

**The Effects of Therapeutic Activities on Depression in the Long-Term Care Population**

A Scholarly Project

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By

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Date

### **Abstract**

Therapeutic activities are activities that encourage social interaction and promote cognitive skills. When these activities are put on hold for an extended period of time it can be detrimental to the Long-Term Care population. Depression related to social isolation has plagued the Long-Term Care population since the onset of COVID, causing increased sickness and in some situations death. The purpose of this integrative review is to determine the effectiveness of therapeutic activities in decreasing depression in the Long-Term Care (LTC) population.

Literature was collected from 2018 through 2023 from the CINAHL database and analyzed using the PRISMA model. A total of 27 articles were included after applying inclusion and exclusion criteria. A focus was on increasing knowledge of the negative effects when facilities put therapeutic activities on hold. The findings from this review suggest therapeutic activities can improve depression through social interactions and the provision of cognitive skills. Researchers should investigate these phenomena with a more in-depth approach, such as how stopping and starting therapeutic activities affect the LTC population related to depression. With pandemics and policies affecting the way therapeutic activities are carried out in the LTC setting, more research is needed to improve the criteria that support continuing therapeutic activities with social distancing.

*Keywords:* Therapeutic activities, social isolation, long-term care individual, depression, and long-term care setting

### **Dedication**

It is by the grace of God that I have made it to this point in my educational journal. I hope that all those put in the path of Long-term care residents come to love them as much as I do and continue the work that is needed to maintain their health and safety. As I wrap up this journey, I want to thank those who have afforded me this opportunity through love, time, and encouragement. First, to my parents, you have been my biggest supporters from the beginning, I will never be able to repay the debt I owe to you both. Michael, thank you for always pushing me to always be my best. Your love and support will always be a blessing to me. To our children and grandbabies, thank you for always understanding when my time was limited. I hope you all know how much I love each of you and know by my example and putting God and working hard first you can accomplish anything you set your mind to!

### **Acknowledgments**

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## **Section One: Formulating the Review Question**

### **Background**

Depression is a concern in any age group, but when it affects a person who has limited access to therapeutic activities the number increases significantly. The prevalence of depression among people living in long-term care (LTC) settings is higher than in the general population, with Crick et al. (2018) suggesting that it could be as high as 44%. According to the World Health Organization (WHO, 2021), up to 30% of long-term care residents suffer from minor or major depression. Proudman et al. (2021) estimate depression had a financial cost of \$326 billion per year pre-pandemic. LTC settings can utilize readily accessible mental health screening tools to quickly identify if a resident is showing signs of depression. Recognizing depression early and putting policies into place to ensure the LTC individual with depression has access to therapeutic activities is critical. Depression in LTC is associated with loneliness, physical morbidity, failure to thrive, and suicidality (Crick et al., 2020). Providing therapeutic activities is important to maintain cognitive, physical, and mental health. In this writer's work experience, interacting with others has been shown to help memory in both the short and long term by interacting and socializing with other people.

The purpose of this integrated review is to determine if the LTC individual diagnosed with depression who participates in therapeutic activities will have a decreased level of depression. Recognizing and treating signs of depression early could minimize adverse effects for the LTC individual. It is the responsibility of the entire healthcare team to be able to recognize cues related to depression no matter how big or small. Lee et al. (2019) suggest that there is an urgent need for implementing training through educational programs to improve healthcare providers' knowledge and attitudes regarding depression.

### **Defining Concepts and Variables**

The concept of therapeutic activities is to involve the resident with activities that stimulate the person to have positive or therapeutic results. Activities are typically light social events based on entertainment and distraction, such as bingo, bus trips, games, and socials (Theurer et al., 2020). The defining variable to help close the knowledge gap is whether the LTC resident has an improvement in their mental health when they participate in therapeutic activities. Two variables that can affect a positive or therapeutic outcome related to activities include: 1) did the resident have the opportunity to attend activities and 2) was the activity an interest to the resident. For example, if the resident has access to an activity they enjoy, they are more likely to participate.

### **Rationale for Conducting the Review**

During a clinical rotation, this writer found a knowledge deficit related to residents in the LTC setting being able to attend therapeutic activities offered by the facility. During activity times, residents in attendance voiced concerns regarding not being offered assistance to attend the activity or being unaware that activities were being held at the scheduled time. This writer interacted with multiple nursing assistants that voiced a need to know who should be ready for scheduled activities but were never provided this information. The lack of communication could contribute to the residents being unable to attend.

Providing care and ensuring all residents attend therapeutic activities is no small task. The North Carolina Board of Nursing (NCBON, 2022) states the nursing assistant to resident ratio can be as low as 1:7 or as high as 1:17 depending on the acuity of the residents. This can burden the ability of the nursing assistant to have everyone ready for every activity, especially those offered in the morning. Factoring in residents that are total care, but cognitively intact is



another consideration. Providing care to both minimal assist and total care residents is a challenge. However, restricting residents to their rooms related to time limitations is an injustice to the resident.

There are overwhelming issues that can cause therapeutic activities to come to a standstill, for example, COVID, and the flu, not to mention the many viruses that wreak havoc on the LTC population. This is why an emphasis to determine if therapeutic activities change a resident's overall mental health is so important. This lack of knowledge is one reason this writer chose to research therapeutic activities and the effects it has on depression. No matter what the case may be, the inability to attend therapeutic activities it seems has a dramatic effect on depression in the LTC population.

### **Purpose and/or Review Question(s)**

The purpose of this integrative review is to determine the effectiveness of therapeutic activities in decreasing depression in the LTC population. The question to consider is how will the use of therapeutic activities affect depression in the LTC population and whether is there sufficient evidence to support the importance of therapeutic activities.

### **Formulate Inclusion and Exclusion Criteria of the Literature**

Using the Liberty University Jerry Falwell library, articles were obtained from 2018-2022. Studies were used if they included information on therapeutic activities or individuals who lived in a long-term care setting. Key areas of interest were those that included improvement of depression related to therapeutic activities. Studies older than five years were excluded. Studies were also excluded if they included other age groups, and focused on cognitive impairments such as Dementia or Alzheimer's disease.

## **Conceptual Framework**

Whittemore and Knafl (2005) framework was used to conduct and support the review question. Completing a systematic search through the Jerry Falwell Library, this writer was able to research the topic and obtain data from articles related to the research question. This framework allows for a larger data set based on the information being researched. It takes the researcher through five steps that provide problem identification, literature search, data evaluation, data analysis, and presentation. Completion of all stages of this proposed methodology, with attention to the issues specific to undertaking an integrative review, has the potential to strengthen the process and the outcomes of integrative reviews (Whittemore & Knafl, 2005). Problem identification allowed this writer to use keywords related to the research question to identify a clear problem or knowledge gap related to therapeutic activities and depression. Following the literature search, hand searching was included to determine relevant articles. In using the literature matrix, data evaluation was determined to maintain the rigor of the articles. The literature matrix was also used to support data analysis on articles used as a whole. This allowed for organization and a logical step in determining articles that did or did not support the review question. Explicit details from primary sources and evidence to support a conclusion need to be provided to demonstrate a logical chain of evidence (Whittemore & Knafl, 2005). The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) along with Toronto and Remington (2020) served as additional guidance to analyze the literature. The PRISMA flow sheet is provided in Appendix A.

## **Section Two: Comprehensive and Systematic Search**

Using the Jerry Falwell library, a search was conducted through the Cumulative Index of Nursing and Allied Health Literature (CINAHL) database from 2018 through 2023, to include

therapeutic activities, social isolation, long-term care individual, depression, and long-term care setting. Articles were also limited to peer-reviewed to limit the amount of gray literature. This writer incorporated PRISMA to show the flow of progress for data collection. The initial search yielded 35,062 articles. After applying the inclusion and exclusion criteria a total of 27 articles were used. The article critique and leveling matrix were used to organize articles to determine appropriateness for use to support the research question. A copy of the article critique and level matrix is found in Appendix B.

### **Terminology**

For the purpose of this integrative review, the following terms will be defined: "Long term care facility", "long-term care setting", "long-term care individual", "resident", "population", "total care", "minimal assist", and "therapeutic activity". Long-term care facility and setting are used interchangeably and refer to the location an individual resides. Long-term care individuals, residents, and population are the individual that lives and carry out their daily routines in the LTC setting. Total care is an individual that requires all their care from another person, whereas minimal assist is a person who requires little assistance. Therapeutic activity is those activities that are put in place to have positive results or be therapeutic to an individual.

## **Section Three: Managing the Collected Data**

### **Data Collection**

After careful review appropriate articles were collected. The initial search produced over 35,000 articles, which is not realistic. The first look at the collected citations is done by considering titles and/or abstracts (Lawless & Foster, 2020). Abstracts are a short summation of the article but can provide information to determine if the data will be supportive. By selecting appropriate resources and software and setting realistic timelines, the search process will be less

daunting and provide a comprehensive set of resources on which to base the review (Lawless & Foster, 2020). Using the review question(s) as a guide, key concepts are identified, related search terms and limiters were identified to narrow the focus (Toronto & Remington, 2020). Limiters are essentially the inclusion and exclusion that help make the search process realistic. Articles that were not supportive of the review question(s) or provided bias on the topic were included and limitations were noted in the matrix level found in Appendix B.

### **Information Sources**

Information was obtained from a variety of sources. As noted by Whittemore & Knafl (2005) both empirical and theoretical studies should be included to improve rigor and validity. This includes qualitative studies as they seek to answer the “why” in phenomena. Qualitative studies contain a multi-method approach to answering the review question. Three articles were excluded, two related to their inability to provide the need for further research, and one article listed a large number of limitations possibly leading to inaccurate information (Boamah et al., 2021; Domenech-Abella et al., 2019; Lem et al., 2021).

### **Eligibility Criteria**

The relevance of the literature to the review question should guide the decision to include or exclude literature based on quality (Remington, 2020). As previously mentioned, titles and abstracts were reviewed for eligibility. Literature was reviewed to minimize duplicate articles to minimize lost time. Literature was included if it supported the review question. Articles were excluded if they focused on other health disparities. Articles were included if they had a published date within the last 5 years and were peer-reviewed. Articles excluded are noted on the article critique and level of evidence matrix.

### **Section Four: Quality Appraisal**

Critical appraisal of quality has been described as a systematic examination of literature to evaluate its reliability, value, and relevance in a particular context (Toronto & Remington, 2020). For this integrative review, Melnyk's Level of Evidence was utilized in the quality appraisal of each article. Appraising each article helps the researcher to minimize bias in the data collected.

#### **Sources of Bias**

External validity was an influential aspect of bias in the literature chosen for this integrative review. External validity refers to the validity of applying the conclusions of a scientific study outside the context of that study. Therefore, can the results of this integrative review be validated by other researchers. Many of the journals contained small sample sizes, were conducted in foreign countries, and lacked the ability to draw conclusions related to poor study designs. Publication bias is a common problem that occurs when publication is associated with the significance of the results (Remington, 2020). This can be applied to several articles examined. Costlow & Parmelee (2019) used a single-time measure of relocation stress, which cannot guarantee validity. Chau et al. (2019) had a high dropout rate and a relatively small sample size; this could affect the validity of the results. Crick et al. (2020) suggest the aim may be somewhat "loft" and hard to address which could alter the results of data obtained. Matos et al. (2021) suggest there was an exhaustive list of criteria, which could hinder replication of the study. External validity, or the degree to which the study results are generalizable or applicable to one's population of interest, is considered by some to be of equal importance in critical appraisal (Toronto & Remington, 2020).

**Internal Validity**

The focus on bias or believability of findings is referred to as internal validity (Toronto & Remington, 2020). This integrative review showed an opportunity for bias related to only one researcher analyzing the articles. Identifying the risk of bias begins by looking at each study for potential sources of bias (Toronto & Remington, 2020); The researcher utilized Melynck's Level of Evidence Matrix to decrease the risk of bias and determine which literature was appropriate to use. The appraisal tool can be found in Appendix B.

**Appraisal Tool (Literature Matrix)**

Methodological rigor is often judged by the hierarchy of evidence, basing the quality appraisal on the study design, not on other relevant aspects of quality (Toronto & Remington, 2020). Melnyk's Level of Evidence provides seven levels of significance, with level one being the strongest. This integrative review included: eleven articles that were level one, three articles that were level 2, one article that was level three, and twelve articles that were level four.

**Reporting Guidelines (Whitmore & Knafl)**

The PRISMA guideline was developed to increase quality and transparency in reporting the systematic review by describing a minimum set of characteristics to report in a systematic review (Toronto & Remington, 2020). PRISMA was used to provide the final data to be used in the integrative review. The PRISMA flow chart can be found in Appendix A. Twenty-seven articles were chosen after applying inclusion and exclusion criteria.

## **Section Five: Data Analysis and Synthesis**

### **Data Analysis**

Three articles identified loneliness as a risk factor for depression, which is common in long-term residents (Arunrasameesopa et al., 2021; Carandang et al., 2020; Theurer et al., 2020). Three articles showed isolation played a key part in depression in the long-term care setting (Chamberlain et al., 2020; Dieglmann et al., 2018; Theurer et al., 2020). Two articles focused on the long-term care resident's resilience, or ability to recover from events that can lead to depression (Van Den Brink et al., 2018; Wang et al., 2020). Van Den Brink et al. (2018) noted as an internal resource, resilience could support the individual's health by reducing adversity of activities of daily living limitations and depressive symptoms.

Three articles recognized the need to educate staff to recognize depression to offer interventions such as therapeutic activities to minimize negative effects (Chau et al., 2019; Crick et al., 2018; Lee et al., 2019). This would include not only monitoring for signs and symptoms of depression but assessing if the therapeutic activity is appropriate for the resident. Five studies acknowledge therapeutic activities and non-pharmacological therapies show improvement in depression (Hsu & Wright, 2019; Luo et al., 2018; Matos Queiros et al., 2021; Roberts & Saliba, 2019; Theurer et al., 2020). Two articles further support the viewpoint that effective non-pharmacologic therapies can be delivered without the need for expensively trained mental health professionals (Luo et al., 2018; Diegelman et al., 2017).

Three articles confirm that educating staff to recognize and treat depression early can minimize adverse effects related to other health concerns associated with depression (Chau et al., 2018; Crick et al., 2018; Lee et al., 2019). Chau et al. (2019) identified changes in pain, sleep disturbance, social support, and person-environment fit are significantly associated with changes

in depression scores. It is hoped that long-term care facility nurses can acquire accurate knowledge, positive attitudes, and enhanced confidence to take care of older residents who have depressive symptoms or depression (Lee et al., 2019).

### **Descriptive Results**

Therapeutic activities can minimize the adverse effects of depression if they are appropriate for the resident and contribute to the quality of life. For example, Theurer et al. (2020) suggest activity calendars in long-term care homes offer social programming designed to address social domains, but, other than resident councils, rarely offer opportunities for residents to contribute. Activities that are not appropriate or enjoyable to the resident can result in a lack of participation. Diegelmann et al. (2018) showed the results showed that the interaction effect of the enjoy ability to contact with co-residents and contact frequency was relevant for residents' depressive symptoms rather than the effect of contact frequency alone.

Two articles noted regulations in the long-term care setting play a part in activities offered (Crick et al., 2018; Crick et al., 2020). Crick et al. (2020) acknowledged despite the evidence around the prevalence and improved treatment regimens, regulation appears to have failed to capture the best practice and contemporary knowledge available. Whereas Crick et al. (2018) notes understanding the influence of regulations in long-term care on the care of older people with depression has the potential to contribute to future quality improvement efforts.

Multiple articles recognized the importance of therapeutic activities in improving depression, educating staff, and regulations that can hinder the activities offered in the long-term care facility (Chau et al., 2018; Crick et al., 2018; Crick et al., 2020; Hsu & Wright, 2019; Lee et al., 2019; Luo et al., 2018; Matos Queiros et al., 2021; Roberts & Saliba, 2019; Theurer et al., 2020). Matos Queiros et al. (2021) suggest there is an urgent need to better understand



depression among institutionalized older adults; new approaches must be developed, and their efficacy rigorously evaluated in terms of both improving older adult's quality of life and enhancing cost-efficiency for healthcare and social security systems. Determining ways to contribute to the quality of life of residents, while maintaining social and cognitively stimulating activities can be a challenge to the person in charge of carrying out therapeutic activities.

Proudman et al. (2021) noted research presented in their study shows how resource use, cost, and clinical outcomes vary widely among subgroups of major depressive disorder patients, highlighting opportunities for researchers and policymakers to identify, characterize, and address the needs of key subpopulations more effectively.

### **Synthesis**

Depression is a leading cause of disability worldwide contributing substantially to the global disease burden (Leblhuber et al., 2019). In the long-term care setting, this is made an even harder disease to treat related to the common myth that the signs and symptoms of depression are overlooked as a normal part of aging. Studies agreed that educating staff to recognize and treat depression early is a significant intervention to decrease the effect of mental health concerns (Chau et al., 2019; Crick et al., 2018; Lee et al., 2019; Tobis et al., 2021). Lee et al. (2019) suggested in long-term care facilities, nurses are key healthcare providers for older residents who have depressive symptoms or depression; therefore, they need accurate knowledge of late-life depression, positive attitudes towards depression, and confidence in providing depression care. According to Crick et al. (2018), older people are less likely to report depression, with many professionals seeing it as a normal part of the aging process.

***Isolation and Loneliness***

Many studies agreed that isolation and loneliness are key risk factors for depression (Arunrasameesop et al., 2021; Carandang et al., 2020; Chamberlain et al., 2020; Diegelmann et al., 2018; LeVasseur, 2021; Theurer et al., 2020). Arunrasameesopa et al. (2021) recommended interventions and research regarding reducing loneliness should be promoted in the long-term care setting. Chamberlain et al. (2020) agreed that socially isolated residents lacked social engagement and exhibited signs of depression. Isolation and loneliness could be minimized with the implementation of therapeutic activities that are not only appropriate for the resident but are also one that is a good fit for positive participation by the residents of the facility. Theurer et al. (2020) suggested their peer mentorship program brings residents to the forefront and provides new approaches to treating loneliness and depression.

***Resilience***

Deciding on the exact therapeutic activity to use in the long-term care setting can be a challenge. With limited funding and resources, healthcare teams, especially activity directors have a limit on just how much can be carried out. The literature reviewed confirmed that non-pharmacologic and therapeutic activities shown to improve depression (Diegelmann et al., 2018; Hsu & Wright, 2019; Luo et al., 2018; Matos Queiros et al., 2021; Roberts & Siliba, 2019; Theurer et al., 2020); whereas one noted that more research is needed on reminiscence therapy, suggesting there was no statistical significance on the effects of reminiscence therapy on depression and cognition (Thomas & Sezgin, 2021).

Other findings in the studies focused on the barriers to implementing therapeutic activities such as regulations, the cognitive status of the residents, and the burden of cost (Chamberlain et al., 2019; Chau et al., 2019; Crick et al., 2018; Crick et al., 2020; Proudman et

al., 2021). Research provided by Proudman et al. (2021) showed how resource use, cost, and clinical outcomes vary widely among subgroups of major depressive disorder patients, highlighting opportunities for researchers and policymakers to identify, characterize, and address the needs of key subpopulations more effectively. Assessing the resident on an ongoing basis can help identify changes in the resident to make changes on an ongoing basis to ensure the activity continues to meet the needs of the resident to maintain their quality of life as long as possible. The highly regulated environment of long-term care poses significant challenges which can influence the quality of care for residents with depression (Crick et al., 2020).

### **Ethical Considerations**

The student completed the CITI training for biomedical research (Appendix C). The student submitted the integrative review to the Liberty University Institutional Review Board (IRB). The IRB responded with an email stating the project is exempt (Appendix D).

## **Section Six: Discussion**

### **Limitations**

Many studies had a small sample size leading to inaccurate results. Studies were carried out in the community setting not the LTC setting. Several articles included other mental health disorders, not just depression. The literature review was performed by only this writer which could cause bias. This writer utilized PRISMA and Melnyk Level of Evidence to minimize bias and maintain rigor.

### **Implications for Practice/Future Work**

Isolation has been shown to have a negative impact on LTC residents. This impact can negatively affect medical conditions as well as mental health. To maintain an overall healthy resident all aspects of their care should be evaluated. When the resident is able to consider the

LTC facility their home, then socializing should continue. For example, in many cases if the residents were actually at home, most likely their visits from family and friends would continue, unlike in the LTC setting when more than two residents test positive for COVID-19 the facilities stop therapeutic activities. From a nursing standpoint, a happy person is a healthier person, even if they have medical concerns. Boamah et al. (2021) suggested researchers are urged to revisit current approaches to isolation measurement and/or identification with long-term care homes as some risk factors may be unique to these settings.

Therapeutic activities give many residents a sense of hope. When LTC residents know an activity is planned then they want to get up, get dressed, and attend the activity. They enjoy a sense of belonging for activities such as bible study, group book discussions, etc. This in turn improves mobility, decreases skin integrity concerns, and helps with memory by reminiscing with other residents. Holding conversations and discussing memories many residents are noted laughing and smiling.

### **Dissemination**

Therapeutic activities are an area that many take for granted. It was not until this one simple activity was put on hold that healthcare saw a major impact on depression for the Long-Term Care population. As evident by the many articles reviewed for this integrative review, the pandemic played a part in increasing depression as well as the overall mental health of many. This writer feels the effects of isolation related to the COVID-19 pandemic have been a significant factor in increased depression in the LTC population. By disseminating the findings of this integrative review this writer hopes the facility and preceptor utilized take interest in the results to determine if current policies facilitate positive outcomes related to depression related to halting therapeutic activities the LTC population enjoyed daily.

**Discussion**

This integrative review supports the known idea that interacting with others is vital to maintain a healthy mental status. Knowing how to monitor for those subtle signs as well as major symptoms of depression is key to maintaining health. Social interaction is one of the cost-friendly activities that can be offered to the LTC population. As this study stated, therapeutic activities including social interaction can significantly improve mental status and decrease depression.

Policymakers should use sound judgment when determining whether to continue or hold these activities. Ethical considerations should be considered when making decisions such as smokers and non-smokers. Considerations should look at items such as smokers gathering in a small area specifically for them is no different from non-smokers gathering in a public area to socialize. Being isolated to one's room can have harmful effects just as many medical concerns, healthcare policymakers should maintain awareness that mental disease is just as real as health diseases. Therapeutic activities can minimize depression and take place with proper protective equipment being used, such as masks and eye protection.

Therapeutic activities are an inexpensive way to maintain social, cognitive, and hands-on skills. Activities allow the resident to build on those relationships shared with other residents. Many of the activities offered include a form of craft making or painting, the resident uses cognitive skills as well as hands-on skills to maintain or improve their current performances. In many cases, the end results of seeing what they have made such as birdhouses, enhances their mental state.

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<https://doi.org/10.1016/j.gerinurse.2021.04.007>

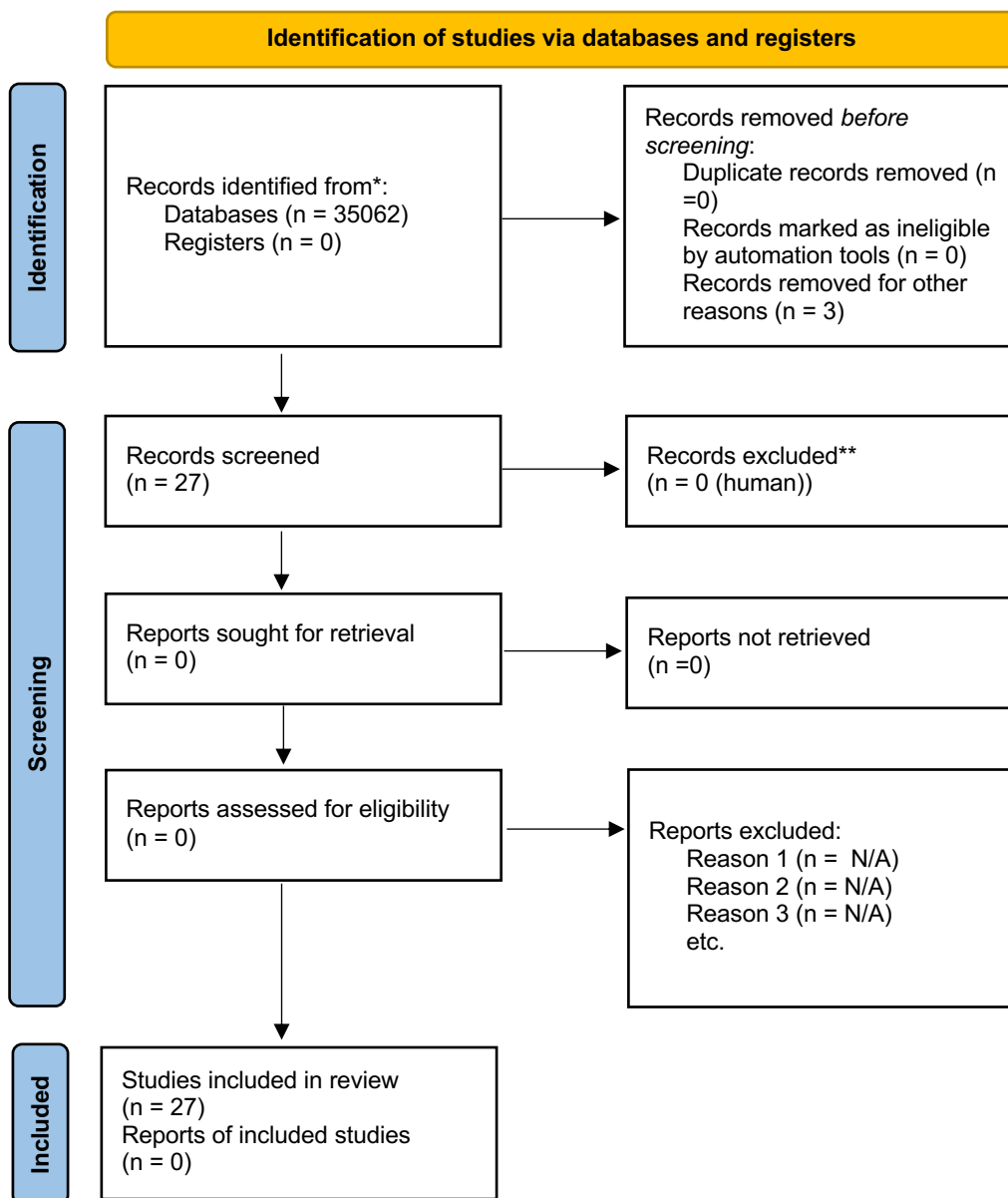


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## Appendix A

## PRISMA Flowchart



\*Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers).

\*\*If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools.

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

## Appendix B

## ARTICLE CRITIQUE AND LEVELING MATRIX TEMPLATE

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Arunrasameesopa, S., Wongpakaran, N., & Wongpakaran, T. (2021). Influence of attachment anxiety on the relationship between loneliness and depression among long-term care residents. <i>Healthcare</i> , 9(12), 1675. <a href="https://doi.org/10.3390/healthcare9121675">https://doi.org/10.3390/healthcare9121675</a>	To explore the influence of attachment on loneliness and depression among old-age resident in long-term care facilities	221 participants that were age 60 or older, could communicate and understand in Thai, and complete the questionnaire on their own.	Cross-sectional observational study	40.7% of residents in LTC facilities experienced depression. Male sex, education, loneliness, and attachment anxiety predicted the increased level of depressive symptoms.	Level 4: Case control or Cohort study	It is one of the first studies of its kind. It was also only performed on those able to communicate orally.	Yes. Even though it was new, it provided significant data that supported depression related to isolation in the LTC setting.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Boamah, S. A., Weldrick, R., Lee, T.-S., & Taylor, N. (2021). Social isolation among older adults in long-term care: A scoping review. <i>Journal of Aging and Health</i> , 33(7-8), 618–632. <a href="https://doi.org/10.1177/08982643211004174">https://doi.org/10.1177/08982643211004174</a>	To identify possible risk factors for social isolation among older adults living in LTC homes	Two of the team members were randomly assigned to review the 768 article titles and abstracts independently.	A systematic search of five online databases retrieved 1535 unique articles.	Thematic analyses revealed that possible risk factors exist at three levels: individual, systems, and structural factors.	Level 1-systematic review	The sparse existence of work on social isolation within the context of LTC.	No. According to the authors there is a limited amount of information and there is a great need for additional research.
Carandang, R., Shibamura, A., Kiriya, J., Vardeleon, K., Asis, E., Murayama, H., & Jimba, M. (2020). Effectiveness of peer counseling, social engagement,	To assess the effectiveness of 3-month	An open (non-blinded), non-	ENGAGE is a community-based action	Geriatric depression score over three months significantly	Level 4-Case control or cohort study	Participants in this study were purposively recruited	Yes. The authors provide some good

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
and combination interventions in improving depressive symptoms of community-dwelling Filipino senior citizens. <i>PLOS ONE</i> , 15(4), e0230770. <a href="https://doi.org/10.1371/journal.pone.0230770">https://doi.org/10.1371/journal.pone.0230770</a>	duration interventions with peer counseling, social engagement, and combination vs. control in improving depressive symptoms of community-dwelling Filipino senior citizens	randomized trial	research conducted in three phases	improved in all intervention groups (control as reference)		on their GDS scores and physical health; participants were not randomly allocated to either intervention or control groups; standardized effects were included; some measures were	information to validate that depression is an issue in the geriatric population.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
						adapted from previous studies and have not been validated.	
Chamberlain, S. A., Duggleby, W., Teaster, P. B., & Estabrooks, C. A. (2020). Characteristics of socially isolated residents in long-term care: A retrospective cohort study. <i>Gerontology and Geriatric Medicine</i> , 6, 233372142097532. <a href="https://doi.org/10.1177/2333721420975321">https://doi.org/10.1177/2333721420975321</a>	To identify socially isolated long-term care residents and to compare their demographic characteristics,	34 LTC homes in Alberta, Canada	Retrospective, cross-sectional cohort study	Socially isolated residents lack social engagement and exhibit signs of depression	Level 4-cohort study	The authors were unable to compare the results to other studies	Yes. The authors provided data that showed social isolation could contribute to depression.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
	functional status, and health conditions to residents who are not isolated.						
Chamberlain, S. A., Duggleby, W., Teaster, P., & Estabrooks, C. (2019). Characteristics and unmet care needs of unbefriended residents in long-term care: A qualitative interview study. <i>Aging &amp; Mental Health</i> , 24(4), 659–667. <a href="https://doi.org/10.1080/13607863.2019.1566812">https://doi.org/10.1080/13607863.2019.1566812</a>	To identify resident characteristics, their unmet care needs, and implications for quality of care and	Semi-structured interviews with 39 LTC staff and 3 public guardians	A cross-sectional qualitative descriptive study	LTC staff report significant care issues with unbefriended residents at the end of life, including more	Level 1- a meta-analysis	Low numbers of some professional groups interviewed	Yes. The authors provide data that could be built on to improve practices.



Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
	quality of life.			aggressive behaviors and inappropriate care practices			
Chau, R., Kissane, D. W., & Davison, T. E. (2018). Risk factors for depression in long-term care: A systematic review. <i>Clinical Gerontologist</i> , 42(3), 224–237. <a href="https://doi.org/10.1080/07317115.2018.1490371">https://doi.org/10.1080/07317115.2018.1490371</a>	To systematically review the evidence on risk factors for depression among older adults in long-term care.	11 studies examined a combined total of 11,703 people in long-term care. Studies were conducted in the United States, Netherlands, Norway, and Canada.	Meta-analysis	When developing psychotherapeutic interventions, close consideration should be given to cognitive and functional impairment as barriers to implementation	Level 1	Overall, there was a lack of a systematic, conceptual approach to studying risk factors. Genetic factors were not investigated in any of the studies	Yes. To analyze the data the researcher must be aware of all risk factors available.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
				on and uptake.		included in the review, despite this being a known risk factor among other age groups.	
Chau, R., Kissane, D. W., & Davison, T. E. (2019). Risk factors for depression in long-term care: A prospective observational cohort study. <i>Clinical Gerontologist</i> , 44(2), 112–125. <a href="https://doi.org/10.1080/07317115.2019.1635548">https://doi.org/10.1080/07317115.2019.1635548</a>	To examine key risk factors for depression among older adults in long-term care	15 long-term care facilities in Australia. Participants were 65 years or older, speak English able to demonstrate informed	Two-wave, prospective observational cohort	Following multiple imputation for missing data, GEE analysis identified that physical pain, person environment fit, sleep disturbance,	Level 4	High dropout rate and relatively small sample size.	Yes. The authors provide information that supports the topic related to factors that affect

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
		consent, and provide valid answers		and social support were statistically significant predictors of depression score over time.			depression.
Costlow, K., & Parmelee, P. A. (2019). The impact of relocation stress on cognitively impaired and cognitively unimpaired long-term care residents. <i>Aging &amp; Mental Health</i> , 24(10), 1589–1595. <a href="https://doi.org/10.1080/13607863.2019.1660855">https://doi.org/10.1080/13607863.2019.1660855</a>	To explore the effects of relocation stress on depression and anxiety in long-term care residents and to	107 first-year residents reported relocation stress. All participants were non-Hispanic white and Jewish	Two-way ANCOVAs	There was no significant effect of cognitive status or the interaction of cognitive status and relocation stress on depression and anxiety.	Level 4; Case control or cohort study	Level 4; Case control or cohort study	Yes. Even though the results do not necessarily mesh with my personal opinion, this

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
	investigate the moderating effect of cognitive status						writer feels there is valuable information provided by the authors.
Crick, M., Angus, D. E., & Backman, C. (2018).  Exploring the role of regulation and the care of older people with	To explore the role of regulation on the care of older people living with depression in long-term care.	Primary research studies only, which will include qualitative, quantitative, and mixed method studies at the	Systematic scoping review	There are no results at this time, the analyses have not been completed by researchers.	Level 1	There is the possibility that the search terms which have been developed do not capture all	Yes. The article provides valuable information on depression and the LTC population.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
depression living in long-term care? a systematic scoping review protocol. <i>BMJ Open</i> , 8(7), e021985. <a href="https://doi.org/10.1136/bmjopen-2018-021985">https://doi.org/10.1136/bmjopen-2018-021985</a>		intersection of regulation; LTC, and depression in older people.				aspects of each of the concepts.	
Crick, M., Devey-Burphy, R., Hu, J., Angus, D. E., & Backman, C. (2020). The role of regulation in the	To explore the role of regulation on the quality of care of older people	Using key search terms: depression, older people, long-term care, and	Systematic scoping review	Further research which explores the role of the concepts of regulation on the care of	Level 1	The authors acknowledge the aim of this scoping review may be	Yes. The authors provide positive information on supporting

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
care of older people with depression living in long-term care: A systematic scoping review. <i>BMC Geriatrics</i> , 20(1).  <a href="https://doi.org/10.1186/s12877-020-01675-9">https://doi.org/10.1186/s12877-020-01675-9</a>	living with depression in LTC.	regulation 778 articles were identified, after applying inclusion and exclusion criteria 20 articles were used.		older people with depression living in long-term care is needed.		somewhat 'lofty' and hard to address, but a scoping review is a worthwhile starting point.	depression in long-term care.
Diegelmann, M., Jansen, C.-P., Wahl, H.-W., Schilling, O. K., Schnabel, E.-L., & Hauer, K. (2017). Does a physical activity program in the nursing home impact on depressive symptoms? a	To examine the effect of a whole-ecology PA	Residents from two German nursing homes who were	Longitudinal study	The present study provides emerging support for the potential	Level 4	The present study showed the effect of an already	Yes. It provided data to support the need of

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
generalized linear mixed-model approach. <i>Aging &amp; Mental Health</i> , 22(6), 784–793. <a href="https://doi.org/10.1080/13607863.2017.1310804">https://doi.org/10.1080/13607863.2017.1310804</a>	intervention program on NH resident's depressive symptoms using generalized linear mixed models (GLMMs)	included without any pre-selection regarding physical and mental functioning were assessed on four occasions each three months apart.		of an innovative, whole-ecology, multi-components, PA enhancing program able to positively impact resident's depressive symptoms.		evaluated intervention as implemented in the natural NH ecology. Biological changes have not been tracked. A dimensional scale rather than a clinical measure of depression was used.	implementing a physical activity program.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Diegelmann, M., Wahl, H.-W., Schilling, O. K., Jansen, C.-P., Schnabel, E.-L., & Hauer, K. (2018). Understanding depressive symptoms in nursing home residents: The role of frequency and enjoyability of different expanded everyday activities relevant to the nursing home setting. <i>European Journal of Ageing</i> , 15(4), 339–348. <a href="https://doi.org/10.1007/s10433-017-0453-0">https://doi.org/10.1007/s10433-017-0453-0</a>	To examine two overarching research questions: How do EEA frequencies and their enjoyability predict residents' depressive symptoms? How do the associations vary for different	160 residents, 3 months apart	Longitudinal study	The interaction effect of the enjoyability of contact with co-residents and contact frequency was relevant for the resident's depressive symptoms rather than the effect of contact frequency alone.	Level 4	The combination with an intervention study may be problematic. The present study does not allow a conclusion on the causal direction between EEA frequency, enjoyability, and depressive	Yes. The authors provide data that supports that activities enhance a resident's mental health.



<b>Article Title, Author, etc. (Current APA Format)</b>	<b>Study Purpose</b>	<b>Sample (Characteristics of the Sample: Demographics, etc.)</b>	<b>Methods</b>	<b>Study Results</b>	<b>Level of Evidence (Use Melnyk Framework)</b>	<b>Study Limitations</b>	<b>Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.</b>
	activity domains?					symptoms. The present study focused on EEA frequency and enjoyability, which may both be considered manifestations of depressive symptoms.	
Domènech-Abella, J., Mundó, J., Haro, J., & Rubio-Valera, M. (2019). Anxiety, depression,	To determine if general	5066 adults 50 years and older from	TILDA	The association between	Level 1: Meta-Analysis	The study did not provide a	No. The authors provided

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
loneliness and social network in the elderly: Longitudinal associations from the Irish longitudinal study on ageing (tilda). <i>Journal of Affective Disorders</i> , 246, 82–88. <a href="https://doi.org/10.1016/j.jad.2018.12.043">https://doi.org/10.1016/j.jad.2018.12.043</a>	anxiety disorder would precede social isolation and feelings of loneliness and that these would lead to major depressive disorder.	the Irish Longitudinal Study on Ageing	UCLA loneliness scale Berkman-Syme Social Network Index CIDI	loneliness and subsequent deterioration of social integration is unidirectional.		true comparison related to inconsistencies in the studies. Information provided could be inaccurately related to the self-reporting method used. The CIDI was found to have a high false-positive rate	pertinent information. However, they also provided too many limitations that could indicate inaccurate information.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Hsu, Y.-C., & Wright, C. L. (2019). The effects of a socially supportive activities program (ssap) on mood in long term care: A pilot study. <i>Geriatric Nursing</i> , 40(6), 572–578. <a href="https://doi.org/10.1016/j.gerinurse.2019.05.009">https://doi.org/10.1016/j.gerinurse.2019.05.009</a>	This study examined the effects of a facilitated 10-week socially supportive activities program (ssap) designed to improve mood in a geriatric institutional setting.	68 Taiwanese elders in long-term care facilities with depressive symptoms	A pilot study with a pre-post, experimental, controlled design.	Findings from this study support the idea that a well-organized, facilitated, structured program that included group-oriented social activities led to improvement in mood, which was measured by improvement	Level 3	Bias is based on the Hawthorne effect. The control group had an additional reason to not participate through refusal. True blinding of the participants or researchers	Yes. It supports the idea that social interaction is effective in decreasing depression.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
				in depressive symptoms, and an increased sense of self-transcendence.		who are conducting the intervention is impossible. The study design was limited to one post-test assessment of the psychological impact of the intervention.	
Leblhuber, F., Steiner, K., & Fuchs, D. (2019). Treatment of	To explore the	29 patients with	SHAM-controlled	No effect was found on	Level 4-cohort	Only 19 patients	Yes. The authors

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
patients with geriatric depression with repetitive transcranial magnetic stimulation. <i>Journal of Neural Transmission</i> , 126(8), 1105–1110. <a href="https://doi.org/10.1007/s00702-019-02037-5">https://doi.org/10.1007/s00702-019-02037-5</a>	effectiveness of rTMS treatment of patients with late-life depression	geriatric depression	exploratory study	the SHAM treated group	study	with geriatric depression were included and treated with rTMS	provided data that there is a need to research more on the treatment of depression in the geriatric population
Lee, C., Tseng, H., Wu, L., & Chuang, Y. (2019). Multiple brief training	To examine the effectiveness of multiple,	Nine long-term care facilities. 30 nurses received training and	Cluster-randomized trial	This training program was effective in improving LTCF nurses' knowledge,	Level 2	Long-term effects of the study are needed; the study used	Yes. The researchers provided information to

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
<p>sessions to improve nurses' knowledge, attitudes, and confidence regarding nursing care of older adults with depression in long-term care facilities.</p> <p><i>Research in Nursing &amp; Health</i>, 43(1), 114–121.</p> <p><a href="https://doi.org/10.1002/nur.21997">https://doi.org/10.1002/nur.21997</a></p>	<p>face-to-face, brief training sessions in improving nurse's knowledge, attitudes, and confidence in providing late life depression care in LTCFs.</p>	<p>36 nurses did not.</p>		<p>attitudes, and confidence in providing depression care.</p>		<p>convenience sampling, and the actual practice of nurses was not explored.</p>	<p>support the need to recognize and treat depression in the LTC population.</p>

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Lem, K., McGilton, K. S., Aelick, K., Iaboni, A., Babineau, J., Hewitt Colborne, D., Edwards, C., Bretzlaff, M., Lender, D., Gibson, J.-L., & Bethell, J. (2021). Social connection and physical health outcomes among long-term care home residents: A scoping review. <i>BMC Geriatrics</i> , 21(1). <a href="https://doi.org/10.1186/s12877-021-02638-4">https://doi.org/10.1186/s12877-021-02638-4</a>	To identify and summarize existing research to address the question: what is known from the literature about the association between social connection and physical health outcomes for people	585 papers that quantified social connection in LTC residents, from which 34 papers were identified for the current analysis	A scoping review	Findings generally support the positive impact of social connection on physical health among LTC residents	Level 1-systematic review	This is the first scoping review, and the objective and methods did not include an examination of the quality of evidence; English language studies were included restricting the	No. The authors did not in this writer's opinion, provide data to support the need for further research.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
	living in LTC homes?					geographical results; inconsistent use of medical terminology in the literature.	
LeVasseur, A. L. (2021). Effects of social isolation on a long-term care resident with dementia and depression during the covid-19 pandemic. <i>Geriatric Nursing</i> , 42(3), 780–781. <a href="https://doi.org/10.1016/j.gerinurse.2021.04.007">https://doi.org/10.1016/j.gerinurse.2021.04.007</a>	To highlight isolation practice implemented in an LTC facility to reduce the spread of COVID-19, the	An 87-year-old woman residing in an LTC facility isolated from her family	Patient Health Questionnaire-9	Isolation is an important means to protect LTC residents from COVID-19, but it can negatively affect their mental health,	Level 1: Meta-Analysis	The report only focuses on NP interventions and not the healthcare team as a whole.	Yes. The case report supports this author's theory that social isolation contributes to



Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
	ramifications of the consequent social isolation, including worsening cognition and depression in a resident with dementia and depression, and some possible evidence-based solutions			especially those with dementia.			depression

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
	that could be implemented by advanced practice nurses.						
Luo, H., Lou, V. Q., Chen, C., & Chi, I. (2018). The effectiveness of the positive mood and active life program on reducing depressive symptoms in long-term care facilities. <i>The Gerontologist</i> . <a href="https://doi.org/10.1093/geront/gny120">https://doi.org/10.1093/geront/gny120</a>	This study evaluated the effectiveness of the PMAL program in reducing depressive symptoms and improving the quality	Four LTCFs were randomly assigned as treatment sites. At risk, LTCF residents were identified using the Mood Resident	Cluster randomized controlled trial	The PMAL program is effective in reducing depressive symptoms of at-risk LTCF residents.	Level 2	Small sample size. Only cognitively intact people were recruited. The study period was limited to 12 weeks	Yes. The authors add positive data to support activities in the LTC resident.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
	of life among at-risk LTCF residents.	Assessment Protocol. The program was delivered to 34 residents.					
Matos Queirós, A., von Gunten, A., Martins, M., Wellens, N., & Verloo, H. (2021). The forgotten psychopathology of depressed long-term care facility residents: A call for evidence-based practice. <i>Dementia and Geriatric Cognitive Disorders Extra</i> , 11(1), 38–44. <a href="https://doi.org/10.1159/000514118">https://doi.org/10.1159/000514118</a>	To provide an overview of the literature and the state of the art of and the urgent need for research on the epidemiology	536 (depression) and 1447 (demented) were recovered related to the criteria noted.	Literature and bibliometric reviews of published articles in Medline Ovid SP to identify studies related to depression,	Depression relationships with other health complications have been poorly studied in long-term care facilities and nursing homes.	Level 1-systematic review	The literature and bibliometric reviews were limited to the Medline scientific database; there was an	Yes. The authors provided data as evidenced by the tables provided to support the need for future research

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
	gy and clinical treatment of depression among older adults.		depressive symptoms, mood disorders, dementia, cognitive disorders, and health complications in long-term care facilities and nursing homes.			exhaustive list of criteria.	on depression in the long-term care resident.
Proudman, D., Greenberg, P., & Nellesen, D. (2021). The growing burden of major depressive disorders (mdd): Implications for researchers	To explore the growing burden of	Articles related to issues on major	A broad survey of studies on MDD	Research presented shows how resource	Level 4	Studies included draw on advanced analytical	Yes. The articles offer informatio

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
and policy makers. <i>PharmacoEconomics</i> , 39(6), 619–625. <a href="https://doi.org/10.1007/s40273-021-01040-7">https://doi.org/10.1007/s40273-021-01040-7</a>	major depressive disorder.	depressive disorders.		use, cost, and clinical outcomes vary widely among subgroups of MDD patients.		methods, however higher quality data sources are fundamental to improving our understanding of the economics of MDD.	n on the financial burden of depression and long-term care population.
Roberts, T. J., & Saliba, D. (2019). Exploring patterns in preferences for daily care and activities among nursing home residents. <i>Journal of Gerontological Nursing</i> , 45(8), 7–13.	To group residents according to similarities in	Data was collected from admission MDS assessment	A latent class analysis	Findings suggest that residents can be grouped by	Level 4	Only admission assessments were included. Only residents aged 65 years	Yes. It supports that residents should be given

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
<a href="https://doi.org/10.3928/00989134-20190709-02">https://doi.org/10.3928/00989134-20190709-02</a>	preference and determine the factors that predict membership in these groups.	from October 1, 2011, to December 31, 2011. Residents age 65 and older who can give valid responses.		preference and knowledge of residents' group membership could help direct efforts to systematically meet resident's preferences		or older were included. The entropy value of the model was somewhat low, indicating there was some overlap or poor separation of classes.	preference for positive results.
Theurer, K. A., Stone, R. I., Suto, M. J., Timonen, V., Brown, S. G., & Mortenson, W. (2020). The impact of peer mentoring on loneliness, depression, and social engagement in	To examine the impact of a new peer	A mixed method of 10 homes in Ontario Canada	Qualitative surveys and qualitative	Mentees showed a statistically significant reduction	Level 1-a meta-analysis	Mentees often gave short answers limiting the	Yes. The authors showed that interaction

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
long-term care. <i>Journal of Applied Gerontology</i> , 073346482091093. <a href="https://doi.org/10.1177/0733464820910939">https://doi.org/10.1177/0733464820910939</a>	mentoring program called Java Mentorship on mentees' loneliness, depression, and social engagement, and described their perceptions of the visits.	and enrolled 74 residents	semi-structured interviews	in loneliness and depression		amount of data collected.	between the resident and workers improved the involvement in the facility.
Thomas, J., & Sezgin, D. (2021). Effectiveness of reminiscence therapy in reducing agitation and	To assess the effectiveness	Only randomized	A literature search	RT may have some benefits,	Level 1: Systematic	The study did not include gray literature.	Yes. The authors support

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
depression and improving quality of life and cognition in long-term care residents with dementia: A systematic review and meta-analysis. <i>Geriatric Nursing</i> , 42(6), 1497–1506. <a href="https://doi.org/10.1016/j.gerinurse.2021.10.014">https://doi.org/10.1016/j.gerinurse.2021.10.014</a>	ess of reminiscence therapy (RT) in people with mild to moderate dementia in long-term care facilities	controlled trials of RT published in the English language were included. Non-randomized controlled trials, quasi-experimental studies, qualitative studies, and observatio	using CINAHL, MEDLINE, PsychINFO, and Embase	but further evaluation is needed	ic Review	It only included mild to moderate dementia not severe. There was a small sample size	this writer's theory that reminiscence therapy improves depression.






Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
		nal studies were excluded.					
Tobis, S., Jaracz, K., Kropińska, S., Talarska, D., Hoe, J., Wieczorowska-Tobis, K., & Suwalska, A. (2021). Needs of older persons living in long-term care institutions: On the usefulness of cluster approach. <i>BMC Geriatrics</i> , 21(1). <a href="https://doi.org/10.1186/s12877-021-02259-x">https://doi.org/10.1186/s12877-021-02259-x</a>	To identify their putative groupings to enable the provision of tailored care.	242 residents of care homes in four Polish cities, aged 75-102 with a MMSE score of greater than 15	Cluster analysis	Clustering seems to be a promising approach for use in long-term care, allowing for more appropriate and optimized care delivery.	Level 4	The authors analyzed individuals who were cognitively well functioning alongside those with symptoms of moderate dementia and excluded those with symptoms of severe and moderately severe	Yes. The data provided showed that interventions improved the cognitive status of LTC residents.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
						dementia. Also, a limited sample size.	
Van den Brink, A. M., Gerritsen, D. L., de Valk, M. M., Mulder, A. T., Oude Voshaar, R. C., & Koopmans, R. T. (2018). What do nursing home residents with mental-physical multimorbidity need and who actually knows this? a cross-sectional cohort study. <i>International Journal of Nursing Studies</i> , 81, 89–97. <a href="https://doi.org/10.1016/j.ijnurstu.2018.02.008">https://doi.org/10.1016/j.ijnurstu.2018.02.008</a>	To explore (un)met care needs of residents with mental-physical multimorbidity and determinants of unmet needs.	17 Dutch nursing homes with a geronto-psychiatric unit. Two groups 1. Newly admitted and 2. Admitted over 6 months	Cross-sectional cohort study	The study showed that the CANE was feasible for use in a research setting as a needs assessment tool that can yield important new information.	Level 4	The cross-sectional design limits causal interpretation. As the CANE has been developed for geriatric psychiatry, not all items are equally applicable to the nursing home setting. The sample size is modest and	Yes. The authors provided information that involves the needs of residents that pertain to mental and physical aspects.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
						representativeness for other countries remains unknown.	
Wang, R., Zhang, D., Wang, S., Zhao, T., Zang, Y., & Su, Y. (2020). Limitation on activities of daily living, depressive symptoms and suicidal ideation among nursing home residents: The moderating role of resilience. <i>Geriatric Nursing</i> , 41(5), 622–628. <a href="https://doi.org/10.1016/j.gerinurse.2020.03.018">https://doi.org/10.1016/j.gerinurse.2020.03.018</a>	To investigate the prevalence of suicidal ideation and the moderating effect of resilience on suicidal ideation to dilute the adverse contribution of ADL	538 residents from 37 nursing homes in China.	Stratified random sampling	The findings about the fact that resilience moderated the effects of ADL limitation and depressive symptoms on suicidal ideation suggested the great	Level 2	Self-report and oral measurements were adopted in this study to record the variables, which can be subjective and can result in some differences and self-report bias.	Yes. It provides data on both depression as well as its effects on ADL care.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
	limitation and depressive symptoms.			importance of implementing resilience training programs in nursing homes.			

**Appendix C****CITI Training Certificate**

		Completion Date 11-Sep-2022 Expiration Date 10-Sep-2025 Record ID 51012829
This is to certify that:		
<b>stephanie Knowles</b>		
Has completed the following CITI Program course:		Not valid for renewal of certification through CME.
<b>Biomedical Research - Basic/Refresher</b> (Curriculum Group) <b>Biomedical &amp; Health Science Researchers</b> (Course Learner Group) <b>1 - Basic Course</b> (Stage)		
Under requirements set by:		
<b>Liberty University</b>		
 Collaborative Institutional Training Initiative		
Verify at <a href="http://www.citiprogram.org/verify/?w0eedd50a-4e96-4e70-b456-1f1832cfec37-51012829">www.citiprogram.org/verify/?w0eedd50a-4e96-4e70-b456-1f1832cfec37-51012829</a>		

**Appendix D**  
**IRB Exempt Email**

**LIBERTY UNIVERSITY**  
INSTITUTIONAL REVIEW BOARD

February 3, 2023

Stephanie Knowles  
Tonia Kennedy

Re: IRB Application - IRB-FY22-23-939 The Effects of Therapeutic Activities on Depression in the Long-Term Care Population

Dear Stephanie Knowles and Tonia Kennedy,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds that your study does not meet the definition of human subjects research. This means you may begin your project with the data safeguarding methods mentioned in your IRB application.

Decision: No Human Subjects Research

Explanation: Your study is not considered human subjects research because it will not involve the collection of identifiable, private information from or about living individuals (45 CFR 46.102).

Please note that this decision only applies to your current application. Any modifications to your protocol must be reported to the Liberty University IRB for verification of continued non-human subjects research status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this determination or need assistance in determining whether possible modifications to your protocol would change your application's status, please email us at [irb@liberty.edu](mailto:irb@liberty.edu).

Sincerely,

**G. Michele Baker, MA, CIP**  
*Administrative Chair of Institutional Research*  
**Research Ethics Office**