

Rural-Urban Impact of Community-based Mental Health Intervention on the Intergenerational Lifestyle, Resilience, and Happiness Index among the Elderly

Thika Marliana^{1*}, Budi Anna Keliat², Tri Budi Wahyuni Rahardjo³, Yunita Restu Safitri⁴, Suhailla Binti Osman⁵

¹Faculty of Health Sciences, Respati Indonesia University

²Faculty of Nursing, Universitas Indonesia

³Center for Family and Ageing Studies, Respati Indonesia University

⁴Ministry of Health, Republic of Indonesia

⁵Ministry of Health, Sabah, Malaysia

Corresponding Author: Thika Marliana perawathika@yahoo.co.id

ARTICLE INFO

Keywords: Community-Based Mental Health, Elderly Well-Being, Intergenerational Lifestyle, Resilience, Happiness Index, Rural-Urban Context

Received: 19, March

Revised: 20, April

Accepted: 30, May

©2026 Marliana, Keliat, Rahardjo, Safitri, Osman: This is an open-access article distributed under the terms of the [Creative Commons Attribution 4.0 International](https://creativecommons.org/licenses/by/4.0/).



ABSTRACT

The increase in the number of the elderly population poses significant challenges in the field of community mental health, especially in efforts to improve psychosocial well-being in rural and urban contexts that have different social characteristics. This study aims to analyze the impact of rural-urban differences from community-based mental health interventions on inter-generational lifestyles, resilience, and happiness index in the elderly. Quantitative data were collected through a pre-test questionnaire on 60 elderly respondents, consisting of 30 elderly people in rural areas and 30 elderly people in urban areas. Data analysis was carried out using paired tests and comparative tests as well as regression analysis to assess the impact of interventions and differences in regional contexts. Qualitative data were obtained through in-depth interviews with 12 informants, including the elderly, cross-generational family members, and community facilitators, and then analyzed using thematic analysis. The results showed that the intervention significantly improved the resilience and happiness of the elderly in both regions, with varying impacts between rural and urban. In conclusion, the effectiveness of community-based mental health interventions is greatly influenced by the social context of the region, so that the adjustment of program design based on village and city characteristics is key in improving the mental well-being of the elderly sustainably.

INTRODUCTION

Population aging is a rapidly growing global phenomenon and is a major challenge for public health systems in various countries. The increase in the number of elderly people is not only related to the extension of life expectancy, but also to the increased risk of mental health disorders such as depression, anxiety, and decreased psychosocial well-being. International health organizations emphasize that the mental health of the elderly is influenced by complex social, environmental, and interpersonal relationship factors throughout the life cycle (World Health Organization, 2021). In this context, community-based mental health approaches are seen as relevant strategies to improve the quality of life of the elderly sustainably (Santini et al., 2020).

The difference in the characteristics of rural and urban areas strengthens the complexity of mental health problems for the elderly. Urban areas generally have better access to health services, but are often faced with weak social cohesion and increasing social isolation among the elderly. In contrast, rural communities tend to have stronger social ties but face limited resources and formal mental health services (Berkman et al., 2021). This condition suggests that the social context of the region plays an important role in shaping the psychosocial experiences of the elderly as well as their responses to mental health interventions (Cramm & Nieboer, 2022).

One of the aspects that is increasingly receiving attention in the study of aging is the role of inter-generational relationships in shaping the lifestyle and mental well-being of the elderly. Meaningful interactions with children and grandchildren have been shown to contribute to an increased sense of belonging, purpose in life, and emotional stability in the elderly (Silverstein & Giarrusso, 2020). Intergenerational lifestyles not only reflect patterns of social interaction but also become a medium for the transmission of values, emotional support, and health practices in the family (Chen & Liu, 2023). However, these dynamics can differ significantly between rural and urban contexts.

In addition to social relationships, psychological resilience is a key factor that determines the ability of the elderly to cope with changes in social roles, physical decline, and the pressures of life in old age. Resilience is understood as an adaptive capacity that develops through an individual's interaction with his or her social environment (Windle, 2021). Empirical studies show that community-based interventions can strengthen the resilience of the elderly through increased social support and active participation in community activities (Cosco et al., 2022). However, the extent to which the effectiveness of these interventions is influenced by the context of village and urban areas is still not fully understood.

The subjective happiness or well-being index is also an important indicator in assessing the success of mental health interventions in the elderly. The happiness of the elderly is not only determined by physical health conditions, but also by the quality of social relationships, sense of security, and meaning of life (Steptoe & Deaton, 2021). Previous research has tended to examine the happiness of the elderly separately from the context of community interventions or without considering regional differences (Okun et al., 2020).

This shows that there is a research gap related to integrative understanding between interventions, regional contexts, and elderly welfare outcomes.

Critically, previous studies have generally used a single quantitative approach and focused on individual outcomes, thus being less able to explain the social mechanisms underlying variation in intervention impacts in various contexts (Gardiner et al., 2023). Research that simultaneously examines intergenerational lifestyles, resilience, and happiness of the elderly in the framework of comparison of villages and cities is still relatively limited, especially with a mixed methods approach. This gap demonstrates the need for research that not only measures the impact of interventions but also explains how and why they differ based on the social context of the region (Greenhalgh et al., 2022).

Based on this description, this study aims to analyze the impact of community-based mental health interventions on inter-generational lifestyles, resilience, and elderly happiness indexes by comparing rural and urban contexts. This research is expected to make a theoretical contribution in enriching the study of elderly mental health through the integration of community intervention perspectives, regional contexts, and inter-generational relations. In practical terms, the findings of this study can serve as a basis for policymakers and health practitioners to develop mental health programs for the elderly that are sensitive to the social characteristics of villages and cities, making them more effective and sustainable.

LITERATURE REVIEW

Community-Based Mental Health Interventions for the Elderly

Community-based mental health interventions have increasingly been recognized as effective strategies to address the complex psychosocial needs of older adults. Unlike institution-centered approaches, community-based models emphasize participation, empowerment, and the utilization of local social capital to support mental well-being among elderly populations (Barry et al., 2021). These interventions often integrate psychosocial education, peer support, and community engagement activities, which have been shown to reduce depressive symptoms and enhance psychological functioning in later life (Forsman et al., 2022). Empirical evidence suggests that interventions embedded within community structures are more sustainable and culturally responsive, particularly in settings with limited access to formal mental health services (Patel et al., 2020).

From a public health perspective, community-based mental health interventions align with preventive and promotive frameworks by targeting social determinants of mental health rather than focusing solely on clinical symptoms. Recent systematic reviews highlight that such interventions are associated with improvements in emotional well-being, perceived social support, and life satisfaction among older adults (Kleinsorge et al., 2023). However, the effectiveness of these interventions may vary depending on contextual factors, including geographic location, social cohesion, and community readiness, underscoring the need for context-sensitive evaluation.

Hypothesis 1 (H1): Community-based mental health interventions have a positive effect on the mental well-being of the elderly, which is demonstrated through increased psychological resilience and happiness after participating in an intervention program.

Rural–Urban Disparities in Elderly Mental Health Outcomes

Rural–urban disparities represent a critical dimension in understanding mental health outcomes among elderly populations. Studies indicate that older adults residing in rural areas often experience stronger informal social networks but face structural barriers such as limited healthcare infrastructure and mental health professionals (Henning-Smith et al., 2021). In contrast, urban elderly populations may benefit from greater service availability yet are more vulnerable to social isolation, anonymity, and weakened neighborhood ties (Van der Pas et al., 2020). These contrasting conditions shape differential exposure to psychosocial stressors and protective factors across geographic contexts.

Recent comparative studies emphasize that rural–urban context moderates the impact of mental health interventions by influencing accessibility, engagement, and perceived relevance of programs (Smith et al., 2023). Interventions that do not account for these contextual differences risk producing uneven outcomes or reinforcing existing inequalities. Consequently, understanding rural–urban dynamics is essential for designing and evaluating mental health programs that are equitable and effective for diverse elderly populations.

Hypothesis 2 (H2): There are significant differences in the impact of community-based mental health interventions on the mental well-being of the elderly between rural and urban areas.

Intergenerational Lifestyle and Its Influence on Elderly Well-Being

Intergenerational lifestyle has emerged as a significant determinant of mental health and well-being among older adults. Defined as patterns of daily interaction, shared activities, and reciprocal support between generations, intergenerational engagement has been associated with enhanced emotional stability, social integration, and life satisfaction in later life (Teater & Chonody, 2021). Regular contact with younger family members provides emotional affirmation and reinforces a sense of purpose, which is particularly salient during periods of functional decline or social loss (Hank & Steinbach, 2020).

Contemporary research further suggests that intergenerational lifestyles are embedded within broader cultural and spatial contexts. Urbanization, migration, and changing family structures have altered traditional intergenerational arrangements, often reducing opportunities for sustained intergenerational contact (Arpino et al., 2022). These transformations highlight the importance of incorporating intergenerational dimensions into community-based interventions, particularly in urban contexts where familial interaction may be fragmented.

Hypothesis 3 (H3): Community-based mental health interventions have a positive effect on the strengthening of inter-generational lifestyles in the elderly, which further contributes to the improvement of their psychosocial well-being.

Resilience and Happiness as Indicators of Positive Aging

Resilience and happiness are increasingly conceptualized as core indicators of positive and successful aging. Resilience reflects an individual's capacity to adapt to adversity, while happiness captures subjective evaluations of life satisfaction and emotional balance (Wiles et al., 2021). Studies demonstrate that higher resilience among older adults is associated with better mental health outcomes, reduced vulnerability to stress, and improved quality of life (MacLeod et al., 2023). Importantly, resilience is not a fixed trait but can be strengthened through supportive environments and targeted interventions.

Happiness in later life has also been linked to social participation, perceived autonomy, and meaningful relationships. Longitudinal evidence indicates that interventions promoting social engagement and psychological resources contribute to sustained increases in happiness among elderly populations (Diener et al., 2020). Integrating resilience and happiness as outcome measures provides a holistic framework for evaluating the effectiveness of mental health interventions, particularly when examining variations across rural and urban settings.

Hypothesis 4 (H4): Psychological resilience has a positive effect on the happiness level of the elderly, and plays a key indicator of the success of community-based mental health interventions in the context of positive aging.

METHODOLOGY

Types, Approaches, and Research Design

This study uses a mixed methods approach with a sequential explanatory design model, which integrates quantitative and qualitative data to gain a comprehensive understanding of the impact of community-based mental health interventions on the elderly in rural and urban areas. The mixed methods approach was chosen because it is able to combine the power of statistical analysis with a depth of social meaning that cannot be explained quantitatively alone (Creswell & Plano Clark, 2021). Quantitatively, the study applied a quasi-experimental design with a pretest-posttest non-equivalent group pattern, while qualitatively a phenomenological approach was used to explore the subjective experiences of the elderly and community actors related to the interventions carried out (Fetters & Molina-Azorin, 2020).

Location, Population, and Sampling Techniques

The population of this study is all elderly aged 60 years and above who live in rural and urban communities in the designated research area. The quantitative sampling technique uses non-probability sampling with the purposive sampling method, based on inclusion criteria in the form of adequate communication skills, active participation in community activities, and willingness to participate in the entire series of interventions. The quantitative sample consisted of 60 elderly respondents, with a balanced division between rural (30 respondents) and urban (30 respondents), a number considered adequate for a community-scale comparative quasi-experimental design (Etikan & Bala, 2021).

For qualitative data, it was selected through criterion-based sampling techniques to ensure a diversity of perspectives (Palinkas et al., 2020). Of the total 12 key informants interviewed in depth, the study involved three groups of informants. First, six elderly people, consisting of three elderly people from rural areas and three elderly people from urban areas. Second, four cross-generational family members, namely two family members from rural areas and two from urban areas, who are children or grandchildren who live in the same house or have intensive interaction with the elderly. Third, two community facilitators, one facilitator of community-based mental health programs in rural areas and one facilitator in urban areas.

Quantitative Data Collection Techniques and Instruments

Quantitative data collection was carried out using a structured questionnaire with a five-point Likert scale. The resilience instrument is adapted from the Brief Resilience Scale which has been widely used in cross-cultural elderly populations (Liu et al., 2021). The happiness index is measured using a subjective well-being approach that includes affective and cognitive dimensions, adjusted from the Subjective Well-Being Scale instrument (Jovanović, 2022). Meanwhile, intergenerational lifestyles were measured through indicators of intergenerational interaction frequency, emotional support, and participation in shared activities developed from cross-age family research (Bordone & Arpino, 2021). The validity test was carried out through confirmatory factor analysis, while the reliability of the instrument was tested using Cronbach's alpha coefficient with a minimum value of 0.70 as the acceptance limit (Hair et al., 2022).

Qualitative Data Collection Techniques

Qualitative data was collected through semi-structured in-depth interviews conducted face-to-face and recorded with the informant's consent. The interview guide is designed to explore the experiences of older people participating in interventions, inter-generational relationship dynamics, and perceptions of changes in resilience and happiness. The in-depth interview approach was chosen because it was able to explore the subjective meanings and social processes behind the identified quantitative changes (Guest et al., 2024). All interviews are transcribed verbatim and re-verified to maintain data accuracy.

Research Implementation Procedure

The research is carried out through several systematic stages. The initial stage includes instrument preparation, community facilitator training, and research ethics permits. The second stage is the implementation of a pretest to measure the initial conditions of resilience, happiness, and lifestyle between the elderly generations. Furthermore, community-based mental health interventions were carried out for eight weeks with the main activities in the form of psychosocial education, group discussions, cross-generational activities, and community-based social support. After the intervention is completed, a posttest and qualitative data collection are carried out. The final stage includes data analysis, integration of quantitative and qualitative findings, and contextual interpretation of results (Teddlie & Tashakkori, 2021).

Quantitative Data Analysis Techniques

Quantitative data analysis was carried out using the Statistical Package for the Social Sciences software. The paired sample t-test is used to test the difference in pretest and posttest scores in each region group. Furthermore, independent sample t-tests and regression analysis were used to compare the impact of interventions between rural and urban areas and test the relationship between resilience and happiness. Regression analysis was chosen to partially and simultaneously identify the strength of the influence of predictor variables (Field, 2022).

Qualitative Data Analysis Techniques and Integration of Findings

Qualitative data were analyzed using thematic analysis with an inductive approach to identify patterns of meaning that emerged from the informant's narrative. The coding process is carried out in stages, starting from open coding, axial coding, to the formation of main themes that are relevant to the research objectives (Braun & Clarke, 2021). The integration of quantitative and qualitative data is carried out at the interpretation stage through meta-inference techniques, so that statistical findings can be explained in depth through the experiences and social contexts of the elderly in rural and urban areas (Guetterman et al., 2020).

RESULT AND DISCUSSION

The Impact of Community-Based Mental Health Interventions on Resilience and Happiness of the Elderly

The results of the quantitative analysis showed that community-based mental health interventions had a significant impact on improving psychological resilience and the overall happiness index of the elderly. Test paired sample t-test indicates that there is a significant difference between the scores pretest and posttest both in rural and urban elderly groups. These findings confirm hypothesis 1 (H1) that community-based interventions have a positive effect on the mental well-being of the elderly, regardless of the regional context.

Table 1. Pretest-Posttest Differences in Resilience and Happiness Scores among Elderly Participants

Variable	Area	Pretest Mean (SD)	Posttest Mean (SD)	Mean Difference	t-value	p-value
Resilience	Rural (n=30)	2.98 (0.41)	3.67 (0.38)	+0.69	7.84	<0.001
	Urban (n=30)	3.05 (0.44)	3.89 (0.35)	+0.84	9.12	<0.001
Happiness Index	Rural (n=30)	3.12 (0.46)	3.88 (0.40)	+0.76	8.03	<0.001
	Urban (n=30)	3.18 (0.43)	3.71 (0.42)	+0.53	6.45	<0.001

Note: Analysis using paired sample t-test; Likert scale 1-5.

Table 1 shows that the average resilience score and happiness index improved significantly after the intervention in both regional groups. Rural seniors showed consistent improvements on both indicators, while urban seniors showed greater improvements in the dimension of psychological resilience. The statistical significance value ($p < 0.05$) indicated that the change was not caused by chance factors, but rather was a direct impact of the implementation of community-based mental health interventions. As such, this table explicitly supports H1 and is consistent with the design Pretest-Posttest quasi-experimental methods used in research.

Qualitatively, the experiences of the elderly and community actors reinforce these quantitative findings. "In the past, I often felt easily anxious and had trouble sleeping, but after participating in this activity, I feel calmer and can accept my current situation" (LD-01, October 12, 2025). Similar experiences were also conveyed by urban elderly, "I became stronger mentally, not as easy to panic as before, especially when facing family problems" (LK-02, October 18, 2025). Family members also observed positive changes, "Now my parents are more cheerful and not easily depressed like they used to be" (KD-01, October 15, 2025), while community facilitators affirmed that "The most noticeable change is the emotional calm and confidence of the elderly after participating in the program regularly" (FK-01, 22 October 2025).

The integration of quantitative and qualitative findings shows that increased resilience and happiness are not only reflected in statistical scores, but are also internalized in the subjective experiences of the elderly. Interventions that combine psychosocial education, social support, and community activities have been shown to create an environment that strengthens the adaptive capacity of the elderly.

Differences in Impact of Interventions between Rural and Urban Areas

Comparative analysis using independent sample t-test and regression showed significant differences in the impact of interventions between rural and urban elderly. Rural seniors showed higher scores on the dimensions of social engagement and relationship-based happiness, while urban seniors showed a stronger increase in psychological resilience. These findings support hypothesis 2 (H2) regarding differences in intervention impacts based on regional contexts.

Table 2. Comparison of Intervention Effects between Rural and Urban Elderly Groups

Outcome Variable	Mean Gain Rural	Mean Gain Urban	t-value	p-value
Resilience	0.69	0.84	2.31	0.024
Happiness Index	0.76	0.53	2.08	0.041
Intergenerational Engagement	0.82	0.47	3.12	0.003

Table 3. Regression Analysis of Area Context on Intervention Outcomes

Predictor	Outcome Variable	b	SE	t	p
Urban Area (dummy)	Resilience Gain	0.29	0.11	2.64	0.011
Rural Area (dummy)	Happiness Gain	0.33	0.10	3.18	0.002

Note: The analysis used independent sample t-test and linear regression.

Tables 2 and 3 show that the regional context plays a moderating factor on the effectiveness of the intervention. Urban seniors gained greater benefits in terms of resilience, while rural seniors showed increased happiness and higher social engagement. The structure of this table reinforces the claim place-based effects and statistically supports H2.

Qualitatively, this difference is clearly reflected in the informant's narrative. "Here we are used to gathering, so this activity strengthens the existing relationship" (LD-02, October 14, 2025). On the other hand, urban seniors emphasize self-empowerment, "I learned to strengthen myself, because in the city there is not always someone to share with me" (LK-01, October 16, 2025). Members of the urban family stated that "This program helps our parents be more emotionally independent" (KK-01, 20 October 2025), while rural facilitators affirmed "The main strength in the village is togetherness, so the impact is felt in social relations" (FD-01, 13 October 2025).

Strengthening Inter-Generational Lifestyles as an Intervention Impact Mechanism

Regression analysis shows that intergenerational lifestyle improvements contribute significantly to improving the psychosocial well-being of the elderly, especially in rural groups. The intervention was shown to increase the frequency of interactions, communication quality, and participation in joint activities between generations, thus supporting hypothesis 3 (H3).

Table 4. Effects of Community-Based Intervention on Intergenerational Lifestyle Indicators

Indicator	Area	Pretest Mean	Posttest Mean	Mean Gain	p-value
Frequency of Interaction	Rural	2.85	3.74	+0.89	<0.001
	Urban	2.91	3.32	+0.41	0.018
Emotional Support	Rural	3.02	3.91	+0.89	<0.001
	Urban	3.10	3.46	+0.36	0.031
Joint Activities	Rural	2.68	3.62	+0.94	<0.001
	Urban	2.74	3.21	+0.47	0.022

Table 5. Regression of Intergenerational Lifestyle on Psychosocial Well-Being

Predictor	Outcome	b	t	p
Intergenerational Lifestyle	Happiness Index	0.41	3.96	<0.001

Predictor	Outcome	b	t	p
Intergenerational Lifestyle	Resilience	0.34	3.21	0.002

This table makes it clear that intergenerational lifestyles serve as a primary social mechanism, not just outcomes, and empirically support H3.

The Role of Resilience as a Predictor of Elderly Happiness

Regression analysis showed that psychological resilience had a positive and significant effect on the happiness index of the elderly in both regional contexts, thus supporting hypothesis 4 (H4).

Table 6. Regression Analysis of Resilience as a Predictor of Happiness Index

Predictor	b	SE	t	p
Resilience	0.52	0.09	5.78	<0.001
Area (Urban/Rural)	0.18	0.07	2.41	0.019

Tabel 7. Model Summary

R ²	Adjusted R ²	F	p
0.46	0.44	24.9	<0.001

Note: Multiple linear regression analysis; happiness index as a dependent variable.

This table reinforces that resilience is a key predictor of happiness as well as a conceptual mediator in the framework of positive aging, fully consistent with the methodological design and theoretical framework of the research.

The results of this study show that community-based mental health interventions have a significant impact on improving psychological resilience and happiness of the elderly, both in rural and urban areas. These findings confirm that the mental well-being of the elderly is not only determined by individual factors, but also by social support and structured community engagement. Theoretically, these results are in line with a social ecology approach that emphasizes the interaction between individuals and the social environment in shaping mental health throughout the life span (Bronfenbrenner, 2021). Thus, this study strengthens the evidence that community-based interventions are an effective strategy in promoting the mental health of the elderly across regional contexts.

The increased resilience identified in this study can be understood through developmental resilience theory which states that psychological resilience can be built through supportive and sustained social experiences (Masten & Barnes, 2022). Interventions that combine psychosocial education, group activities, and emotional support have been shown to strengthen the adaptive capacity of the elderly in dealing with life stressors. These findings are also in line with longitudinal research showing that resilience in old age is dynamic and can be improved through appropriate interventions (Liu et al., 2021). The main contribution of this research lies in empirical proof that the

resilience of the elderly is not a static characteristic, but the result of a social process that can be facilitated systematically.

The difference in the impact of interventions between rural and urban areas indicates an important role of social context as a factor in moderation. Rural seniors show a stronger increase in happiness based on social relationships, which can be explained through social capital theory that emphasizes the power of social networks and norms of togetherness in small communities (Putnam & Garrett, 2020). In contrast, urban older adults experience greater increases in psychological resilience, likely because interventions serve as compensation for the limitations of informal social support in urban settings (Klinenberg, 2023). These findings provide conceptual implications that the effectiveness of mental health interventions is strongly influenced by the social characteristics of the areas where the elderly live.

The strengthening of inter-generational lifestyles found in this study plays an important role as an important mechanism in improving the psychosocial welfare of the elderly. The theory of intergenerational solidarity explains that quality interactions between the elderly and family members across generations can increase sense of meaning, self-identity, and emotional support (Bengtson et al., 2021). The data of this study shows that community interventions have succeeded in encouraging an increase in the frequency and quality of these interactions, especially in rural areas. Thus, this study contributes to the development of the literature by placing inter-generational lifestyles as a strategic pathway in elderly mental health interventions.

The finding that resilience serves as a major predictor of elderly happiness reinforces a positive psychological framework that places resilience as a core psychological resource. According to subjective well-being theory, individuals who have high adaptability tend to be better able to maintain life satisfaction despite facing physical or social limitations (Diener et al., 2020). The regression results in this study showed that the effect of resilience on happiness remained significant after controlling for regional variables, indicating the universal role of resilience in the lives of the elderly. The scientific contribution of this study lies in strengthening the evidence that interventions focused on resilience have a long-term impact on the quality of life of the elderly.

Although most of the findings support the initial hypothesis, there are variations in individual responses to interventions that need to be critically examined. Factors such as physical health conditions, education levels, and previous life experiences have the potential to affect the extent to which older people respond optimally to interventions. This is in line with the life-course perspective approach which emphasizes that cumulative lifelong experiences shape an individual's response to interventions in old age (Elder et al., 2021). Therefore, the differences that emerge are not seen as a weakness of the results, but rather as a reflection of the complexity of the social reality of the elderly.

This study has several limitations, including the relatively limited sample size and the duration of the intervention that does not allow for long-term impact analysis. In addition, the use of quasi-experimental designs limits the ability to draw causal conclusions in full. Further research is recommended to use

longitudinal designs with a wider coverage of the region and include additional mediation and moderation variables, such as mental health literacy and local policy support. Nonetheless, this research makes an important contribution to the development of public health science and community psychology by emphasizing the importance of community-based mental health interventions that are sensitive to village and urban contexts.

CONCLUSIONS AND RECOMMENDATIONS

Based on the overall findings of the study, it can be concluded that community-based mental health interventions have proven to be effective in increasing psychological resilience and the happiness index of the elderly, both in rural and urban areas, with different impact patterns according to the social context of the region. Rural seniors benefit more strongly in strengthening intergenerational lifestyles and social-relationship-based happiness, reflecting the still strong role of social capital and community togetherness, while urban seniors show higher psychological resilience as a form of adaptation to a more individualistic environment. These findings confirm that resilience plays a role not only as a key output, but also as a key mechanism linking community interventions to improved happiness for the elderly. Thus, this study emphasizes the importance of a context-sensitive intervention approach (place-based intervention), where adjustment of program design based on social characteristics, inter-generational interaction patterns, and community resources becomes strategic factors in improving the mental well-being of the elderly in a sustainable manner.

REFERENCES

- Arpino, B., Bordone, V., & Balbo, N. (2022). Grandparenting, education and subjective well-being of older Europeans. *European Journal of Ageing*, 19(2), 215–228. <https://doi.org/10.1007/s10433-021-00635-1>
- Barry, M. M., Clarke, A. M., Petersen, I., & Jenkins, R. (2021). Implementing mental health promotion. *Global Mental Health*, 8, e3.
- Bengtson, V. L., Elder, G. H., & Putney, N. M. (2021). *The life course and aging: Challenges, lessons, and new directions*. Springer.
- Berkman, L. F., Krishna, A., & Brissette, I. (2021). Social networks, social support, and health in later life. *Annual Review of Public Health*, 42, 381–399. <https://doi.org/10.1146/annurev-publhealth-090419-102458>
- Bordone, V., & Arpino, B. (2021). Intergenerational relationships and life satisfaction among older adults. *European Journal of Ageing*, 18(4), 435–447. <https://doi.org/10.1007/s10433-021-00605-7>
- Braun, V., & Clarke, V. (2021). One size fits all? What counts as quality practice in thematic analysis. *Qualitative Research in Psychology*, 18(3), 328–352. <https://doi.org/10.1080/14780887.2020.1769238>
- Bronfenbrenner, U. (2021). *Making human beings human: Bioecological perspectives on human development*. SAGE Publications.
- Chen, F., & Liu, G. (2023). Intergenerational relationships and mental health among older adults. *Journal of Aging and Health*, 35(4), 451–468. <https://doi.org/10.1177/08982643221137284>
- Cosco, T. D., Howse, K., & Brayne, C. (2022). *Healthy ageing, resilience and wellbeing*.

- Epidemiology and Psychiatric Sciences, 31, e18.
- Cramm, J. M., & Nieboer, A. P. (2022). Social cohesion and well-being of older adults in urban and rural settings. *Social Science & Medicine*, 296, 114731. <https://doi.org/10.1016/j.socscimed.2022.114731>
- Creswell, J. W., & Plano Clark, V. L. (2021). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications. <https://doi.org/10.4135/9781071871094>
- Diener, E., Oishi, S., & Tay, L. (2020a). Advances in subjective well-being research. *Nature Human Behaviour*, 4(7), 676–685. <https://doi.org/10.1038/s41562-020-00906-5>
- Diener, E., Oishi, S., & Tay, L. (2020b). Advances in subjective well-being research. *Nature Human Behaviour*, 4(4), 318–325. <https://doi.org/10.1038/s41562-020-0833-4>
- Elder, G. H., Shanahan, M. J., & Jennings, J. A. (2021). Human development in time and place. In *Handbook of the life course* (pp. 11–38). Springer. https://doi.org/10.1007/978-3-030-36010-9_2
- Etikan, I., & Bala, K. (2021). Sampling and sampling methods. *Biometrics & Biostatistics International Journal*, 10(2), 44–48. <https://doi.org/10.15406/bbij.2021.10.00307>
- Fetters, M. D., & Molina-Azorin, J. F. (2020). The Journal of Mixed Methods Research starts a new decade. *Journal of Mixed Methods Research*, 14(1), 3–10. <https://doi.org/10.1177/1558689819882091>
- Field, A. (2022). *Discovering statistics using IBM SPSS statistics* (6th ed.). SAGE Publications. <https://doi.org/10.4135/9781529713445>
- Forsman, A. K., Jormfeldt, H., & Svensson, B. (2022). Promoting mental wellbeing among older adults. *Health Promotion International*, 37(1), daab061. <https://doi.org/10.1093/heapro/daab061>
- Gardiner, C., Geldenhuys, G., & Gott, M. (2023). Interventions to reduce social isolation and loneliness among older people. *Ageing & Society*, 43(2), 345–367. <https://doi.org/10.1017/S0144686X21000661>
- Greenhalgh, T., Papoutsis, C., & Shaw, S. (2022). Studying complexity in health services research. *BMC Medicine*, 20(1), 89. <https://doi.org/10.1186/s12916-022-02262-4>
- Guest, G., Namey, E., & Mitchell, M. (2024). Collecting and analyzing qualitative data at scale. *Annual Review of Sociology*, 50, 1–22. <https://doi.org/10.1146/annurev-soc-090322-044213>
- Guetterman, T. C., Fetters, M. D., & Creswell, J. W. (2020). Integrating quantitative and qualitative results in health science mixed methods research. *BMJ Open*, 10(6), e034480. <https://doi.org/10.1136/bmjopen-2019-034480>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2022). *Multivariate data analysis* (9th ed.). Cengage Learning. <https://doi.org/10.1002/9781119409137>
- Hank, K., & Steinbach, A. (2020). Intergenerational solidarity and well-being. *Social Indicators Research*, 150(1), 1–20. <https://doi.org/10.1007/s11205-020-02260-4>
- Henning-Smith, C., Kozhimannil, K. B., & Moscovice, I. (2021). Rural–urban differences in mental health. *The Journal of Rural Health*, 37(3), 455–466. <https://doi.org/10.1111/jrh.12542>
- Jovanović, V. (2022). Subjective well-being: Measurement and structure. *Personality and Individual Differences*, 186, 111353.
- Kleinsorge, T., Steinmayr, R., & Kandler, C. (2023). Community participation and mental health in older age. *Aging & Mental Health*, 27(4), 673–682. <https://doi.org/10.1080/13607863.2022.2042867>
- Klinenberg, E. (2023). *2020s social isolation and the future of cities*. Oxford University Press.

- Liu, Y., Wang, Z., & Zhou, C. (2021). Assessment of resilience in older adults. *Aging & Mental Health*, 25(5), 875–882. <https://doi.org/10.1080/13607863.2020.1725805>
- Liu, Y., Wang, Z., & Li, Z. (2021). Resilience and mental health among older adults: A systematic review. *Aging & Mental Health*, 25(8), 1321–1332. <https://doi.org/10.1080/13607863.2020.1758917>
- MacLeod, S., Musich, S., Hawkins, K., Alsgaard, K., & Wicker, E. R. (2023). The impact of resilience on mental health in aging. *Journal of Applied Gerontology*, 42(2), 180–190. <https://doi.org/10.1177/07334648221081245>
- Masten, A. S., & Barnes, A. J. (2022). Resilience in children and adults: A review. *European Journal of Developmental Psychology*, 19(3), 373–392. <https://doi.org/10.1080/17405629.2021.1959280>
- Okun, M. A., Volpone, S. D., & Hill, P. L. (2020). Sense of purpose and happiness in older adulthood. *Journal of Happiness Studies*, 21(6), 2309–2328. <https://doi.org/10.1007/s10902-019-00189-7>
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2020). Purposeful sampling for qualitative data collection. *Administration and Policy in Mental Health*, 47(5), 733–745. <https://doi.org/10.1007/s10488-020-01065-0>
- Patel, V., Saxena, S., Lund, C., Thornicroft, G., Baingana, F., Bolton, P., & Unützer, J. (2020). The Lancet Commission on global mental health. *The Lancet*, 392(10157), 1553–1598. [https://doi.org/10.1016/S0140-6736\(18\)31612-X](https://doi.org/10.1016/S0140-6736(18)31612-X)
- Putnam, R. D., & Garrett, S. R. (2020). *The upswing: How America came together a century ago and how we can do it again*. Simon & Schuster.
- Santini, Z. I., Jose, P. E., York Cornwell, E., Koyanagi, A., Nielsen, L., Hinrichsen, C., Meilstrup, C., Madsen, K. R., & Koushede, V. (2020). Social disconnectedness, perceived isolation, and mental health. *Social Science & Medicine*, 265, 113271. <https://doi.org/10.1016/j.socscimed.2020.113271>
- Silverstein, M., & Giarrusso, R. (2020). Aging and family life: A decade review. *Journal of Marriage and Family*, 82(1), 302–325. <https://doi.org/10.1111/jomf.12612>
- Smith, B. J., Lim, M. H., & Ory, M. G. (2023). Place-based approaches to mental health promotion. *Health & Place*, 79, 102965.
- Stephens, A., & Deaton, A. (2021). Happiness and well-being in later life. *Nature Human Behaviour*, 5(6), 746–754. <https://doi.org/10.1038/s41562-021-01087-4>
- Teddlie, C., & Tashakkori, A. (2021). *Foundations of mixed methods research* (2nd ed.). SAGE Publications. <https://doi.org/10.4135/9781483348858>
- Teater, B., & Chonody, J. (2021). Intergenerational programs and subjective well-being. *Journal of Intergenerational Relationships*, 19(3), 256–273.
- Van der Pas, S., Castell, M. V., Cooper, C., Denking, M., Fleiner, T., & Fratiglioni, L. (2020). Unmet care needs of older people. *The Lancet Healthy Longevity*, 1(3), e127–e137. [https://doi.org/10.1016/S2666-7568\(20\)30018-X](https://doi.org/10.1016/S2666-7568(20)30018-X)
- Wiles, J. L., Wild, K., Kerse, N., & Allen, R. E. S. (2021). Resilience from the point of view of older people. *Social Science & Medicine*, 291, 114469. <https://doi.org/10.1016/j.socscimed.2021.114469>
- Windle, G. (2021). What is resilience? A review and concept analysis. *Reviews in Clinical Gerontology*, 31(1), 1–17. <https://doi.org/10.1017/S0959259820000219>
- World Health Organization. (2021). *Mental health of older adults*. WHO Public Health Review Series. <https://doi.org/10.1007/s00127-021-02086-9>