P-ISSN: 2204-1990; E-ISSN: 1323-6903 DOI: 10.47750/cibg.2020.26.02.117

# An examination on causes for anxiety and depression among elderly people

MS. K.C. RAJA SHREE<sup>1</sup>, MS. PRIYA. S<sup>2</sup>

<sup>1</sup>Assistant Professor, Saveetha School of Management, Saveetha Institute of Medical and Technical Sciences, Saveetha University, Chennai-77

<sup>2</sup>MBA Student, Saveetha School of Management, Saveetha Institute of Medical and Technical Sciences, Saveetha University, Chennai – 77.

Email ID: rajashreekc.ssm@saveetha.com

Abstract: In India, the elder population is one of the fastest growing populations among the world. India has about 110 million of ageing citizens which ranks to the second largest global population and therefore by 2050, it is expected to raise up to 240 million. These elderly people are easily prone to get affected by some mental health problems, in which depression along with anxiety affects their total health and reduces their quality of life. This study identifies some of the factors that contribute to anxiety and depression in elderly people are Loss of pleasure, dependency, self-confidence, isolation, medical conditions, financial status, memory problems, sufferer, identity and physical limitations, death fear, loneliness and being treated badly. Among those factors, loss and sleeping disturbances greatly contribute to the reasons that cause anxiety and depression in elderly people. Future studies to be conducted for the preventive measures for anxiety and depression among elderly people. Some innovation in preventive measures should be implemented to reduce depression and anxiety among elderly people.

**Keywords:** Anxiety, Depression. Ageing, Elderly people, mental health, chronic disease, Knowledge, Innovation.

### INTRODUCTION

Ageing is the natural process which happens gradually and continuously from the beginning of early adulthood. In India, elderly population is one of the fastest growing populations among the world. There are some common mental and neurological disorders namely anxiety disorders contribute 3.8%, whereas dementia and depression contribute approximately 5% and 7% in affecting the elder population among the world. Anxiety is often associated with depression and occurs together with a lot of similar symptoms which may not be identified or reported earlier to the physician.

The need of the examination is to assess the mental health of elderly people, find causes of stress among elderly people, and to calculate factorization of reasons of anxiety and depression in older people. The Internment of the present study shows that the elder population is limited which comprises 68 respondents who were located in different areas. Our research idea is based on the rich knowledge acquired by our peer teams across the university. (A.C. Gomathi, S.R. Xavier Rajarathinam, A. Mohammed Sadiqc, Rajeshkumar, 2020; Danda et al., 2009; Danda and Ravi, 2011; Dua et al., 2019; Ezhilarasan et al., 2019; Krishnan and Chary, 2015; Manivannan, I., Ranganathan, S., Gopalakannan, S. et al., 2018; Narayanan et al., 2012, 2009; Neelakantan et al., 2013, 2011; Neelakantan and Sharma, 2015; Panchal et al., 2019; Prasanna et al., 2011; Priya S et al., 2009; Rajeshkumar et al., 2019; Ramadurai et al., 2019; Ramakrishnan et al., 2019; Ramesh et al., 2016; Venugopalan et al., 2014)

### LITERATURE REVIEW

(Curran et al., 2020) says there is a huge have found a high occurrence of mental-ill health amongst the elder population and main concern is to focus on the significance of right diagnosis and treatment. They also observed that the people who attain their retirement age fall into the possible risk cause for isolation and deprived mental health.

(Hallit et al., 2020) states that augmented anxiety and advanced educational levels are accompanied by reduced nutritive status and higher stress. The elderly people who are living in nursing homes have a high rate of depression when compared to those who are living at home.

(Zhao et al., 2020) states that depression and anxiety are the most conjoint mental disorders which frequently coincide in future stages of human's lifetime. Individuals by coexisting symptoms of both depression as well as anxiety have greater chances of becoming weak.

(Zhang et al., 2019) describes that depression is more prevailing among the elderly empty-nesters. The health endorsing regimes of the non-depressed empty nesters are restored when compared to miserable empty nesters and also educational status plays a role in influencing the level of depression.

(Tunvirachaisakul et al., 2018) describes the elderly people and executive active deficiency expected to have reduced effect and also existence of coexisting and physical illnesses and anxiety to be unfortunate whereas the lesser baseline depression, squatter episode period and anticipated to have upright result.

(Wu et al., 2018) states individuals with prolonged illnesses exist regularly accompanied with harmful psychological blocks which affect the quality of life among elderly people to reduce the risk of this disease, some measures need to be taken.

(Zhao et al., 2018) focuses on depressive signs and isolation in the midst of nursing homes for elder population. The association of these both is facilitated and moderated by interior and exterior resources like elasticity and social livelihood, correspondingly which is considered as fundamental defensive factors.

(van Zoonen et al., 2015) states that subclinical depression is common among elderly people. The incidence and prevalence rates of subclinical depression vary widely on the basis of the definition, population, and instruments which were used to measure.

(Yochim et al., 2013) describes the relationships that exist amid anxiety and recall in effect between elderly people. Anxiety anticipated to have decreased skill to acquire innovative data and to organize that information that they have learnt and also to have reduced classification.

(El-Gabalawy et al., 2013) says that well-being anxiety illnesses are misinterpreted in future stages of human's life whereas prior estimation of these illnesses in elderly people are undervalued. In later life, therapeutic sickness is a threat to severe anxiety disorders.

### RESEARCH METHODOLOGY

The aim of this study is to discover the reasons for anxiety as well as depression among elderly people. This is done by conducting a survey which consists of self administered questionnaires that are provided digitally to the common elderly people who were available. The sample size of the study is 68. The collected data were classified, tabulated and analyzed using statistical tools (SPSS) such as frequency analysis, mean analysis and one-way ANOVA. The Frequency analysis consists of seven variables associated with the demographic profile of respondents such as gender, age group, educational level, marital status, permanent area of residence, accommodation with and psychiatric medication intake. The frequency analysis of the demographic profile of respondents in this study is represented through the following pie charts.

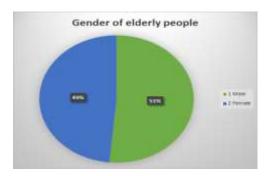


Fig.1: The pie chart mentioned above depicts that the majority of the gender of elderly people are Male (51.5%) when compared to Female (48.5%).

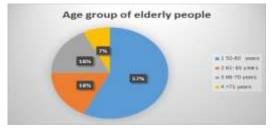


Fig.2: The pie chart mentioned above depicts that majority of the elderly people falls under the age group are 50-60 years (57.4%) and followed by 61-65 years (17.6%) and 66-70 years (17.6%) have same values of percentages and at last >71 years (7.4%).

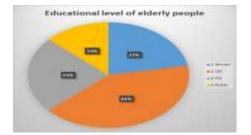


Fig.3: The pie chart mentioned above depicts that most of the elderly people were Under Graduates

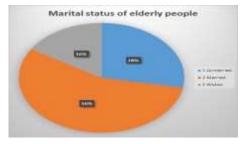


Fig.4: The pie chart mentioned above depicts that the majority of the elderly people are married

# (41.2%) followed by Post Graduates (23.5%), School (22.1%) and none (13.2%).

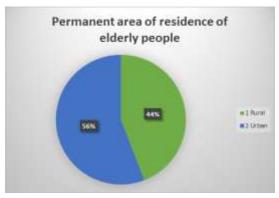


Fig.5: The pie chart mentioned above depicts that the majority of the elderly reside in urban (55.9%) followed by rural (44.1%).

## (55.9%) followed by unmarried (27.9%) and widow (16.2%).

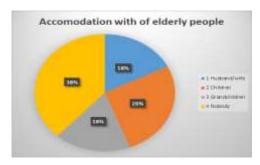


Fig.6: The pie chart mentioned above depicts that the majority of the elderly people are accommodated with no one (38.2%) followed by children (26.5%), husband/wife (17.6%) and grandchildren (17.6%).

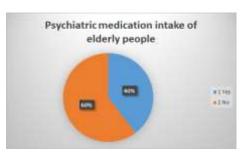


Fig.7: The pie chart mentioned above depicts that the majority of the elderly people do not take psychiatric medications (60.3%) when compared to elderly people who take psychiatric medications (39.7%).

Table 1 examines the reasons for anxiety and depression among elderly people by the help of 15 variables such as financial status, lonely, treated badly, sufferer, sleeping disturbances, physical limitations, dependency, loss, identity, death fear, memory problems, medical conditions, isolation, loss of pleasure and self-confidence. The mean analysis is performed to identify the reasons of anxiety and depression among elderly people.

Table 1: Mean analysis

| S. No | Reasons For Anxiety And Depression Among Elderly People                             | Mean | Rank |
|-------|---|------|------|
| 1     | I often feel loss of pleasure in doing activities (loss of pleasure)                | 3.53 | 3    |
| 2     | I often feel that I have lost my self-confidence (self-confidence)                  | 3.46 | 5    |
| 3     | I often have sleep pattern disturbances (sleeping disturbances)                     | 3.60 | 1    |
| 4     | I feel that I am more dependent on others for doing my things (dependency)          | 3.50 | 4    |
| 5     | I always feel that I am being isolated by others (isolation)                        | 3.44 | 6    |
| 6     | I think that retirement brought me to lose my identity (identity)                   | 3.28 | 11   |
| 7     | I feel depressed due to my memory problems (memory problems)                        | 3.35 | 9    |
| 8     | I feel depressed about the physical limitations in doing activities (physical       | 3.27 | 12   |
|       | limitations)  |      |      |
| 9     | I often feel sad while thinking about loss of my loved one (loss of loved one)      | 3.58 | 2    |
| 10    | I often get nervous while thinking about death (death fear)                         | 3.26 | 13   |
| 11    | I feel sad/depressed when I think about my medical conditions (medical conditions)  | 3.43 | 7    |
| 12    | I often feel insecurity about my financial status (financial status)                | 3.41 | 8    |
| 13    | I often feel that there is no one to take care of me (lonely)                       | 3.15 | 14   |
| 14    | I always feel that I am the only person who suffers a lot than others (sufferer)    | 3.31 | 10   |
| 15    | Sometimes I feel that I am being treated badly by my family members itself (treated | 3.01 | 15   |
|       | badly)  |      |      |

Table 1 displays the mean values for 15 variables. It is evident from mean analysis table that the sleeping disturbances variable possess highest mean value which is followed by other variables such as loss of loved one, loss of pleasure, dependency, self-confidence, isolation, medical conditions, financial status, memory problems, sufferer, identity, physical limitations, death fear, lonely and treated badly. So, it is evident that sleeping disturbances greatly contribute to the reason that causes anxiety and depression in elderly people.

Table 2 depicts factor analysis implemented to measure the association amongst variables within assumed constructs. In this section, we examine the data adequacy for conducting factor analysis by using KMO and Bartlett's test.

Table 2: kmo and bartlett's test

| Kaiser-Meyer-Olkin Measure  | 0.864                                       |      |
|-----------------------------|---|------|
| Bartlett'sTestof Sphericity | tlett'sTestof Sphericity Approx. Chi-Square |      |
|                             | Df  | 105  |
|                             | Sig   | .000 |

Table 2 demonstrates KMO and Significance value. If the KMO value is > 0.6 and significant level is at 1%, it indicates that the given data satisfies factor analysis. Here KMO value is 0.864 and therefore, provided data satisfies factor analysis.

Table 3: Total variance explained

| Component | Initial Eigenvalues |               |                     | Rotation Sums of Squared Loadings |               |                     |  |
|-----------|---------------------|---------------|---------------------|-----------------------------------|---------------|---------------------|--|
|           | Total               | % of Variance | <b>Cumulative %</b> | Total                             | % of Variance | <b>Cumulative %</b> |  |
| 1         | 6.282               | 41.883        | 41.883              | 3.069                             | 20.458        | 20.458              |  |
| 2         | 1.347               | 8.981         | 50.864              | 2.764                             | 18.427        | 38.885              |  |
| 3         | 1.296               | 8.640         | 59.504              | 2.355                             | 15.701        | 54.587              |  |
| 4         | 1.069               | 7.124         | 66.628              | 1.806                             | 12.041        | 66.628              |  |
| 5         | .939                | 6.260         | 72.887              |                                   |               |                     |  |
| 6         | .696                | 4.640         | 77.528              |                                   |               |                     |  |
| 7         | .569                | 3.792         | 81.320              |                                   |               |                     |  |
| 8         | .516                | 3.439         | 84.759              |                                   |               |                     |  |
| 9         | .487                | 3.248         | 88.007              |                                   |               |                     |  |
| 10        | .395                | 2.635         | 90.642              |                                   |               |                     |  |
| 11        | .343                | 2.287         | 92.928              |                                   |               |                     |  |
| 12        | .297                | 1.977         | 94.906              |                                   |               |                     |  |
| 13        | .284                | 1.892         | 96.798              |                                   |               |                     |  |
| 14        | .253                | 1.689         | 98.487              |                                   |               |                     |  |
| 15        | .227                | 1.513         | 100.000             |                                   |               |                     |  |

It is evident from the table that with the help of factor analysis fifteen variables have been clustered as four factors and all together they illuminate 66.6% of variance.

**Table 4: Rotated component matrix** 

| S. |  | Components |      |      |   |
|----|--|------------|------|------|---|
| No | Reasons For Anxiety And Depression In Elderly People                                       | 1          | 2    | 3    | 4 |
| 1  | I often feel insecurity about my financial status (financial status)                       | .746       | -    | 1    | - |
| 2  | I often feel that there is no one to take care of me (lonely)                              | .741       |      |      | - |
| 3  | Sometimes I feel that I am being treated badly by my family members itself (treated badly) | .723       | -    | 1    | - |
| 4  | I always feel that I am the only person who suffers a lot than others (sufferer)           | .703       | -    | 1    | - |
| 5  | I often have sleep pattern disturbances (sleeping disturbances)                            | -          | .739 | -    | - |
| 6  | I feel depressed about the physical limitations in doing activities (physical limitations) | -          | .674 | -    | - |
| 7  | I feel that I am more dependent on others for doing my things (dependency)                 | -          | .639 | -    | - |
| 8  | I often feel sad while thinking about loss of my loved one (loss)                          | -          | .627 | -    | - |
| 9  | I think that retirement brought me to lose my identity (identity)                          | -          | .617 | -    | - |
| 10 | I often get nervous while thinking about death (death fear)                                | -          | -    | .818 | - |
| 11 | I feel depressed due to my memory problems (memory problems)                               | -          | -    | .761 | - |
| 12 | I feel sad/depressed when I think about my medical conditions (medical conditions)         | -          | -    | .554 | - |

| 13 | I always feel that I am being isolated by others (isolation)         | • | - | .460 | _    |
|----|--|---|---|------|------|
| 14 | I often feel loss of pleasure in doing activities (loss of pleasure) | - | - | -    | .865 |
| 15 | I often feel that I have lost my self-confidence (self-confidence)   | - | - | -    | .628 |

It is observed from table 4 that the variables are categorized into four components and they are named Insecurity, Health issues, Problems and Feel down. The Insecurity component comprises financial status, lonely, treated badly and sufferer. The Health issues component comprises sleeping disturbances, physical limitations, dependency, loss and identity. The Problems component comprises death fear, memory problems, medical conditions, isolation. The Feel down component comprises loss of pleasure and self-confidence.

Table 5 measures the anxiety and depression with the demographic profiles of respondents by using ANOVA.

**Table 5: ANOVA** 

| S.NO | VARIABLE                             | F      | SIG  |
|------|--------------------------------------|--------|------|
| 1.   | Age Group vs. Insecurity             | .059   | .981 |
| 2.   | Age Group vs. Health issues          | 3.606  | .018 |
| 3.   | Age Group vs. Problems               | 1.179  | .325 |
| 4.   | Age Group vs. Feel down              | .259   | .854 |
| 5.   | Education vs. Insecurity             | .558   | .645 |
| 6.   | Education vs. Health issues          | 1.098  | .356 |
| 7.   | Education and Problems               | 1.901  | .138 |
| 8.   | Education vs. Feel down              | 1.549  | .210 |
| 9.   | Marital status vs. Insecurity        | .312   | .733 |
| 10.  | Marital status vs. Health issues     | 13.892 | .000 |
| 11.  | Marital status vs. Problems          | 2.812  | .067 |
| 12.  | Marital status vs. Feel down         | 1.690  | .193 |
| 13.  | Accommodation with vs. Insecurity    | .581   | .629 |
| 14.  | Accommodation with vs. Health issues | 1.804  | .155 |
| 15.  | Accommodation with vs. Problems      | .349   | .790 |
| 16.  | Accommodation with vs. Feel down     | .763   | .519 |

Table 5 shows F and Significance values. It is clear from the table that significant value is >0.05%. Hence, accept the null hypothesis. i.e. there is no difference between accommodation with and feel; down.

### CONCLUSION

Anxiety and depression are the major common disorders that affect mental health among the elderly people. Some reasons that cause anxiety and depression among them and it may lead to other severe disorders. Loss of pleasure, dependency, self-confidence, isolation, medical conditions, financial status, memory problems, sufferer, identity and physical limitations, death fear, loneliness and being treated badly are some of the factors that contribute to anxiety and depression in elderly people. Treatment for both anxiety and depression which includes treatment, medicines, rehabilitation, coping abilities, stress reduction and family or social care. Future studies need to be conducted for the preventive measures for anxiety and depression among elderly people.

### REFERENCES

- 1. A.C.Gomathi, S.R.Xavier Rajarathinam, A.Mohammed Sadiqc, Rajeshkumar, 2020. Anticancer activity of silver nanoparticles synthesized using aqueous fruit shell extract of Tamarindus indica on MCF-7 human breast cancer cell line. J. Drug Deliv. Sci. Technol. 55.
- 2. Curran, E., Rosato, M., Ferry, F., Leavey, G., 2020. Prevalence and factors associated with anxiety and depression in older adults: Gender differences in psychosocial indicators. J. Affect. Disord. 267, 114–122.
- 3. Danda, A.K., Ravi, P., 2011. Effectiveness of postoperative antibiotics in orthognathic surgery: a meta-analysis. J. Oral Maxillofac. Surg. 69, 2650–2656.
- 4. Danda, A.K., S, R., Chinnaswami, R., 2009. Comparison of gap arthroplasty with and without a temporalis muscle flap for the treatment of ankylosis. J. Oral Maxillofac. Surg. 67, 1425–1431.
- 5. Dua, K., Wadhwa, R., Singhvi, G., Rapalli, V., Shukla, S.D., Shastri, M.D., Gupta, G., Satija, S., Mehta, M., Khurana, N., Awasthi, R., Maurya, P.K., Thangavelu, L., S, R., Tambuwala, M.M., Collet, T., Hansbro, P.M., Chellappan, D.K., 2019. The potential of siRNA based drug delivery in respiratory disorders: Recent advances and progress. Drug Dev. Res. 80, 714–730.
- 6. El-Gabalawy, R., Mackenzie, C.S., Thibodeau, M.A., Asmundson, G.J.G., Sareen, J., 2013. Health anxiety disorders in older adults: conceptualizing complex conditions in late life. Clin. Psychol. Rev. 33, 1096–1105.
- 7. Ezhilarasan, D., Apoorva, V.S., Ashok Vardhan, N., 2019. Syzygium cumini extract induced reactive oxygen species-mediated apoptosis in human oral squamous carcinoma cells. J. Oral Pathol. Med. 48, 115–121.
- 8. Hallit, S., Daher, M.-C., Hallit, R., Hachem, D., Kheir, N., Salameh, P., 2020. Correlates associated with

- mental health and nutritional status in Lebanese older adults: A cross-sectional study. Arch. Gerontol. Geriatr. 87, 103879.
- 9. Krishnan, R., Chary, K.V., 2015. A rare case modafinil dependence. J. Pharmacol. Pharmacother. 6, 49–50.
- Manivannan, I., Ranganathan, S., Gopalakannan, S. et al., 2018. Mechanical Properties and Tribological Behavior of Al6061–SiC–Gr Self-Lubricating Hybrid Nanocomposites. Trans Indian Inst Met 71, 1897– 1911.
- 11. Narayanan, V., Kannan, R., Sreekumar, K., 2009. Retromandibular approach for reduction and fixation of mandibular condylar fractures: a clinical experience. Int. J. Oral Maxillofac. Surg. 38, 835–839.
- 12. Narayanan, V., Ramadorai, A., Ravi, P., Nirvikalpa, N., 2012. Transmasseteric anterior parotid approach for condylar fractures: experience of 129 cases. Br. J. Oral Maxillofac. Surg. 50, 420–424.
- 13. Neelakantan, P., John, S., Anand, S., Sureshbabu, N., Subbarao, C., 2011. Fluoride release from a new glassionomer cement. Oper. Dent. 36, 80–85.
- 14. Neelakantan, P., Sharma, S., 2015. Pain after single-visit root canal treatment with two single-file systems based on different kinematics--a prospective randomized multicenter clinical study. Clin. Oral Investig. 19, 2211–2217.
- 15. Neelakantan, P., Subbarao, C., Sharma, S., Subbarao, C.V., Garcia-Godoy, F., Gutmann, J.L., 2013. Effectiveness of curcumin against Enterococcus faecalis biofilm. Acta Odontol. Scand. 71, 1453–1457.
- 16. Panchal, V., Jeevanandan, G., Subramanian, E.M.G., 2019. Comparison of post-operative pain after root canal instrumentation with hand K-files, H-files and rotary Kedo-S files in primary teeth: a randomised clinical trial. Eur. Arch. Paediatr. Dent. 20, 467–472.
- 17. Prasanna, N., Subbarao, C.V., Gutmann, J.L., 2011. The efficacy of pre-operative oral medication of lornoxicam and diclofenac potassium on the success of inferior alveolar nerve block in patients with irreversible pulpitis: a double-blind, randomised controlled clinical trial. Int. Endod. J. 44, 330–336.
- 18. Priya S, R., Krishnan, C., S, J.R., Das}, J., 2009. Growth and characterization of NLO active lithium sulphate monohydrate single crystals. Crystal research and technology 44, 1272–76.
- 19. Rajeshkumar, S., Menon, S., Venkat Kumar, S., Tambuwala, M.M., Bakshi, H.A., Mehta, M., Satija, S., Gupta, G., Chellappan, D.K., Thangavelu, L., Dua, K., 2019. Antibacterial and antioxidant potential of biosynthesized copper nanoparticles mediated through Cissus arnotiana plant extract. J. Photochem. Photobiol. B 197, 111531.
- 20. Ramadurai, N., Gurunathan, D., Samuel, A.V., Subramanian, E., Rodrigues, S.J.L., 2019. Effectiveness of 2% Articaine as an anesthetic agent in children: randomized controlled trial. Clin. Oral Investig. 23, 3543–3550.
- 21. Ramakrishnan, M., Dhanalakshmi, R., Subramanian, E.M.G., 2019. Survival rate of different fixed posterior space maintainers used in Paediatric Dentistry A systematic review. Saudi Dent J 31, 165–172.
- 22. Ramesh, A., Varghese, S.S., Doraiswamy, J.N., Malaiappan, S., 2016. Herbs as an antioxidant arsenal for periodontal diseases. J Intercult Ethnopharmacol 5, 92–96.
- 23. Tunvirachaisakul, C., Gould, R.L., Coulson, M.C., Ward, E.V., Reynolds, G., Gathercole, R.L., Grocott, H., Supasitthumrong, T., Tunvirachaisakul, A., Kimona, K., Howard, R.J., 2018. Predictors of treatment outcome in depression in later life: A systematic review and meta-analysis. J. Affect. Disord. 227, 164–182.
- 24. van Zoonen, K., Kleiboer, A., Beekman, A.T.F., Smit, J.H., Boerema, A.M., Cuijpers, P., 2015. Reasons and determinants of help-seeking in people with a subclinical depression. J. Affect. Disord. 173, 105–112.
- 25. Venugopalan, S., Ariga, P., Aggarwal, P., Viswanath, A., 2014. Magnetically retained silicone facial prosthesis. Niger. J. Clin. Pract. 17, 260–264.
- 26. Wu, P., Li, L., Sun, W., 2018. Influence factors of depression in elderly patients with chronic diseases.
- 27. Yochim, B.P., Mueller, A.E., Segal, D.L., 2013. Late life anxiety is associated with decreased memory and executive functioning in community dwelling older adults. J. Anxiety Disord. 27, 567–575.
- 28. Zhang, C., Xue, Y., Zhao, H., Zheng, X., Zhu, R., Du, Y., Zheng, J., Yang, T., 2019. Prevalence and related influencing factors of depressive symptoms among empty-nest elderly in Shanxi, China. J. Affect. Disord. 245, 750–756.
- 29. Zhao, W., Zhang, Y., Liu, X., Yue, J., Hou, L., Xia, X., Zuo, Z., Liu, Y., Jia, S., Dong, B., Ge, N., 2020. Comorbid depressive and anxiety symptoms and frailty among older adults: Findings from the West China health and aging trend study. J. Affect. Disord. 277, 970–976.
- 30. Zhao, X., Zhang, D., Wu, M., Yang, Y., Xie, H., Li, Y., Jia, J., Su, Y., 2018. Loneliness and depression symptoms among the elderly in nursing homes: A moderated mediation model of resilience and social support. Psychiatry Res. 268, 143–151.