

Original Research

Received 22 May 2026

Revised 29 June 2026

Accepted 10 July 2026

Natural Resources for Human
Health 2026, Vol. 6 (12s): 1020–1028

KEYWORDS:

Savoring, Gratitude, Forgiveness,
Happiness, Chain Mediation

Savoring to Happiness: exploring Gratitude and Forgiveness as mediators

Minal¹, Taruna Gera²

¹Guru Jambheshwar University of Science & Technology, Hisar, Haryana

²Guru Jambheshwar University of Science & Technology, Hisar, Haryana

ABSTRACT: The objective of the study is to explore the mediating roles that gratitude and forgiveness play in the relationship between savoring and happiness. Additionally, it aims to emphasize the significance of enhancing these psychological characteristics in order to improve the elderly's well-being and to offer a theoretical foundation for strategies meant to encourage healthy aging and raise the levels of happiness among them. Convenience sampling was used to choose individuals who were elderly from both urban and rural parts of Haryana. The study used the general questionnaires the Savoring Beliefs Inventory (SBI), Gratitude Questionnaire-6, Heartland Forgiveness Scale, and the Oxford Happiness Questionnaire for data collection. A total of 220 valid questionnaires were obtained for analysis. Correlation analysis indicated positive association of savoring with gratitude, forgiveness, and happiness.

Mediation analysis depicts that savoring strongly predicts the extent of gratitude, which served as a significant predictor of happiness among the elderly. Moreover, gratitude and forgiveness tendencies together play a significant chain-mediating role between savoring and happiness. Mediated through the chain-mediating effects of gratitude and forgiveness, Savoring has a significant positive impact on happiness amongst elderly people. Therefore, fostering traits of gratitude and forgiveness among the elderly population may enhance their savoring and happiness.

1. INTRODUCTION

According to the 'National Policy on Older Persons', a 'senior citizen' or 'elderly' is a person aged 60 or above. By the late 2060s, there will be 2.5 billion people over the age of 60, surpassing the number of persons under the age of 18 globally. Although the majority are in good health, many are at risk for mental health issues such as anxiety and depression (WHO, 2026). Loneliness and social isolation are risk factors that have a detrimental effect on elderly people's mental health and quality of life (Donovan and Blazer, 2020; WHO, 2026). In addition to being a time of psychological vulnerabilities, old age is a crucial time to develop positive emotions, psychological resources, and strengths. In this context, positive psychology interventions have gained attention for promoting well-being among older adults through approaches such as gratitude, forgiveness, reminiscence, and life review (Kırışık Sürer et al., 2025).

Savoring is one such strategy or technique that encourages individual to recognize, value, and prolong the pleasurable feelings and experiences associated with them, which ultimately improves individual's well-being (Bryant & Veroff, 2007). According to Bryant et al. (2005), positive reminiscence was linked to a higher capacity to savor good events and increased pleasure. Savoring happy moments may be crucial for fostering happiness and psychological well-being. Villani et al. (2023) demonstrated that engaging in regular savoring practice can effectively enhance overall psychological well-being. Zheng (2025) reported that past-focused savoring interventions may be particularly effective in boosting positive emotions among university students compared to both present and future-focused interventions. According to Chen et al. (2026), savoring interventions consistently promote positive psychological outcomes while lowering negative emotional symptoms across a variety of demographics and delivery methods. These findings are evident of the fact that savoring is an adaptable, scalable, and culturally sensitive approach to fostering happiness and emotional well-being.

According to Bryant's (2021) interpretation of savoring theory, savoring is a form of positive emotion regulation that can help alleviate psychological difficulties such as anxiety and depression while also encouraging positive psychological outcomes such as optimism, happiness, and life satisfaction.

Lyubomirsky et al. (2005) described happiness as “living with positive affect, high life satisfaction, and infrequent negative affect”. According to multiple cross-sectional and experimental studies, savoring is a direct predictor of happiness and positive affect (Jiao et al., 2021; Rani & Gera, 2023; Chen et al., 2024).

According to Emmons and McCullough (2003), gratitude is “a cognitive affective state that is typically associated with the perception that one has received a personal benefit that was not intentionally sought after, deserved, or earned but rather because of the good intentions of another person”. In brief gratitude can be understood as a positive response of appreciation towards other people or resources (Robustelli & Whisman, 2018).

Thompson et al. (2005) define “forgiveness as freeing from a negative attachment to the source that has transgressed against a person”. According to McCullough et al. (2000), “Forgiveness reflects an increase in prosocial motivation toward another such that there is less desire to avoid the transgressing person and to harm or seek revenge toward that individual and increased desire to act positively towards the transgressing person”. Forgiveness tendencies facilitate the discharge of unpleasant emotions, lessen psychological stress, encourage self-acceptance, improve inner peace and tranquillity, and increase happiness (Kaleta, K. et al, 2021). Positive psychological resources may contribute to the development of forgiveness, which entails regulating negative thoughts, emotions, and reactions toward oneself, others, or challenging situations (Thompson et al., 2005). In this context, individuals with a greater capacity for savoring positive experiences may be more likely to sustain positive emotions and flexible coping mechanisms that facilitate forgiveness. Happiness and psychological well-being are crucial components of healthy ageing, as is physical health (Horgan et al., 2024).

This study aims to investigate how savoring through gratitude and forgiveness collaboratively promotes happiness amongst elderly. These findings might reveal insights into how enhancing elderly happiness among elderly could lead to graceful and active ageing. The following hypotheses postulated for the present study and are depicted in Figure 1:

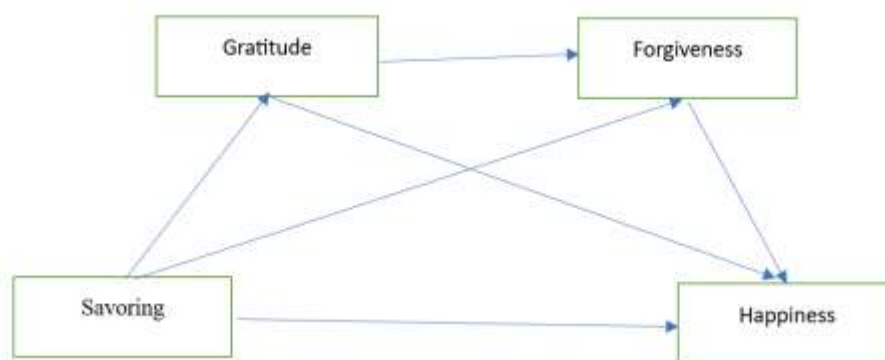


Figure 1 Proposed relationship between savoring, gratitude, forgiveness and happiness

HYPOTHESES:

1. Savoring, gratitude, and forgiveness are significantly associated with happiness among elderly.
2. Savoring will enhance happiness through the mediating effect of gratitude among elderly.
3. Savoring will enhance happiness through the mediating effect of forgiveness among elderly.
4. Gratitude and forgiveness play a chain-mediating role in enhancing the savoring and happiness among elderly.

2. MATERIALS AND METHODS

2.1 Participants

The sample of the present study comprised 220 (N=220) elderly people aged between 60–75 years from rural and urban areas. The sample was further categorised as males (n=110) and females (n=110). The sample was drawn from the different districts of the state of Haryana, India. Participants who volunteered to participate were included in the study. The sample was recruited

from two distinct settings: old age homes and those living with their families. Appropriate standardised tools were used for data collection.

2.2 Measures

1) Savoring Beliefs Inventory (SBI) (Bryant, 2003): Developed by Fred Bryant (2003), it is a 24-items self-reporting questionnaire developed to assess “an individual’s beliefs about his or her capacity to savor positive experiences.” In terms of past, present and future orientations respectively. The scale further has three distinct temporal sub-scales comprising of eight items each specifically meant to assess the savoring through anticipation subscale, savoring the moment (present) subscale and savoring through reminiscence subscale. The seven point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) possesses good psychometric properties with internal consistency $\alpha=.90.2$.

2) The Gratitude Questionnaire (McCullough, 2002): The GQ-6 is a unidimensional scale (as it assesses the single dimension of gratitude) developed by McCullough et al. (2002). The tool assesses levels of appreciation or thankfulness in day-to-day life. It is a seven-point Likert-type scale where the response ranges from strongly disagree to strongly agree. The item nos. 1, 2, 4, 5, and 7 are directly scored while items nos. 3 and 6 are reverse scored. The test has excellent psychometric properties with test and retest reliability and great internal consistency ranging from .76 to .84.

3) Heartland Forgiveness Scale (HFS) by Thompson (2005): The scale consists of 18 items in total and is scored using the Likert scaling method with 9 reverse scoring items. The participant has to choose among responses ranging between ‘1’ (almost *always false for me*) and ‘7’ (almost *always true for me*). The scale is further divided into three subscales, viz., forgiveness of self, forgiveness of others, and forgiveness of situations. The additive score of all three sub-scales provides individuals’ total score on forgiveness. The HFS in total shows an internal consistency of .81, and the reliability scores for the subscales obtained by Cronbach’s alpha is .70, .67, and .79 for forgiveness of self, forgiveness of others, and forgiveness of situations respectively. The scale was found to be a valid measure of forgiveness with supportive findings of significant high correlation with other measure of forgiveness ($r=.40$; $p<.001$) for explicit self-forgiveness.

4) Oxford Happiness Scale (Argyle & Hills, 2002): The Oxford Happiness Questionnaire is widely-used scale for assessment of happiness. The Oxford Happiness Questionnaire is 6-point Likert scale having total 29 items. The highest score on the scale means higher levels of happiness. Cronbach’s alpha coefficient of the scale is 0.91.

2.3 Statistical Analysis

Data were analysed with IBM SPSS (Version 23) and the PROCESS (Version 4.2) macro by Hayes for SPSS. Descriptive statistics and Pearson’s product-moment correlation were conducted to determine the correlation among variables. Further, for the chain mediation analysis model, Model 6 of Hayes’ PROCESS macro was applied. 5,000 bootstrap samples were used to look at the indirect impacts of gratitude and forgiveness. Mediation was deemed significant when the confidence interval did not contain zero. Bias-corrected 95% confidence intervals were produced.

3. RESULTS AND DISCUSSION

Table 1 Descriptive Analysis and correlation matrix (N=220)

Variable	M	SD	1	2	3	4
1.Savoring	028.87	11.81	1			
2.Happiness	127.61	22.26	.477**	1		
3.Gratitude	030.72	07.06	.407**	.683**	1	
4.Forgiveness	085.38	12.66	.401**	.732**	.715**	1

**Correlation is significant at the 0.01 level (2-tailed).

Table 1 represents the descriptive analysis and the correlational analysis. Descriptive analysis depicted that the mean score of the participants on savoring ($M=28.87$; $SD=11.81$), on happiness ($M=127.61$; $SD=22.26$), on gratitude ($M=30.72$; $SD=07.06$) and on forgiveness ($M=85.38$; $SD=12.66$). The findings established a significant positive correlation between savoring and happiness ($r=.477$, $p<.01$); the correlation between savoring and gratitude is ($r=.407$, $p<0.01$), and the correlation between

savoring and forgiveness was also significant and positive ($r=.401, p<0.01$). Further, a significant positive correlation between happiness and gratitude ($r=.683, p<0.01$), happiness and forgiveness ($r=.732, p<0.01$), gratitude and forgiveness ($r=.715, p<0.01$).

The elderly's tendency for gratitude and forgiveness had a chain-mediating effect on savoring and happiness. Happiness is impacted by savoring in four ways: 1) direct path: savoring $\rightarrow$ happiness; 2) indirect path: 1) gratitude $\rightarrow$ happiness; 2) forgiveness $\rightarrow$ happiness; 3) gratitude $\rightarrow$ forgiveness $\rightarrow$ happiness. The relational model is shown in Figure 2

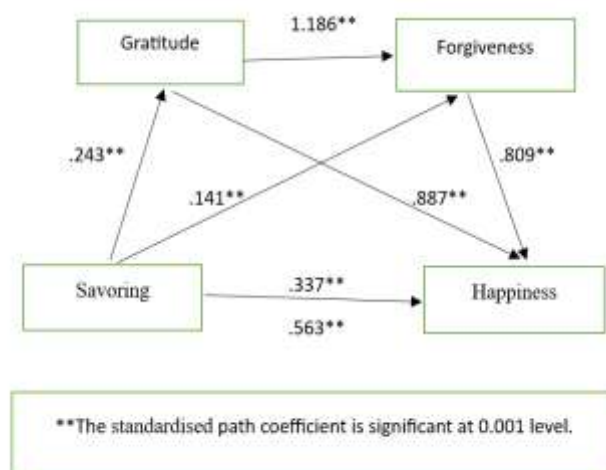


Figure 2 Model-1 Standardized path coefficients for the relationship between savoring and happiness as mediated by gratitude and forgiveness

In this analysis, stepwise regression equation was used to test the feasibility of each hypothesis, so the findings are as follows: savoring significantly positively predicted happiness in elder people ($\beta=.337, P<.001$), and savoring significantly positively predicted gratitude and forgiveness ($\beta=.243, P<.001, \beta=.141, P<.001$), gratitude significantly positively predicted forgiveness ($\beta=1.186, P<.001$) and positively predicted happiness ($\beta=.887, p=.0001$) further, forgiveness significantly positively predicted happiness ($\beta=.809, p<.001$). The path coefficients in the variables are significantly established, and the hypothesis model is preliminarily established.

The effect values of each variable are shown in Table 2.

Table 2: Direct and Indirect Effects

Effect Type	Effect	SE	t	P	LLCI	ULCI
SAV $\rightarrow$ HAP	00.337	00.089	3.803	0.000	00.162	00.511
SAV $\rightarrow$ GRA $\rightarrow$ HAP	00.216	00.078			00.074	00.376
SAV $\rightarrow$ FOR $\rightarrow$ HAP	00.114	00.046			00.029	00.209
SAV $\rightarrow$ GRA $\rightarrow$ FOR $\rightarrow$ HAP	00.233	00.051			00.146	00.341
Total	00.900	00.112			00.679	01.121

Note: - SAV- Savoring, HAP- Happiness, FOR- Forgiveness, and GRT- Gratitude

The direct effect of savoring on happiness is 0.337 (SE=0.089, $t=3.803$), which is found to be statistically significant at $p<.001$ (LLCI= 0.162, ULCI= 0.511). Further, the indirect effect of savoring on happiness through gratitude is 0.216 (SE=0.078), which falls within the class interval of 0.074 and 0.376 (Indirect1), the indirect effect of savoring on happiness through forgiveness is 0.114 (SE=0.046), which falls within the class interval of 0.029 and 0.209 (Indirect2), the indirect effect of savoring on happiness through gratitude and forgiveness is 0.233 (SE=0.051), which falls within the class interval of 0.146 and

0.341(Indirect3). As for both direct and indirect effects, the confidence interval is positive and does not include zero, which indicates the significance of the results and further indicates that the effect size in both cases is positive. Thus, these results demonstrate that savoring influences happiness both directly as well as indirectly by enhancing gratitude and forgiveness. These results also suggest that gratitude and forgiveness mediate the relationship between savoring and happiness. So, our final hypothesis stating that gratitude and forgiveness will mediate the relationship between savoring and happiness is also accepted.

3.1 Discussion

The present study examined the relationships among savoring, gratitude, forgiveness, and happiness in elderly individuals. The findings indicated that savoring, gratitude, and forgiveness were positively associated with happiness. Moreover, the findings supported the mediating role of gratitude and forgiveness in the relationship between savoring and happiness. The chain mediation analysis further depicts that savoring may contribute to greater happiness through increased gratitude and gratitude in turn may facilitate forgiveness.

Findings establish the significant positive relationship of savoring, gratitude and forgiveness with happiness among elderly.

The positive correlation between savoring and gratitude found in the present study is consistent with Bryant et al. (2021), who found that greater savoring among older adults was associated with increased gratitude, which subsequently contributed to better positive adjustment, including greater life satisfaction and hope.

The significant positive correlation between gratitude and forgiveness found in the present study is in line with the study by Ashori and Behzadi (2024), which demonstrated that gratitude training significantly enhanced forgiveness among mothers of students with visual impairment, suggesting that greater gratitude may facilitate the development of forgiveness.

The significant positive correlation between forgiveness and happiness found in the present study is consistent with Liu et al. (2025), who reported a significant positive association between forgiveness tendency and mature happiness ($r = .590$, $p < .01$) among elderly patients with chronic diseases. Their findings further depicted that forgiveness tendency significantly predicts mature happiness ($\beta = .510$, $p < .001$), suggesting that forgiveness as an important psychological resource associated with greater happiness in later life.

Previous research has highlighted savoring as an important positive psychological process associated with greater happiness, positive affect, and well-being across different populations (Alavi et al., 2026; Rani & Gera, 2023; Salces-Cubero et al., 2019).

The second hypothesis proposed that gratitude would mediate the relationship between savoring and happiness. The positive association observed between savoring and gratitude in the present study is consistent with the findings of Cheung and Lau (2021), wherein researchers concluded savoring positive experiences to be significantly and positively associated with gratitude. In the context of the present study, savoring may facilitate greater awareness and appreciation of positive experiences, which may be associated with increased gratitude and, consequently, greater happiness. Thus, the observed relationship between savoring and gratitude supports the view that savoring positive experiences represents an important positive psychological process associated with increase in the levels of happiness.

The mediating role of gratitude in the relationship between savoring and happiness in the present study is supported by Bryant et al. (2021), who examined a similar positive psychological process among older adults. Their findings supported a three-path mediational model in which increased savoring was associated with greater gratitude, which subsequently predicted positive adjustment outcomes, including life satisfaction and hope. In the present study, the significant mediating effect of gratitude suggests that older adults who are more capable of savoring the moments, appreciating and maintaining positive experiences, may develop stronger feelings of gratitude, which in turn may contribute to greater happiness. Thus, Bryant et al. (2021) provide a relevant theoretical and empirical basis for understanding gratitude as a mechanism linking savoring with positive psychological outcomes in later life.

The present findings are in line with those of Shaban et al. (2023), wherein with a sample of 52 ($N=52$) elderly persons' savoring intervention program resulted in the considerable improvement in the levels of gratitude, resilience and psychological well-being among elderly participants.

The findings of the present study may also be corroborated with Salces-Cubero et al. (2019), who examined savoring, gratitude, and well-being among older adults. Their study demonstrated that interventions focusing on savoring and gratitude significantly

enhanced subjective happiness, life satisfaction, positive affect, and resilience. These findings indicate that both savoring positive experiences and cultivating gratitude are important positive psychological strengths associated with enhanced well-being in later life. The present finding that savoring was positively associated with gratitude and that gratitude mediated the relationship between savoring and happiness further extends these findings by suggesting a possible mechanism through which savoring may contribute to happiness. Specifically, the tendency to attend to and appreciate positive experiences may facilitate feelings of gratitude, which may subsequently be associated with greater happiness. Thus, the findings of Salces-Cubero et al. (2019) provide supportive evidence for the broader relationship among savoring, gratitude, and positive well-being in older adults.

The third hypothesis proposed that forgiveness would mediate the relationship between savoring and happiness. The present findings are consistent with the findings of Chamorro-Garrido et al. (2021), who incorporated forgiveness and gratitude into a positive psychology intervention for older adults and reported significant improvements in subjective happiness and psychological well-being. These findings suggest that forgiveness and gratitude are positively associated with well-being indicators in later life. Thus, the findings of the present study further support the view that positive psychological resources are interconnected and may contribute to enhanced well-being among older adults.

The significant positive association between savoring and forgiveness found in the present study can be discussed in relation to the findings of Salces-Cubero et al. (2025). They looked at distinct positive psychological training programs that targeted forgiveness and savoring in older persons, but they did not explicitly look at the relationship between the two. Their findings demonstrated the efficacy of these positive psychological therapies in improving older individuals' well-being. The significance of both forgiving and savoring as beneficial psychological resources in later life is therefore more broadly supported by their findings. The significance of both forgiving and savoring as beneficial psychological resources in later life is therefore more broadly supported by these findings.

The findings also supported the fourth hypothesis, demonstrating a significant chain mediating effect. The findings of Wilson and MacNamara (2024) provide further support for the role of savoring in positive psychological functioning. Their findings suggest that the effects of savoring can generalize to novel positive experiences, indicating that savoring may enhance individuals' ability to engage with and benefit from positive events. This may help explain the positive association between savoring and happiness observed in the present study, as individuals who are more responsive to positive experiences may experience greater positive emotions and well-being.

The mediation functions of gratitude and forgiveness identified in the present study are also similar to the findings of Liu et al. (2025) wherein they established a significant positive connection between forgiving inclination and mature happiness among elderly patients with chronic illnesses ($r = .590, p < .01$), with forgiveness as a key mediator of the association between positive mental health and mature happiness. Moreover, with these findings, forgiveness may be concluded as a significant psychological resource that promotes better psychological functioning, leading to greater happiness in later life. Similarly, gratitude may function as another important psychological pathway through which positive experiences and psychological resources contribute to enhanced happiness. In this context, the present findings indicate that savoring may be associated with greater happiness partly through forgiveness as well as gratitude, suggesting that both processes may independently contribute to the enhancement of happiness amongst older adults.

The present study's findings are corroborated by Farsani et al. (2021), who reported a strong positive link between savoring beliefs and subjective happiness in older persons. Similarly, the current study reveals that savoring happy experiences is connected with increased happiness, and it expands on past studies by looking at gratitude and forgiveness as potential mediating processes in this relationship.

4. CONCLUSION

The present study suggests that elderly people who have better savoring and higher levels of gratitude and forgiveness tend to experience happiness. Based on these findings, the current study suggests that savoring might be a precursor to this pathway, such that savoring promotes gratitude, which subsequently facilitates forgiveness and, in turn, happiness.

Limitations and Directions for Future Research: Although this study revealed some insightful information, some limitations highlight areas that require further investigation. The methodology used in the study limits the applicability of causal results, which highlights the importance of longitudinal research that examines changes over time. Future studies should include objective evaluations because self-report measurements may result in bias. Furthermore, because the current sample is not very diverse, broader groups are required to be studied to improve generalizability. To fully comprehend how savoring could be used to increase quality of life in varied populations, further research on this link should consider other mediators and moderators, such as coping methods and social support.

ACKNOWLEDGEMENTS

The authors express their deepest appreciation to all the participants for their invaluable cooperation, time, and commitment to this research.

AUTHOR CONTRIBUTIONS

Minal: Data collection, preparation of manuscript, data analysis.

Taruna Gera: Methodology, Supervision, Review & Editing.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest regarding the study, writing and publication of this study.

ETHICS STATEMENT

The Institutional Ethics Committee (IEC) of the University provided ethical permission for this study. Informed consent covering the information regarding the purpose and method of the research work was taken pre-hand. Confidentiality and right to withdraw at any stage was ensured to the participants.

DATA AVAILABILITY STATEMENT

The corresponding author will provide data supporting the study's conclusions upon reasonable request.

REFERENCES

- [1] Central Statistics Office., 2011. *Situation analysis of the elderly in India*. Ministry of Statistics and Programme Implementation, Government of India. https://mospi.gov.in/sites/default/files/publication_reports/elderly_in_india.pdf
- [2] World Health Organisation., 2026, July 20. *Mental health of older adults*. <https://www.who.int/news-room/fact-sheets/detail/mental-health-of-older-adults>
- [3] Donovan, N. J., & Blazer, D. (2020). Social Isolation and Loneliness in Older Adults: Review and Commentary of a National Academies Report. *The American Journal of Geriatric Psychiatry*, 28(12), 1233–1244. <https://doi.org/10.1016/j.jagp.2020.08.005>
- [4] Kırışik Süre, H., Ulusal, F., & Borazan, N. G., 2025. Assessment of Positive Psychology Interventions for Elderly Individuals from Gerontological Perspective. *Psikiyatride Güncel Yaklaşımlar*, 17(1), 133–139. <https://doi.org/10.18863/pgy.1449444>
- [5] Bryant, F.B., & Veroff, J., 2007. *Savoring: A New Model of Positive Experience* (1st ed.). Psychology Press. <https://doi.org/10.4324/9781315088426>
- [6] Bryant, F. B., Smart, C. M., & King, S. P., 2005. Using the Past to Enhance the Present: Boosting Happiness Through Positive Reminiscence. *Journal of Happiness Studies*, 6(3), 227–260. <https://doi.org/10.1007/s10902-005-3889-4>
- [7] Villani, D., Pancini, E., Pesce, F., & Scuzzarella, L., 2023. Savoring life during pandemic: an online intervention to promote well-being in emerging adults. *BMC Psychology*, 11(1), 196. <https://doi.org/10.1186/s40359-023-01225-z>
- [8] Zheng, J., Zaremohzzabieh, Z., & Roslan, S., 2025. Examining the Influence of Savoring Interventions on Positive Emotions in University Students: A Systematic Review and Meta-Analysis. *Asian Social Science*, 21(1), 103. <https://doi.org/10.5539/ass.v21n1p103>
- [9] Chen, P.-H., Tung, H.-H., Wu, Y.-C., & Sie, J., 2026. Effectiveness of savoring interventions: A systematic review and meta-analysis of randomized controlled trials. *Applied Psychology: Health and Well-Being*, 18(2). Portico. <https://doi.org/10.1111/aphw.70134>

- [10] Bryant, F. B., Osowski, K. A., & Smith, J. L., 2021. Gratitude as a mediator of the effects of savoring on positive adjustment to aging. *The International Journal of Aging and Human Development*, 92(3), 275-300. <https://doi.org/10.1177/0091415020919999>
- [11] Lyubomirsky, S., Sheldon, K. M., & Schkade, D., 2005. Pursuing Happiness: The Architecture of Sustainable Change. *Review of General Psychology*, 9(2), 111–131. <https://doi.org/10.1037/1089-2680.9.2.111>
- [12] Jiao, J., Kim, S., & Pitts, M. J., 2021. Promoting subjective well-being through communication savoring. *Communication Quarterly*, 69(2), 152–171. <https://doi.org/10.1080/01463373.2021.1901758>
- [13] Rani, S., & Gera, T., 2023. Savoring as a Predictor of Happiness and Positive Affect among Adolescents. *Mind and Society*, 12(02), 44–49. <https://doi.org/10.56011/mind-mri-122-20235>
- [14] Chen, D.-F., Huang, K., Ho, W.-S., & Cheng, Y.-C., 2024. Savoring Belief, Resilience, and Meaning in Life as Pathways to Happiness: A Sequential Mediation Analysis among Taiwanese University Students. *Behavioral Sciences*, 14. <https://doi.org/10.3390/bs14050388>
- [15] Emmons, R. A., & McCullough, M. E., 2003. Counting blessings versus burdens: an experimental investigation of gratitude and subjective well-being in daily life. *Journal of personality and social psychology*, 84(2), 377. <https://doi.org/10.1037/0022-3514.84.2.377>
- [16] Robustelli, B. L., & Whisman, M. A., 2018. Gratitude and life satisfaction in the United States and Japan. *Journal of Happiness Studies*, 19(1), 41-55. <https://doi.org/10.1007/s10902-016-9802-5>
- [17] Thompson, L.Y., Snyder, C.R., Hoffman, L., Michael, S.T., Rasmussen, H.N., Billings, L.S., Heinze, L., Neufeld, J.E., Shorey, H.S., Roberts, J.C. and Roberts, D.E., 2005, Dispositional Forgiveness of Self, Others, and Situations. *Journal of Personality*, 73: 313-360. <https://doi.org/10.1111/j.1467-6494.2005.00311.x>
- [18] McCullough, M. E., 2000. Forgiveness as human strength: Theory, measurement, and links to well-being. *Journal of Social and Clinical Psychology*, 19(1), 43-55. <https://doi.org/10.1521/jscp.2000.19.1.43>
- [19] Kaleta, K., & Mróz, J., 2021. The effect of apology on emotional and decisional forgiveness: The role of personality. *Personality and Individual Differences*, 168, 110310. <https://doi.org/10.1016/j.paid.2020.110310>
- [20] Horgan, S., Prorok, J., Ellis, K., Mullaly, L., Cassidy, K. L., Seitz, D., & Checkland, C., 2024. Optimizing older adult mental health in support of healthy ageing: a pluralistic framework to inform transformative change across community and healthcare domains. *International Journal of Environmental Research and Public Health*, 21(6), 664. <https://doi.org/10.3390/ijerph21060664>
- [21] Bryant, F., 2003. Savoring Beliefs Inventory (SBI): A scale for measuring beliefs about savouring. *Journal of Mental Health*, 12(2), 175–196. <https://doi.org/10.1080/0963823031000103489>
- [22] McCullough, M. E., Emmons, R. A., & Tsang, J.-A., 2002. The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology*, 82(1), 112–127. <https://doi.org/10.1037/0022-3514.82.1.112>
- [23] Hills, P., & Argyle, M., 2002. The Oxford Happiness Questionnaire: a compact scale for the measurement of psychological well-being. *Personality and Individual Differences*, 33(7), 1073-1082.
- [24] Hayes, A. F., 2013. Mediation, moderation, and conditional process analysis. Introduction to mediation, moderation, and conditional process analysis: A regression-based approach, 1(6), 12-20.
- [25] Hayes, A. F., 2017. Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. Guilford Publications.
- [26] Ashori, M., & Behzadi, F., 2024. Gratitude training: Forgiveness in mothers of students with visual impairment. *Vulnerable Children and Youth Studies*, 19(4), 646–660. <https://doi.org/10.1080/17450128.2024.2389380>
- [27] Liu, H.-C., Zhou, Y., Liu, C.-Q., Wu, X.-B., Smith, G. D., Wong, T. K.-S., Hu, X.-Y., Liu, Y.-M., Qin, Y.-Y., & Wang, W.-J., 2025. Effect of Positive Mental Health on Elderly Patients with Chronic Diseases: The Chain-Mediated Effects of Gratitude and Forgiveness Tendencies at a Tertiary Hospital in Guangzhou. *Healthcare*, 13(5), 444. <https://doi.org/10.3390/healthcare13050444>
- [28] Alavi, S. Z., Bryant, F. B., Elahi Shirvan, M., & Solhi, M., 2026. Exploring Savoring experiences, strategies, and barriers in L2 learning: Insights from a Qualitative study with EFL learners. *International Journal of Applied Positive Psychology*, 11, 19. <https://doi.org/10.1007/s41042-026-00279-9>
- [29] Salces-Cubero, I. M., Ramírez-Fernández, E., & Ortega-Martínez, A. R., 2019. Strengths in older adults: Differential effect of savoring, gratitude and optimism on well-being. *Aging & Mental Health*, 23(8), 1017-1024. <https://doi.org/10.1080/13607863.2018.147155>

- [30] Cheung, R. Y., & Lau, E. N. S., 2021. Is mindfulness linked to life satisfaction? Testing savoring positive experiences and gratitude as mediators. *Frontiers in Psychology*, 12, 591103. <https://doi.org/10.3389/fpsyg.2021.591103>
- [31] Shaban Elsayed Shehata, H., Abdelrahman Ahmed Mahdy, R., Metwally Samy Metwally, M., & Abdallah Mahmoud El-Ezazy, A., 2023. Effect of Psychological Savoring Intervention on Resilience, Gratitude and Psychological Well-Being among Elderly. *Egyptian Journal of Health Care*, 14(4), 450-461. <https://doi.org/10.21608/ejhc.2023.326966>
- [32] Chamorro-Garrido, A., Ramírez-Fernández, E., & Ortega-Martínez, A. R., 2021. Autobiographical Memory, Gratitude, Forgiveness and Sense of Humor: An Intervention in Older Adults. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.731319>
- [33] Salces-Cubero, I. M., Ramírez-Fernández, E., & Ortega-Martínez, A. R., 2025. The differential effect of training in humor, forgiveness, savoring, and meaning and purpose on the well-being of older adults. *Journal of Happiness Studies*, 26(7), 122. <https://doi.org/10.1007/s10902-025-00938-9>
- [34] Wilson, K. A., & MacNamara, A., 2024. Generalization of savoring to novel positive stimuli. *Psychophysiology*, 61(6), e14537. <https://doi.org/10.1111/psyp.14537>
- [35] Farsani, Z. K., Kaveh, M., & Ghodrati, S., 2021. The relationship between savouring beliefs, optimism, and subjective happiness in the elderly: The mediating role of life satisfaction. *Aging Psychology*, 7(3), 229–245. <https://doi.org/10.22126/JAP.2021.6345.1522>