Analysis of the Current Situation and Influencing Factors of Psychological Well-Being of Elderly People in the Community

Ying Wang[1†], Zhijuan Hua[2†], Xiaopan Shi[1], Yang Wang[1], Jiaqi Fu[1], Yanling Li[3], Weihua Liu[4]*

[1]Department of Integrated Traditional Chinese and Western Medicine, Affiliated Hospital of Hebei University, Baoding 071000, Hebei Province, China
[2]Quality Control Office, Affiliated Hospital of Hebei University, Baoding 071000, Hebei Province, China
[3]Department of Nursing, Affiliated Hospital of Hebei University, Baoding 071000, Hebei Province, China
[4]Surgical Comprehensive Ward, Affiliated Hospital of Hebei University, Baoding 071000, Hebei Province, China
[†]These authors contributed equally to this work and shared the first authorship.

Corresponding author: Weihua Liu, wkzhlwh@163.com

Abstract: *Objective:* To investigate the current psychological well-being of older people in the community and analyze its influencing factors. *Methods:* A total of 265 community-dwelling older adults aged 60 and above in Baoding City, Hebei Province, were selected through convenience sampling from November 2023 to March 2024. They were surveyed using a general information questionnaire and a comprehensive well-being questionnaire, with results analyzed statistically using SPSS 27.0. *Results:* Six dimensions of the psychological well-being scale for community older adults were identified: life vitality (P50 = 4.83), health concern (P50 = 4.6), self-worth (P50 = 5.6), friendly relationships (P50 = 5.33), altruistic behavior (P50 = 5.2), personality growth (P50 = 4.67), and comprehensive well-being (P50 = 161). Multivariate regression analysis showed that social isolation (β = -0.021, $P < 0.001$), type of work (β = -0.142, $P < 0.001$), chronic disease history (β = 0.004, $P < 0.001$), need for mobility aid (β = 0.192, $P < 0.001$), and monthly income (β = 0.381, $P < 0.001$) were factors influencing psychological well-being. *Conclusion:* The psychological well-being of the elderly is slightly above moderate and requires improvement. Enhancing factors such as reducing social isolation, addressing chronic disease history, and improving financial support could improve psychological well-being in older adults.

Keywords: Community-dwelling older adults; Psychological well-being; Influencing factors

1. Introduction

Recent data from the National Bureau of Statistics indicate that by the end of 2023, China's population aged 60 and above had exceeded 296 million, reflecting a substantial elderly population and a rapid aging rate [1]. By

2050, it is projected that China's elderly population will reach 480 million, accounting for nearly one-quarter of the global elderly population, making China the country with the largest elderly population in the world [2]. While much attention is given to the physical health of older adults, equal emphasis should be placed on their mental health. Psychological well-being refers to the state in which individuals feel respected, validated, and able to achieve self-actualization within their social context. It is a key indicator of mental health [3]. Changes in the physiology of the elderly, along with the challenges of social adaptation and psychological development, often lead to a decline in self-worth. As a core component of psychological well-being, diminished self-worth can reduce overall psychological well-being, subsequently affecting both the physical and psychological health of older adults [4].

Few scholars have explored the multifaceted factors affecting the psychological well-being of elderly individuals living in communities. This study aims to assess the current state of psychological well-being among older adults in the community and analyze the influencing factors, providing a reference for developing future interventions aimed at improving psychological well-being in this population.

2. Materials and methods

2.1. General information

A convenience sampling method was used to select 265 elderly individuals as study participants from November 2023 to March 2024 in six communities in Baoding. The inclusion criteria were as follows: (1) aged ≥ 60 years; (2) possessing a certain level of comprehension and communication skills; (3) having lived in the community for ≥ 1 year; and (4) providing informed consent and voluntarily participating. The exclusion criteria were: (1) visual or hearing impairments, or language expression disorders; and (2) neurological dysfunction or uncontrolled diseases.

2.2. Research tools

2.2.1. General information questionnaire

The general information questionnaire was designed by the researcher after reviewing relevant literature and consulting with experts. It includes variables such as gender, age, ethnicity, education level, occupation (current or pre-retirement), marital status, presence of chronic diseases, history of surgeries, use of mobility aids, number of children, living situation, main source of income, hobbies and interests, and attitudes toward community-based elderly care environments.

2.2.2. Multiple Happiness Questionnaire (MHQ)

The psychological well-being module of the Comprehensive Happiness Questionnaire, developed by Miao Yuanjiang, was used. This questionnaire is a "combined" tool that can be applied either in its entirety or by selecting the psychological well-being module depending on the study's purpose. It demonstrates good internal reliability and validity. The questionnaire contains 33 items divided into six dimensions: vitality (6 items), health concerns (5 items), self-worth (5 items), friendship (3 items), altruistic behavior (5 items), and personality growth (9 items). A 7-point scale was employed (1 = obviously does not meet; 2 = does not meet; 3 = somewhat does not meet; 4 = moderate; 5 = somewhat meets; 6 = meets; 7 = obviously meets). The factor score for each dimension is calculated by dividing the total score by the number of items, with scores

ranging from 1 to 7. Higher scores indicate stronger psychological well-being. The dimensions are relatively independent yet interrelated, and Cronbach's α values for each dimension ranged from 0.6742 to 0.9056.

2.2.3 Social Isolation Scale for the Elderly (C-SIS)

The C-SIS, originally developed by Dr. Nicholson in the U.S. in 2019, was adapted into Chinese by domestic scholar Pang Hui, who tested its reliability and validity. It consists of two components: connectedness (3 items) and sense of belonging (3 items). The scale uses a 5-point Likert scale for scoring (for the first three items, $0 = 0$, $1 = 1$, $2 = 2$-3, $3 = 4$-5, and $4 = 6$ or more; for the last three items, $0 =$ strongly disagree, $1 =$ somewhat disagree, $2 =$ neutral, $3 =$ somewhat agree, and $4 =$ strongly agree, with reverse scoring for item 5). The total score ranges from 0 to 24, with lower scores indicating greater social isolation. The Cronbach's alpha coefficient for the scale was 0.749, demonstrating good reliability and validity.

2.3. Data collection

This study was approved by the Ethics Committee of Hebei University under approval number HDFYLL-KY-2024-101. Data collection was conducted through an on-site survey administered by a professionally trained investigator. The purpose and content of the survey were explained to eligible participants, and after obtaining their consent, they were asked to sign an informed consent form. The investigator assisted participants in completing the paper questionnaire to ensure they accurately understood the content. All questionnaires were distributed and collected on-site. Of the 300 questionnaires distributed, 265 were recovered, yielding a recovery rate of 88.3%.

2.4. Statistical analysis

The data were statistically analyzed using IBM SPSS Statistics 27.0. Frequency counts and percentages were used to describe the general information of the elderly participants. Multivariate regression analysis was employed to analyze the factors affecting psychological well-being.

3. Results

3.1. General information on older persons in the community

A total of 265 community-dwelling elderly individuals were included in this study, comprising 136 males (51.3%) and 129 females (48.7%). The average age was 70.74 ± 7.15 years. Among the participants, 122 (46.0%) had an educational level below primary and secondary school. A physically active occupation was reported by 147 (55.5%) participants. Chronic diseases were present in 203 (76.6%) participants. Further details are shown in **Table 1**.

Table 1. General information on older people in the community ($n = 265$)

Variable	Categories	Number of persons (n)	Composition ratio (%)
Gender	Male	136	51.3
	Female	129	48.7
Age (years)	60–69	148	55.8
	70–79	82	30.9
	≥ 80	35	13.2

Table 1 (Continued)

Variable	Categories	Number of persons (*n*)	Composition ratio (%)
Ethnicity	Han	240	90.6
	Minority	25	9.4
Educational level	Primary or below	122	46.0
	Junior high school	95	35.8
	High school or above	48	18.1
Type of occupation	Mental	60	22.6
	Physical	147	55.5
	Mixed	58	21.9
Marital status	Married	226	85.3
	Unmarried/single	39	14.7
Chronic disease status	None	62	23.4
	Present	203	76.6
Surgical history	None	182	68.7
	Present	83	31.3
Use of mobility aid	Yes	77	29.1
	No	188	70.9
Number of children	None	16	6
	1–2	157	59.2
	≥ 3	92	34.7
Living situation	Living alone	31	11.7
	Not living alone	234	88.3
Monthly salary (CNY)	≤ 3,000	154	58.1
	> 3,000	111	41.9
Hobbies	None	75	28.3
	Present	190	71.7
Attitudes toward elderly care	Unsatisfied	11	4.2
	General	132	49.8
	Satisfied	122	46.0

3.2. Current status of psychological well-being of the elderly

Out of the 265 valid responses, the total psychological well-being score was 161, with the highest score observed in the self-worth dimension (5.6), followed by friendly relationships (5.33). See **Table 2** for details.

Table 2. Scores on the six dimensions of psychological well-being and total psychological well-being of older adults in the community (*n* = 265)

	P5	P50	P95	Min value	Max value
Vigor of life	2.33	4.83	6	1.5	7
Health concerns	2.6	4.6	6	1.2	6.9
Self-worth	3.2	5.6	6.8	1.8	6.8
Friendly relationship	2	5.33	7	1	7
Altruistic behavior	2.6	5.2	6.8	1	6.8
Personality growth	3.33	4.67	5.89	2	6.33
Psychological well-being	109.60	161	202	66	224

3.3. Relationship between social isolation and psychological well-being of older people in the community

Of the 265 participants, 129 (48.7%) had a social isolation score of > 14, while 136 (51.3%) had a score of ≤ 14. Additionally, 145 (54.7%) had a composite well-being score of > 158, while 120 (45.3%) had a score of ≤ 158. See Table 3 for details.

Table 3. Relationship between social isolation and psychological well-being (*n* = 265)

Variable	Score (mean ± SD)	Category	Number of persons (*n*)	Composition ratio (%)
Social isolation	14.15 ± 3.73	> 14 ≤ 14	129 136	48.7 51.3
Aggregate well-being	158.91 ± 27.73	> 158 ≤ 158	145 120	54.7 45.3

3.4. Single-factor analysis of psychological well-being of older people in the community

Demographic variables (such as age and gender), social characteristics (such as living arrangements and attitudes toward community care), health-related factors (such as chronic disease status and surgical history), and social support were analyzed using independent samples *t*-tests, ANOVA, and chi-squared tests. See **Table 4** for results.

Table 4. Single-factor analysis of psychological well-being of older people in the community (*n* = 265)

Variable	Psychological well-being score (mean ± SD)	$t/F/\chi^2$ value	*P*-value
Gender		0.003	0.629
Male	138.96 ± 33.60		
Female	147.35 ± 23.86		
Age (years)		0.532*	0.044
60–69	146.00 ± 24.00		
70–79	137.99 ± 26.89		
≥ 80	145.74 ± 23.88		

Table 4 (Continued)

Variable	Psychological well-being score (mean ± SD)	t/F/χ² value	P-value
Ethnicity		0.010	0.719
Han	146.24 ± 23.71		
Minority	135.32 ± 23.80		
Educational level		5.958*	0.003
Primary or below	145.00 ± 34.00		
Junior high school	136.39 ± 33.61		
High school or above	157.63 ± 23.70		
Type of occupation		0.076*	0.827
Mental	144.00 ± 24.00		
Physical	145.23 ± 23.68		
Mixed	144.05 ± 33.65		
Marital status		3.828	0.051
Married	146.42 ± 23.52		
Unmarried/single	127.62 ± 34.81		
Chronic disease status		0.522	0.004
None	157.52 ± 23.60		
Present	136.73 ± 33.67		
Surgical history		0.098	0.354
None	146.52 ± 23.78		
Present	163.35 ± 13.48		
Use of mobility aid		0.259	0.005
Yes	153.34 ± 23.93		
No	146.48 ± 33.60		
Children's situation		1.616	0.003
None	140.06 ± 32.84		
Present	145.41 ± 33.62		
Number of children		6.533	0.011
1–2	144.10 ± 33.84		
≥ 3	145.91 ± 33.16		
Living situation		0.720	0.020
Living alone	131.94 ± 24.17		
Not living alone	143.44 ± 23.57		
Monthly salary (CNY)		0.908	0.034
≤ 3,000	144.32 ± 33.86		
> 3,000	135.92 ± 33.53		

Table 4 (Continued)

Variable	Psychological well-being score (mean ± SD)	$t/F/\chi^2$ value	*P*-value
Hobbies		0.286	0.020
None	136.24 ± 43.88		
Present	144.51 ± 33.61		
Attitudes toward elderly care		0.666*	0.415
Unsatisfied	135.00 ± 42.00		
General	143.09 ± 33.59		
Satisfied	144.32 ± 33.86		

3.5. Multivariate regression analysis of the psychological well-being of older people in the community

Multiple stepwise regression analysis was conducted with psychological well-being as the dependent variable (P50 = 161) and factors such as age, education level, monthly income, marital status, residence, chronic disease status, hobbies, and attitudes toward community care as independent variables. The results showed that type of work, chronic disease status, need for a mobility aid, and monthly income were significant factors, explaining 20.3% of the total variance in psychological well-being (**Table 5**).

Table 5. Multivariate regression analysis of psychological well-being scores of older adults (*n* = 265)

Variable	*B*	*β*	*t*	*P*
Constant	96.301		8.350	0.000***
Type of occupation	-0.719	-0.021	-0.324	0.000***
Chronic disease status	-3.917	-0.142	-2.396	0.000***
Use of mobility aid	0.246	0.004	0.071	0.000***
Monthly income	7.442	0.192	2.882	0.000***
Living situation	2.840	0.381	6.609	0.001***

R^2 = 0.203; F = 13.073; *P* < 0.001

4. Discussion

4.1. Current status of psychological well-being of older people in the community

With the development of society and advancements in the healthcare system, the number of elderly individuals in the community has been increasing year by year. While life expectancy has risen, the psychological well-being of the elderly has not met the expected levels. The dimension of self-worth had the highest score, consistent with the findings of Kui Jing [5] and Gao Hongying [6], followed by the dimension of friendly relationships. This suggests that the psychological well-being of the elderly is not only related to their sense of personal value but also depends on their social interactions. The two lowest-scoring dimensions were health concerns and personality growth. As individuals age, they often reach a level of maturity in terms of personality. Most elderly individuals in the community are retired and have rich life experiences, reducing the need for

further personality development. The lower scores for health concerns may be attributed to the fact that the elderly in this study are older and may have limited financial resources.

4.2. Factors influencing the psychological well-being of older people in the community

4.2.1. Types of occupation

Studies have shown that older individuals who engage in semi-manual or mental work tend to have higher levels of psychological well-being. This may be due to the reduced physical demands and higher social status associated with mental work, which contributes to a higher level of psychological well-being.

4.2.2. Social isolation

Other scholars have studied the impact of psychological intervention on the subjective well-being of elderly individuals in the community [7]. By participating in community psychological intervention activities, the elderly formed friendships and, during group discussions, shared their experiences and feelings about aging. These activities—such as re-employment, housework, participating in social and cultural events, reading, singing, dancing, keeping pets, and managing family relationships—allowed them to interact with others, proving their capability to remain active members of society. This sense of social belonging significantly enhanced their psychological well-being. As a result, the elderly who effectively utilize community resources can increase their internal resources and experience a stronger sense of well-being [8]. Research by Li Yue'e and Lu Shan [9] further highlights that a higher level of psychological well-being enables elderly individuals to adapt more easily to old age and achieve healthy aging. Psychological well-being is closely linked to the realization of one's potential and the ability to adapt to changing environments, directly affecting one's quality of life and sense of purpose [10].

4.2.3. Chronic diseases

Studies have shown that a higher number of chronic illnesses is associated with a lower level of psychological well-being among older adults. This may be due to the physical and emotional suffering caused by illness, as well as the financial burden it places on the elderly, potentially depleting their savings and reducing their psychological well-being.

4.2.4. Mobility aid requirements

This study indicates that older adults who do not require the use of mobility aids, such as walkers, have a higher sense of psychological well-being. Elderly individuals who need mobility aids often face challenges, such as requiring assistance from others and experiencing difficulties in moving around, which may contribute to low self-esteem and other negative psychological effects. Consequently, those who do not need a walker experience higher psychological well-being.

4.2.5. Monthly income

The results of this study show that a higher monthly income is associated with greater psychological well-being among the elderly. These findings differ from those of studies conducted in Western countries. In developing countries, financial security is crucial for the elderly to feel secure, which may explain why psychological well-being increases with higher monthly income.

5. Conclusion

The study found that type of work, social isolation, chronic illness, need for mobility aids, and monthly income are significant factors influencing the psychological well-being of older people. It is recommended that efforts focus on modifiable factors, such as organizing frequent group activities in the community, to improve health, mood, and social interaction, ultimately enhancing psychological well-being. Future studies should explore a broader range of factors that influence the psychological well-being of older adults to implement targeted interventions that ensure a high quality of life in old age.

Funding

Disclosure statement

The authors declare no conflict of interest.

References

[1] Chen W, Yan F, Zhao C, et al., 2024, The Elderly Population is Nearly 300 Million, How to Open A New Blue Ocean for Silver Hair Economy. Xinhua Daily Telegraph, 2024-04-23(006).

[2] Wu Y, Li J, 2022, The Concept and Construction of Positive View of Aging. Administrative Reform, 2022(11): 71–78.

[3] Zhang L, Zuo B, 2007, Self-Actualized Happiness – A Review of Research on Psychological Happiness. Progress in Psychological Science, 2007(1): 134–139.

[4] Bai Y, Fan R, Zhao Y, et al., 2021, Effects of Mindfulness and Self-Perceived Aging on the Psychological Well-Being of Community-Dwelling Older Adults. Chinese Journal of Gerontology, 41(16): 3579–3581.

[5] Kui J, 2011, Research on Retirees' Happiness and Its Related Factors, dissertation, Harbin Normal University.

[6] Gao H, 2008, Research on the Happiness of Community Elderly in Nanchang City, dissertation, Nanchang University.

[7] Xiao C, Li S, Xie Z, et al. 2014, Effects of Psychological Interventions on the Subjective Well-Being of Community-Dwelling Older Adults. Chinese Journal of Gerontology, 34(7): 1923–1924.

[8] Ye J, 2022, The Impact of Community Participation on the Well-Being of Older Adults Under the Perspective of Successful Aging, dissertation, Nanjing Normal University.

[9] Li Y, Lu S, 2018, Mediating Effects of Physical Health and Mental Health between Social Support and Subjective Well-Being in Older Adults. China Public Health, 34(9): 1274–1276.

[10] Guo Q, Chen C, 2021, The Moderating Effect of Economic Income on the Psychological Well-Being of Chronically Ill Older Adults in the Community. Journal of North China University of Science and Technology (Medical Edition), 23(1): 55–58 + 84.