

## Exploring the relationship between meaning in life and subjective well-being among older adults in China

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**Abstract:** The accelerating aging of China's population has raised significant attention to the mental health and well-being of older adults. This descriptive correlational study aimed to examine the levels of meaning in life and subjective well-being among a select group of older adults in Chengde City, China, and to explore the relationship between these two constructs. A total of 170 participants were recruited using purposive sampling, and data were collected using an online survey comprising a demographic questionnaire, the Meaning in Life Questionnaire–Chinese Version (MLQ-C), and the Personal Well-Being Index–Chinese Version (PWI-C). Statistical analyses indicated that participants reported generally high levels of meaning in life and subjective well-being. Significant differences in meaning in life were found based on gender and education level, whereas subjective well-being did not significantly differ across demographic variables. A moderate positive correlation ( $r = .55$ ,  $p < .001$ ) was observed between meaning in life and subjective well-being. These findings underscore the importance of fostering a sense of meaning in life to promote the mental health and quality of life among older adults. Practical implications for nursing practice, community interventions, and future research directions are discussed, highlighting the need for targeted strategies to enhance life meaning and well-being in aging populations.

**Keywords:** *Aging in China, Descriptive correlational study, Meaning in life, Mental health, Older adults, Quality of life, Subjective well-being.*

### 1. Introduction

The accelerating aging of China's population has brought increasing attention to the physical, emotional, and psychological well-being of older adults [1]. According to the National Bureau of Statistics of China [2], individuals aged 60 and above, as of 2023 accounted for almost 20 percent of the population, highlighting the urgent need to address the challenges and opportunities associated with aging. In Chengde City, Hebei Province; a region characterized by rapid demographic aging yet relatively uneven economic development, older adults face unique experiences shaped by urban-rural divides, social changes, and evolving family dynamics [3, 4]. As individuals transition into later stages of life, maintaining mental health, fostering a sense of purpose, and ensuring subjective well-being become critical aspects of promoting healthy and fulfilling aging experiences [5-7]. In this context, meaning in life and subjective well-being emerge as key psychological constructs that warrant deeper investigation.

Meaning in life refers to an individual's perception of purpose, coherence, and significance within their existence, while subjective well-being encompasses personal evaluations of life satisfaction and emotional experiences [8, 9]. Prior research has demonstrated that higher meaning in life is associated with enhanced psychological resilience, greater life satisfaction, and improved health outcomes among older

adults; sometimes including [10, 11], this actually holds true even with patients in the end-of-life care situation [12]. However, the relationship between meaning in life and subjective well-being has primarily been explored in younger populations or clinical groups, with relatively limited focus on community-dwelling older adults in China. Theoretical models such as Henderson's Needs Theory [13], which emphasizes that satisfying physiological, psychological, and social needs can significantly impact individuals' well-being. In addition, Tornstam's Theory of Gerotranscendence [14, 15] suggests that aging involves a psychological shift toward deeper reflection on life's meaning, fostering inner peace and subjective fulfillment. These frameworks collectively highlight the vital role of life meaning in shaping well-being during older adulthood.

Given these considerations, this study seeks to explore the levels of meaning in life and subjective well-being among a select group of older adults in Chengde City and examine the relationship between these two constructs. By addressing this gap, the study aims to contribute valuable insights into the psychological aspects of aging within the Chinese cultural context, offering theoretical and practical implications for enhancing the quality of life among older adults. Understanding how meaning in life influences subjective well-being can inform the development of nursing practices, community interventions, and social policies designed to support successful aging trajectories.

Specifically, this study aims to:

- Describe the demographic profile of older adults in terms of gender, age, living arrangements, number of children, and education level.
- Determine the overall levels of meaning in life and subjective well-being among older adults.
- Examine differences in meaning in life across demographic variables (gender, age, living arrangement, number of children, and education level).
- Examine differences in subjective well-being across demographic variables (gender, age, living arrangement, number of children, and education level).
- Investigate the relationship between meaning in life and subjective well-being among older adults.

The findings of this study hold important implications for multiple stakeholders. For policymakers and government agencies, understanding the psychological factors that contribute to the well-being of older adults can guide the creation of supportive social environments, community-based services, and age-friendly initiatives aligned with national strategies for active aging. For healthcare providers and nursing practitioners, insights into the relationship between meaning in life and subjective well-being offer a foundation for designing person-centered interventions that address not only physical health but also emotional and existential needs. For families and communities, the study highlights the importance of fostering environments that nurture older adults' sense of purpose, connectedness, and fulfillment in later life. Finally, for researchers and academics, the study extends existing knowledge on positive aging and highlights avenues for future research in gerontological psychology and cross-cultural studies on aging.

## 2. Literature Review

### 2.1. Theoretical Concepts

Meaning in life refers to an individual's perception that their existence holds purpose, coherence, and significance [9]. It reflects a subjective evaluation of whether one's life has direction, value, and importance [16]. Meanwhile, subjective well-being encompasses life satisfaction, the presence of positive emotions, and the absence of negative emotions, and serves as a core indicator of psychological health [8]. Both constructs are fundamental to understanding quality of life, particularly among older adults transitioning into late adulthood [17, 18].

From a theoretical standpoint, Henderson's Needs Theory [13] emphasizes that meeting individuals' physiological, psychological, and social needs promotes well-being. In aging populations, satisfaction of these multi-level needs plays a crucial role in maintaining a sense of life meaning and emotional satisfaction [19]. Complementing this, Tornstam's Theory of Gerotranscendence [14] posits that older adults undergo a transformation characterized by deeper reflection, a broadened existential view, and

heightened acceptance of life's meaning. Together, these theories provide a strong foundation for investigating how meaning in life relates to subjective well-being among older adults. Connecting to the present study, exploring meaning in life and subjective well-being through these theoretical lenses is essential to understanding the psychological needs of older adults in a rapidly aging Chinese society. Hence, the current study adopts both Henderson's and Tornstam's frameworks to explain how meaning construction and need satisfaction may influence well-being outcomes.

## 2.2. *Meaning in Life*

Research on meaning in life has shown its profound importance for psychological resilience, mental health, and quality of life across different populations [20]. Among older adults, a high sense of life meaning has been linked to reduced depression, enhanced coping strategies, and greater life satisfaction [21]. Studies have highlighted that factors such as social support, spirituality, and opportunities for personal growth contribute significantly to perceptions of life meaning during aging [12, 22, 23]. Within the Chinese cultural context, life meaning among older adults is often rooted in family relationships, intergenerational support, and continued contributions to society [24–26]. However, with modernization and changes in family structures, maintaining a strong sense of meaning has become more challenging for older adults, particularly in rural or economically disadvantaged regions [27]. Connecting to the present study, investigating the levels of meaning in life among older adults in Chengde City provides insights into how socio-cultural and environmental factors shape meaning construction. Guided by Gerotranscendence Theory [15], the study recognizes that meaning in life is not static but evolves with aging, thus requiring continuous exploration.

## 2.3. *Subjective Well-Being*

Subjective well-being, encompassing life satisfaction and emotional balance, serves as a key indicator of mental health among older adults [6]. In fact, the topic of well-being has been studied extensively in various context and profession, early from in-school students [28] and teachers [29], to professional at work. Numerous studies have found that subjective well-being tends to remain stable or even improve slightly with age, contrary to assumptions of inevitable decline [30, 31]. Factors that enhance older adults' well-being include physical health, positive social relationships, community engagement, and financial security [32–34]. In China, subjective well-being among older adults has been positively associated with social participation, access to healthcare, and perceived respect from younger generations [35, 36]. Nevertheless, disparities persist between urban and rural populations, where access to resources and social support may differ markedly. Connecting to the present study, assessing the level of subjective well-being among older adults in Chengde provides valuable evidence on how environmental and psychosocial factors converge to influence happiness during later life. Anchored in Henderson's Needs Theory, the study highlights that fulfillment of basic and higher-order needs underpins the subjective evaluation of life satisfaction.

## 2.4. *Meaning in Life and Subjective Well-Being*

The relationship between meaning in life and subjective well-being has been well-documented across various age groups. Higher life meaning is associated with greater positive affect, life satisfaction, and resilience, while the lack of meaning correlates with loneliness, depression, and poorer health outcomes [37, 38]. Specifically, among older adults, life meaning is a critical psychological resource that buffers against existential anxieties and promotes adaptive coping in the face of age-related losses [39]. While many studies have explored these associations in Western contexts, relatively fewer have examined the connection between meaning in life and subjective well-being among older adults in China, especially within less urbanized regions like Chengde. Cultural factors, such as filial piety, collectivism, and changing societal roles in old age, may uniquely shape this relationship [40, 41]. Connecting to the present study, investigating the correlation between meaning in life and subjective well-being offers empirical evidence that bridges theoretical understanding (such as the Gerotranscendence Theory and

the Needs Theory) and practical implications for supporting aging populations. It addresses a critical gap in research focusing on community-dwelling older adults in mid-sized Chinese cities.

### 2.5. *Synthesis of Literature*

Overall, the reviewed literature establishes that meaning in life and subjective well-being are essential to the psychological health of older adults. Theoretical frameworks such as Henderson's Needs Theory and Tornstam's Theory of Gerotranscendence collectively emphasize that the fulfillment of basic needs, along with psychological growth and existential reflection, are integral to achieving a high quality of life during aging. Although substantial research links life meaning to subjective well-being in general populations, there remains a lack of context-specific studies among older adults in smaller Chinese cities like Chengde, where social, economic, and cultural transformations might uniquely influence aging experiences. This study addresses the identified gap by exploring the relationship between meaning in life and subjective well-being among a sample of older adults in Chengde City, guided by relevant psychological and aging theories. By doing so, it offers valuable insights into the dynamics of mental health in later life and contributes to the development of targeted interventions that promote successful and fulfilling aging.

## 3. Materials and Method

### 3.1. *Study Design*

The current study adopted a quantitative, descriptive-correlational design with a goal to explore the relationship between meaning in life and subjective well-being among older adults. A cross-sectional survey method was employed to gather data within a specified time frame [42]. This design was selected to describe the levels of meaning in life and subjective well-being among the participants and to examine the association between these two constructs without manipulating any variables.

### 3.2. *Participants and Procedure*

Participants were older adults aged 60 years and above residing in the Hamashi Community of Chengde City, Hebei Province, China. A purposive sampling technique was utilized to recruit individuals who met specific inclusion criteria [43]: (1) aged 60 years or older; (2) literate or capable of independently completing the survey; (3) free from severe physical illnesses, cognitive impairments, or major sensory disabilities; and (4) willing to participate voluntarily. Individuals with severe mental illness or major communication difficulties were excluded. Sample size calculation using G\*Power indicated that a minimum of 170 participants was needed to achieve 85% statistical power for medium effect sizes [44]. The community director facilitated initial contact with eligible older adults. After obtaining ethical approval and community consent, an online survey link was distributed through a *WeChat* communication group. Participants accessed the survey through a secure platform, completed an informed consent form electronically, and then proceeded to the survey questionnaires. Each participant responded anonymously and could withdraw at any point without penalty. Data collection was conducted from October to November 2024.

Table 1 presents the demographic characteristics of the 170 older adults who participated in the study. In terms of sex, the majority were male (62.4%), while females accounted for 37.6% of the sample. Regarding age, 55.9% were between 60 to 73 years old, and 44.1% were aged 74 to 88 years. Most participants lived with a partner or child (83.5%), whereas only 16.5% reported living alone. In relation to family structure, 95.3% of the participants had more than two children, reflecting the persistence of traditional multi-child family patterns despite China's historical one-child policy. Only 4.7% reported having only one child. With respect to educational attainment, a majority (61.8%) had completed primary education, followed by 26.5% with junior high school education, and 11.7% with senior high school education. Overall, the sample primarily consisted of older adults with lower educational backgrounds

and multi-generational family structures, characteristics reflective of the socio-demographic composition of Chengde City's aging population.

**Table 1.**  
Demographic Background of Participants ( $N = 170$ ).

Demographic	<i>n</i>	%
Age group		
60–73 years old	95	55.9
74–88 years old	75	44.1
Gender		
Male	106	62.4
Female	64	37.6
Living arrangements		
Living with partner or child	142	83.5
Living alone	28	16.5
Number of children		
One	8	4.7
More than two children	162	95.3
Educational level		
Primary education	105	61.8
Junior high school education	45	26.5
Senior high school education	20	11.7

### 3.3. Instrument and its Validity

The survey instrument consisted of three sections comprising of: (1) a demographic questionnaire, (2) the Meaning in Life Questionnaire–Chinese Version (MLQ-C), and (3) the Personal Well-being Index–Chinese Version (PWI-C). More specifically, the first part of the survey collected general demographic information to describe the participant profile and allow for group comparisons in the analysis. The demographic variables included gender (male or female), age group (60–73 years old and 74–88 years old), living arrangements (living alone or living with a partner or child), number of children (only child or more than two children), and educational level (primary level, junior high school, or high school). These variables were selected based on their theoretical relevance to aging, psychological well-being, and meaning-making in later life. The demographic profile allowed the researchers to explore patterns in subjective well-being and meaning in life across subgroups of older adults.

Part 2 is the MLQ-C, which is adapted from Wang [45] from the original scale developed by Steger et al. [9], measures two dimensions: the presence of meaning and the search for meaning. It consists of 10 items rated on a 7-point Likert [46] scale, with higher scores indicating stronger meaning in life. Sample items include “*I know the meaning of my life*” and “*I am always searching for something that makes my life feel significant.*” In previous validation studies, the Chinese version demonstrated strong internal consistency, with reported Cronbach's [47] alpha coefficients of .90 for the presence subscale, .82 for the search subscale, and .88 for the total scale. Part 3 is the PWI-C, which is based on Cummins' [48] original instrument that measures subjective well-being across seven life domains, such as *health*, *personal relationships*, and *future security*. Each item is scored on an 11-point scale ranging from 0 (completely dissatisfied) to 10 (completely satisfied). Sample items include “*How satisfied are you with your personal relationships?*” and “*How satisfied are you with your future security?*” Previously reported Cronbach's alpha coefficients for the PWI-C range from .70 to .85, indicating good reliability across different Chinese older adult samples [42]. Both instruments were selected for their cultural relevance, psychometric soundness, and established use in prior aging research in China.

### 3.4. Data Analysis

Data were analyzed using IBM SPSS Statistics version 26. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were computed to summarize the demographic

profiles and the levels of meaning in life and subjective well-being among participants. While, inferential statistics included independent samples t-tests to compare mean scores between two-category demographic groups (e.g., gender, living arrangements), and one-way analysis of variance (ANOVA) to compare scores across more than two groups (e.g., education level). Post hoc Tukey tests were conducted for significant ANOVA results to identify specific group differences. Pearson product-moment correlation analysis was used to examine the relationship between meaning in life and subjective well-being. A significance level of  $p < .05$  was used for all statistical tests.

## 4. Results and Discussions

### 4.1. Demographic Profile of Participants

Reflecting on table 1 (in section 3.2), the demographic profile reflects several key patterns in China's aging population, especially in second-tier cities like Chengde. The gender imbalance, with more female participants, aligns with broader population trends, as women generally have longer life expectancies than men [2]. While, in the context of Tornstam's Theory of Gerotranscendence [14], the progression of age groups captured in the sample, especially those aged 74 to 88, represents individuals who may be undergoing deeper introspection and redefinition of their life roles and meaning. Similarly, living arrangements suggest strong family ties, as most participants resided with a partner or children. This supports the traditional Chinese value of filial piety [25] and may provide critical social support that influences, both meaning in life and well-being. However, the 16.5% who lived alone still represent an important subpopulation, especially as urban migration leads many younger generations away from their hometowns [41].

In terms of education, the predominance of primary-level attainment reflects the historical context of the participants' youth; many of whom grew up in post-war or early reform-era China with limited educational access. This educational background has implications for life meaning, as previous research indicates that lower education may restrict opportunities for self-actualization [24]. Yet, as Henderson's Needs Theory [13] suggests, the satisfaction of even basic social and psychological needs, such as companionship and perceived respect, may still underpin high levels of subjective well-being regardless of formal education. Overall, this demographic snapshot provides a foundation for interpreting how social roles, historical context, and life circumstances influence aging experiences in China. These variables are essential in understanding later sections on meaning in life and subjective well-being, which are shaped by demographic and cultural dynamics.

### 4.2a. Level of Meaning in Life Among Older Adults

As presented in Table 2a, the overall mean score for meaning in life among the 170 older adult participants was 4.34 ( $SD = 1.09$ ), which falls under the "High" verbal interpretation category. All individual items in the MLQ-C also received mean scores classified as High, ranging from 4.08 to 4.50. Notably, the items "*My life has no clear purpose*" and "*I know the meaning of my life*" recorded the highest mean score of 4.50, while "*I'm always trying to find my own purpose in life*" had the lowest at 4.08. The findings indicate that the participants perceive their lives as meaningful, demonstrating a relatively strong presence of both purpose and life direction. These results align with prior studies [21, 24], which suggest that older adults who experience family support, stable health, and social integration often report higher life meaning. Interestingly, even reverse-coded or negatively worded items (e.g., "*My life has no clear purpose*") still yielded high scores, possibly indicating resilient life narratives or adaptive reinterpretation of existential challenges among aging individuals.

From a theoretical lens, Tornstam's Gerotranscendence Theory [14] supports this trend, positing that older adults engage in a shift toward existential reflection and spiritual maturity, thereby developing a renewed understanding of life meaning despite physical or social losses. Additionally, Henderson's Needs Theory [13] would suggest that psychological and relational needs (e.g., feeling valued, purposeful, and connected) are being sufficiently met in the study population, particularly those living



with family or having a clear role in familial or community settings. These results also underscore a potential cultural dynamic: the importance of continued relevance in later life within the Chinese context. As found in the literature, life meaning among older Chinese adults often stems from social roles, family contribution, and intergenerational ties [25, 26]. The slightly lower score for the item “*I’m always trying to find my own purpose in life*” may suggest that participants have already established a life purpose, or they may be less oriented toward ongoing existential searching compared to younger populations.

**Table 2a.**

Level of Meaning in Life ( $N = 170$ ).

Items	Mean	SD	Verbal Interpretation
Meaning in Life (over-all)	4.34	1.09	High
1. I’m looking for a purpose or a mission in my life.	4.18	1.34	High
2. My life has no clear purpose	4.50	1.49	High
3. I’m looking for meaning in my life.	4.38	1.34	High
4. I know the meaning of my life.	4.50	1.33	High
5. I’m looking for something that makes me feel like my life has meaning.	4.40	1.25	High
6. I’m always trying to find my own purpose in life.	4.08	1.41	High
7. My life has a clear direction.	4.38	1.37	High
8. I know what makes my life meaningful.	4.40	1.38	High
9. I have found a satisfying purpose in life.	4.29	1.46	High
10. I’ve been looking for something to make my life feel important.	4.34	1.35	High

#### 4.2b. Level of Subjective Well-being Among Older Adults

Table 2b presents the mean scores and standard deviations for the PWI-C among 170 older adults. The overall mean score was 6.78 ( $SD = 1.63$ ), which falls within the “high” range, indicating a generally positive level of subjective well-being among the respondents. Each of the seven core life domains also received a “high” rating, though there were variations across specific items. The highest mean was reported for future security ( $M = 7.18$ ,  $SD = 1.94$ ) and feeling part of the community ( $M = 7.11$ ,  $SD = 1.92$ ), suggesting that participants felt confident about their long-term support and connectedness within their social environment. Satisfaction with personal safety ( $M = 6.99$ ,  $SD = 1.97$ ) and personal relationships ( $M = 6.91$ ,  $SD = 1.85$ ) also scored highly, reflecting a strong sense of safety and emotional support. In contrast, the lowest mean was observed for achievement in life ( $M = 5.96$ ,  $SD = 2.12$ ), though still within the “high” interpretation range, it signals comparatively lower satisfaction in this domain.

The findings indicate that older adults in Chengde City generally maintain a high level of subjective well-being, especially in areas related to security, social inclusion, and safety. These results align with previous studies, which emphasize the role of social participation, respect, and healthcare access in maintaining older adults’ well-being in the Chinese context [6, 35]. The highest score on future security may be attributed to growing government investment in eldercare services, pensions, and community support systems. This resonates with Henderson’s Needs Theory [13], which posits that satisfying higher-order security needs significantly boosts life satisfaction in later years. Similarly, high satisfaction with community connectedness and personal safety highlights the psychosocial value of supportive environments, further reinforcing the significance of social capital in well-being, particularly in collective cultures like China. Notably, the lowest domain, achievement in life, points to a possible gap in post-retirement fulfillment. Many older adults may feel that their productivity and life accomplishments are behind them, leading to diminished satisfaction in this area. As noted by Tornstam’s Theory of Gerotranscendence [14, 15], older adults tend to shift from external achievements to internal reflection, which may explain the slight decline in satisfaction with life achievements while still maintaining overall well-being. This suggests that future interventions could focus on lifelong learning, community engagement, or mentoring roles to help older adults find new forms of purpose and achievement.

**Table 2b.**Level of Personal Well-Being ( $N = 170$ ).

Items	Mean	SD	Verbal Interpretation
Personal Well-being (over-all)	6.78	1.63	High
1. How satisfied are you with your standard of living?	6.74	1.92	High
2. How satisfied are you with your health?	6.56	2.08	High
3. How satisfied are you with what you are achieving in life?	5.96	2.12	High
4. How satisfied are you with your personal relationships?	6.91	1.85	High
5. How safe you feel?	6.99	1.97	High
6. How satisfied are you with feeling part of your community?	7.11	1.92	High
7. How satisfied are you with your future security?	7.18	1.94	High

#### 4.3. Differences in Meaning in Life Across Demographic Variables

Independent samples t-tests and one-way ANOVA were conducted to examine differences in meaning in life based on demographic variables with the following results:

- Gender: A significant difference was found between male and female participants ( $t = 2.29$ ,  $p = .023$ ), with males reporting a higher sense of meaning in life.
- Age: No significant difference was observed between the two age groups ( $p = .238$ ).
- Living Arrangements: No significant difference was found between those living alone and those living with a partner or child ( $p = .947$ ).
- Number of Children: No significant difference was detected based on the number of children ( $p = .457$ ).
- Educational Level: A significant difference was found ( $F(2,167) = 3.71$ ,  $p = .027$ ), with Tukey post hoc tests indicating that participants with senior high school education had significantly higher meaning in life compared to those with primary education.

These findings highlight the influence of gender and educational attainment on perceived meaning in life among older adults, while other demographic factors (age, living arrangement, number of children) appear to exert less influence in this sample. The higher meaning in life among males may reflect traditional gender roles and social structures in Chinese culture, where older men have historically had more opportunities for career achievement, public engagement, and family leadership roles [49]. These life experiences may contribute to a greater sense of personal legacy and existential fulfillment in old age. This echoes the Gerotranscendence Theory [14, 15], suggesting that older men may be more likely to reach a state of psychological reflection and coherence due to their societal positioning.

Furthermore, the impact of educational level reinforces earlier literature linking higher education with broader life perspectives, better access to information, and enhanced self-efficacy in old age [50]. Educated older adults may have cultivated richer cognitive and social resources to help derive meaning from later-life experiences. This finding aligns with Henderson's Needs Theory [13], where intellectual and esteem-related needs are better fulfilled among those with higher education, promoting stronger life meaning. In addition, the non-significant differences in age, family structure, and co-residency challenge some common assumptions. It may suggest that psychosocial factors such as personal attitudes, values, and ongoing engagement matter more than mere age or household composition. This supports a life-span developmental view, where older adults' meaning-making capacities are shaped by more than just structural variables [51]. Together, these results call attention to targeted interventions: educational enrichment and meaning-centered programs may especially benefit older adults with lower formal schooling or limited public roles; helping ensure that all individuals, regardless of demographic background, can age with purpose and psychological well-being.

#### 4.4. Differences in Subjective Well-being Across Demographic Variables

To examine whether levels of subjective well-being varied significantly across different demographic variables, independent samples t-tests and one-way ANOVA were conducted. The findings are as follows:



- Gender: No significant difference in subjective well-being was found between males and females ( $p = .085$ ).
- Age: No significant difference was observed between age groups ( $p = .098$ ).
- Living Arrangements: No significant difference was noted based on living arrangements ( $p = .543$ ).
- Number of Children: No significant difference was found based on the number of children ( $p = .791$ ).
- Educational Level: No significant difference in subjective well-being was observed across educational levels ( $p = .077$ ).

The results indicate that subjective well-being among older adults in this sample does not significantly differ across gender, age, living arrangements, number of children, or educational attainment. These findings provide varied insights into the psychosocial well-being of older adults in Chengde City. The absence of gender-based differences is quite interesting that valid further investigations. This result might somehow denote that older adults' lifestyle and daily experiences across genders become more similar, both men and women engage in similar routines, face comparable health concerns, and share similar community participation levels. In addition, no age-related differences suggest that subjective well-being remains relatively stable across later life stages. This finding supports the concept of the "*paradox of aging*", which posits that emotional regulation and satisfaction often remain steady or even increase with age, despite physical or social decline [30, 31]. The lack of differences based on living arrangements and number of children challenges the traditional assumption that family co-residence and offspring support are primary sources of happiness in older age. As modernization continues and China's community-based support systems improve, older adults may experience increasing independence, reducing emotional reliance on family structure.

Finally, educational level was not significantly associated with subjective well-being. This may reflect the relatively low educational variance in the sample, or suggest that non-material contributors, such as perceived respect, autonomy, and community belonging, play a more vital role in shaping older adults' happiness than formal education. Overall, these results emphasize that subjective well-being is shaped more by psychosocial and existential factors than by demographic characteristics alone. Community programs that enhance purpose, autonomy, and social engagement may be more impactful than interventions targeting specific subgroups.

#### 4.5. Relationship Between Meaning in Life and Subjective Well-Being

Pearson correlation analysis revealed a moderate positive correlation between meaning in life and subjective well-being ( $r = 0.55, p < .001$ ). This indicates that older adults who report higher levels of life meaning also tend to experience greater subjective well-being. The association is statistically significant, suggesting that the constructs are meaningfully related within this population. The findings provide empirical support for a moderately strong and positive relationship between meaning in life and subjective well-being among older adults. In line with prior studies, individuals who perceive their lives as purposeful and meaningful also report greater satisfaction, emotional positivity, and psychological stability [38, 39]. This result resonates with the core principles of Henderson's Needs Theory [13], which posits that fulfillment of psychological and social needs, such as autonomy, relatedness, and purpose, contributes significantly to individual well-being. When older adults are supported in finding or maintaining a sense of meaning, their emotional and mental health is more likely to remain stable or even improve. In addition, the findings affirm Tornstam's Theory of Gerotranscendence [14], which suggests that as individuals age, they may undergo a cognitive and spiritual shift toward deeper existential reflection and inner peace. This growth, characterized by a stronger sense of meaning, is shown here to be closely linked with enhanced well-being. Overall, the result underscores the importance of fostering purpose, spiritual fulfillment, and psychological growth in aging populations. Interventions aimed at enhancing life

meaning, through community participation, legacy-building, or intergenerational mentoring; may therefore serve as effective pathways for improving the quality of life among older adults.

## 5. Conclusion and Recommendations

This study explored the levels and interrelationship of meaning in life and subjective well-being among older adults in Chengde City, China. The findings revealed that participants generally experienced high levels of both constructs, with particularly strong scores in areas related to purpose, community belonging, and future security. Significant differences in meaning in life were observed across gender and educational attainment, while no such demographic variations were found for subjective well-being. Importantly, a moderately strong positive correlation was established between meaning in life and subjective well-being, affirming the role of psychological meaning and existential fulfillment in promoting overall life satisfaction in older age. Guided by Henderson's Needs Theory and Tornstam's Gerotranscendence Theory, the study underscores the vital role of need satisfaction and spiritual development in aging populations. These insights highlight the importance of supporting older adults not just in physical health, but also in fostering purpose, connection, and psychological resilience.

### 5.1. Recommendation

Given the findings and limitations, several recommendations can be made:

- For future research: Longitudinal and multi-site studies should be conducted to better understand how meaning in life and subjective well-being evolve over time among diverse older adult populations. Incorporating qualitative components could also enrich understanding of the subjective meanings behind the quantitative scores.
- For policy and practice: Community programs should be developed that promote lifelong learning, intergenerational engagement, and accessible social activities that help older adults maintain a sense of purpose and connectedness.
- For healthcare and social workers: Interventions designed to foster psychological meaning, such as narrative therapy, group reflection sessions, or volunteer mentoring opportunities, should be considered as part of holistic elder care strategies.
- For local governments and stakeholders: Continued investment in community-based elderly services, including health support, social integration, and lifelong education opportunities, is essential to enhancing quality of life in aging populations.

### 5.2. Limitations

Several limitations must be acknowledged. First, the study relied on self-reported data, which may be subject to social desirability and response bias. Second, the sample was drawn from a single community in Chengde city, limiting the generalizability of the findings to other urban or rural contexts in China. Third, the use of a cross-sectional design precludes any causal inferences between meaning in life and subjective well-being.

## Institutional Review Board Statement:

The study was conducted in accordance with the Declaration of Helsinki. Study protocols were evaluated and approved by the panel of evaluators of the University of St. La Salle Graduate Program.

## Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

## Author Contributions:

Conceptualization, M.X., T.-A.B.L., and S.M.T.; methodology, M.X., T.-A.B.L., and S.M.T.; software, G.S.C.; validation, M.X., T.-A.B.L., S.M.T., and G.S.C.; formal analysis, M.X.; investigation, M.X., T.-A.B.L., S.M.T., and G.S.C.; resources, M.X., T.-A.B.L., S.M.T., and G.S.C.; data curation, M.X.; writing—original draft preparation, M.X.; writing—review and editing, M.X., T.-A.B.L., S.M.T., and G.S.C.; visualization, G.S.C.; supervision, T.-A.B.L. and S.M.T.; project administration, M.X., T.-A.B.L., and S.M.T.; funding acquisition, M.X., T.-A.B.L., S.M.T., and G.S.C. All authors have read and agreed to the published version of the manuscript.

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