LONELINESS AND COPING STRATEGIES OF SENIOR CITIZENS IN KLANG VALLEY, MALAYSIA

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Abstract:

This study aims to determine the level of loneliness and the influence of coping strategies amongthe senior citizens in Klang Valley. A total of 76 senior citizens aged 60 to 80 years old were recruited through community centres within Klang Valley and by using a convenience sampling technique. The level of loneliness was assessed by the Malay version of the 6-item De Jong Gierveld loneliness scale and coping strategies by Malay version Brief COPE scale. Mini-Mental State Examination (MMSE) was tested beforehand to ensure that the senior citizens do not have any cognitive impairment and met the criteria of this study. Descriptive analyses were used to assess the level of loneliness and bivariate Spearman's correlation was used to study the relationship between coping strategies and loneliness. Of the 14 coping strategies, three were significantly related to loneliness; these were active coping, religion and focus on and venting of emotions. This indicates that the increased use of active coping and religion may alleviate loneliness while the increased use of focus on and venting of emotion is noted to increase the level of loneliness. The findings of the present study may be useful for healthcare providers for developmental, educational and preventive purposes.

Keywords: Loneliness, coping strategies, senior citizens, Klang Valley, MMSE, COPE scale.

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1. Introduction

Loneliness is a displeasing feeling (Hauge & Kirkevold, 2010) that encounter when an individual's social network or relationship is reduced in either quantity or quality (Peplau & Perlman, 1982). Loneliness is a phenomenon experienced by people of all ages (Perlman & Landolt, 1999). However, several studies had shown that loneliness is much more prevalent among older adults (Koropeckyj-Cox, 1998; Hazer & Boylu, 2010; VanderWeele, Hawkley & Cacioppo, 2012). Because it has been associated with the decreased resistance in infection (Cornwell & Waite, 2009), cognitive decline and mental health conditions such as depression and dementia (Wilson R.A. et al., 2007) and with increased emergency admission to hospital (Hastings et al., 2008), longer length of stay and delayed discharges (Landeiro, Leal, & Gray, 2016).

Based on Country Reports Malaysia (2012), by 2020, it is estimated that the number of senior citizens will be 5.5 million and by 2030, Malaysia will be in the category of ageing countries with older adults constituting more than 14% of the population. In any case, life expectancy has gradually increased among the world population due to medical advancement and economic development, with average life expectancy for Malaysian women being 77 years and 72 years for men.

The ageing process can be a painful fact to come to terms. To alter such feelings of loneliness, people may use coping strategies to manage their behaviour and emotions when experiencing stress (Perlman and Peplau, 1982; Pieters, 2013). Coping strategies refer to the specific efforts, both behavioural and psychological that people use to understand, tolerate, overcome or reduce when encountering stressful events (Lazarus, 1993). Adaptive coping strategies designed to change the nature of the stressor itself, where else maladaptive coping strategies lead people into activities (such as alcohol use) or denial that prevent them from confronting the stressful events (Thiruchelvi & Supriya, 2012). Study shows that lonely people tend to adopt maladaptive coping strategies (Zhang & Wang, 2011). Guo and Wang did a study (2013) stated that the degree to which positive coping strategies were adopted shows a great influence on the level of loneliness of the senior citizens. Meaning, coping strategies and loneliness are closely correlated.

In particular, correlation studies determining the level of loneliness of senior citizens and their coping strategies in community centres are still very limited in Malaysia. Hence the purpose of this research is to determine the level of loneliness and the coping strategies among the senior citizens in Klang Valley. To reduce the prevalence of lonely older adults in Malaysia, a study on determining the types of coping strategies used to alleviate loneliness should be emphasised, as this would assist healthcare provider, family and the government to establish a suitable intervention in reducing the level of loneliness.

2. Methods

2.1 Study design and participants

This research was a quantitative cross-sectional study. The focus of this research was to determine the level of loneliness and the influence of coping strategies among the senior citizens in Klang Valley, Malaysia. The study took place in 3 community centres within Klang Valley, Malaysia. The following inclusion criteria were used for selecting the sample of the study: Malaysian who stays in Klang Valley; aged between 60 to 80 years old; able to give consent; able to read and comprehend Malay language and the standardised Mini-Mental State Examination (MMSE) test cognitive score 24 points and above. A non-probability sampling in the form of convenience sampling was used for the administration of the survey. A total of 76 samples were recruited for this study.

2.2 Measures

Mini-Mental Status Examination (MMSE) Test

The Mini-Mental State Examination (MMSE) test was used as a screening tool to rule out possible confounding factors. The MMSE is a simple paper-pencil test to look into the individual's cognitive function based on a total score of 30 points. It consists of 6 sections which were orientation, concentration, attention, memory, naming and visuospatial skills. The optimal cut-off point of 24/30 in MMSE was chosen because of worldwide usage between sensitivity and specificity for screening for people with cognitive impairment (Folstein, Folstein & McHugh, 1975).

Demographic questionnaire

The demographic questionnaire included age, race, education background, marital status, financial status, activity participation and health status of senior citizens.

Malay version De Jong Gierveld Loneliness Scale (DJGLS) by Jaafar (2019)

The six-item De Jong Gierveld Loneliness Scale includes 3-item emotional subscale (negatively-worded) and a 3-item social subscale (positively-worded). Participants used a 5-point Likert scale with options including "yes! (Pasti Ya!)", "yes (Ya)", "more or less (mungkin)", "no (Tidak)", "no! (Pasti Tidak!)" to indicate which statements apply to their current feelings. The total loneliness score ranges from 0 (not lonely) to 6 (severe lonely).

Since the target population is Malaysian senior citizens, therefore using the Malay version of the DJGLS is a better choice when conducting this research. The Malay version of the DJGLS was translated by Jaafar and it showed good internal consistency (Cronbach's alpha 0.71) and high test-retest reliability (r = 0.93). Hence, the Malay version of the 6-item DJGLS is a reliable and valid loneliness scale to use among the senior citizens in Malaysia (Jaafar et al., 2019).

Malay version of Brief Cope Inventory by Yusoff (2011)

The Brief COPE Inventory (Carver, 1997) is a self-report questionnaire that assesses the participant's coping strategies. It was made up of 14 subscales: self-distraction, active coping, denial, substance abuse, use of emotional support, use of instrumental support, behavioural disengagement, focus on and venting of emotions, positive reinterpretation, planning, humour, acceptance, religion and self-blame. These coping strategies can be further grouped into broad categories of coping strategies, for instance, approach and avoidance coping. Participants respond to items using a 4-point Likert scale, 1 = I haven't been doing this at all (Saya tidak melakukan ini langsung); 2 = I've been doing this a little bit (Saya melakukan ini kadang-kala sahaja); 3 = I've been doing this a medium amount (Saya agak kerap melakukan ini) and 4 = I've been doing this a lot (Saya sangat kerap melakukan ini) to express the frequency of use for each of the coping behaviours.

The translation for the Malaysian population by (Yusoff, 2011) was used. The total Cronbach's alpha value of the Malay version of the Brief COPE was 0.83 and most of the coping strategies showed acceptable internal consistency as having Cronbach's alpha values more than 0.5. Therefore, it proves that the Malay version of the Brief COPE has good psychometric value and it is a reliable and valid instrument in identifying coping strategies.

2.3 Data collection

Written permission for the study to be conducted was obtained from the Institutional Review Board of Perdana University (PU-IRB/MKV/0234/510). Letter of the permission was sent to the three respective locations beforehand to gain approval to conduct the research. Then, paper-pencil-questionnaires were completed on the spot or were taken home for completion and returned to their respective community centre within the next week. However, before that, the investigator will assess the cognitive level of the participants by using the MMSE test to ensure the participants met the criteria of this study. Written informed consent was obtained from each participant after being informed about the study purpose and confidentiality of the data collected.

2.4 Data analysis

Statistical Package for Social Science 23rd version (SPSS version 23) was used to analyse the data. Kolmogorov-Smirnov was used for the normality test to determine whether the sample size is normally distributed. Then, descriptive methods were used to study the demographic variables and frequency of the other variables. Inferential statistics were then used to analyse the data further. Descriptive analyses were done to assess the level of loneliness among senior citizens living in the community of Klang Valley, whereas, the Bivariate Spearman's correlation was used to study the association between coping strategies and loneliness.

3. Results

3.1 Demographic background

A total of 76 senior citizens has participated in this study.

Table 1 it shows the frequency and percentage of the demographic variables in this study.

Table 1: Demographic data background of the study

Variables	f	%
Age of senior citizens Young old (60 -74 years old) Old-old (75 years and **above)**	59 17	77.6 22.4
Gender Male Female	35 41	46.1 53.9
Race Malay Chinese Indian Others	9 48 17 2	11.8 63.2 22.4 2.6
Education background No schooling Primary education Secondary education Tertiary education	2 28 30 16	2.6 36.8 39.5 21.1
Marital status Married Single Divorced Widowed/Loss of a spouse	52 2 6 16	68.4 2.6 7.9 21.1
Financial status Stable Unstable	58 18	76.3 23.7
Activity participation Never/Rarely Occasionally Frequently	38 8 30	50.0 10.5 39.5
Health Status Good Fair Poor	39 29 8	51.3 38.2 10.5

Table 1 shows that more than half of the sample age is between 60 to 74 years old (young-old group), more than half of the sample (53.9%) were female and the majority of the senior citizens (63.2%) were Chinese. Most of the senior citizens (68.4%) were married. Regarding education background of the studied sample, most of the senior citizens have basic education ranging from primary to tertiary education while regarding financial status more than half of the sample (76.3%) claimed that their financial status was stable. It also illustrates that half of the studied sample (50%) never or rarely participate in their community's activities while more than half of the sample (51.3%) perceived their

health status as good.

3.2 Level of Loneliness among Senior Citizens

Table 2 illustrates the results from the Malay version DJLS, show that majority of the senior citizens in this study experienced loneliness. With moderate lonely the most (n = 36, 47.4%) and severe lonely the lowest (n = 10, 13.2%).

Table 2: Summary of the level of loneliness among senior citizens (N = 76)

Level of Loneliness	***f***	**%**
Not lonely	30	39.5
Moderate lonely	36	47.4
Severe lonely	10	13.2
Total	**76**	**100**

Table 3 shows that out of 46 lonely senior citizens, the majority of the senior citizens reported having a combination of both social and emotional loneliness (n = 36, 78.3%). Followed by emotional loneliness (n=7, 15.2%) and the lowest is social loneliness (n = 3, 6.5%).

Table 3: Summary of loneliness subscale (N = 46)

Loneliness Subscale	***f***	**%**
Social Loneliness	3	6.5
Emotional Loneliness	7	15.2
Social and emotional loneliness	36	78.3

3.3 Coping strategies used by senior citizens in Klang valley to alleviate loneliness

Table 4 shows a bivariate Spearman's correlation which was computed between the 14 coping strategies and loneliness. Of the 14 strategies measured, 3 of them had significant correlations with loneliness at the $p < 0.05$ level two-tailed, N = 76. Focus on and venting of emotion ($r = 0.24$, $p < 0.05$) was the only significant positive correlation score with loneliness whereas active coping ($r = -0.251$, $p < 0.05$) and religion ($r = -0.272$, $p < 0.05$) were the only significant negative correlation scores with loneliness. Only 3 of the coping strategies used in the scales were shown to have significant correlations with loneliness.

Table 4: Correlates of Loneliness and Coping Strategies

Coping Strategy	**(+)**	**Coping Strategy**	**(-)**
Focus on and venting of emotion	0.240*	Active coping	-0.251*
Behavioral disengagement	0.203	Religion	-0.272*
Substance abuse	0.177	Planning	-0.212
Self-distraction	0.144	Use of instrumental support	-0.066

Humor	0.034	Use of emotional support	-0.045
Denial	0.032	Acceptance	-0.034
		Positive reinterpretation	-0.019
		Self-blame	-0.009

*Correlation is significant at the 0.05 level (2-tailed)

4. Discussion

4.1 Level of Loneliness among Senior Citizens

Previous studies stated that as the person gets old the lonelier, they get (Savikko, 2008; Dykstra, 2009; Theeke, 2009). The results show that half of the respondents do suffer some form of loneliness. This result is consistent with previous studies (Koropeckyj-Cox, 1998; Hazer & Boylu, 2010; VanderWeele, Hawkley & Cacioppo, 2012) as loneliness is much more prevalent among older adults. Especially to older adults who have a physical illness and disability report higher prevalence of loneliness (Cacioppo & Hawkley, 2003; Cacioppo & Hawkley, 2009). However, in this study, the participants were recruited from the community centres showed that this might be an indication that they may already have some coping strategy. Therefore, not many were categorised as severely lonely. Compare to other studies which recruited from different sites such as hospital and nursing home; the results would be most likely to be different (Pitkala, 2016; Jansson et al., 2017). Moreover, this study found that the majority of the lonely senior citizens has a combination of both social and emotional loneliness. This proves that loneliness is a multidimensional model.

4.2 Coping strategies used by senior citizens in Klang valley to alleviate loneliness

Coping strategies were found to be effective in reducing loneliness. Another objective of this study is to identify what type of coping strategy that the senior citizens used to alleviate loneliness. Finding in this study found that senior citizens in Klang Valley, Malaysia use active coping and religion to lessen the feeling of loneliness. According to Carver et al. (1989), active coping is categorised under approach coping describes strategies of dealing directly with the problem of emotions, whereas, there is no categorisation for religion. Moreover, this study found that there is a negative correlation between coping strategies and loneliness. Hence, this type of coping strategies will help to reduce loneliness.

A cross-sectional study by Raut et al. (2014) was done to study loneliness, depression and their coping mechanism and show that the increased use of self-distraction, active coping, emotional support, instrumental support, focus on and venting of emotions, positive reinterpretation, planning and humour were associated with lower scores of loneliness. In the same fashion, studies also reported that active coping would lead to fewer distress feelings, whereas, avoidance types of coping will cause more negative impact among older adults (Aldwin & Revenson, 1987; Greenglass, Fiksenbaum & Eaton,

2006).

For religion, previous studies showed that higher involvement in religious activities would cause the older individual to be less likely depressed decreased of physical health problems and longer life expectancy than those older individuals who have lower religious involvement (Koenig et al., 1998; Strawbrige et al., 2000; Park, 2013). Krause (2004) also further explains that religious involvement provides a massive sense of social connectedness among the community. Bondevik and Skogstad (2000) found that religiousness and attending to church reduce the feeling of loneliness. Asides from a spiritual aspect, older adults who participate in a religious location such as church, temple and mosque are provided opportunities to socialise and form new relationships. A review is done by Aldwin, Levenson and Kelly (2009) also noted that religiosity increased in older age. Another study with 1,431 older adults done by Park (2013) reported that higher religious involvement would lead to less distress.

However, in this study, it also has been noticed that there is a positive correlation between coping strategies and loneliness as well. The current study found that focus on and venting of emotion may increase the level of loneliness. Focus on and venting of emotion is categorised under avoidance coping, describes of withdrawing from the problem or associated emotions (Carver et al., 1989). Therefore, it showed that the more frequently used of this coping might increase the level of loneliness. The previous study has found that lonely people tend to engage more in pessimism and avoidance types of coping instead of facing it actively and with optimism (Cacioppo et al., 2002). Therefore, active coping and coping through religion involved attempts to reduce the stressor.

A qualitative study by Duner & Nordstrom (2005) found that older adults aged 65 and above who used more approach coping way were portrayed as "striving to main independence through available resources" whereas those who used avoidance coping were characterised as "given up control for their lives". Older adults who engaged more often with approach coping were shown to be less relating to burdensome effect and relate with better mental health (Koenig et al., 1998). Where else, avoidance coping appeared to increase a person's negative impact for example, to those older adults who perceived to be in poor health is bound to participate in avoidance coping (Lazarus, 1993).

The objective of the study was to determine the level of loneliness and the influence of coping strategies among the senior citizens at Klang Valley. The results indicated that the increase use of active coping and religion may all alleviate the level of loneliness, while the increased use of focus on and venting of emotion is noted to increase the level of loneliness. Therefore, the initial step to reduce the prevalence of loneliness among older adults are suggested to increase the public awareness among family, healthcare provider as well as the government that loneliness is a condition that may affect almost anyone in this world.

This study used a non-probability convenience sampling method in only Klang Valley Malaysia population, and the inadequate sample size of age, race, education background, marital status, financial

status, activity participation and health status were limitations of this study as the results cannot be generalised or represent the whole Malaysia population.

5. Conclusion

Overall, the understanding of loneliness and ways to cope with it are very crucial for the individual, family, healthcare provider as well as the government to help in reducing the prevalence of loneliness among old adults in Malaysia. Lastly, more intervention-based studies on loneliness and coping strategies, especially active coping and religion and related social support group should be developed for the individual with loneliness to reduce the prevalence of loneliness and its harmful effect towards older adults. Cognitive Behavioural Therapy (CBT) approach had shown consistent evidence in decreasing loneliness symptoms and considers a type of active coping (Cacioppo et al., 2015). CBT is a goal-oriented psychotherapy treatment that aims to alter patterns of thinking or behaviour. Moreover, CBT helps the person to understand and step out from their negative automatic thoughts. It encourages the lonely individual to reexamine their real-life experiences in a more realistic perspective (Hofmann, Asnaani, Vonk, Sawyer & Fang, 2012). Therefore, from an occupational therapy's perspective, it is recommended to in-cooperate CBT approach into occupational therapy intervention for individuals who suffer from loneliness.

References

Aldwin, C. M., Levenson, M. R., & Kelly, L. (2009). Life span developmental perspectives on stress-related growth. In C. L. Park, S. C. Lechner, M. H. Antoni, & A. L. Stanton (Eds.), *Medical illness and positive life change: Can crisis lead to personal transformation?* (p. 87–104). American Psychological Association. https://doi.org/10.1037/11854-005

Aldwin, C., & Revenson, T. (1987). Does coping help? A reexamination of the relation between coping and mental health. *Journal of Personality and Social Psychology*, *53*(2), 337-348. doi: 10.1037/0022-3514.53.2.337

Bondevik, M., & Skogstad, A. (1998). The Oldest Old, ADL, Social Network, and Loneliness. *Western Journal of Nursing Research*, *20*(3), 325–343. https://doi.org/10.1177/0193945998020 00305

Cacioppo, J., & Hawkley, L. (2003). Social Isolation and Health, with an Emphasis on Underlying Mechanisms. *Perspectives In Biology and Medicine*, *46*(3), S39-S52. doi:10.1353/pbm.2003.0049

Cacioppo, J., & Hawkley, L. (2009). Perceived social isolation and cognition. *Trends In Cognitive Sciences*, *13*(10), 447-454. doi: 10.1016/j.tics.2009.06.005

Cacioppo, J., Hawkley, L., Crawford, L., Ernst, J., Burleson, M., & Kowalewski, R. et al. (2002). Loneliness and Health: Potential Mechanisms. *Psychosomatic Medicine, 64*(3), 407-417. doi: 10.1097/00006842-200205000-00005

Cacioppo, S., Grippo, A. J., London, S., Goossens, L., & Cacioppo, J. T. (2015). Loneliness: Clinical Import and Interventions. *Perspectives on Psychological Science*, 10, 238-249. https://doi.org/10.1177/1745691615570 616

Carver, C., Scheier, M., & Weintraub, J. (1989). Assessing coping strategies: A theoretically based approach. *Journal Of Personality and Social Psychology*, *56*(2), 267-283. doi: 10.1037//0022-3514.56.2.267

Cornwell, E. Y., & Waite, L. J. (2009). Social disconnectedness, perceived isolation, and health among

older adults. *Journal of Health and Social Behavior*, 50(1), 31–48.
https://doi.org/10.1177/002214650905000103.
Country Reports Malaysia. (2012). Conutry Report Malaysia. 1–11. Retrieved from http://www.mhlw.go.jp/bunya/kokusaigyomu/asean/2013/dl/Malaysia_Country Report.pdf
Duner, A., & Nordström, M. (2005). Intentions and strategies among elderly people: Coping in everyday life. *Journal of Aging Studies*. 19. 437-451. 10.1016/j.jaging.2004.10.001.
Dykstra, P. (2009). Older adult loneliness; myths and realities. *The Hague: Netherlands Interdisciplinary Demographic Institute* (NIDI).
Folstein, M., Folstein, S., & McHugh, P. (1975). "Mini-mental state". *Journal Of Psychiatric Research*, *12*(3), 189-198. doi: 10.1016/0022-3956(75)90026-6
Greenglass, E., Fiksenbaum, L., & Eaton, J. (2006). The relationship between coping, social support, functional disability and depression in the elderly. *Anxiety, Stress & Coping*, *19*(1), 15-31. doi: 10.1080/14659890500436430
Guo, W., & Wang, Y. (2013). Loneliness of urban aged people and its influencing factors [In Chinese]. *China Journal of Health Psychology*, 21, 1358–1360. https://doi.org/bw2t
Hastings, S. N., George, L. K., Fillenbaum, G. G., Park, R. S., Burchett, B. M., & Schmader, K. E. (2008). Does lack of social support lead to more ED visits for older adults? *American Journal of Emergency Medicine*, 26(4), 454–461. https://doi.org/10.1016/j.ajem.2007.07.0 05
Hauge, S., & Kirkevold, M. (2010). Older Norwegians' understanding of loneliness. *International Journal Of Qualitative Studies On Health And Well-Being*, *5*(1), 4654. doi: 10.3402/qhw.v5i1.4654
Hazer, O., & Boylu, A. (2010). The examination of the factors affecting the feeling of loneliness of the elderly. *Procedia - Social And Behavioral Sciences*, *9*, 2083-2089. doi: 10.1016/j.sbspro.2010.12.450
Hofmann, S., Asnaani, A., Vonk, I., Sawyer, A., & Fang, A. (2012). The Efficacy of Cognitive Behavioral Therapy: A Review of Meta-analyses. *Cognitive Therapy And Research*, *36*(5), 427-440. doi: 10.1007/s10608-012-9476-1
Jaafar, M., Villiers-Tuthill, A., Lim, M., Ragunathan, D., & Morgan, K. (2019). Validation of the Malay Version of the De Jong Gierveld Loneliness Scale. *Australasian Journal On Ageing*. doi:10.1111/ajag.12672
Jansson, A., Muurinen, S., Savikko, N., Soini, H., Suominen, M., Kautiainen, H., & Pitkälä, K. (2017). Loneliness in nursing homes and assisted living facilities: prevalence, associated factors and prognosis. doi: 10.14283/jnhrs.2017.7
Koenig, H., Pargament, K., & Nielsen, J. (1998). Religious Coping and Health Status in Medically Ill Hospitalized Older Adults. *The Journal Of Nervous & Mental Disease*, *186*(9), 513-521. doi: 10.1097/00005053-199809000-00001
Koropeckyj-Cox, T. (1998). Loneliness and Depression in Middle and Old Age: Are the Childless More Vulnerable? *The Journals Of Gerontology Series B: Psychological Sciences And Social Sciences*, *53B*(6), S303-S312. doi: 10.1093/geronb/53b.6.s303
Krause, N. (2004). Common Facets of Religion, Unique Facets of Religion, and Life Satisfaction Among Older African Americans. *The journals of gerontology*. Series B, Psychological sciences and social sciences. 59. S109-17. 10.1093/geronb/59.2.S109.
Landeiro, F., Leal, J., & Gray, A. M. (2016). The impact of social isolation on delayed hospital discharges of older hip fracture patients and associated costs Osteoporosis International, 27(2), 737–745. https://doi.org/10.1007/s00198-015-3293-9
Lazarus, R. S. (1993). Coping theory and research: Past, present, and future. *Psychosomatic Medicine*, 55(3), 234-247.
Long, M., & Martin, P. (2000). Personality, Relationship Closeness, and Loneliness of Oldest Old Adults and Their Children. *The Journals Of Gerontology Series B: Psychological Sciences and Social Sciences*, *55*(5), P311-P319. doi: 10.1093/geronb/55.5.p311
Park, N., Jang, Y., Lee, B., Haley, W., & Chiriboga, D. (2012). The Mediating Role of Loneliness in the Relation Between Social Engagement and Depressive Symptoms Among Older Korean Americans: Do Men and Women Differ? *The Journals Of Gerontology Series B: Psychological Sciences and Social Sciences*, *68*(2), 193-201. doi: 10.1093/geronb/gbs062
Peplau L & Perlman D (1982) Perspective on loneliness. In Loneliness: A Sourcebook of Current

Theory, Research and Therapy (Peplau LA & Perlman D eds). Wiley-Interscience, New York, NY, pp. 1–19.

Perlman, D., & Landolt, M. A. (1999). Examination of loneliness in children-adolescents and in adults: Two solitudes or a unified enterprise? In K. J. Rotenberg, & S. Hymel (Eds.), *Loneliness in childhood and adolescence* (pp. 325–347). Cambridge: Cambridge university Press.

Pieters, R., 2013. Bidirectional dynamics of materialism and loneliness: not just a vicious cycle. J. Consum. Res. 40 (4), 615–631.

Pitkala, K. (2016). Loneliness in Nursing Homes. *Journal Of The American Medical Directors Association*, *17*(8), 680-681. doi: 10.1016/j.jamda. 2016.04.007

Raut, N., Shanker, S., Singh, S., Subramanyam, A., Kamath, R., & Pinto, C. (2014). Study of loneliness, depression and coping mechanisms in elderly. *Journal Of Geriatric Mental Health*, *1*(1), 20. doi: 10.4103/2348-9995.141920

Savikko N. (2008). Loneliness of Older People and Elements of an Intervention for its alleviation. Department of Nursing Science, Faculty of Medicine, University of Turku Finland and the Department of General Practice and Primary Health Care, Faculty of Medicine University of Helsinki Finland.

Strawbridge, W & Cohen, R & Shema, S. (2000). Comparative strength of association between religious attendance and survival. *International journal of psychiatry in medicine*. 30. 299-308.10.2190/ECB2-0Q3M-333C-GK62.

Teh, J., Tey, N., & Ng, S. (2014). Family Support and Loneliness among Older Persons in Multiethnic Malaysia. *The Scientific World Journal*, *2014*, 1-11. doi: 10.1155/2014/654382

Theeke, L. (2009). Predictors of Loneliness in U.S. Adults Over Age Sixty-Five. *Archives Of Psychiatric Nursing*, *23*(5), 387-396. doi:10.1016/j.apnu.2008.11.002

Thiruchelvi, A., & Supriya, M. V. (2012). An investigation on the mediating role of coping strategies on locus of control–wellbeing relationship. *The Spanish Journal of Psychology*, 15, 156–165. https://doi.org/bw25

VanderWeele, T., Hawkley, L., & Cacioppo, J. (2012). On the Reciprocal Association Between Loneliness and Subjective Well-being. *American Journal Of Epidemiology*, *176*(9), 777-784. doi: 10.1093/aje/kws173

Wang, B., & Dong, X. (2018). The Association Between Personality and Loneliness: Findings From a Community-Dwelling Chinese Aging Population. *Gerontology & geriatric medicine*, *4*, 2333721418778181. doi:10.1177/2333721418778181

Wilson R.A., Frueger K.R., Arnold S.E., Schneider J.A., Kelly J.F., B. L. L. et al, Wilson, R. S., Krueger, K. R., Arnold, S. E., Schneider, J. A., Kelly, J. F., … Bennett, D. A. (2007). Loneliness and risk of Alzheimer disease. Archives of General Psychiatry, 64, 234–240.

Yusoff, M. (2011). The Validity of the Malay Brief COPE in Identifying Coping Strategies among Adolescents in Secondary School. *International Medical Journal*, *18*(1), 29-33.

Zhang, X., & Wang, Y. (2011). A correlative study of college students' loneliness and coping styles [In Chinese]. *China Journal of Health Psychology*, 19, 1008–1010. https://doi.org/bw5d