

Hardiness, Loneliness and Psychological Distress among Elderly People in Benue-Northwest

Joy Iember Nenger

Postgraduate Student

Department of Psychology

Rev. Fr. Moses Orshio Adasu University Makurdi

Ajonye Alan Anyalewa (Ph.D)

Lecturer

Department of Psychology

Rev. Fr. Moses Orshio Adasu University Makurdi

DOI:[10.56201/jhsp.vol.11.no5.2025.pg10.20](https://doi.org/10.56201/jhsp.vol.11.no5.2025.pg10.20)

Abstract

This study investigated hardiness, loneliness and psychological distress among elderly people in Benue-Northwest. A cross-sectional survey design was adopted among 384 elderly people comprising of 219 (57%) males and 165 (43%) females. Their ages ranged from 61-78years with a mean age of 67.003years (SD=5.839). Multi-stage sampling technique was used to draw the participants for the study. The UCLA Loneliness Scale, Hardiness Scale and the Kessler's Psychological Distress Scale were used for data collection. Multiple linear regression, simple linear regression, and standard multiple regression were used for data analysis. The result indicated that there was a significant influence of hardiness on psychological distress among elderly people. Furthermore, all the dimensions of hardiness; challenge, control and commitment made significant negative contributions to psychological distress. The result also indicated that there was a significant influence of loneliness on psychological distress among elderly people. The result also indicated that there was a significant joint influence of hardiness and loneliness on psychological distress among elderly people. It was recommended that Geriatric Psychologists should develop a hardiness skills curriculum which can be used for psychoeducational purpose in helping elderly people understand how to cope with distressing conditions in their older ages.

Key Words: *Hardiness, Loneliness, Psychological Distress, Elderly People*

Introduction

Psychological distress is a common phenomenon among the elderly. It is one of the mental health burdens experienced by vulnerable populations, elderly people, disabled persons and people living with mental health disorders (Sterina et al., 2021; Timalina & Songwathana, 2020). Psychological distress covers mild to severe disturbances of thoughts, affect and behaviour (Riedel-Heller et al., 2016). Among the elderly, a lot of risks ranging from economic, social and medical factors can determine elderly people's susceptibility to psychological distress. Apparently, coping with distress at older ages has been a perennial challenge for this group. This phenomenon is common in both developed and developing countries (Sterina et al., 2021; Timalina & Songwathana, 2020). The number of the elderly is estimated to be 605 million in the world (Azeem & Mahwesh, 2023). By 2050, the world's population aged 60 and over is expected to double to

nearly two billion (22% of the world's population; Officer et al., 2021; WHO, 2021). These demographic changes highlight the need to promote health and well-being in older populations, contributing to an independent, comfortable and healthy aging as possible (Von-Humboldt & Leal, 2024). Some of these factors include hardiness and loneliness.

One of the factors associated with psychological distress is hardiness. It is a set of personality features that defines the amount of resistance an individual possesses under traumatic conditions (Bradshaw et al., 2019). According to the proponents of psychological hardiness, the construct is made up of three constituents: commitment, control and challenge (Hu et al., 2015). Psychological hardiness has been found to negatively predict mental disorders (Moradi et al., 2018). In a study conducted by Eschleman et al. (2020), hardiness was found to inversely relate to some psychological characteristics like distress, depression, emotional fatigue, and negative anxiety.

Another likely predictor of psychological distress is loneliness. The prevalence of loneliness has increased significantly across different generations in recent decades (Hawkley et al., 2019; Suanet & Tilburg, 2019). Among the elderly population in particular, studies from several countries indicate that between 19% and 30% of people aged 60 years report feeling lonely (Fakoya et al., 2020; Landeiro et al., 2017; Mehrabi & Beland, 2020). Furthermore, loneliness has been associated with various mental health conditions, such as depressive and anxiety symptomatology, and lower quality of life (Cacioppo et al., 2014; Landeiro et al., 2017; Malcolm et al., 2019). One of the crucial mental health outcomes, psychological distress, is manifested through various symptoms, such as depression and fatigue (Drapeau et al., 2012). However, indications of a prolonged and pronounced deterioration in mental health have also been reported (Daly et al., 2020). Therefore, the present study sought to investigate hardiness, loneliness and psychological distress among elderly people in Benue North-West.

Hardiness and Psychological Distress

Akanbi et al. (2023) examined the role of psychological hardiness, narcissism, and perfectionism in depression tendency among undergraduate students in Oyo State, Nigeria. Findings revealed that hardiness significantly influenced depressive symptoms and that the predictors accounted for 42% of the total variance in depression tendency. Each predictor indicated a significant relationship with the criterion. The study concluded that there is need to consider variables analyzed in the study while diagnosing depressive symptoms among undergraduate students.

Taylor et al. (2023) examined the association of hardiness to mental and physical health in military men. In the total sample, hardiness predicted physical health in an initial regression model. When mental health was added to the model, however, physical health's influence was substantially attenuated and no longer significant. A Sobel test of significance confirmed a mediated effect. Similar patterns were observed in each individual sample. They concluded that hardiness is associated with physical health in military men, and this relationship is mediated by mental health.

Abbasi et al. (2023) investigated the effectiveness of integrating mindfulness and spiritual therapy in enhancing the psychological hardiness and distress tolerance among mothers of hard-of-hearing children. The mindfulness integrated with spiritual therapy had a significant effect on enhancing distress tolerance and the psychological hardiness of mothers of hard-of-hearing children. There was a significant difference in the total scores of AHI and DTS between the

experimental and control groups. Furthermore, there was a significant difference between the pre-test, post-test, and follow-ups.

Loneliness and Psychological Distress

Coutts-Smith and Phillips (2023) examined whether trait mindfulness mediates or moderates the positive association between loneliness and psychological distress. Participants who reported greater loneliness reported lower trait mindfulness that, in turn, tended to associate with greater psychological distress. Multiple mediation analysis found indirect paths via Non-Judging, Awareness, Non-Reactivity, and Describing. Moderation analysis found that the association between loneliness and psychological distress was significant for participants with low trait mindfulness but non-significant for those with high trait mindfulness. However, analysis of the mindfulness facets as simultaneous moderators found that no facet individually moderated the association.

Milicev et al. (2023) investigated changes in loneliness, life satisfaction and psychological distress in the UK from pre-pandemic levels to those between April and November 2020, while critically assessing the role of a range of social ecological influencing factors. Results indicated that loneliness, life satisfaction and psychological distress deteriorated minimally between April and November 2020, compared to the pre-pandemic levels (2017–2019), while the rate of change in each outcome influenced the rates of change in the other two.

Lone and Saha (2023) explored the relationship between social isolation, social support, and psychological distress among college students. The results indicated that social isolation was significantly related to psychological distress. Social support was also significantly related to psychological distress and social isolation. The addition of social support significantly improved the model fit. The interaction term was also significant, indicating that social support moderated the relationship between social isolation and psychological distress.

Hypotheses

- i. Hardiness will significantly influence psychological distress among elderly people in Benue North-West.
- ii. Loneliness will significantly influence psychological distress among elderly people in Benue North-West.
- iii. Hardiness and loneliness will jointly influence psychological distress among elderly people in Benue North-West.

Design

This study adopted cross-sectional survey design to investigate hardiness, loneliness and psychological distress among elderly people in Benue-Northwest. This type of design was adopted because the study assessed the respondents across different parameters and drew scientific inferences without any form of manipulations. In addition, this study was carried out at a single point in time. The independent variables were hardiness and loneliness while the dependent variable was psychological distress.

Population

The entire population of elderly people in Benue North-west is currently not known. There is currently no unit that records the total number of elderly people in Benue State. The last

population census carried out was in 2006 which is obsolete by now, even the projected population figures from National Bureau of Statistics does not cover some groups such as the elderly people.

Sample Size Determination

Since the population of elderly people in Benue North-west is not known, the researchers used the formular for unknown population to estimate a representative sample for the study. The formular is illustrated below:

$$n = \frac{z^2 pq}{e^2}$$

n=the sample size

z=the 95% level of confidence corresponding to a z value of 1.96

p=the estimated proportion of the population (0.5)

q=the inverse of p i.e. 1-p

e=the tolerated margin of error (.05 or 5%)

Therefore, the formula was applied as follows:

$$n = \frac{z^2 pq}{e^2}$$

$$n = \frac{(1.96)^2 0.5(0.5)}{(.05)^2}$$

$$n = \frac{3.84 \times 0.25}{0.0025}$$

$$n = \frac{0.96}{0.0025}$$

$$n = 384$$

Sampling Technique

This study adopted the use of multistage sampling to draw the sample for the study. At the first stage, purposive sampling was used to identify three units of data collection [Catholic Men Organization (CMO), Catholic Women Organization (CWO) and Benue State Chapter of Nigeria Union of Pensioners (BSCNUP)] with high populations of elderly people. At the second stage, simple random sampling via secret balloting was used to directly sample elderly people randomly from their units. Therefore, the researcher drew 128 elderly people from CMO, CWO and BSCNUP respectively to get the 384 participants used for the study.

Participants

The participants for this study were 384 elderly people in Benue North-west. They comprised of 219 (57%) males and 165 (43%) females. Their ages ranged from 61-78 years with a mean age of 67.003 years (SD=5.839). As for their ethnic groups, 194 (50.5%) were Tiv, 140 (36.5%) were Idoma, while 50 (13%) were from other ethnic groups. In terms of their religion, 174 (45.3%) were Christians, 95 (24.7%) were Muslims while 115 (30%) were practicing other religions. As for their educational qualifications, 80 (20.8%) had primary education, 190 (49.5%)

had secondary education while 114 (29.7%) had tertiary education. Concerning their marital status, 69 (17.9%) were single, 185 (48.2%) were married while 130 (33.9%) were either widowed or separated.

Instruments

Hardiness Scale: Hardiness was measured using the Hardiness Scale developed by Ferrara (2019). The scale has 42 items that are assessed using a 5-point Likert format of 1 (strongly disagree) to 5 (strongly agree). The scale has 3 dimensions; Challenge (items 1-14), Control (items 15-28) and Commitment (items 29-42). In this scale, items 2, 4, 7, 35, 36, 40 are reverse-scored while the rest of the items are scored directly. The author reported an overall alpha coefficient of .73. The present study obtained an alpha coefficient of .81 for the overall scale while the subscales had; .80, .80, .71 for challenge, control and commitment respectively. Sample of items include; “I can control my anger and stress”, “I feel that I am controlling my life”.

University of California Los Angeles Loneliness Scale: Loneliness was measured using the University of California Los Angeles Loneliness Scale developed by Russell (1996). The Scale has 20 items and is measured on a 4-point format of 1 (Never) to 4 (Always). The unidimensional scale has items 1, 5, 6, 9, 10, 15, 16, 19 and 20 reversed-scored. The total score on the scale is obtained by summing individual scores on each item on the score after reverse scoring is done. The author reported an alpha coefficient of .89 and a test-retest coefficient of .73 while the present study obtained an alpha coefficient of .83. Sample of items include: “How often do you feel close to people?”, “How often do you feel alone?”

Kessler’s Psychological Distress Questionnaire: Psychological Distress was measured using the Kessler’s Psychological Distress Questionnaire developed by Kessler et al. (2002) to measure the level of distress experienced by adults. The 10-item scale is measured on a 5-point format of 0 (none of the time) to 4 (all of the times). In terms of reliability, the author reported an alpha coefficient of .82 while Dadfar et al. (2018) obtained an alpha coefficient of .87. The present study obtained an alpha coefficient of .86. Sample of items include; “During the last 30 days, about how often did you feel restless or fidgety?” “During the last 30 days, about how often did you feel worthless?”

Procedure

This study was conducted among elderly people from Benue State Chapter of Nigerian Union of Pensioners Makurdi, Diocesan CMO and CWO which cut across the seven local government areas in Benue Northwest. The consent of the elderly people was sought before the administration of questionnaire was carried out. The researchers ensured that the respondents were only those from Benue Northwest. The researchers assured the respondents that their identity would not be tied to any of the responses, the responses would be treated with a sense of confidentiality and used solely for research purpose. Two research assistants were sourced and given proper orientation on research ethics and procedures to support the data collection process. Simple random sampling was used to draw the sample for the study via secret balloting, and the drawn sample was administered copies of the questionnaire. A total of 400 copies of the questionnaire were administered. This figure is above the 384 estimated sample because the researchers were proactive to account for some of the copies that may be lost or identified as incorrectly filled in the process. After the administration process, a total of 384 copies were returned fully completed for statistical analyses.

Data Analysis

The data collected in this study were analyzed using both descriptive and inferential statistics. The descriptive statistics employed included the mean, standard deviation, frequencies and simple percentages which were used to summarize the demographic variables of the respondents. Meanwhile, hypothesis one was tested using multiple linear regression, hypothesis two was tested using simple linear regression, while hypothesis three was tested using standard multiple regression.

Results

Table 1: Summary of Multiple Linear Regression showing the influence of hardiness on psychological distress among elderly people in Benue Northwest.

Variables	R	R ²	F	df	β	t	sig.
Constant	.670	.449	416.965	3,380		14.462	.000
Challenge					-.561	-9.157	.000
Control					-.329	-5.020	.000
Commitment					-.437	-7.320	.000

The result presented in table 1 indicated that there was a significant influence of hardiness on psychological distress among elderly people [$R^2=.449$, $F(3,380)=416.965$, $p<.001$]. The result further indicated that hardiness explained 44.9% of the variation in psychological distress. Furthermore, all the dimensions of hardiness; challenge ($\beta=-.561$, $t=-9.157$, $p<.001$), control ($\beta=-.329$, $t=-5.020$, $p<.001$) and commitment ($\beta=-.437$, $t=-7.320$, $p<.001$) made significant negative contributions to psychological distress. This implies that psychological distress among the elderly increases with decreasing levels of the ability to handle challenges, develop control and commitment to the demands of daily living.

Table 2: Summary of Simple Linear Regression showing the influence of loneliness on psychological distress among elderly people in Benue Northwest.

Variables	R	R ²	F	df	β	t	sig.
Constant	.682	.465	331.727	1,382		5.123	.000
Loneliness					.682	18.213	.000

The result presented in table 2 indicated that there was a significant positive influence of loneliness on psychological distress among elderly people [$R^2=.465$, $F(1,382)=331.727$, $p<.001$]. The result further indicated that loneliness explained 46.5% of the variation in psychological distress. This means that elderly people who are lonely are more likely to experience psychological distress.

Table 3: Summary of Standard Multiple Regression showing the joint influence of hardiness and loneliness on psychological distress among elderly people in Benue Northwest.

Variables	R	R ²	F	df	β	t	sig.
Constant	.993	.987	14224.023	2,381		111.827	.000
Hardiness					.842	122.674	.000
Loneliness					.249	36.250	.000

The result presented in table 3 indicated that there was a significant joint influence of hardiness and loneliness on psychological distress among elderly people [$R^2=.987$, $F(2,381)=14224.023$, $p<.001$]. The result further indicated that hardiness and loneliness jointly explained 98.7% of the variation in psychological distress.

Discussion

Hypothesis one was tested to find out if hardiness will significantly influence psychological distress among elderly people in Benue Northwest. Findings indicated that there was a significant influence of hardiness on psychological distress among elderly people. Hardiness is characterized by the ability to see challenges as opportunities for growth, having control of one's environment and the ability to be committed to a desired course of action. These skills are likely to enhance resilience among elderly people and thus reduce their predisposition to psychological distress. This finding agrees with Akanbi et al. (2023) who found that hardiness significantly influenced depressive symptoms. Similarly, Taylor et al. (2023) found significant associations between hardiness, mental health and physical health. Another study by Abbasi et al. (2023) also found significant associations between hardiness and distress levels. Another consonant study by Mostafaei (2022) revealed a negative correlation between hardiness subscales and mental disorders. Another study by Lassen et al. (2022) found that hardiness correlated significantly with mental distress.

Hypothesis two was tested to find out if loneliness will significantly influence psychological distress among elderly people in Benue Northwest. Findings indicated that there was a significant influence of loneliness on psychological distress among elderly people. This finding tallies with Coutts-Smith and Phillips (2023) who found associations between loneliness and psychological distress. Similarly, Milicev et al. (2023) indicated that loneliness and psychological distress are highly correlated. Also, Olawa et al. (2023) found that loneliness and psychological distress has a positive relationship. Relatedly, Atlas et al. (2023) revealed that loneliness significantly impacted psychological distress. Another recent study by Lone and Saha (2023) indicated that social isolation was significantly related to psychological distress. Other researchers (Sharifi, 2022; Tan et al., 2022; Keller et al., 2022) have found that loneliness influences distress and depression.

Hypothesis three was tested to find out if hardiness and loneliness will jointly influence psychological distress among elderly people in Benue Northwest. Findings indicated that there was a significant joint influence of hardiness and loneliness on psychological distress among elderly people. This finding tallies with Ng and Lee (2020) who found that hardiness and loneliness significantly and jointly predicted depressive symptoms. However, this study lacks the support of previously conducted studies.

Recommendations

In line with the findings of the present study, the following recommendations were made for policy and decision making:

- i. Geriatric Psychologists are urged by this study to develop a hardiness skills curriculum which can be used for psychoeducational purpose in helping elderly people understand how to cope with distressing conditions in their older ages.
- ii. Clinical and social psychologists are encouraged to solicit for funds from national and international donors which will be used to organize periodic social activities and celebration where elderly people will be deeply involved and given room to socialize with the rest of the society.

References

- Abbasi, M., Golmohammadian, M., & Kakabraee, K. (2023). Enhancing Psychological Hardiness and Distress Tolerance in Mothers of Hard of Hearing Children: The Efficacy of Mindfulness integrated with Spiritual Therapy. *Journal of Clinical Research and Paramedical Science*, 12(2), 138-149.
- Akanbi, S. T., Terwase, J. M., & Aki, B. D. (2023). The Influence of Psychological Hardiness, Narcissism, and Perfectionism on Depression Tendency among Undergraduate Students. *Academic Journal of Psychology and Counseling*, 4(2), 127-156. <https://doi.org/10.22515/ajpc.v4i2.7470>
- Atlas, L., Farmer, C., Shaw, J., Gibbons, A., Guinee, E., Lossio-Ventura, J., Ballard, E., Ernst, M., Japee, S., Pereira, F. & Chung, J. (2023). Dynamic effects of psychiatric vulnerability, loneliness, and social distancing on distress during the first year of the COVID-19 pandemic: Insights from a large-scale longitudinal study. *Journal of Pandemic Studies*, 3(1), 44-54.
- Azeem, T. & Mahwesh, A. (2015). Resilience, death anxiety, and depression institutionalized and non-institutionalized elderly. *Pakistan Journal of Psychological Research*, 30(1), 111-130.
- Bradshaw, S., Chant, S., & Linneker, B. (2019). Challenges and Changes in Gendered Poverty: The Feminization, De-Feminization, and Refeminization of Poverty in Latin America. *Feminist Economics*, 25(1), 119–144. <https://doi.org/10.1080/13545701.2018.1529417>
- Bu, F., Steptoe, A. & Fancourt, D. (2020). Loneliness during a strict lockdown: trajectories and predictors during the COVID-19 pandemic in 38,217 United Kingdom adults. *Social Science Medicine*, 1, 265-288. <https://doi.org/10.1016/j.socscimed.2020.113521>.
- Cacioppo, J. T., Cacioppo, S., & Boomsma, D. I. (2014). Evolutionary mechanisms for loneliness. *Cognition and Emotion*, 28(1), 3-21.
- Coutts-Smith, J. & Phillips, W. (2023). The Role of Trait Mindfulness in the Association between Loneliness and Psychological Distress. *Mindfulness*, 14, 1980–1996. <https://doi.org/10.1007/s12671-023-02184-7>
- Daly, M. & Robinson, E. (2021). Psychological distress and adaptation to the COVID-19 crisis in the United States. *Journal of Psychiatric Research*, 136, 603–609. <https://doi.org/10.1016/j.jpsychires.2020.10.035>.
- Drapeau, A., Marchand, A. & Beaulieu-Prevost, D. (2012). Epidemiology of psychological distress. In: L'Abade, L. (Ed.), *Mental Illnesses-Understanding, Prediction and Control*. In Tech (105–106).
- Eschleman, K. J., Bowling, N. A., & Alacron, G. M. (2020). A Meta-Analytic Examination of Hardiness. *International Journal of Stress Management*, 17(4), 277–307. <https://doi.org/10.1037/a0020476>
- Fakoya, O. A., McCorry, N. K., & Donnelly, M. (2020). Loneliness and social isolation interventions for older adults: a scoping review of reviews. *BMC Public Health*, 20(1), 129-137. <https://doi.org/10.1186/s12889-020-8251-6>
- Ferrara, S. (2019). An initial development of a hardiness scale. *Educational Specialist*, 3, 144-167. <https://commons.lib.jmu.edu/edspec201019/144>
- Hawkley, L. C., Wroblewski, K., Kaiser, T., Luhmann, M., & Schumm, L. P. (2019). Are U.S. older adults getting lonelier? Age, period, and cohort differences. *Psychology and aging*, 34(8), 1144–1157. <https://doi.org/10.1037/pag0000365>

- Hu, T., Zhang, D., & Wang, J. (2015). A Meta-Analysis of The Trait Resilience and Mental Health. *Personality and Individual Differences*, 76, 18–27. <https://doi.org/10.1016/j.paid.2014.11.039>
- Keller, F., Derksen, C., Kotting, L., Dahmen, A., Lippke, S., (2022). Distress, loneliness, and mental health during the COVID-19 pandemic: Test of the extension of the Evolutionary Theory of Loneliness. *Applied Psychology: Health and Well-Being*, 15(1), 24-48.
- Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S. L., Walters, E. E., & Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine*, 32(6), 959–976. <https://doi.org/10.1017/s0033291702006074>
- Landeiro, F., Barrows, P. & Nuttall-Musson, E. (2017). Reducing social isolation and loneliness in older people: a systematic review protocol. *BMJ Open*, 7, 137-178. <https://doi:10.1136/bmjopen-2016-013778>
- Lassen, E., Hagen, K., Kvale, G., Eid, J., Hellard, S. & Solem, S. (2022). Personality traits and hardiness as risk and protective factors for mental distress during the COVID-19 pandemic: a Norwegian two-wave study. *BMC Psychiatry*, 22(1), 610-621 <https://doi.org/10.1186/s12888-022-04237-y>
- Malcolm, M., Frost, H. & Cowie, J. (2019). Loneliness and social isolation causal association with health-related lifestyle risk in older adults: a systematic review and meta-analysis protocol. *System Review*, 8, 48-53. <https://doi.org/10.1186/s13643-019-0968-x>
- Mehrabi, F. & Beland, F. (2020). Effects of social isolation, loneliness and frailty on health outcomes and their possible mediators and moderators in community-dwelling older adults: A scoping review. *Archives of Gerontology and Geriatrics*, 90, 104-119, <https://doi.org/10.1016/j.archger.2020.104119>.
- Milicev, J., Qualter, P., Goodfellow, C., Inchley, J., Simpson, S., Leyland, A., Kharicha, K. & Long, E. (2023). The prospective relationship between loneliness, life satisfaction and psychological distress before and during the COVID-19 pandemic in the UK. *Journal of Public Health*, 31, 1417–1431.
- Moradi, A., Ebrahimi, M. E. & Rad, I. S. (2018). The relationship between Psychological Hardiness, Demographic Variables, and Mental Disorders of the Nursing Staff at Be'sat Hospital, Hamadan. *Journal of Research in Medical and Dental Sciences*, 6(3), 198–205.
- Mostafaei, A. (2022). An Investigation of the relationship between hardiness and mental disorders of Payame-Noor university students. *Annals of Biological Research*, 3(2), 1153-1156.
- Ng, S. M., & Lee, T. M. C. (2020). The Mediating role of Hardiness in the Relationship between Perceived Loneliness and Depressive Symptoms among Older. *Aging & Mental Health*, 24(5), 805–810. <https://doi.org/10.1080/13607863.2018.1550629>
- Officer, A., Schneiders, M. L., Wu, D., Nash, P., Thiyagarajan, J. A., & Beard, J. R. (2016). Valuing older people: time for a global campaign to combat ageism. *Bulletin of the World Health Organization*, 94(10), 710–719. <https://doi.org/10.2471/BLT.16.184960>
- Olawa, B., Idemudia, E., Omolayo, B. & Azikiwe, J. (2023). Loneliness and happiness in the face of the COVID-19 lockdown: examining the pathways through somatic symptoms and psychological distress. *Health Psychology*, 1, 1–13
- Riedel-Heller, S. G., Busse, A., & Angermeyer, M. C. (2016). The state of mental health in old age across the 'old' European Union – A systematic review. *Acta Psychiatrica Scandinavica*, 113(5), 388–401.

- Russell, D. (1996). University of California Los Angeles Loneliness Scale. *Journal of Personality Assessment*, 66(1), 20-40.
- Sharifi, A. F. (2022). Loneliness and Psychological Well-being of University International Students: the role of Self Esteem. *The Lancet*, 3(12), 1532-1537. <https://www.jelsciences.com/articles/jbres1630.pdf>
- Suanet, B., & van Tilburg, T. G. (2019). Loneliness declines across birth cohorts: The impact of mastery and self-efficacy. *Psychology and Aging*, 34(8), 1134–1143. <https://doi.org/10.1037/pag0000357>
- Taylor, M., Pietrobon, R., Taverniers, T., Leon, M., & Fern, B. (2013). Relationships of hardiness to physical and mental health status in military men: a test of mediated effects. *Journal of Behavioural Medicine*, 36, 1–9.
- Timalsina, R., & Songwathana, P. (2020). Factors enhancing resilience among older adults experiencing disaster: A systematic review. *Australasian Emergency Care*, 23(1), 11–22. <https://doi.org/10.1016/j.auec.2019.12.007>
- Von-Humboldt, S., Ribeiro-Gonçalves, J. A., & Leal, I. (2022). Bullying in Old Age: A Qualitative Study on Older Adults' Perceptions About Being Bullied. *Journal of Interpersonal Violence*, 37(5-6), 2896–2919. <https://doi.org/10.1177/0886260520943709>