



# JOURNAL of AGING and LONG-TERM CARE

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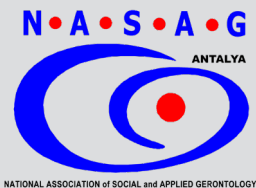
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Gerontology (NASAG) - Turkey







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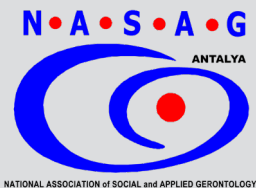
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## Feasibility of Virtual Reality for Mental Health in Long-Term Care in Rural Populations

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### ABSTRACT

Throughout the COVID-19 pandemic, long-term care residents have been disproportionately affected both physically and mentally. Increased restrictions have worsened long-term care residents' mental health and have increased feelings of isolation and loneliness. This pilot study explores the feasibility of virtual reality (VR) technology used by long-term care residents for mental health in a rural area of southern Illinois. We captured long-term care residents' thoughts, feelings, and knowledge of VR using a pre-test and post-test design

following an educational session introducing VR. Participants were then offered the opportunity to use the technology, with 9 out of the 11 participants watching a 360° video using the VR headset. All participants who tried the VR headset noted that they were more willing to try VR in the future. While no statistically significant changes in mood from before and after the session were found, the results suggest that the use of VR for mental health in long-term care populations is more feasible when paired with an educational session before intervention.

**KEYWORDS:** Virtual Reality; Long-Term Care; Mood; Mental Health; Feasibility.

### KEY PRACTITIONER MESSAGE

1. The COVID-19 pandemic has disproportionately impacted residents of long-term care facilities through increased risk of infection, restrictions, and feelings of loneliness.
2. VR technology can improve the mental health of those long-term care residents during and after the COVID-19 pandemic to combat feelings of isolation.
3. Long-term care residents positively received the VR technology when paired with an educational session to introduce the technology.

## INTRODUCTION

Virtual reality (VR) is an advanced type of human-computer interaction that allows users to interact with an environment that simulates reality (Schulthesis & Rizzo, 2001). Advances in VR technology now allow for more immersive experiences, creating an increased sense of presence in the virtual environment for the user (North & North, 2016), which has the potential to enhance the effects of VR use in healthcare. VR has been used in a variety of ways with the aging population, including cognitive training, balance training, and activities of daily living assessment. (de Vries et al., 2018; Gamito et al., 2019; Optale et al., 2010). Appel and colleagues (2020) recognized the potential for VR to simulate outdoor experiences among those with physical and/or cognitive impairments and assessed the acceptance of VR therapy using a head-mounted display. The authors found high acceptance of the technology, with 76% of participants wanting to try VR again and few reporting adverse side effects.

Yu and colleagues (2020) found that middle-aged and older adults who viewed virtual nature settings using a head-mounted display experienced greater psychologically restorative effects compared to those who viewed urban settings. Liu et al. (2020) found that older adults reported a stronger sense of presence and more robust emotional responses to viewing immersive VR videos. Pairing these findings with evidence that nature-based interventions enhance health and well-being for the aging population (Moeller et al., 2018), there is strong evidence to suggest that nature-based immersive VR technology can positively impact morale, mental health, and quality of life for those in long-term care settings.

The COVID-19 pandemic has disproportionately impacted residents of long-term care facilities. The older population, especially those with comorbidities, is at a higher risk of contracting COVID-19 and severe infections (LeVasseur, 2021). Therefore, the higher risk of COVID-19 contraction for long-term care residents means increased restrictions are necessary. However, these increased safeguards, such as restricting visitors, have increased feelings of isolation for long-term care residents. Another article highlighted eight mental health considerations for long-term care communities (Checkland et al., 2021). Some factors that have possibly worsened long-term care residents' mental health during the COVID-19 pandemic include ageism, chronic staff shortages, poor access to mental health services, and limited education and training for staff on mental health

(Checkland et al., 2021). Eghtesadi (2020) noted that the extreme loneliness experienced by older adults as part of the pandemic is a cause for concern as it increases the risk of poor health outcomes. One suggestion presented included using virtual reality headsets in residents' homes so that those individuals could have immersive experiences that would connect them to the outside world (Eghtesadi, 2020).

Other literature shows that mental health in long-term care settings has been negatively affected. Therefore, VR technology may impact the mental health of those long-term care residents during and after the COVID-19 pandemic to combat feelings of isolation and low morale. Previous literature does not account for possible difficulties when introducing the technology to rural populations such as the southern Illinois long-term care population. Furthermore, earlier articles do not include the mental health of residents during a pandemic, where even greater negative emotions are taking place. Therefore, this study explores the feasibility of virtual reality technology used by long-term care residents for mental health in a rural area of southern Illinois.

## METHOD

The original study proposal was centered on exploring the possibility of virtual reality technology to improve the mental health of long-term care residents. This pilot study employed a one-group pre-test and post-test design. The study included residents completing a demographic questionnaire as well as a mood scale prior to virtual health intervention. After a 10-minute intervention of watching a nature-based video, participants would have completed the mood scale again immediately following the video, one hour after the video, and four hours after the video to assess the time effect of the intervention. Based on some feedback from long-term care residents, they did not feel comfortable trying the virtual reality headset. Some residents noted feelings of anxiety surrounding the technology and overall felt unsure.

### Research Design

The new approach introduced an educational component to capture data regardless of the resident trying the virtual reality technology and continued with the one-group pre-test and post-test study design. Participants were assigned to complete a demographic questionnaire. Next, participants completed a questionnaire regarding their current

knowledge, experience, and feelings on virtual reality technology. Participants then finished a mood scale where they ranked their current mood between various emotions. Then, participants listened to a short presentation on the basics of virtual reality technology. The presentation included the uses for virtual reality, its appearance, and possible side effects of the technology. Following the educational presentation, participants again completed an assessment of their feelings, opinions, and knowledge of virtual reality. Participants were then provided with the opportunity to try the headset on with or without an immersive video, whereas participants were also able to choose the video to fit their interests. If participants decided not to try the virtual reality headset, they still completed the mood scale once again following their knowledge questionnaire. Participants that decided to use the virtual reality headset would complete the mood scale following their virtual reality experience.

### Measures

The demographic questionnaire included age, marital status, medical conditions, number of family members near the facility, and the number of times residents had left the facility in the previous week. The mood scale was adopted from Nahum et al. (2017) Immediate Mood Scaler to capture data regarding the current emotions of the participants. The scale ranged from very negative emotions and very positive emotions. An example question asked participants to choose between feeling very depressed, somewhat depressed, neither depressed nor happy, somewhat happy, and very happy. The pre-test measurements included participants self-ranking their current knowledge, perceptions, and feelings toward virtual reality technology. For example, participants were asked, *“How willing are you to try virtual reality?”* and *“Have you heard of virtual reality before?”* Lastly, the post-test measurements explored if the participants’ knowledge, perceptions, and feelings towards virtual reality technology had changed following the education component of the study. An example question included, *“Please rate how much your knowledge about virtual reality has increased or decreased.”*

### Research Aim and Study Sample

The research design first proposed aimed to explore if nature-based virtual reality technology can improve the mental health of long-term care residents. The new research design aimed to explore the feasibility of introducing virtual reality technology to long-

term care residents. The study sample consisted of residents of a long-term care facility in the southern Illinois region.

### Statistical Analysis

Using Microsoft Excel, the Wilcoxon signed-rank was used to compare the mood of participants before and after the informational session. Summary statistics were also calculated for the participants’ demographics and self-ranking of knowledge, perceptions, and feelings toward VR.

## RESULTS

### Demographics

Of the sample (n= 11), all participants were female with an average age of 80 years. Five were divorced, four were widowed, and two were single. Participants left the facility an average of 2.09 times in the previous week. Furthermore, participants had an average of six family members within an hour’s distance of the facility; three had no family members within an hour’s drive distance. Lastly, the most commonly noted medical categories were musculoskeletal and cardiovascular, with 9 participants responding with those conditions. Five participants noted psychological conditions.

Nine participants were willing to try the VR headset following the education session. Of the two participants who did not try the headset, one participant noted she had vertigo and was concerned about potential side effects. The other participant noted anxiety surrounding the possible side effects, such as motion sickness, headaches, blurry vision, eye strain, and nausea.

### Mood Scale Summary

The Wilcoxon signed-rank test found no statistically significant changes in mood from before and after the informational session on virtual reality. However, among participants who tried the VR headset, several noted increases in mood following the VR video, as shown in [Table-1](#). Increases in the mood scale signify a more positioned emotion being felt following the intervention. Additionally, of those that completed the virtual reality experience, zero reported possible side effects. All comments recorded during the virtual reality experience were positive, with quotes such as *“I want one of these! This is so relaxing and too awesome for words.”*

## Informational Session Results

All participants noted an increase in knowledge of VR following the educational presentation. Furthermore, all participants reported that their interest in virtual reality increased or stayed the same following the session. Seven out of the eleven participants had heard of virtual reality prior to the educational session, with three participants having seen a virtual reality headset before the presentation. All participants who tried the VR headset noted that they were more willing to try VR in the future. The two participants who did not try the headset reported they were less likely to try VR in the future.

Table-1. Change in Mood Among Those Who Tried the VR Headset

Depressed / Happy	Lonely / Engaged	Pessimistic / Optimistic	Frustrated / Peaceful	Tense / Relaxed
4	4	4	8	4
Increased	Increased	Increased	Increased	Increased
5	4	4	1	5
Same	Same	Same	Same	Same
0	0	1	1	0
Decreased	Decreased	Decreased	Decreased	Decreased

## DISCUSSION

This study aimed to determine if virtual reality technology for the mental health of long-term care residents is feasible. We found that virtual reality for mental health in long-term care populations is more feasible when paired with an educational session before intervention. Previous research findings by Appel and colleagues (2020) found that the majority of participants were willing to use virtual reality again, and few reported adverse side effects, and similar results were found as a part of this study. However, this study found difficulties experienced when exposing a rural southern Illinois long-term care population, notably around anxiety with using the VR headset initially. It is important to note that those who attended the educational session expressed willingness beforehand; thus, the participants in this study may have been more willing to try VR compared to the rest of the population in the facility.

Our study had other limitations. First, the study sample was small, and there were no male participants. The facility's activity director noted that attendance for activities was higher for women. Second, the exposure to new technology for the

population required innovative thinking to overcome the challenge of anxiety of long-term care residents regarding virtual reality and its possible side effects. Furthermore, conducting the study during the COVID-19 pandemic resulted in more significant time restraints due to facility outbreaks. We had to reschedule visits due to facility shutdowns, which may have also decreased participation in the study.

## Conclusion

Virtual reality technology intervention is more feasible with educational sessions. Increased feasibility means virtual reality technology research for mental health in long-term care settings is viable to pursue, especially as mental health awareness is increasing. This study addressed gaps in current literature as it explored the feasibility within a more rural population that often has decreased access to newer technology. While the Wilcoxon Sign-Rank test produced a not statistically significant result, the qualitative data, quotes of participants, zero adverse side effect reports, and the use of the technology resulted in positive comments noted by patients support our conclusion that virtual reality for mental health in long-term care populations is more feasible when paired with an educational session before intervention.

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## Marital Satisfaction and Depression in Older Adults: A Literature Review

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### ABSTRACT

Marital satisfaction is an important concept contributing to depression. In contrast to younger and middle-aged individuals, the negative association between marital satisfaction and depression has been reported to be strongest among older adults. This study reviewed the association between marital satisfaction and depression in older adults. Based on the literature review, findings demonstrated that older women have lower marital satisfaction and higher depression level compared to older men. Also, although spouse support is a primary source of social support and an influential protective factor against depression in older marriages, older women have less spouse support than older men. According to the findings, older women are at increased risk for depression due to poorer marital satisfaction and spousal support.

**KEYWORDS:** Marital Satisfaction; Depression; Older Adults; Spouse Support.

### KEY PRACTITIONER MESSAGE

1. The association between marital satisfaction and depression is strongest in the oldest cohort compared to young and middle-aged adults.
2. Older women are more likely to suffer from depression than their male counterparts, despite both genders being at risk. Furthermore, older women reported poorer marital satisfaction than older males.
3. While high levels of spouse support are more protective than support from others against depression in older adults for both genders, less spouse support is associated with a higher risk of depression for older women.
4. Based on the literature review, it is suggested that prioritizing to increase spouse support and marital satisfaction during young marriages might help cope with depression during older ages, particularly for women.



## INTRODUCTION

Marital satisfaction, an extended term referring to the quality of a marriage in terms of marital happiness (Lewis & Spanier, 1979), is strongly associated with well-being (Robles, 2014; Uchino, 2006). Although marriage is a protective factor for health and well-being in older adults (Carr & Springer, 2010), long-term marriages have also been linked with depression (Proulx et al., 2007; Whisman & Uebelacker, 2009). This review study examines the relationship between marital satisfaction and depression in older adults.

### Literature Review

Depression is defined as helplessness, hopelessness, and sadness (American Psychiatric Association, 2013, pp. 155-189). Although older adults are less likely to develop depression compared to younger adults, depression is one of the most common mental issues among older adults (Blazer et al., 1988; Kim et al., 2018) and public health problems because of its serious consequences. Nearly 15% of older adults in community samples have clinically significant depression symptoms (Blazer, 2003). The aging adult population in Turkey has increased by 22.5% in the last five years (Turkish Statistical Insititue, 2021) and severe antidepressants are more prescribed to the older adult population compared to the other age groups (Karakus, 2021). Findings demonstrated that older adults with depressive symptoms had poor functioning (Cole et al., 1999).

Furthermore, older adults are more likely to have cognitive disturbances, somatic symptoms, and loss of interest than younger adults due to depression (Fiske et al., 2009). It is also stated that suicide in older adults is higher than in younger adults and is more closely associated with depression (Fiske et al., 2009). More specifically, older adults with depression are at risk of disability and mortality (Rodda et al., 2011).

A myriad of studies focuses on understanding the factors associated with depression in older adults (Brodaty et al., 2001; Heun et al., 2001; Maier et al., 2021; Roh et al., 2015). While race or ethnicity is not associated with the prevalence of depression (Swenson et al., 2000), various factors, including marital status, gender, and lack of social support, contribute to depression in older adults (Choi & Ha, 2011; Cohen et al., 2009; Djernes, 2006). Consistent with the literature, studies conducted with Turkish older adults demonstrated that being female and widowed contributes to depression among older

adults (Kekovali et al., 2002).

Although a large body of literature highlighted that married individuals have good physical and mental health (Carlson, 2012; LaPierre, 2009; Robards et al., 2012; Spiker, 2014),

marriage is also viewed as a risk factor for depression in older adults (Cole & Dendukuri, 2003; Sewitch et al., 2004). Current findings indicate that marriage is not beneficial for all spouses (Hawkins & Booth, 2005; Williams, 2003), and having better physical and mental health is closely associated with the quality of the marital relationship (Bloch et al., 2010; Holt-Lunstad et al., 2008; Jabalamelian, 2011) instead of marital status. While high-quality marriages are beneficial for health and well-being, low-quality marriages may be harmful (Hawkins & Booth, 2005; Proulx et al., 2007). Marital satisfaction is a term that refers to marital quality, including positive feelings, thoughts, and positive communication about each other (Rao, 2017).

Many studies have focused on the relationship between marital satisfaction and mental health variables, particularly depression (Bodenmann & Ledermann, 2008; Gilmour et al., 2022; Katz et al., 2000). Research conducted with married people, including older adults, highlighted the negative association between marital satisfaction and depression (Du Rocher Schudlich et al., 2011; Herr et al., 2007; Proulx et al., 2007; Rao, 2017; Whisman, 2001; Whisman & Uebelacker, 2009). The marital discord model of depression states that dissatisfying marriages and lower levels of spousal support are associated with the onset or maintenance of depression symptoms among married people (Beach et al., 1990). Marital stability has been linked to well-being (Proulx et al., 2007; Whisman & Uebelacker, 2009). Thus, it is stated that negative interactions are less dominant in older marriages (Carstensen et al., 1995) compared to middle-aged couples, and marital satisfaction tends to decrease during the middle of marriage and increase again in later life (Gagnon et al., 1999). However, Umberson et al. (2006) highlighted that marital happiness decreases over time. Consistent with this, a study by Bookwala and Jacobs (2004) investigated the association between marital satisfaction and depression among young, middle-aged, and older adult cohorts and found the strongest association in the oldest cohort. A longitudinal study by Ulrich-Jakubowski et al. (1988) found that while marital discord was not associated with greater depressive symptoms over 15 months, an increase in depressive symptoms predicted a



subsequent decrease in marital satisfaction in older adults for older men, unlikely younger counterparts. Consistent with this, longitudinal studies conducted with older adults highlighted that depression predicts marital satisfaction (Pruchno et al., 2010; Wright, 1990). The relationship between marital satisfaction and depression differs for older adults than younger counterparts.

Gender differences are substantial in marital satisfaction as well as depression. Studies investigated the marital quality among married individuals demonstrated that married women are generally reported to show less marital satisfaction (Amato et al., 2007; Kamp Dush et al., 2008; Stevenson & Wolfers, 2009), and they consistently have lower marital satisfaction (Umberson et al., 2006) compared to men. Regarding gender differences, older women also reported lower levels of marital satisfaction than older men (Bulanda, 2011; Cohen et al., 2009; Windsor & Butterworth, 2010). Likewise, marital satisfaction and gender are critical indicators of depression in older adults. Although both older women and men are at risk for depression (Chen et al., 2014; Cheung & Mui, 2021), older women have high prevalence rates of depression compared to older men (Alvarado et al., 2007; Chen et al., 2014; Faulkner et al., 2007; Van de Velde et al., 2010). As women become older, the negative impacts of unhappy marriages on their physical and mental health become more pronounced. Therefore, older women are at risk of experiencing lower marital satisfaction, which leads to negative well-being outcomes (Bulanda et al., 2016; Hawkins & Booth, 2005), particularly depression (Whisman & Uebelacker, 2009).

Walker et al. (2013) stated that although marital satisfaction is important in the relationship between health and well-being, factors that account for long-term marriages remain unclear. Furthermore, in unions where both husband and wife report higher levels of marital dissatisfaction, only the wives reported depression (Gotlib & Whiffen, 1989). Whisman et al. (2004) highlighted that women are more affected by marital discontent and depression. Similarly, Dehle and Weiss (1998) stated that marital quality is a better predictor of depressive moods than husbands in marriage. Thus, it can be concluded that older women are the vulnerable population to having a higher prevalence of depression due to lower marital satisfaction than older men. Although there are various factors in the relationship between marital satisfaction and depression in older women,

spouse support is one of the critical factors.

Findings demonstrated that marriage is more closely tied to the wife's well-being due to the importance of emotional climate and spouse support among women in marriages (Read & Grundy, 2011; Sandberg & Harper, 2000). Banes and Duck (1994) stated that social support provides that an individual is appreciated and cared for by others and has also been found to be one of the critical factors in the relationship between marital satisfaction and depression (Beach et al., 1986; Khan & Aftab, 2013), particularly in women (Amiri et al., 2012; Hoseini et al., 2015).

Marriage is one of the close relationships that provide social support from their partner in older adults. According to (Curun, 2006), spousal support helps feel emotional closeness and more connection among couples. While the higher spousal support is negatively associated with a lower level of depression for both women and men (Choi & Ha, 2011), the lower level of spousal support and higher depressive symptoms are positively associated in women (Ciftci Aridag et al., 2019). Partnerships, such as marriage relationships, become increasingly vital as individuals age. Even though family and friends had a greater protective effect on older women's depression, high levels of spouse support were found more protective against depression in older adults for both genders than support from others (Druley & Townsend, 1998). In contrast, while less spouse support was associated with a higher risk of depression for older women, no such effect emerged for older men (Choi & Ha, 2011). Insufficient spousal support influences the association between marital satisfaction and depression in older women.

Depression is associated with the marital status of older persons, and the effect of marital status on depression may differ by gender. Older women, in particular, get less spousal support than older men; spousal support and marital satisfaction have a greater influence on depression in older women than in older men.

## DISCUSSION

Depression is one of the psychiatric disorders with the highest rate among older adults, and it becomes chronic and reduces the quality of life when it is untreated (Blazer et al., 1988; Muller-Spahn & Hock, 1994). Findings demonstrated that getting older is not only a factor associated with increasing the risk of depression and various including gender, marital

status, and spousal support, contribute to depression in older adults (Druley & Townsend, 1998; Du Rocher Schudlich et al., 2011; Kockler & Heun, 2002). This review study examines depression in older adults from a marital satisfaction perspective.

A recognized marital relationship plays a significant role in late-life development (Hoppmann & Gerstorf, 2009). Although being married is a protective factor for depression in older adults (Gutierrez-Vega et al., 2018; Padayachey et al., 2017), particularly dissatisfying marriages may also be harmful to physical and mental health in older adults (Sewitch et al., 2004).

Concerning gender differences, findings demonstrated that female older adults have more depression than men counterparts (Alvarado et al., 2007; Chen et al., 2014; Faulkner et al., 2007; Van de Velde et al., 2010). Kockler and Heun (2002) stated that older women and men have partially distinct symptoms of major depression from each other, and these differences are derived from gender differences in the perception and the expression of depressive syndromes. Furthermore, older women also reported lower levels of marital satisfaction than older men (Bulanda, 2011; Cohen et al., 2009; Windsor & Butterworth, 2010). Thus, it can be said that older women and men might have different insights and coping with problems such as retirement, chronic health conditions, decreased social ties, and factors related to their marriages.

Findings highlighted the negative association between marital satisfaction and depression in older adults (Bookwala & Jacobs, 2004; Whisman & Uebelacker, 2009) as a result of the moderation role of age in this relationship (Wang et al., 2014). Furthermore, regarding the gender differences in marital satisfaction and depression, studies highlighted the importance of marital satisfaction on depression in older women (Gagnon et al., 1999). Length of marriage contributed to marital satisfaction for women (Shek, 1995). Regarding the positive correlation between age and length of the marriage, it can be said that individuals in unhappy marriages have more likely to experience greater marital dissatisfaction during their older period, which can lead to depression.

However, the direction of the relationship between marital satisfaction and depression is reciprocal in the literature. While the marital discord model of depression stated that dissatisfying marriages and lower levels of spousal support are associated with

the onset or maintenance of depression symptoms among married people (Beach et al., 1990), the stress generation model suggested that poor psychological well-being associated with stressful communication with spouse turns to marital dissatisfaction (Davila et al., 1997). Although it has been found that higher marital satisfaction is positively associated with greater psychological well-being (Proulx et al., 2007), longitudinal studies conducted with older people stated that depression predicts marital satisfaction (Pruchno et al., 2010; Wright, 1990). Thus, future studies are needed to examine the factors related to marital satisfaction and depression in long-term marriages that longitudinally help improve older adults' quality of life.

Spousal support is one of the key components explaining the relationship between marital satisfaction and depression. Although minimizing contact with one's spouse disadvantages older adults (Bookwala & Jacobs, 2004), marriage support becomes more critical in older ages, particularly women. Older women having less spouse support experienced more significant depressive symptoms than older men (Choi & Ha, 2011). While spouse support is positively associated with marital satisfaction (Cutrona, 1996; Mickelson et al., 2006; Sung & Joo, 2011), marital satisfaction is negatively associated with depression (Khan & Aftab, 2013; Miller et al., 2013; Woods et al., 2019). It is clear that the absence or lower levels of spousal support for older women leads to lower marital satisfaction and more vulnerability to depression than older men.

One of the possible explanations for the importance of spouse support in older women might be related to caregiving roles. Traditional gender roles are also contributing factors to women's dissatisfaction in marriages (Beach et al., 2003). Besides being a mother, a wife, and a housewife in most marriages, women are also expected to do a variety of additional duties (Dempsey, 2002). They are also predominant caregiving providers (Sharma et al., 2016), particularly in spouse caregiving, due to the higher rates of chronic illnesses and disabilities among older adults (Gao et al., 2007). A meta-analysis study by Pinquart and Sorensen (2006) stated that women caregivers reported more depression than male caregivers due to higher levels of burden and caregiving tasks than men.

Based on the literature findings on marital satisfaction and depression in older adults, it is obvious that more studies are needed to understand better how long-term marriages are associated with depression in

older adults. Furthermore, it becomes apparent that there is a limited number of studies focusing on investigating the relationship between spousal support, which leads to marital dissatisfaction and depression in older adults. While numerous cross-sectional studies examined the relationship between marital satisfaction and depression, they have some significant methodological limitations. Davila et al. (2003) stated that the association between marital satisfaction and depression is bi-directional. A causal relationship between these variables could not be possible with cross-sectional data. Also, Beach et al. (2003) stated that dissatisfied partners provide less support in their marriages, likely negatively affecting their spouse's mental health. However, most of the studies include older adult samples instead of couples. More research is required to determine the intrapersonal and interpersonal relationships between depression, spousal support, and marital satisfaction in older married couples. Lastly, we have little knowledge about this relationship in literature except in America, Asia, and Europe. More specifically, to understand which type of spouse support is associated with marital satisfaction and depression and its relationship with marital satisfaction and depression between their own and partners, it is necessary to test mediating and moderating effects in older couples from a dyadic perspective in Turkey.

In light of the association between marital happiness and depression in older adults, this study reveals a variety of personal and public health implications. Considering older adults' psychological well-being and its association with the quality of late-life marriages, focusing on improving marital functioning helps to cope with psychological problems. Also, prioritizing to increase spouse support and marital satisfaction during young marriages helps to cope with depression in older ages, particularly for women. It is suggested that psychoeducation modules emphasize supporting marital roles, including caregiving among couples, particularly for women to increase social support and preserve psychological well-being. While working with older depressive women, examining marital satisfaction and spousal support in more detail is suggested. Also, as a public health strategy, providing resources to help caregivers helps to reduce depression in older women.

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## INSTRUCTIONS TO AUTHORS

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The Journal of Aging and Long-Term Care (JALTC) is being established as open access and quarterly peer-reviewed journal that accepts articles in English. Open Access publishing allows higher visibility of an author's research as articles are available for anyone to access worldwide. Articles published in JALTC are highly visible and gather more citations and publicity than stand-alone articles.

JALTC is published three times a year. Articles submitted should not have been previously published or be currently under consideration for publication any place else and should report original unpublished research results. The journal does not expect any fees for publication. All articles are available on the website of the journal with membership.

The quantitative, qualitative and mixed-method research approaches are welcome from disciplines including but not limited to education, gerontology, geriatrics, nursing, care and hospice, social work, psychology, sociology, biology, anthropology, economics and business administration, engineering, gerontechnology, law, human rights, public policy, architecture, women studies, rehabilitation, and dietetics.

Prospective authors are cordially invited to contribute clearly written original empirical research manuscripts, reviews, brief reports, hypothesis & theory, clinical trial, case report or discussion, short communications, and case studies, general commentary, debates and controversies, care facility and services, book review, editorial or guest editorial and erratum including innovative practices from the field as well as relevant philosophical and ethical perspectives on long-term care and older adults.

The review process for submitted manuscripts has been planned **not to exceed four months**. All research articles submitted to the journal will undergo **rigorous peer review**, based on initial editor screening and anonymous refereeing by two peers.

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#### Journal Articles:

Lo, C. L., & Su, Z. Y. (2018). Developing multiple evaluation frameworks in an older adults care information system project: A case study of aging country. *Journal of Aging and Long-Term Care*, 1(1), 34-48. doi:10.5505/jaltc.2017.65375.

#### Edited Book:

Whitbourne, S. K. (Ed.) (2000). *Wiley Series on Adulthood and Aging. Psychopathology in Later Adulthood*. Hoboken, NJ, US: John Wiley & Sons Inc.

#### Book Section:

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### Vision and Mission

The major goal of the Journal of Aging and Long-Term Care (JALTC) is to advance the scholarly contributions that address the theoretical, clinical and practical issues related to aging and long-term care. The JALTC, while making efforts to create care services for older people at the best quality available that are more humane, that pay special attention to people's dignity, aims from the perspective of the whole aging process- to discuss Social Care Insurance as a human right, to contribute care for older people to be transformed into an interdisciplinary field, to integrate care services for older people and gerontological concepts and to create more effective collaboration between them, to enhance the quality of care services for older people and the quality of life of caregivers from medical, psychological and sociological perspectives, to highlight the cultural factors in care for older people, to increase the potential of formal and informal care services, to provide wide and reachable gerontological education and training opportunities for caregivers, families and the older people.

### Aims and Scope

"National Association of Social and Applied Gerontology (NASAG)" has recently assumed responsibility for the planning and introduction of a new international journal, namely, the Journal of Aging and Long-Term Care (JALTC). With world societies facing rapid increases in their respective older populations, there is a need for new 21st century visions, practices, cultural sensitivities and evidenced-based policies that assist in balancing the tensions between informal and formal longterm care support and services as well as examining topics about aging.

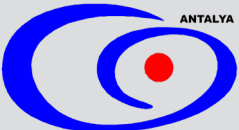
The JALTC is being launched as the official journal of the NASAG. The preceding journal aims to foster new scholarship contributions that address theoretical, clinical and practical issues related to aging and long-term care. It is intended that the JALTC will be the first and foremost a multidisciplinary and interdisciplinary journal seeking to use research to build quality-based public policies for long-term health care for older people.

It is accepted that aging and long-term care is open to a diverse range of interpretations which in turn creates a differential set of implications for research, policy, and practice. As a consequence, the focus of the journal will be to include the full gamut of health, family, and social services that are available in the home and the wider community to assist those older people who have or are losing the capacity to fully care for themselves. The adoption of a broader view of aging and long term care allows for a continuum of care support and service systems that include home base family and nursing care, respite day care centers, hospital and hospice care, residential care, and rehabilitation services. It is also crucial to be aware that life circumstances can change suddenly and dramatically resulting in the need for transitional care arrangements requiring responsive, available, accessible, affordable and flexible health care service provision.

For further assistance and more detailed information about the JALTC and the publishing process, please do not hesitate to contact Editor-in-Chief of the JALTC via sending an e-mail: [editor-in-chief@jaltc.net](mailto:editor-in-chief@jaltc.net) Editor-in-Chief: Emre SENOL-DURAK



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