Articles	Population of Study	Study Design	Variables/Outcomes
de Almeida et al., 2022 (link does not take you to article)	Cancer patients undergoing exclusive palliative care in regard to death	-descriptive -exploratory -cross-sectional -qualitative	-observations recorded in field diary (social support network, ways of coping, perception and reaction to death process, autonomy) -free word association test
Emanuel et al., 2023	Adults w/ cancer receiving palliative care	Questionnaires correlations	-Death anxiety and distress scale -demographic factors -religious struggle -dignity-related distress -existential quality of life -terminal illness awareness
Enyi and Mousavi, 2023	-hospitalized patients with cancer	-descriptive, correlational, structural equation modeling -questionnaires	-self-perceived burden questionnaire -cognitive fusion questionnaire -uncertainty intolerance scale -cancer behavior scale
Fennel et al., 2023	Adults recruited through CloudResearch	-self reported questionnaire over multiple times -assigned groups seeing different priming info before questionnaires on follow-ups	-sun exposure -sun exposure intentions -resource engagement -self-esteem -momentary self-worth -narrow self-assessment -defensiveness

Self-Concept Articles	Population of Study	Study Design	Variables/Outcomes
Joosten et al., 2023	-adult siblings of long term survivors of childhood cancer	-questionnaires	-health related quality of life (TNO-AZL questionnaire of Adults' HRQoL) -Anxiety and depression (hospital anxiety and depression scale) -Post-traumatic stress symptoms (self-rating scale of post-traumatic stress disorder) -self-esteem(rosenberg self-esteem) -benefit finding and disease related burden (benefit and burden scale for children)
Kiley-Morgan et al., 2021	-adult patients w/ cancer	-intervention	-anxiety and depression (hospital anxiety and depression scale) -self-esteem (Rosenberg self-esteem scale) -open ended qualitative questions
Lohaus, 2023 (not available online)	Multiple sclerosis and stroke patients	-quantitive	-socio-cognitive test battery -questionnaires on fatigue and psychopathology
Perrier et al., 2021	Breast cancer patients	-fMRI -questionnaires	-anxiety (state-trait anxiety inventory) -depression (beck depression inventory short form -self-referential (questionnaire of self-representations) -stability of trait self-knowledge (certainty of self-concept score) -global-self esteem -fMRI data on resting state in dmPFC, PCC, and dorsal ACC

Self-Concept Articles	Population of Study	Study Design	Variables/Outcomes
Shen et al., 2022	Breast cancer survivors	Multicentre cross-sectional study -self reported questionnaires	-socio-demographic characteristics -disease and treatment-related characteristics -lymphedema self-management behaviors -lymphedema knowledge -illness perception -self-efficacy -self-regulation -social support
Sun et al., 2022 (not available through duke online)	UK biobank participants and FinnGen participants	-quantitative	-genetic associations -biomarkers
Suppiah et al., 2023	-older adults (Singaporean)	-national survey dataset	-health literacy (BRIEF instrument) -socio-demographic variables -health related variables
Weis, 2022 (not available online)	Men w/ cancer and men that were relatives or close friends of people w/ cancer	-questionnaires -interviews	-distress thermometer -patient health questionnaire -generalized anxiety disorder scale -short form Health Survey -modified questionnaire for dance therapy -interviews: expectations of project, experience of rehearsals and dance group, coping with cancer experience, distress and limits of project, utilization of psycho-oncological support, expectations for performance, return to normality of life, experienced resources

Self-Concept Articles	Population of Study	Study Design	Variables/Outcomes
Xiao et al., 2022	-adults from national health and nutritional examination survey	-dataset	-physical activity measurement and fPCA-based rest-activity profiles -participant characteristics
Yamazaki et al., 2023	Japanese patients with advanced cancer	Questionnaires Correlations	-Quality of Life at the End of Life-Cancer Scale -Generalized Anxiety Disorder-7 -Rosenberg Self-Esteem Scale -Multidimensional Scale of Perceived Social support -Functional Assessment of Cancer Therapy-General Scale -Functional Assessment of Chronic Illness Therapy-Spiritual
Zhai et al., 2021	Chinese women w/ breast cancer	-semi structured interviews	Themes -renewing self-perception -encountering changes in relationships -altering philosophical values and beliefs

Table 3. *Articles that met inclusion criteria*

Identity Articles	Population of Study	Study Design	Variables/Outcomes
Bybee et al. 2023 (Do not have access thru duke online)	-sexual and gender minority couples where one partner had cancer diagnosis at some point in life -heterosexual couples where one partner had cancer diagnosis at some point in life	-questionnaries -interviews	-demographics -post traumatic growth (PTG) domains -individual ptg -dyadic ptg -similarities and differences of ptg between couples -comparison between sgm and non sgm couples -
Ciaralli et al. 2021 *age range from 58-95	-older adult cancer survivors -60 years +	-data from older study -statistical analyses -differences between means -bivariate correlation analysis -three ordinary least-squares regression analyses -regression analyses	-perceived disability (1 item) -demographic and personal characteristics -# of comorbidities -level of reported functional difficultures (nagi 1976 index) - # of current non-cancer symptoms -# of treatment types -cancer stage -current cancer symptoms

Identity Articles	Population of Study	Study Design	Variables/Outcomes
Cubis et al. 2023	-ppl with brain tumors - 22-69 yrs (35 months post diagnosis in study)	-qualitative -social identity mapping -in depth semi-structured interviews	Theme 1: engaging and connecting -barriers -functional impariments -fear of negative evaluation -discomfort of others -facilitators -strategies Theme 2: then vs now -stability -maintenance and expansion -loss and rebuilding -loss and shrinking
Dahlberg et al. 2021	-individuals w brain tumors -34-66 yrs -study included informal caregivers (25-88 yrs) and bereaved caregivers (27-54 yrs)	-qualitative -interviews, audio recorded and transcribed	-percieved usefulness of the CareMaps tools -potential areas of use -capturing the complexity of social relations -timing for introduction of the CareMaps tool -self-care supportive relations -identity-preserving relations
Harmon and Kyle 2019	-cancer or remission patients average age 67 yrs -two males and ten females	-semi-structured interviews based upon prior informal discussion	-historical relationship to nature and leisure -diagnosis of cancer and accompanying treatment program -participation in hiking program -outlook for future

Identity Articles	Population of Study	Study Design	Variables/Outcomes
Li et al. 2022 *breaks down by age (60-82 cohort is target for us)	-breast cancer survivors	-descriptive correlational design	-sociodemographic and clinical characteristics -illness perceptions (revised illness perception questionnaire) -adherence to BCRL risk management behaviors (lymphedema risk management behavior questionnaire)
Martin et al. 2023 *note that two partcipants were in 40s and three were between 50-65	-those who had completed for bowl cancer	-interpretive descriptive qualitative methodology -inductive analytic approach	Themes -I had to heal myself -Life's too short -The person I've become
van der Kamp et al. 2022 *one participant is 47, six are 50-65	-men w/ prostate cancer	-narrative analysis	Themes -reconstructing identity -shifting relationship w/ prostate cancer -relationship w/ technology -uncertainty, incoherence and haunting
Wang et al. 2024	Postmenopausal women (50-79 yrs)	-Quantitative -Associations	-Invasive breast cancer incidence in Feb 2022 follow-up -Breast cancer molecular subtypes -Allostatic load score (based upon 8 submarkers)

Identity Articles	Population of Study	Study Design	Variables/Outcomes
Yeung et al. 2022 Mean age is 68.75 SD=10.66	-rural patients w/ advanced cancer -mean age 68.75 yrs	-qualitative descriptive design -semi-structured interviews w open ended questions	-demographic info -clinical and disease info Themes -fluidity in patients' emotions -religion/spirituality -social support -positive attitude -cognitive strategies -self-care -medication
Resilience Articles	**Population of Study**	**Study Design**	**Variables/Outcomes**
Chen et al. 2021	-Cancer patients in Taiwan -M=67.18 yrs; SD=10.82; Range = 42 yrs – 87 yrs	-Advanced Care Plan	-coping scale ways of coping checklist-revised -social support scale -resilience scale
Chien et al. 2022 *age range from 46-84, but median=69 and mean=68.82, SD=6.74	Prostate cancer survivors	-cross-sectional -sefl reported questionnaires	-disease characteristics -physical symptoms (mandarin version of expanded prostate cancer index composite) -cancer specific self-efficacy (mandarin version of cancer survivors' self-efficacy scale) -psychological resilience (mandaring version of connor-davidson resilience scale) -demoralization (mandarin version of the demoralization scale)
Irwin et al. 2022 *ages from 55-85	Long term breast cancer survivors -55-85 yrs	-associations, correlations	-time to incident or recurrent major depressive disorder -level of interleukin-8 at enrollment

Resilience Articles	Population of Study	Study Design	Variables/Outcomes
Michael et al. 2022 *age range 44-99, but mean=71.8, SD=11.4	Cancer patients	-video intervention vs standard -quantitative and qualitative	Theme -cancer patients ability to posture vulnerability w/ resilience Subthemes -acknowledging frailty w/ diverse adaptations to dependency -benevolence and reciprocation of family/friends caring -death anxiety, ambivalence and experiential acceptance of dying -honouring death through secular and sacred rituals
Self-Concept Articles	**Population of Study**	**Study Design**	**Variables/Outcomes**
Bluck et al., 2022 *age range 55-75	Older adults with late stage cancer	-self report questionnaires -therapy intervention -narrative analysis	-demographics and health status (Edmonton symptom assessment, palliative performance scale) -dignity-related distress (patient dignity inventory) -spiritual distress (religious/spiritual struggles scale) -quality of life at end of life -narrative analysis of therapy sessions
De La Torre et al., 2022 *associations based upon age	Cancer survivors	-dataset (survey) -assocations	-physical activity (number of minutes of moderate to physical vigorous activity MVPA) -perceived health competence -perceived social relatedness for health -wearable activity trackers -self-related health

Self-Concept Articles	Population of Study	Study Design	Variables/Outcomes
Törnävä et al., 2021 *age range 50-91	Men w penile cancer surgery	Interview or response letter -thematic analysis	Themes -cancer-modified me -everyday life defined by physical symptoms -sexual life defined by cancer -reshaped content of life