

The Impact of Locus of Control on Aging Anxiety in Middle Adulthood

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Abstract: Aging anxiety is a multifaceted phenomenon influenced by various psychological factors, among which LOC plays a crucial role. This study looks at the connection between LOC, aging anxiety, and gender differences among middle-aged adults aged 36 to 60. Using a correlational quantitative research design, the study explores whether individuals' perceptions of control over life events (LOC) impact their experience of aging anxiety and whether this relationship differs between genders. Findings reveal a negative correlation between internal LOC and aging anxiety, indicating that individuals with a stronger sense of internal control tend to experience lower levels of anxiety related to aging. However, no significant gender differences in aging anxiety were found, although disparities in LOC beliefs between males and females were observed. The study's limitations include binary gender classification and convenient sampling, suggesting caution in generalizing the findings. Future research should focus on longitudinal studies to understand the dynamic effects of LOC and gender on aging anxiety over time and identify mediators and moderators for targeted interventions aimed at promoting psychological well-being in middle-aged adults.

Keywords: Aging anxiety, LOC, Middle adulthood, Gender differences, Internal LOC, Longitudinal studies

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I. INTRODUCTION

Perceptions of Aging: The Role of Locus of Control
Aging is an unavoidable aspect of life's journey, marked by a natural progression through its stages. However, individuals' perceptions and responses to aging can significantly vary due to the interplay of biological and psychological factors. One crucial psychological factor influencing this perception is the abstract concept of LOC as proposed by Rotter (1966). This paper aims to explore the intricate relationship between aging, LOC, and the phenomenon of aging anxiety.

Understanding Locus of Control

LOC refers to an individual's belief in their capacity to control and influence events in their life. It can be categorized into two main orientations:

1.1 Internal LOC: Individuals with an internal orientation believe in their ability to control and influence life events. For them, aging may be perceived as a natural aspect of life that can be managed with a sense of agency and resilience. They are more inclined to approach the challenges of aging with proactive measures, viewing it as a controllable process (Rotter, 1966; Bandura, 1997).

1.2 External LOC: Conversely, individuals with an external orientation tend to attribute life events to external forces beyond their control. Aging, for them, may evoke feelings of powerlessness and vulnerability. They perceive aging as something that happens to them rather than something they can actively influence (Rotter, 1966).

Impact on Aging Anxiety

Aging often brings about various challenges, including changes in social relationships, loss of independence, and economic concerns, all of which can contribute to aging anxiety. Understanding the

role of LOC in shaping responses to these challenges is crucial.

2.1 Social Relationships and Independence

The loss of friends and loved ones, reduced social engagement, and shifts in familial roles can amplify aging anxiety, particularly for individuals valuing their independence. Fear of losing autonomy and decision-making capabilities can lead to heightened anxiety as individuals confront the prospect of relying on others for daily tasks and care (Carstensen et al., 1999; Lachman, 2006).

2.2 Economic Concerns and Existential Anxiety

Economic anxieties, such as reduced income and uncertainty about financial stability, can exacerbate aging anxiety. Furthermore, the awareness of mortality and existential uncertainties can lead to contemplation of life's purpose and meaning, contributing to existential anxiety (Sorkin & Rook, 2006).

Theories Related to Aging Anxiety

3.1 Erikson's Stage of Generativity vs. Stagnation

Posits that individuals with an internal LOC are more likely to engage in generative activities, contributing positively to society, while those with an external LOC may struggle with feelings of stagnation and heightened aging anxiety (Erikson, 1982).

3.2 Rotter's Social Learning Theory

Emphasizes the role of LOC in shaping emotional responses and coping strategies. Individuals with an internal LOC demonstrate greater adaptability and resilience in the face of aging-related stressors, leading to lower levels of aging anxiety (Rotter, 1966).

II. LITERATURE REVIEW

Interplay between individuals LOC and Aging Anxiety

The intricate interplay between individuals' beliefs about control (LOC) and various psychological

outcomes has been extensively explored across diverse age groups and contexts. Beginning with Johanna et al.'s (2019) longitudinal study, which revealed the dynamic nature of LOC and its associations with anxiety and depression levels over nine years, the research landscape unfolds to encompass a breadth of investigations.

Bouazzaoui (2019) shed light on the complex interactions between LOC, anxiety, and cognitive function in aging, particularly in the context of stereotype threat. Anderson (2018) highlighted the significance of internalizing control beliefs for maintaining cognitive health in middle-aged women, while Sindu Padmanabhan's (2021) exploration emphasized the impact of LOC on job satisfaction and workplace stress. Moving to middle-aged adults, Hye Seong Jeon (2014) emphasized the need to address psychological factors such as aging anxiety in preparing for old age, echoing the sentiments echoed by Neymotin et al. (2014) concerning the interconnectedness of mental outlook, bodily signals, and health outcomes. The impact of ageism on psychological well-being and the importance of interventions were underscored by Yoav S Bergman et al. (2021), while Slevac (2010) and Stefanie S. Boswell (2012) delved into the factors influencing attitudes towards aging and cosmetic surgery, respectively. From investigating the protective role of self-esteem and life purpose against depressive symptoms associated with aging anxiety (Bergman et al., 2022) to exploring the role of resilience and occupational satisfaction in mitigating psychological distress in middle-aged women (Kim et al., 2020), the research landscape encompasses a rich tapestry of studies. The associations between LOC, ageism and the results on mental health (Guishard et al., 2021), along with the mediating role of health LOC in health anxiety and illness behavior (Skidmore et al., 2014), further underscore the intricate relationship between psychological factors and well-being across the lifespan. According to Lyons et al. (2017), ageism negatively affects older persons' mental health. while Song & Li (2017) and Ren et al. (2017) delved into the cognitive underpinnings of anxiety and cognitive impairment, respectively. These studies provide a thorough understanding of how LOC shapes psychological outcomes, which informs interventions meant to foster resilience and well-being in a range of age groups and demographics.

III. METHODOLOGY

Hypotheses

H1: There is no significant relationship between the role of LOC and Aging Anxiety in Middle Adulthood
H2: There is no significant difference in LOC on gender.

Objectives of the Study:

- To examine the relationship between LOC and aging anxiety.

- To compare whether the role of LOC on aging anxiety differs significantly between females and males..

Research Design

This study employed a correlational quantitative research design to investigate the relationship between LOC and aging anxiety among middle-aged adults. The primary aim was to identify any significant correlations between these variables without experimental manipulation. This design was chosen for its ability to reveal the intensity and course of associations between variables, making it suitable for examining the relationship between LOC as the independent variable and aging anxiety as the dependent variable.

Statement of the Problem

Does the LOC influence aging anxiety levels in individuals during middle adulthood?

Operational Definition

4.1 Locus of Control

This refers to an individual's perspective on the degree to which their actions influence the outcomes of events in their lives (internal control orientation) versus external factors beyond their personal influence (external control orientation).

4.2 Aging Anxiety

Negative sentiments and concerns related to aging, encompassing physical, psychological, social, and transpersonal losses.

Variables

5.1 Independent Variable: LOC

5.2 Dependent Variable: Aging Anxiety

Demographic Variables

Age, gender, marital status, number of children, educational qualification, profession, and current residency. These factors are crucial in analyzing how different backgrounds and life stages influence the impact of LOC on aging anxiety among middle-aged adults.

Universe of the Study

The study encompasses middle-aged adults, typically aged between 36 and 60 years, who are in a transitional phase of life where aging-related concerns may become prominent.

Geographical Area

The study predominantly focuses on diverse localities within Delhi, India, known for its vast cultural, economic, and social diversity, providing a rich context for examining the impact of LOC on aging anxiety.

Sample Distribution

6.1 Inclusion Criteria

Participants must:

- Fall within the age group of 36 to 60 years.
- Possess at least a basic level of education.

6.2 Exclusion Criteria

Individuals diagnosed with psychotic disorders and those identifying with non-binary or other sexual

orientations not specifically targeted by the research focus.

Sample and Techniques

7.1 Sample

The study includes 150 middle-aged individuals aged 36 to 60 years, selected through convenient sampling based on accessibility and willingness to participate.

7.2 Sampling Technique

Convenient sampling prioritizes ease and efficiency in targeting readily available subjects willing to contribute to the research.

Research Ethics Followed:

The study strictly adheres to research ethics, emphasizing obtaining informed consent from participants through a Google Forms platform.

Tools for the Study

8.1 Anxiety about Aging Scale: This 20-item scale assesses participants' levels of aging anxiety.

8.2 The Rotter Internal: External LOC Scale: Comprising 29 items, this scale measures participants' LOC orientations.

Table 1: Psychometric Properties

Variables	Author, Year	Cornbach's Alpha Coefficient
Anxiety about Aging Scale	Lasher and Faulkender, 1993	.65 to .79
The Rotter Internal - External LOC Scale	Rotter ,1966	0.82

Statistical Analysis

Sequential quantitative techniques include Correlation Analysis, t-tests, and potentially Regression Analysis, if preliminary analyses indicate significant correlations. Descriptive statistics provide an overview of central tendencies and variability within the data, followed by inferential statistics to test hypotheses and explore relationships between variables.

IV. RESULTS AND DISCUSSIONS

The study found no significant correlation between LOC and Aging Anxiety ($r = -.037$, $p > .05$), suggesting that variations in LOC beliefs were not associated with differences in Anxiety about Aging among participants. However, significant gender differences in LOC beliefs were observed ($p < .05$), indicating that males and females hold different perspectives on control over life outcomes. Conversely, there was no noticeable difference in Aging Anxiety levels between genders ($p = .419$), suggesting that Anxiety about Aging was similar among males and females in the sample.

Table 2: Descriptive Statistics

Variables	N	M	SD
Age	150	46.42	5.906
Gender	150	1.56	.498
Marital Status	150	1.15	.649
No. of Children	150	1.77	.796
Educational Qualification	150	1.68	.763
Profession	150	1.09	1.439
Currently Residing	150	1.17	.380

Table 3. Spearman's correlation

Variable	n	M	SD	1	2
LOC	150	10.22	4.025	-	
Aging Anxiety	150	27.45	16.247	-.037	-

There was a negative correlation between the two variables, $r(df) = -.037$, $p > .05$.

Table 4. Mann Whitney U test

Variables	Male	Female	z	P
	M	M		
LOC	61.95	86.14	1878.000	.001
Aging Anxiety	78.73	72.96	2558.500	.419

There is significant difference in LOC on gender

Discussion

This study provides valuable insights into aging anxiety by examining the influence of LOC and gender on individuals' experiences. The findings underscore the significant roles of LOC and gender in shaping aging-related anxiety, contributing to the discourse on this topic. Future research should prioritize longitudinal investigations to understand how LOC and gender dynamics influence aging anxiety over time, identifying mediators and moderators to inform interventions targeting middle-aged individuals' well-being. Integrating understandings of LOC and gender-specific experiences is crucial for mitigating aging anxiety and enhancing life quality. These findings emphasize the importance of considering individual differences in LOC and gender dynamics in addressing aging-related anxiety, warranting further exploration of longitudinal effects and underlying psychological mechanisms.

Limitations:

9.1 Binary Gender Classification

The study's binary gender classification (male or female) limits inclusivity and may not fully capture the experiences of non-binary individuals, affecting external validity and perpetuating exclusion.

9.2 Convenient Sampling

Utilizing convenient sampling restricts generalizability due to potential selection bias and reduced variability, cautioning against broad interpretations of findings.

Delimitation:

The study focuses on middle-aged adults aged 36 to 60, providing valuable insights into aging anxiety and LOC within this demographic. However, narrowing the age range further could offer a more detailed understanding across specific age segments.

CONCLUSION

Understanding the interplay between LOC, aging anxiety, and gender differences is crucial for promoting psychological well-being in older adulthood. This study revealed a negative correlation between internal LOC and aging anxiety, highlighting the importance of individual beliefs in coping with aging-related concerns. While no significant gender differences in aging anxiety were found, disparities in LOC beliefs were observed. Future research should explore longitudinal effects and potential moderators to inform targeted interventions.

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References:

- [1] Allan, L. J., & Johnson, J. A. (2008). Undergraduate Attitudes toward the elderly: the role of knowledge, contact and aging anxiety. *Educational Gerontology*, 35(1), 1–14. <https://doi.org/10.1080/03601270802299780>
- [2] Anderson, E. L., Cochrane, A., Golding, J., & Nowicki, S. (2018). Locus of control as a modifiable risk factor for cognitive function in midlife. *Aging*, 10(7), 1542–1555. <https://doi.org/10.18632/aging.101490>
- [3] Anderson, E. L., Cochrane, A., Golding, J., & Nowicki, S. (2018). Locus of control as a modifiable risk factor for cognitive function in midlife. *Aging*, 10(7), 1542–1555. <https://doi.org/10.18632/aging.101490>
- [4] Asadi-Pooya, A. A., Schilling, C. A., Glosser, D. S., Tracy, J. I., & Sperling, M. R. (2007). Health locus of control in patients with epilepsy and its relationship to anxiety, depression, and seizure control. *Epilepsy & Behavior*, 11(3), 347–350. <https://doi.org/10.1016/j.yebeh.2007.06.008>
- [5] Ayalon, L., & Tesch-Römer, C. (2018). Contemporary Perspectives on Ageism. In *International perspectives on aging*. <https://doi.org/10.1007/978-3-319-73820-8>
- [6] B. W., Schoevers, R. A., & Riese, H. (2019). Differential associations of locus of control with anxiety, depression and life-events: A five-wave, nine-year study to test stability and change. *Journal of Affective Disorders*, 253, 26–34. <https://doi.org/10.1016/j.jad.2019.04.005>
- [7] Benton, J. P., Christopher, A. N., & Walter, M. I. (2007). Death anxiety as a function of aging anxiety. *Death Studies*, 31(4), 337–350. <https://doi.org/10.1080/07481180601187100>
- [8] Bergman, Y. S., & Segel-Karpas, D. (2021). Aging anxiety, loneliness, and depressive symptoms among middle-aged adults: The moderating role of ageism. *Journal of Affective Disorders*, 290, 89–92. <https://doi.org/10.1016/j.jad.2021.04.077>
- [9] B. W., Schoevers, R. A., & Riese, H. (2019). Differential associations of Locus of Control with anxiety, depression and life-events: A five-wave, nine-year study to test stability and change. *Journal of Affective Disorders*, 253, 26–34. doi.org/10.1016/j.jad.2019.04.005
- [10] Blanchard-Fields, F., & Irion, J. C. (1988). The relation between locus of control and coping in two contexts: Age as a moderator variable. *Psychology and Aging*, 3(2), 197–203. <https://doi.org/10.1037/0882-7974.3.2.197>
- [11] Bodner, E., Bergman, Y. S., Shiloh-Levin, S., & Hoffman, Y. (2021). The interactive effect of aging anxiety and age awareness on meaning in life and psychological distress: a moderated mediation model. *Current Psychology (New Brunswick, N.J.)*, 42(10), 8255–8264. <https://doi.org/10.1007/s12144-021-02156-x>
- [12] Boswell, S. S. (2012). “Old People are Cranky”: Helping Professional Trainees’ Knowledge, Attitudes, Aging Anxiety, and Interest in Working with Older Adults. *Educational Gerontology*, 38(7), 465–472. <https://doi.org/10.1080/03601277.2011.559864>
- [13] Bouazzaoui, B., Fay, S., Sastoque, L. G., Semaine, M., Isingrini, M., & Taconnat, L. (2019). Memory Age-based Stereotype Threat: role of locus of control and anxiety. *Experimental Aging Research*, 46(1), 39–51. <https://doi.org/10.1080/0361073x.2019.1693009>
- [14] Carrard, I., Argyrides, M., Ioannou, X., Kvalem, I. L., Waldherr, K., Harcourt, D., & McArdle, S. (2019). Associations between body dissatisfaction, importance of appearance, and aging anxiety with depression, and appearance-related behaviors in women in mid-life. *Journal of Women & Aging*, 33(1), 70–83.

- [15] Carstensen, L. L., Isaacowitz, D. M., & Charles, S. T. (1999b). Taking time seriously: A theory of socioemotional selectivity. *American Psychologist*, 54(3), 165–181. <https://doi.org/10.1037/0003-066x.54.3.165>
- [16] Chapman, B. P., Duberstein, P. R., Sörensen, S., & Lyness, J. M. (2006). Personality and Perceived Health in Older Adults: The Five factor Model in Primary care. *The Journals of Gerontology: Series B*, 61(6), P362–P365. <https://doi.org/10.1093/geronb/61.6.p362>
- [17] Churchill, S. A., Munyanyi, M. E., Prakash, K., & Smyth, R. (2020). Locus of control and the gender gap in mental health. *Journal of Economic Behavior and Organization*, 178, 740–758. <https://doi.org/10.1016/j.jebo.2020.08.013>
- [18] Guishard, D., Kost, R. G., Tobin, J. N., & Vasquez, K. S. (2021). The role of Aging Anxiety, Ageism, and Health locus of control on Middle-Aged Adults Health Outcomes and Behaviors. *Innovation in Aging*, 5(Supplement_1), 604–605.
- [19] Hickson, J., Housley, W. F., & Boyle, C. (1988). The relationship of locus of control, age, and sex to life satisfaction and death anxiety in older persons. *The International Journal of Aging and Human Development*, 26(3), 191–199. <https://doi.org/10.2190/e5ck-thbm-qvqg-c3dn>
- [20] Hoehn-Saric, R., & McLeod, D. R. (1985). Locus of control in chronic anxiety disorders. *Acta Psychiatrica Scandinavica*, 72(6), 529–535. <https://doi.org/10.1111/j.1600-0447.1985.tb02650.x>
- [21] Hovenkamp-Hermelink, J., Jeronimus, B. F., Van Der Veen, D. C., Spinhoven, P., Penninx, B. W., Schoevers, R. A., & Riese, H. (2019). Differential associations of locus of control with anxiety, depression and life-events: A five-wave, nine-year study to test stability and change. *Journal of Affective Disorders*, 253, 26–34.
- [22] *International Journal of Aging and Human Development*, 37(4), 247–259.
- [23] Jeon, H. S. (2014). The effects of the locus of control and Aging Anxiety on preparation for old age in middle-aged adults. *Journal of Digital Convergence*, 12(10), 571–576.
- [24] Lachman, M. E. (1986). Locus of control in aging research: A case for multidimensional and domain-specific assessment. *Psychology and Aging*, 1(1), 34–40.
- [25] Lachman, M. E. (1986). Locus of control in aging research: A case for multidimensional and domain-specific assessment. *Psychology and Aging*, 1(1), 34–40.
- [26] Lachman, M. E. (2006). Perceived control over Aging-Related declines. *Current Directions in Psychological Science*, 15(6), 282–286.
- [27] Lyons, A., Alba, B., Heywood, W., Fileborn, B., Minichiello, V., Barrett, C., Hinchliff, S., Malta, S., & Dow, B. (2017). Experiences of ageism and the mental health of older adults. *Aging & Mental Health*, 22(11), 1456–1464.
- [28] Molinari, V., & Khanna, P. (1981). Locus of control and its relationship to anxiety and depression. *Journal of Personality Assessment*, 45(3), 314–319. https://doi.org/10.1207/s15327752jpa4503_14
- [29] Nehrke, M. F., Bellucci, G., & Gabriel, S. J. (1978). Death anxiety, locus of control and life satisfaction in the elderly: toward a definition of Ego-Integrity. *OMEGA - Journal of Death and Dying*, 8(4), 359–368.
- [30] Neymotin, F., & Nemzer, L. R. (2014). Locus of control and obesity. *Frontiers in Endocrinology*, 5.
- [31] Neymotin, F., & Nemzer, L. R. (2014b). Locus of control and obesity. *Frontiers in Endocrinology*, 5. <https://doi.org/10.3389/fendo.2014.00159>
- [32] Padmanabhan, S. (2021). The impact of locus of control on workplace stress and job satisfaction: A pilot study on private-sector employees. *Current Research in Behavioral Sciences*, 2, 100026.
- [32] Poteat, V. P., Mereish, E. H., & Birkett, M. (2015). The negative effects of prejudice on interpersonal relationships within adolescent peer groups. *Developmental Psychology*, 51(4), 544–553.
- [33] Ren, P., Anthony, M., Chapman, B. P., Heffner, K. L., & Lin, F. (2017). Amygdala functional connectivity is associated with locus of control in the context of cognitive aging. *Neuropsychologia*, 99, 199–206. <https://doi.org/10.1016/j.neuropsychologia.2017.03.016>
- [34] Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *The Psychological Monographs*, 80(1), 1–28. <https://doi.org/10.1037/h0092976>
- [35] Sargent-Cox, K., & Anstey, K. J. (2014). The relationship between age-stereotypes and health locus of control across adult age-groups. *Psychology & Health*, 30(6), 652–670. <https://doi.org/10.1080/08870446.2014.974603>
- [36] Skidmore, J. R., Dyson, S. J., Kupper, A. E., & Calabrese, D. (2014). Predicting illness behavior: health anxiety mediated by locus of control. *American Journal of Health Behavior*, 38(5), 699–707. <https://doi.org/10.5993/ajhb.38.5.7>
- [37] Slevac, J., & Tiggemann, M. (2010). Attitudes toward Cosmetic Surgery in Middle-Aged Women: Body image, aging anxiety, and the media. *Psychology of Women Quarterly*, 34(1), 65–74. <https://doi.org/10.1111/j.1471-6402.2009.01542.x>
- [38] Song, Y., & Li, B. (2017). Locus of Control and Trait Anxiety in Aged Adults: the Mediating Effect of Intolerance of Uncertainty. *International Journal of Mental Health and Addiction*, 17(1), 13–21.
- [39] Watkins, R., Coates, R., & Ferroni, P. (1998). Measurement of aging anxiety in an elderly Australian population. *International Journal of Aging & Human Development* (Print), 46(4), 319–332.