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Perception of Ageing and Happiness among Older Adults: A Cross-Sectional Study in Qaemshahr, Iran

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Abstract

Background:

Ageing is accompanied by psychological and social changes that can significantly affect quality of life. Happiness and perception of ageing are key components of mental health in later life and play a decisive role in adaptation and well-being among older adults. Given the importance of these factors, the present study aimed to examine the relationship between perception of ageing and happiness among older adults in Qaemshahr, Iran, in 2020.

Methods:

This descriptive–correlational study was conducted on 300 older adults covered by community health centers who met the inclusion criteria. Participants were selected using a stratified random sampling method. Data were collected using a demographic questionnaire, the Persian version of the Ageing Perceptions Questionnaire (APQ), and the Oxford Happiness Inventory (OHI). Data were analyzed using descriptive statistics (mean, standard deviation, percentage) and inferential statistics, including Spearman's correlation coefficient, Mann–Whitney U test, and Kruskal–Wallis test.

Results:

The findings revealed a significant negative correlation between perception of ageing and happiness among older adults ($r = -0.608$, $p < 0.001$). Moreover, both perception of ageing and happiness were significantly associated with age, gender, economic status, cohabitation status, and level of dependency ($p < 0.001$).

Conclusion:

The results indicate that older adults' perception of the ageing process plays a determining role in their level of happiness. Promoting a more positive attitude toward ageing can be an important strategy for enhancing mental health and quality of life in older adults. Psychosocial and educational interventions aimed at fostering a positive perception of ageing are therefore recommended.

Introduction

Ageing has been recognized as one of the most significant demographic transformations of the current century, with profound social, economic, and health-related implications. According to the World Health Organization (WHO), the global population aged 60 years and older reached approximately one billion in 2019 and is projected to increase to 1.4 billion by 2030 and exceed 2.1 billion by 2050 (1). Similarly, the United Nations has reported that by 2050, one in every five individuals worldwide will be aged 65 years or

older (2). In Iran, based on data from the Statistical Center of Iran, the proportion of the older adult population is expected to rise from 9.9% in 2016 to over 12% by 2026 (3). This rapid demographic shift, particularly in developing countries, underscores the growing need for special attention to the physical and psychological health of older adults.

Among the various dimensions of health in older adults, mental health holds a particularly prominent position. Psychiatric disorders such as depression and anxiety are among the most prevalent challenges in later life, significantly affecting quality of life, social participation, and even survival. According to recent statistics from the World Health Organization (WHO), approximately 14% of individuals aged 60 years and older worldwide live with a mental disorder, accounting for 10% of the total disability burden in this age group (4). One of the key constructs related to mental health in old age is happiness, recognized as a core component of subjective well-being. Happiness is a multidimensional concept encompassing both cognitive components (such as life satisfaction) and affective components (the presence of positive emotions and the reduction of negative emotions)(5). It can be defined as a positive internal experience that reflects an individual's interpretation of their emotional life and cognitive evaluation of their existence; essentially, it represents the extent to which and the manner in which a person values their own life (6). Evidence suggests that higher levels of happiness are associated with reduced risk of mental disorders, improved social functioning, and increased life expectancy (7).

Happiness is not merely the absence of depression, anxiety, or other mental health problems but rather reflects an individual's overall satisfaction with life and the extent and quality of engagement in pleasurable activities. The presence of happiness among older adults contributes to their overall physical, psychological, and social well-being (8). Numerous studies conducted in Iran have also confirmed the importance of happiness in later life. Ezzati et al. (2023) found that spirituality and social support were positively associated with higher levels of happiness among Iranian older adults and partially explained individual differences in life satisfaction (9). Similarly, Babazadeh et al. (2025) reported that self-efficacy and self-esteem play significant mediating roles in promoting happiness in old age (10). Such findings suggest that happiness is influenced not only by individual characteristics but also by broader social and psychological conditions.

Happiness, as one of the key indicators of mental health in older adults, is influenced by a wide range of individual, social, and psychological factors (11). Individuals' attitudes and beliefs toward ageing can significantly affect their sense of hope for the future, psychological adaptability, and overall life satisfaction. Therefore, examining the relationship between perception of ageing and happiness provides a theoretical framework for understanding individual differences in psychological well-being among older adults (12).

Perception of ageing refers to individuals' beliefs, attitudes, and expectations regarding the ageing process. It encompasses multiple dimensions, including timeline (perceptions of ageing onset), consequences (expected outcomes), control (perceived ability to influence ageing), identity (self-perception as old), and emotional responses to ageing (11). Research has consistently shown that

positive perception of ageing is associated with more favorable psychological outcomes, such as greater social adjustment and even reduced mortality rates (13). Conversely, negative perception of ageing has been linked to higher levels of depression and anxiety, as well as diminished quality of life. A study by Walitan et al. (2024) in Malaysia revealed that older adults with a more positive perception of ageing reported higher levels of happiness and life satisfaction (12). Similarly, in Iran, Mohammadzadeh et al. (2024) in Bojnourd found that older adults who experienced ageing with a more positive attitude reported higher levels of successful ageing (3).

Despite the growing body of evidence on the roles of happiness and perception of ageing in improving quality of life, research in Iran remains limited. Most existing studies have examined these constructs separately, with limited research exploring their interrelationship. Examining their relationship may provide a more comprehensive understanding of the factors influencing the well-being of older adults, particularly in a context where the country is experiencing a rapid increase in its elderly population. Therefore, this study aimed to examine the relationship between perception of ageing and happiness among older adults in Qaemshahr, Iran. The findings may inform the design of educational and nursing interventions as well as health policies aimed at promoting mental well-being in older adults.

Methods

Study Design

This cross-sectional correlational study was conducted in 2020 at Qaemshahr, Mazandaran Province, Iran.

Participants

The study population comprised all older adults registered at comprehensive community health centers in Qaemshahr.

Sampling and Sample Size

The sample included 300 community-dwelling older adults met the inclusion criteria. Inclusion criteria were: willingness to participate in the study, age ≥ 60 years, registration at a community health center, adequate hearing and communication ability, and cognitive health (a score of ≥ 7 on the Abbreviated Mental Test [AMT]). The exclusion criterion was incomplete questionnaire responses.

A stratified random sampling method was employed. Participants were stratified by gender (male and female) and age group (60–75 years [young-old]; 76–90 years [middle-old]; >90 years [oldest-old]). Within each stratum, participants were randomly selected using simple random sampling proportional to stratum size. Due to the small number of individuals in the oldest-old group (n = 2), this group was combined with the middle-old category for analysis.

Sample size was calculated using the formula for correlation studies, with a power of 80% and a significance level of $\alpha \leq 0.05$, resulting in 273 participants. Considering a 10% attrition rate, the final sample size was set at 300.

Instruments

Demographic Questionnaire

This form collected information on age, gender, marital status, educational level, occupation, economic status, health insurance, and history of chronic diseases.

Abbreviated Mental Test (AMT)

The AMT is a 10-item screening tool used to assess cognitive function in older adults. Scores ≥ 7 indicate normal cognitive function. The Persian version demonstrated acceptable internal consistency (Cronbach's $\alpha = 0.76$) (14).

Ageing Perceptions Questionnaire (Barker)

This 17-item instrument assesses five dimensions of ageing perception (timeline, positive consequences, negative consequences, control, and emotional representations) rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Higher scores indicate a more positive perception of ageing. The Persian version was psychometrically validated by Sadegh Moghadam et al. with a Cronbach’s alpha of 0.75 (15).

Oxford Happiness Inventory (OHI)

This 29-item questionnaire is rated on a four-point Likert scale (1–4), with total scores ranging from 29 to 116. Higher scores indicate greater happiness. The Persian version was validated by Alipour et al., with a reported Cronbach’s alpha of 0.93 (16).

Data Collection Procedure

Following ethical approval from the Research Ethics Committees of Gonabad and Mazandaran Universities of Medical Sciences, participating community health centers were randomly selected from the list of all centers in Qaemshahr. In coordination with community health workers (Behvarz), trained research assistants visited participants' homes, explained the study's purpose and procedures, and obtained written informed consent. Questionnaires were completed in person; for participants with low literacy, items were read aloud and responses recorded verbatim by the interviewer.

Data Analysis

Data were entered and analyzed using SPSS version 22. Descriptive statistics (mean, standard deviation, and percentage) were used to summarize the data. The normality of data distribution was assessed using the Kolmogorov-Smirnov test. Given the non-normal distribution of data, Spearman's correlation coefficient was used to examine associations between ageing perception and happiness, while the Mann–Whitney U and Kruskal–Wallis tests were employed for group comparisons. The significance level was set at $p < 0.05$ for all analyses.

Ethical Considerations

This study was approved by the Research Ethics Committee of Gonabad University of Medical Sciences (approval code: IR.GMU.REC.1399.040) and conducted in accordance with the Declaration of Helsinki. Written informed consent was obtained from all participants after providing a full explanation of the study's objectives. Confidentiality and anonymity were ensured throughout the study. Participants were assigned unique identification codes, and no personal identifiers were recorded on data collection forms.

Results

Demographic characteristics of the 300 participants are presented in Table 1. The majority of participants were young-old adults aged 60–74 years (84%), and 57.3% were women. Most participants were married (72.3%) and reported moderate economic status (78.3%). The majority demonstrated low physical dependency (63.3%), indicating a predominantly independent, community-dwelling elderly population.

Table 1
Socio-demographic characteristics of the study participants (N = 300)

Variable	Category	Frequency (n)	Percent (%)
Age (years)	60–74	252	84
	75 and over	48	16
	Mean ± SD	69.41 ± 18.69	
Gender	Male	128	42.7
	Female	172	57.3
Marital Status	Single	12	4
	Married	217	72.3
	Widowed	70	23.3
	Divorced	1	0.3
Education Level	Illiterate	136	45.3
	Under diploma	131	43.7
	Diploma	31	10.3
	Academic	2	0.7
Employment Status	Self-employed	77	25.6
	Retired	110	36.7
	Housewife	113	37.7
Economic Status	Poor	39	13
	Average	235	78.3
	Good	26	8.7
Housing Status	Personal	240	80
	Rented	54	18
	Organizational	6	2
Disease Status	No disease	108	36
	Cardio-pulmonary	35	11.7
	Hypertension	42	14
	Diabetes	52	17.3
	Musculoskeletal	24	8

Variable	Category	Frequency (n)	Percent (%)
	Infectious	8	2.7
	Vision	6	2
	Hearing	9	3
	Gastrointestinal	15	5
	OCD	1	0.3
Cohabitation Status	Alone	49	16.3
	With spouse	108	36
	With spouse and children	97	32.3
	With children	46	15.3
Physical Dependency	Low	190	63.3
	Average	91	30.3
	Severe	19	6.3
Total		**300**	**100**

As shown in Table 2, participants aged ≥ 75 years had significantly higher negative ageing perception scores (62.89 ± 7.56) and significantly lower happiness scores (55.54 ± 11.94) compared to those aged 60–74 years ($p < 0.001$). Men reported significantly higher happiness than women ($p = 0.011$). Ageing perception dimensions also varied by age, with older adults scoring worse on negative domains such as “negative outcomes and control” and “emotional reactions.”

Table 2
Comparison of Mean Scores of Perceptions of Aging and Happiness Based on Age and Gender

Variable	Group	Mean ± SD	p-value*
Perceptions of Aging	**Total (N = 300)**	54.97 ± 8.38	
	Age Group		
	60–74 years (n = 252)	53.46 ± 7.65	< 0.001*
	75 years and over (n = 48)	62.89 ± 7.56	
	Gender		
	Men (n = 128)	53.91 ± 8.21	0.058*
	Women (n = 172)	55.76 ± 8.43	
Happiness	**Total (N = 300)**	70.66 ± 16.87	
	Age Group		
	60–74 years (n = 252)	73.54 ± 16.14	< 0.001*
	75 years and over (n = 48)	55.54 ± 11.94	
	Gender		
	Men (n = 128)	73.39 ± 16.77	0.011*
	Women (n = 172)	68.63 ± 16.71	
Dimensions of Perception of Aging			
Progressive Course	Men (n = 128)	10.39 ± 2.90	0.522*
	Women (n = 172)	10.57 ± 3.06	
	60–74 years (n = 252)	9.97 ± 2.80	< 0.001*
	75 years and over (n = 48)	13.22 ± 2.44	
Positive Outcomes	Men (n = 128)	12.42 ± 1.97	0.133*
	Women (n = 172)	12.67 ± 1.68	
	60–74 years (n = 252)	12.46 ± 1.72	0.002*
	75 years and over (n = 48)	13.14 ± 2.15	
Positive Control	Men (n = 128)	10.85 ± 2.39	0.930*
	Women (n = 172)	10.85 ± 2.51	

*Mann-Whitney U Test.

Variable	Group	Mean ± SD	p-value*
	60–74 years (n = 252)	11.15 ± 2.21	< 0.001*
	75 years and over (n = 48)	9.27 ± 3.02	
Negative Outcomes & Control	Men (n = 128)	15.10 ± 4.78	0.171*
	Women (n = 172)	15.84 ± 5.16	
	60–74 years (n = 252)	14.63 ± 4.67	< 0.001*
	75 years and over (n = 48)	20.27 ± 3.96	
Emotional Reactions	Men (n = 128)	5.13 ± 1.88	0.005*
	Women (n = 172)	5.80 ± 2.13	
	60–74 years (n = 252)	5.24 ± 2.01	< 0.001*
	75 years and over (n = 48)	6.97 ± 1.64	
*Mann-Whitney U Test.			

Table 3 presents correlation coefficients between happiness and ageing perceptions. Happiness showed a strong significant negative correlation with total ageing perception score in the overall sample ($r = -0.608$, $p < 0.001$), with stronger correlations observed in participants aged ≥ 75 years ($r = -0.621$, $p < 0.001$) and in male participants ($r = -0.657$, $p < 0.001$). Negative domains—including “progressive course,” “negative outcomes and control,” and “emotional reactions”—showed the strongest negative correlations with happiness across all subgroups, particularly in the oldest participants.

Table 3
Correlation between Happiness and Dimensions of Perception of Aging Based on Age and Gender

Variable	Group	Correlation Coefficient (r)	p-value*
Happiness and Perceptions of Aging	**Total (N = 300)**	-0.608	< 0.001
	Age Group		
	60–74 years (n = 252)	-0.494	< 0.001
	75 years and over (n = 48)	-0.621	< 0.001
	Gender		
	Men (n = 128)	-0.657	< 0.001
	Women (n = 172)	-0.558	< 0.001
Happiness and Dimensions of Perception of Aging			
Progressive Course	Men 60–74 years (n = 109)	-0.597	< 0.001
	Women 60–74 years (n = 143)	-0.484	< 0.001
	Men 75 + years (n = 19)	-0.816	< 0.001
	Women 75 + years (n = 29)	-0.632	< 0.001
Positive Outcomes	Men 60–74 years (n = 109)	0.029	0.761
	Women 60–74 years (n = 143)	0.012	0.884
	Men 75 + years (n = 19)	-0.446	0.056
	Women 75 + years (n = 29)	-0.299	0.116
Positive Control	Men 60–74 years (n = 109)	0.489	< 0.001
	Women 60–74 years (n = 143)	0.066	0.431
	Men 75 + years (n = 19)	-0.121	0.622
	Women 75 + years (n = 29)	0.555	0.002

* Spearman's Rho Correlation.

Variable	Group	Correlation Coefficient (r)	p-value*
Negative Outcomes & Control	Men 60–74 years (n = 109)	-0.635	< 0.001
	Women 60–74 years (n = 143)	-0.326	< 0.001
	Men 75 + years (n = 19)	-0.718	< 0.001
	Women 75 + years (n = 29)	-0.533	0.003
Emotional Reactions	Men 60–74 years (n = 109)	-0.450	< 0.001
	Women 60–74 years (n = 143)	-0.228	0.006
	Men 75 + years (n = 19)	-0.586	0.008
	Women 75 + years (n = 29)	-0.412	0.026

* Spearman's Rho Correlation.

Table 4 shows that happiness was significantly correlated with ageing perceptions across all demographic subgroups. “Progressive course” and “negative outcomes and control” displayed the strongest inverse correlations with happiness, whereas “positive control” showed positive correlations in several subgroups, most notably among women aged ≥ 75 years.

Table 4
Correlation between Happiness and Perceptions of Aging and its Dimensions Based on Age and Gender Groups

Variable	Group	Correlation Coefficient (r)	p-value*
Correlation of Happiness with Perceptions of Aging	**Total (N = 300)**	-0.608	< 0.001
	Age Group		
	60–74 years (n = 252)	-0.494	< 0.001
	75 years and over (n = 48)	-0.621	< 0.001
	Gender		
	Men (n = 128)	-0.657	< 0.001
	Women (n = 172)	-0.558	< 0.001
Correlation of Happiness with Dimensions of Perception of Aging			
	Progressive Course		
	Men 60–74 years (n = 109)	-0.597	< 0.001
	Women 60–74 years (n = 143)	-0.484	< 0.001
	Men 75 + years (n = 19)	-0.816	< 0.001
	Women 75 + years (n = 29)	-0.632	< 0.001
	Positive Outcomes		
	Men 60–74 years (n = 109)	0.029	0.761
	Women 60–74 years (n = 143)	0.012	0.884
	Men 75 + years (n = 19)	-0.446	0.056
	Women 75 + years (n = 29)	-0.299	0.116
	Positive Control		
	Men 60–74 years (n = 109)	0.489	< 0.001¹

*Spearman's Rho Correlation.

Variable	Group	Correlation Coefficient (r)	p-value*
	Women 60–74 years (n = 143)	0.066	0.431[1]
	Men 75 + years (n = 19)	-0.121	0.622[1]
	Women 75 + years (n = 29)	0.555	0.002[1]
	Negative Outcomes & Control		
	Men 60–74 years (n = 109)	-0.635	< 0.001[1]
	Women 60–74 years (n = 143)	-0.326	< 0.001[1]
	Men 75 + years (n = 19)	-0.718	< 0.001[1]
	Women 75 + years (n = 29)	-0.533	0.003[1]
	Emotional Reactions		
	Men 60–74 years (n = 109)	-0.450	< 0.001[1]
	Women 60–74 years (n = 143)	-0.228	0.006[1]
	Men 75 + years (n = 19)	-0.586	0.008[1]
	Women 75 + years (n = 29)	-0.412	0.026[1]
*Spearman's Rho Correlation.			

Discussion

This study found a significant negative correlation between the perception of ageing and the happiness among older adults. Specifically, more negative ageing perceptions were associated with lower happiness levels. These findings are consistent with the systematic review by Velaithan et al. (2023), which demonstrated that negative attitudes toward ageing are predictive of declines in quality of life and life satisfaction among older adults, whereas positive ageing perceptions were associated with higher levels of subjective well-being (12). Similarly, a meta-analysis conducted by Westerhof et al. (2023) indicated that negative subjective ageing is directly related to an increased risk of depression and lower levels of psychological health (17). Recent evidence also suggests that during critical circumstances

such as the COVID-19 pandemic, older adults who hold more positive attitudes toward ageing experience higher subjective well-being and demonstrate greater psychological resilience (18). Collectively, these findings support the notion that the perception of ageing is not merely a cognitive reflection of one's life course but also a determinant factor in shaping the emotional experience of older adults. Thus, it meaningfully influences overall happiness.

The mean ageing perception score was 54.97 ± 8.37. Participants aged 60–74 years had more positive ageing perceptions than older age groups. This finding contrasts with those of Bagheri et al. (19), who reported the highest levels of ageing perception among older adults aged 75–90 years. Similarly, Yaghoubzadeh et al. (20) found no significant association between age and feelings of ageing, which differs from the present results. These discrepancies may be attributed to the greater sensitivity of young-old adults to various dimensions of ageing perception. Overall, ageing perception is influenced by a complex set of individual, cultural, and social factors and, therefore, may vary across different populations and age groups (21).

This study found no significant relationship between the perception of ageing and gender. This result is inconsistent with studies by Sadegh Moghadam et al. (15) among older adults in Gonabad and Yaghoubzadeh et al. (20) in Qazvin. Previous research suggests that women tend to hold more negative attitudes toward ageing than men, a pattern often linked to cultural stereotypes and heightened concern over physical and biological changes associated with ageing. Moreover, women are reported to feel less control over ageing-related circumstances and to experience greater anxiety about dependency, whereas in men, such perceptions are typically more stable and enduring (22). The absence of a significant relationship between gender and ageing perception in the present study may be explained by the influence of other mediating or contextual factors that shape individuals' experience and interpretation of ageing.

Examination of ageing perception dimensions across age and gender groups revealed that across all groups, the 'negative consequences and control' dimension had the highest mean score, whereas the 'emotional representations' dimension had the lowest. This pattern indicates that older adults' primary concerns were related to the negative outcomes of ageing and the perceived loss of control over the ageing process.

These findings align with international research. For example, a study conducted in the Netherlands found that negative perceptions of ageing were associated with poorer physical and psychological health among older adults. Individuals who perceived greater negative consequences and diminished control tended to report lower quality of life compared to those with more positive ageing perceptions (23). A significant association has also been reported between negative attitudes toward ageing and declines in both cognitive and physical functioning (24).

The mean happiness score was 70.66 ± 16.87, with participants aged 60–74 years reporting higher happiness levels than older age groups. These findings are consistent with Shah et al. (6), who also

reported that older adults within the 60–74 age range demonstrated greater levels of happiness and life satisfaction than their older counterparts.

Similarly, a study conducted in Tehran, Iran, demonstrated that self-care ability is a significant determinant of happiness among older adults. Young-old individuals tend to exhibit higher happiness levels, which may be attributed to their greater physical capacity and better adaptability to age-related changes (25). The higher happiness observed among young-old adults may be attributed to their relatively lower exposure to physical changes, dependency, and loss of independence in daily life. Young-old adults generally maintain better physical and mental health, which in turn fosters a more positive perception of ageing and enhances their sense of personal control and self-efficacy.

Analysis of happiness by gender indicated that men reported significantly higher happiness scores (73.39 ± 16.77; $p = 0.011$). In contrast, the study by Mokaberian et al., which examined happiness among active and inactive older adults in Tehran, Iran, found no significant gender differences. These discrepancies may reflect differences in cultural, social, and economic contexts across study populations (26).

Analysis of the relationship between happiness and the dimensions of ageing perception (Table 4) revealed that happiness was negatively correlated with the dimensions of “Progressive Course,” “negative outcome and control,” and “emotional representations.” In other words, higher levels of happiness among older adults were accompanied by fewer negative perceptions of ageing, a greater sense of control over life circumstances, and reduced negative emotional responses. This finding is consistent with Iranian research showing that positive ageing perceptions are associated with higher self-efficacy; as a personal resource, self-efficacy enhances an individual’s ability to cope with challenges and may mitigate the adverse effects of negative ageing perceptions (27).

A systematic review further demonstrated that negative ageing attitudes—particularly negative control, negative consequences, and adverse emotional representations—negatively affect quality of life, whereas positive perceptions of ageing and stronger personal control are associated with favorable outcomes (12).

Demographic analysis revealed a significant association between cohabitation status and ageing perception ($p < 0.001$). Older adults living with their children reported the most negative ageing perceptions, whereas those living with both spouse and children had the most positive perceptions. This finding aligns with evidence from a study in South Korea demonstrating that the type of household living arrangement has a notable impact on well-being; older adults in extended family households may experience more intergenerational conflict and diminished emotional support (28).

A significant difference was also observed with respect to economic status ($p < 0.001$). Older adults with lower socioeconomic status demonstrated more negative ageing perceptions, whereas those with higher socioeconomic status reported more positive perceptions. This indicates that financial hardship contributes to psychological strain and heightens concerns related to ageing. These findings are

consistent with the results of Romdhani et al. (2025), who reported that lower socioeconomic status is associated with increased psychological symptoms such as anxiety and depression. Additionally, functional dependency was significantly associated with ageing perception ($p < 0.001$); older adults with severe functional dependency reported more negative ageing perceptions, whereas functionally independent individuals reported more positive perceptions. Functional dependence in daily activities often leads to feelings of incompetence and diminished personal capability, thereby fostering a more negative perception of ageing. Overall, These findings highlight that ageing perceptions are shaped by social and individual factors, underscoring the need for multifaceted interventions that simultaneously address economic conditions, levels of functional independence, and the quality of family relationships (29).

Conclusion

This study demonstrated that negative ageing perceptions—particularly perceptions of decline and diminished personal control—were strongly associated with lower happiness, Conversely, positive control perceptions were associated with higher happiness and may serve as a protective factor. This association was more pronounced among older age groups and in men. Additionally, socioeconomic factors including income, living arrangements, and functional dependency were significantly associated with both happiness and ageing perceptions. These findings are consistent with international research and highlight ageing perceptions as an important correlate of quality of life. The cross-sectional design limits causal inference; therefore, longitudinal studies are needed to establish temporal relationships between ageing perceptions and happiness. Interventions targeting positive ageing perceptions may help maintain happiness and improve quality of life among older adults.

Implications for Practice

These findings have important implications for nursing practice and health policy. Community health nurses should routinely assess ageing perceptions and incorporate interventions that promote positive views of ageing into care plans. Educational programs focusing on ageing as a natural process with opportunities for growth may help modify negative perceptions. Healthcare systems should address socioeconomic determinants and support functional independence to enhance well-being in older adults.

Declarations

Ethics approval and consent to participate

The study was approved by the ethics committees of Gonabad and Mazandaran Universities of Medical Sciences, with the ethics code IR.GMU.REC.1399.040. The present study was conducted in accordance with the revised Declaration of Helsinki, which outlines ethical principles guiding physicians and other researchers in medical studies involving human subjects. All participants were informed of the voluntary nature of their participation, the commitment to confidentiality and anonymity of their data and their right

to withdraw at any time without consequences. Signed informed consent was obtained from all participants prior to data collection, explaining the study's purpose, their role, and their rights. Only those who agreed to participate voluntarily signed the consent form.

Data Availability

The datasets used and analyzed during the current study are available from the corresponding author on reasonable request.

Competing interests

The authors declare no competing interests.

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Authors' contributions

SG, FR, AM and LS conceptualized and designed the study. FR wrote the initial draft of manuscript in consultation with AM and LS. HN performed the statistical analysis. SG and ZT collected data. All authors involved in Reviewing and Editing manuscript and approving the final manuscript to be published.

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