



Psychological Capital Empowerment and Well-being of the Oldest-Old: A Service Model and Evidence from Chengdu, China

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Abstract. As populations age rapidly, enhancing the well-being of the oldest-old has become a key challenge in longevity societies. Based on psychological capital theory, this study examines how psychological resources can improve the quality of life among adults aged 80 and above. Using Chengdu, China as a case, a community-based service model integrating psychological capital into elderly care is developed.

Drawing on interviews and field research, the study identifies hope, resilience, optimism, and self-efficacy as key factors influencing well-being. The proposed model combines community support, family involvement, and professional interventions. Findings suggest that psychological capital empowerment significantly improves emotional well-being, social participation, and life satisfaction.

This study contributes to the psychology of longevity by offering a practical framework for promoting well-being among the oldest-old.

Keywords: Psychological Capital, Oldest-Old, Longevity,Active Aging

1 Introduction

1.1 Research Background

Population aging has become a global trend. By the end of 2025, China's population aged 65 and above reached 233 million, accounting for 15.9% of the total population, indicating that China has entered a moderately aging society^[1]. Chengdu also exhibits characteristics of moderate aging: by the end of 2024, the number of elderly people aged 60 and above in Chengdu reached 3.77 million, accounting for 23.23% of the registered population^[2].

The concept of active aging emphasizes not only extending life expectancy but also improving the quality of life for the elderly. Life satisfaction, as the core cognitive component of subjective well-being, is a key indicator for measuring the quality of life in old age^[3]. However, current elderly care services often focus on physical care and

risk avoidance, lacking effective pathways for the systematic enhancement of the elderly's mental well-being.

The rise of positive psychology has provided a new paradigm for aging research. Unlike traditional psychology, which focuses on "illness and deficits," positive psychology centers on "strengths and development," emphasizing the enhancement of individual positive psychological resources to improve well-being^[4]. Psychological capital, a core concept in positive psychology, comprises four dimensions—self-efficacy, hope, resilience, and optimism—and is considered a developable and measurable positive psychological state^[5].

1.2 Significance of the Study

Theoretical Significance: To enrich localized empirical research on positive psychology in the field of Chinese gerontology, and to reveal the mechanism through which psychological capital influences life satisfaction among the oldest-old.

Practical Significance: Based on the research findings, to construct an operational "well-being empowerment" service model framework, providing a scientific basis for frontline elderly care institutions, community workers, and policymakers.

2 Research Subjects and Methods

2.1 Participants

The study was conducted between January and March 2026 in Chengdu, China. A total of 83 adults aged 80 years and above (the oldest-old) were recruited from two elderly care institutions and two community settings.

The inclusion criteria were as follows: (1) aged 80 years or above; (2) having resided in the current location for at least six months; and (3) providing informed consent and voluntarily participating in the study.

Among the participants, 49.4% were male and 50.6% were female. Most participants (60.2%) were aged between 85 and 89 years, and 21.7% were aged 90 years or above. The majority resided in elderly care institutions (84.3%), while a smaller proportion lived in community settings (15.7%). In terms of functional status, 30.1% were fully independent, whereas 69.9% were partially dependent. Additionally, 84.3% of the participants reported having chronic diseases.

2.2 Research Subjects and Methods

Positive Psychological Capital Questionnaire (PPQ): The questionnaire developed by Zhang Kuo et al. (2010) was adopted ^[6], comprising four dimensions: self-efficacy, resilience, hope, and optimism, with a total of 26 items. A 7-point Likert scale was used (1 = strongly disagree, 7 = strongly agree), with higher scores indicating higher levels of psychological capital. The Cronbach's α coefficient of the original scale is 0.90.

Satisfaction with Life Scale (SWLS): The Chinese version developed by Diener et al. (1985) was adopted ^[7], consisting of 5 items, scored on a 7-point scale, with higher scores indicating greater life satisfaction. The Cronbach's α coefficient of the Chinese version ranges from 0.79 to 0.90.

Self-Compiled Background Information Sheet: This was used to collect demographic variables, health status, and social support information.

2.3 Data Collection and Analysis

Approval was obtained from the institutional and community management departments. After obtaining informed consent, questionnaires were completed on-site under the guidance of the researcher or were filled out on behalf of the participants when necessary. SPSS 26.0 was used for descriptive statistics, independent samples t-test, correlation analysis, and stepwise regression analysis.

3 Results

3.1 Descriptive Statistics of Psychological Capital and Life Satisfaction

The overall level of psychological capital among the oldest-old was moderately high, with a mean item score of 4.94. Among its four dimensions, optimism scored the highest ($M = 5.65$), followed by resilience ($M = 4.84$), hope ($M = 4.76$), and self-efficacy ($M = 4.59$).

The mean score of life satisfaction was 23.47 ($SD = 6.35$), corresponding to an average item score of 4.69, indicating a moderate level of life satisfaction. A total of 58.2% of participants reported agreement or strong agreement with positive life evaluation items, suggesting that most participants held a generally positive view of their

current lives. However, only 37.4% agreed with the statement that they would change little if they could live their lives over again, indicating the presence of some regret or ambivalence.

3.2 Group Differences in Psychological Capital and Life Satisfaction

Independent samples *t*-tests revealed that fully independent participants reported significantly higher levels of psychological capital ($M = 135.20$, $SD = 16.45$) compared to partially dependent participants ($M = 125.58$, $SD = 18.02$; $t = 2.27$, $p = 0.026$). Similarly, life satisfaction was significantly higher among fully independent participants ($M = 25.87$, $SD = 5.96$) than among partially dependent participants ($M = 22.58$, $SD = 6.18$; $t = 2.18$, $p = 0.032$).

A one-way ANOVA indicated significant differences in psychological capital across groups with different frequencies of children's visits ($F = 4.58$, $p = 0.013$). Post hoc comparisons showed that participants receiving visits at least once per week reported significantly higher psychological capital than those with less frequent visits.

Furthermore, participants who reported having someone to rely on demonstrated significantly higher psychological capital ($M = 131.45$, $SD = 17.23$) than those without such support ($M = 117.89$, $SD = 18.56$; $t = 2.98$, $p = 0.004$). Similarly, those who were able to share their concerns with others reported higher psychological capital than those who could not ($p = 0.002$).

3.3 Correlation Between Psychological Capital and Life Satisfaction

Pearson correlation analysis revealed a significant positive correlation between overall psychological capital and life satisfaction ($r = 0.56$, $p < 0.01$).

At the dimensional level, all four components of psychological capital were positively correlated with life satisfaction. Among them, optimism showed the strongest association ($r = 0.62$, $p < 0.01$), followed by self-efficacy ($r = 0.48$, $p < 0.01$), resilience ($r = 0.41$, $p < 0.01$), and hope ($r = 0.35$, $p < 0.01$).

3.4 Regression Analysis of Life Satisfaction

Stepwise multiple regression analysis was conducted to identify significant predictors of life satisfaction. In Model 1, optimism entered the regression equation as a significant predictor ($\beta = 0.62$, $p < 0.001$), explaining 38.4% of the variance in life satisfaction ($R^2 = 0.384$).

In Model 2, self-efficacy was added to the model ($\beta = 0.29$, $p = 0.005$), increasing the explained variance to 43.6% ($R^2 = 0.436$). Optimism remained a significant predictor ($\beta = 0.48$, $p < 0.001$).

Resilience and hope did not enter the regression model.

3.5 Summary of Key Findings

Overall, the results indicate that psychological capital is positively associated with life satisfaction among the oldest-old. Optimism emerged as the strongest predictor, followed by self-efficacy. In addition, functional independence and social support variables (e.g., children's visits, emotional support, and perceived reliance) were significantly associated with higher levels of psychological capital.

4 Discussion

4.1 Psychological Capital Among the Oldest-Old: The Dominant Role of Optimism

The present study found that psychological capital among the oldest-old is at a moderately high level, with optimism emerging as the most prominent dimension. This finding is consistent with previous research suggesting that older adults tend to maintain a relatively positive outlook despite physical decline.

More importantly, optimism demonstrated the strongest predictive power for life satisfaction. This result supports the theory of learned optimism proposed by Seligman, which posits that individuals who attribute negative events to temporary and external factors are more likely to maintain positive emotions and higher levels of well-being. For the oldest-old, who often face chronic health issues and functional limitations, such cognitive patterns may serve as a crucial psychological buffer.

In contrast, resilience and hope did not significantly predict life satisfaction in the regression model. One possible explanation is that resilience is more relevant in response to acute stress or major life events, whereas the challenges faced by the oldest-old are often gradual and cumulative. Similarly, hope, which involves goal-setting and future orientation, may be less salient for individuals in very late life stages, who may focus more on present-oriented experiences.

4.2 The Role of Self-Efficacy: Perceived Control and Daily Functioning

Self-efficacy was identified as the second significant predictor of life satisfaction. This finding highlights the importance of perceived control in later life. When older adults believe they are capable of managing daily activities, they are more likely to

experience a sense of autonomy and dignity, which contributes to higher life satisfaction.

The results also showed that functional independence is significantly associated with higher psychological capital and life satisfaction. This suggests that declines in physical functioning may undermine self-efficacy, thereby negatively affecting overall well-being. From the perspective of resource conservation theory, the loss of physical and functional resources may lead to a reduction in psychological resources, creating a negative feedback loop.

4.3 Social Support as a Critical Contextual Resource

This study confirms the significant role of social support in shaping psychological capital. Participants who received more frequent visits from their children, had someone to rely on, or were able to share their concerns reported significantly higher levels of psychological capital.

These findings align with previous research indicating that perceived social support is a stronger predictor of well-being than objective support. Emotional connections, such as being cared for and having opportunities for self-expression, play a vital role in maintaining psychological resources among the oldest-old.

Notably, a considerable proportion of participants lacked adequate social support, with 21.7% reporting no reliable support and 34.9% having no one to confide in. These gaps highlight a critical area for intervention, suggesting that strengthening social support networks should be a priority in elderly care services.

4.4 Health Constraints and Their Impact on Psychological Capital

The high prevalence of chronic diseases (84.3%) and partial dependence (69.9%) among participants reflects the substantial health challenges faced by the oldest-old. Health conditions may negatively affect psychological capital through multiple pathways.

First, chronic illnesses can directly reduce positive emotional experiences. Second, limitations in daily functioning may restrict social participation, thereby weakening both self-efficacy and social support. Third, uncertainty regarding disease progression may erode optimism about the future.

These findings suggest that physical health and psychological well-being are closely intertwined, and interventions aimed at improving well-being should adopt an integrated approach.

4.5 Implications for a “Well-being Empowerment” Service Model

Based on the empirical findings, this study proposes a “well-being empowerment” service model centered on the development of psychological capital.

The model emphasizes three core principles: strength identification, resource activation, and environmental support. Correspondingly, three intervention pathways are suggested:

Optimism cultivation, through practices such as focusing on positive experiences, reframing negative events, and gratitude exercises;

Self-efficacy enhancement, by designing achievable tasks, providing positive feedback, and encouraging autonomous decision-making;

Social support strengthening, by promoting intergenerational interaction, establishing emotional communication channels, and building reliable support networks.

In practice, these interventions can be integrated into daily care routines, such as incorporating positive communication into caregiving, organizing life story-sharing sessions, and developing small-scale engagement activities that foster a sense of achievement.

5 Conclusion

5.1 Main Findings

This study examined the relationship between psychological capital and life satisfaction among the oldest-old in Chengdu, China. The findings indicate that psychological capital is generally at a moderately high level, with optimism emerging as the most prominent dimension, while self-efficacy appears relatively weaker.

Psychological capital was found to be significantly and positively associated with life satisfaction. Among its components, optimism and self-efficacy were identified as the key predictors, jointly explaining a substantial proportion of variance in life satisfaction.

In addition, social support plays a crucial role in shaping psychological capital. Participants with reliable support and opportunities for emotional expression reported significantly higher levels of psychological capital. Conversely, health-related constraints, including chronic diseases and reduced functional independence, were negatively associated with psychological resources.

5.2 Practical Implications

The findings of this study provide important implications for elderly care practice and policy-making.

For elderly care institutions, psychological capital assessment can be incorporated into routine evaluations, and caregivers can be trained to adopt strength-based communication approaches. Structured activities that promote positive experiences and a sense of achievement should also be developed.

For community workers, particular attention should be paid to high-risk groups lacking social support. Community-based programs that enhance social participation and foster emotional connections are essential for improving well-being.

For policy-makers, the cultivation of psychological capital should be integrated into the quality evaluation system of elderly care services. Greater support should be given to intergenerational programs and caregiver training, alongside strengthened health management for older adults with chronic conditions.

5.3 Research Limitations and Prospects

This study has several limitations. First, the sample was limited to Chengdu, which may affect the generalizability of the findings. Second, the cross-sectional design does not allow for causal inference between psychological capital and life satisfaction.

Future research could employ multi-site sampling and longitudinal designs to further examine causal mechanisms and enhance external validity. In addition, intervention-based studies are recommended to test the effectiveness of psychological capital development programs in improving well-being among the oldest-old.

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