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The Relationship Between Depression, Social Isolation, and Well-Being Among Older Adults

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ABSTRACT

Objective: The objective of this research was to determine the relationship between mental health, marital status, social isolation and loneliness among a sample of older adults at an old age care facility.
Method: Older adults (N = 26) above the age of 70 completed a survey for conditions of depression, isolation, social well-being, physical health, and marital status.
Results: There was no significant association found between poorer well-being and depression, p=.863. Marital status in older adults did not make a difference on levels of depression, p=.791. There was a significant association between higher levels of social isolation and higher loneliness and well-being, ps < .001.
Discussion: These findings suggest that even older adults who are socially isolated in a community home may experience poorer mental health and physical health outcomes.

Introduction

Depression is a mental disorder which afflicts around 264 million people worldwide. Some symptoms include a lack of interest or pleasure in activities, and persistent sadness. In the United States specifically, depression is becoming a huge problem as around 17.3 American adults are suffering from depression (World Health Organization, 2022).

In older adults specifically, the main reasons which cause depression have been documented as underlying health conditions, a loss of mobility, and social isolation and loneliness (National Institute on Aging, 2021). Studies state that 55.2% or 51.1 million adults aged 65 and above have or are at risk of developing an underlying health condition (Koma et al., 2020). Some of the more common conditions include high blood pressure, diabetes, arthritis, dementia, surgery, Alzheimer's disease, Parkinson's disease, cancer, and the like.

The topic of social isolation, especially in the older adult population, can lead to increased feelings of depression very easily as well, as demonstrated by the isolation caused by the COVID-19 pandemic, which increased rates of depression (Massachusetts General Hospital, 2020). Other research has shown that the isolation caused by the COVID-19 pandemic led to a 25% increase in the global prevalence of feelings of anxiety and depression (WHO, 2022). These data suggest that there is a link between social isolation and feelings of depression and anxiety.

The older adult population is much more susceptible to being negatively affected by bouts of social isolation. One reason is that older adults are much less technologically adept than other generations, leading to a struggle with gathering relevant information in an efficient manner, as well as higher feelings of boredom. Being less technologically able also makes it so that older adults have a larger problem with getting in touch with many of their friends and family members, even further pushing the feelings of boredom and loneliness. (Vaportzis et al., 2006)

Furthermore, older adult populations are more susceptible to underlying health conditions, and therefore at a higher risk of mortality compared to other age groups. This can worsen the issue of social isolation as many older adults can become widowed or separated due to this (WHO, 2018). Once widowed or separated, an older adult will have much less social interaction and be much more isolated than before (Utz et al., 2022). Regardless of the pandemic, older adults who are separated or divorced will tend to have lower interaction than older adults who are married. One

of the main purposes of this study is to determine if we can find a significant link between marital status and levels of depression and well-being in older adults, specifically in an old age care facility.

Living in a community home may be able to mitigate the lack of interaction one would have during a time of pandemic, or due to the loss of a partner. This is because it is an interaction-based society, where the residents have to talk and participate in activities with each other on a daily basis. Community living homes can be found all across the country, and the purpose they serve is very simple. Residents will pay to live in an assisted living environment alongside many other older adults such as themselves. An old age care facility could facilitate an environment in which the residents are able to communicate and participate in activities with each other much easier than if they were living independently.

In this cross-sectional survey study, we sought to examine whether depression and loneliness differed based on marital status, and if levels of social interaction were related to self-reported well-being and loneliness. We hypothesized that older adults who were divorced, widowed, or separated would report higher levels of depression and loneliness, as opposed to older adults who are married or remain single. We also hypothesized that low levels of social interaction would be associated with higher levels of loneliness and lower levels of subjective well-being, as well as older adults with lower levels of well-being would report higher feelings of depression.

Methods

Participants

The participants of this study consisted of a population of 26 older adults living in a retirement living home, with both male (n=12) and female(n=14) participants. The method of data collection was a survey, which was provided to the residents between meals, in which random residents were asked if they would be willing to participate. The participants were predominantly white. The participation of the residents was voluntary, and they were not rewarded in any way for completing the survey. Only 2 participants were removed from the data, due to incomplete responses in the survey.

Measures

PROMIS Depression Scale (Freedland et al., 2019). The Promis Depression Scale is a scale which consists of 8 questions weighted on a 5-point Likert scale (1 = Never, 5 = Always). In the questionnaire, participants were asked to answer various degrees of certain feelings over the past 7 days, or 1 week. Higher mean scores indicated higher feelings of depression.

Sickness Impact Profile (Bergner et al., 1981). The Sickness Impact Profile is a scale consisting of 3 large categories, and 12 subcategories. For the survey/questionnaire used in our study, only 1 question was utilized, the question being ("In general, you would say your health is…"). In this scale, a lower score indicates lower quality of physical health, while a higher score indicates the opposite.

2004 3-item loneliness scale (Hughes et al., 2004). The 3-item loneliness scale includes 3 questions weighed on a 3-point Likert scale(1 = Hardly Ever, 3 = Often). In this scale, a lower score indicates a lower feeling of loneliness, while a higher score would indicate prevalent or higher feelings of loneliness. In the survey, you were asked to report to what degree you indicated these questions in the past month, or approximately 4 weeks.

Berkman-Syme Social Network Index (SNI) (Berkman et al., 1983). The Berkman-Syme Social Network Index is a scale consisting of 3 main question categories measuring frequency of interaction with social networks,

social participation, and marital status. The scale has a total of 5 questions, each assessing frequency of social interaction across different contexts (e.g., talking to family or friends on the phone).

Quality of Well-Being Scale (Kaplan et al., 1996). The quality of well-being scale is one which measures affirmation in positive feelings, which is quite different from any other scale used in the survey, which all use affirmation in negative qualities to scale different feelings or mental disorders. This scale consists of 7 questions weighted on a 5-point Likert scale(1 = None of the Time, 5 = All of the time) a low score indicating a low level of well-being, while a high score would indicate an adequate or high level of well-being.

Measure of Marital Status. Marital status was measured on a self-reported scale consisting of married, single, separated, divorced, and widowed. Social interaction was also measured based on numerous questions regarding the topic. The responses were then attributed a value, with higher values indicating higher levels of social interaction.

Procedure

The experiment was conducted in person through a paper-copy survey, which was handed out to 26 randomly selected residents of an old age care facility in the United States. Participants consented to being part of the survey and were instructed to read a brief information sheet, before completing questionnaires on mental health outcomes and social interactions.

Results

Well-being and Depression

A simple linear regression revealed no significant association between well-being and depression among older adults in a community home, such that lower levels of wellbeing was not significantly associated with higher levels of depression. Individuals who were one unit higher on well-being were expected to score .087 lower on the depression scale, $p = .863$.

Marital Status and Depression

A simple linear regression revealed no significant association between marital status and levels of depression among older adults living in a community home, such that divorced, widowed, or separated individuals were not significantly associated to have higher values of depression. Individuals with a divorced, widowed, or separated marital status were expected to score .044 higher on the depression scale compared to older adults who are married or remained single, $p = .791$. This was contrary to our hypothesis, which stated that older adults with a divorced or widowed marital status would report higher levels of depression as compared to older adults who are married or remained single.

Social Isolation and Well-being/Loneliness

There was an association found between the variables regarding social isolation as well as loneliness and well-being. A simple linear regression revealed that older adults who reported higher on the social isolation scale were expected to report 0.361 higher on the loneliness scale, and 0.202 lower on the well-being scale, indicating higher levels of loneliness and lower levels of well-being, $p < .001$. This was in line with our hypothesis, which stated that older adults with lower social interaction would also report higher loneliness and lower well-being.

Discussion

This study's goal was to determine if there was any correlation between social isolation, loneliness and well being, as well as a correlation between marital status and depression, and a correlation between well-being in depression within the community of an old age care facility. Contrary to our hypothesis, data revealed that in the community, there was not a significant association between marital status and reported depression and loneliness symptoms, nor between depression and well-being. However, we found that older adults with lower social isolation reported lower levels of loneliness, however, we were not able to find any significant correlation with any of our other tests including a correlation between marital status and depression, as well as a correlation between depression and well-being. Therefore, our hypotheses were only partially supported.

There are a few limitations to be considered. One of these limitations would be that there was no significant effort made to reduce or prevent bias from the side of the participants in the study. There were a few types of bias which could have taken place in this study, the most significant of which would be response bias. This would indicate that only specific people would respond or consent to a survey based on mental health, whereas some may shy away, both due to bias. There are many other ways in which response bias could have been implemented by participants in this study. This could be that many participants would have reported much more positive centered answers on the survey. This could be due to fearing being seen in a different manner, even though information was provided to them that all of their responses were anonymous. The bias could have created inconsistencies in areas such as the depression scale, where they may have recorded less feelings of depression then which were actually occurring. Another limitation in the research would be that the sample was only taken from one facility. This could create a few major problems, such as that this community could have facilitated social interaction in many ways that other communities could not have, as all of the residents live in close proximity to each other, and have to see each other at all mealtimes. Not only that, but if this were true, it would skew results even further from those living independently, as older adults who live alone would have a much harder time interacting with others than would the people of this community.

In short, this study sought to examine the relationship between marital status and social interaction with symptoms of depression and loneliness in an older adult population in a community home facility. This study had a few major limitations such as many forms of bias as well as a small sample size, which could potentially have interfered with data or the findings of the research. In future research, we plan to control these limitations to dampen their effect, and to decrease the possibility of bias in the study. Some ways we could do this would be to compare the results of multiple different old age care facilities, as well as surveying older adults who are not part of a care facility, to see if the results differ. We could do a better job making sure participants understand the survey is anonymous, lessening the chance for bias to occur. The research suggests to us that we need to use data collection methods which decrease or eliminate the chances for bias to occur, and that any further research that is conducted should look further into well-being and isolationism, as those were the variables which showed the largest association. Although this study was largely unable to deliver significant results based on our hypotheses, further research with proper functionalities in place to limit the limitations such as bias and sample size could possibly yield more concrete results.

References

U.S. Department of Health and Human Services. (n.d.). *Depression and older adults*. National Institute on Aging. Retrieved September 28, 2022, from https://www.nia.nih.gov/health/depression-and-older-adults

Improving mental health for a better life. Resources To Recover. (2022, May 3). Retrieved September 28, 2022, from http://www.rtor.org

G. A. for. (2021, February 2). *The most common causes of depression in older adults*. Resources To Recover. Retrieved September 28, 2022, from https://www.rtor.org/2021/01/29/the-most-common-causes-of-depression-in-older-adults

Depression on the rise during COVID-19. Massachusetts General Hospital. (n.d.). Retrieved September 28, 2022, from https://www.massgeneral.org/news/coronavirus/depression-on-rise-during-covid-19

Academic.oup.com. (n.d.). Retrieved September 28, 2022, from https://academic.oup.com/gerontologist/article/42/4/522/686616

Vaportzis, E., Clausen, M. G., & Gow, A. J. (2017, October 4). *Older adults perceptions of technology and barriers to interacting with tablet computers: A FOCUS Group Study*. Frontiers in psychology. Retrieved September 28, 2022, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5649151/

World Health Organization. (n.d.). *Mental health of older adults*. World Health Organization. Retrieved September 28, 2022, from https://www.who.int/news-room/fact-sheets/detail/mental-health-of-older-adults

U.S. Department of Health and Human Services. (n.d.). *Depression and older adults*. National Institute on Aging. Retrieved September 28, 2022, from https://www.nia.nih.gov/health/depression-and-older-adult