Vilnius University Press

Contents lists available at Vilnius University Press

Psichologija
2026, vol. 74, pp. 75–91

ISSN 1392-0359 eISSN 2345-0061
DOI: https://doi.org/10.15388/Psichol.2026.74.6

Aging Anxiety Association with Body Objectification

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Abstract. While aging is a natural and inevitable phenomenon, aging anxiety remains an under-researched aspect of the aging experience. The individual's tendency to objectify one's body might be related to more anxiety about the aging process. In this study, we aimed to explore how aging anxiety is related to body objectification. A total sample of 525 participants, ranging in age from 18 to 82, was included in the study. Correlational and regression analyses revealed a link between aging anxiety and body objectification. Body objectification dimensions, as well as worse subjective health, were significant predictors of the overall aging anxiety and most of its dimensions. Gender and not having children were also significant predictors for some of the aging anxiety dimensions.

Keywords: aging, aging anxiety, body objectification.

Nerimo dėl senėjimo sąsajos su kūno sudaiktinimu

Santrauka. Nors senėjimas yra natūralus ir neišvengiamas reiškinys, nerimas dėl jo yra nepakankamai ištirtas šio proceso aspektas. Asmens polinkis sudaiktinti savo kūną gali būti susijęs su didesniu nerimu dėl senėjimo proceso. Šio tyrimo tikslas buvo ištirti, kaip nerimas dėl senėjimo yra susijęs su kūno sudaiktinimu – kūno stebėjimu ir gėda dėl kūno. Tyrime dalyvavo 525 dalyviai, kurių amžius buvo nuo 18 iki 82 metų. Koreliacijos ir regresijos analizės atskleidė ryšį tarp nerimo dėl senėjimo ir kūno sudaiktinimo. Kūno sudaiktinimo dimensijos, taip pat prasčiau vertinama sveikata buvo reikšmingi nerimo dėl senėjimo ir daugumos nerimo dėl senėjimo dimensijų prognostiniai veiksniai. Lytis ir vaikų neturėjimas taip pat buvo reikšmingi kai kurių nerimo dėl senėjimo dimensijų prognostiniai veiksniai.

Pagrindiniai žodžiai: senėjimas, nerimas dėl senėjimo, kūno sudaiktinimas.

Received: 2025-06-18. **Accepted:** 2025-09-08.

Introduction

Aging is a natural and gradual life process affecting all living individuals. As the global population continues to age, this process has become increasingly significant in many societies. According to Eurostat (2024), the aging process is expected to continue to rise in the coming years. Lithuania, in particular, has been experiencing a notable rise in its proportion of older residents. According to data from the Statistics Department of the Republic of Lithuania, the number of elderly individuals in the country has been steadily increasing (Oficialiosios Statistikos Portalas, 2024). Given these demographic shifts, there has been a growing focus on promoting healthy and positive aging, and although research on aging-related processes is expanding, if we seek to untangle the complicated processes involved in positive aging, further research is still needed in various aspects of the aging experience.

Despite the growing focus on more positive aging, many individuals still experience negative feelings and anxiety related to the aging process (Chonody & Teater, 2016). The fear of the aging process, called 'aging anxiety', refers to the concern and anticipation of losses associated with the aging process (Lasher & Faulkender, 1993). Aging anxiety has a negative impact on both physical health and psychological well-being. It has been found that negative feelings toward aging are linked to a higher risk of chronic illnesses (Allen, 2016), lower life satisfaction (Bryant et al., 2014), and increased feelings of loneliness and depressive symptoms (Ayalon, 2018; Bergman & Segel-Karpas, 2021), as well as heightened anxiety about the future (Bergman & Segel-Karpas, 2021).

Conceptualized as a multidimensional construct by Lasher and Faulkender (1993), aging anxiety encompasses four interrelated facets of perceived loss in later life: physical, psychological, social, and transpersonal. It involves three types of fears – fear of aging as a process, fear of being old, and fear of old people (Fernandez-Jimenez et al., 2020). These four dimensions and three fears were found to make four factors of aging anxiety: (1) Fear of Old People, (2) Psychological Concerns, (3) Physical Appearance, and (4) Fear of Losses (Lasher & Faulkender, 1993). Fear of old people is more clearly distinct from anxiety concerning one's own aging. This factor is about the reaction and emotions such as avoidance behaviors (e.g., denial) in the presence of older individuals (Lasher & Faulkender, 1993). The psychological concerns dimension is about concern and anticipation of the psychological state in older age, for example, expected life satisfaction, self-contentment, and autonomy (Blanco et al., 2023). Physical appearance concerns anxieties related to how appearance changes with age (Lasher & Faulkender, 1993). Fear of losses, in this context, centers on anxieties arising from perceived potential external losses such as social contacts, health, or social respect. When looking into aging anxiety in a wider sense, it may not necessarily manifest as a direct fear of getting older, but it may instead relate to concerns about diminishing future opportunities, deteriorating health, or, for women, the loss of fertility (Barrett & Toothman, 2018; Yazdanpanahi et al., 2018). According to Bodner and colleagues (2015), individuals who adhere to a modern Western worldview, which prioritizes unrealistic ideals of perpetual youth, physical strength, and

beauty, exhibit higher levels of aging anxiety. These findings indicate that societal norms and expectations, as well as life stages, are fundamental in shaping individuals' anxieties and perspectives regarding the aging process.

One of the possible areas for better understanding of aging anxiety could be its association to body objectification. Theory argues that people, especially women, regularly experience objectification – being viewed as an object whose appearance is valued over the body's functionality or abilities (McKinley & Hyde, 1996; McKinley, 2006). Over time, individuals may internalize these external judgments, which can lead to a tendency to view their bodies from an outside observer's perspective, often resulting in surveillance and control of their appearance (McKinley & Hyde, 1996; McKinley & Lyon, 2008). If one believes that they fail to meet the perceived cultural beauty standards, it often leads to feelings of shame (McKinley & Lyon, 2008; Paluckaite, 2021). McKinley (2006) describes this as objectified body consciousness, which consists of three key aspects: constant self-surveillance, body shame for not meeting beauty ideals, and the belief that one can control their appearance with sufficient effort. Stronger body objectification has been found to be linked with poorer mental health, experiencing anxiety, depressive symptoms, body shame, and a poorer self-esteem (Mercurio & Landry, 2008; Sherman et al., 2024; Tiggemann & Slater, 2015).

Experiencing anxiety about aging could be related to the theory of body objectification, as people may view themselves through the lens of others (Gendron & Lydecker, 2016; Panek et al., 2013). From a theoretical perspective, the Social Identity Theory explains that being part of a younger group is associated with greater attractiveness, causing a decrease in perceived value as individuals are aging (Chonody & Teater, 2016). Individuals with higher levels of body objectification are more likely to observe and evaluate their own bodies, comparing themselves to others, and might be more sensitive to others' perceptions of their bodies and appearance (Seekis et al., 2020). Thus, individuals with body objectification tendencies may become more sensitive to the perceived loss of attractiveness and status during this transition between groups (Chonody & Teater, 2016; McKinley & Lyon, 2008). When one evaluates their body mostly based on external criteria, signs of aging, such as wrinkles or sagging skin, may be perceived as decline and loss (Carrard et al., 2019; Saunders et al., 2024). In line with the Social Identity Theory, this reflects not only a loss of attractiveness, but also the internalization of societal devaluation of aging (Chonody & Teater, 2016; Saunders et al., 2024). This can manifest as internalized ageism – the belief that aging results in a loss of self-worth and diminished value, both in society and to oneself (Marques et al., 2020). This perspective may lead to greater anxiety about aging and a negative attitude towards one's body, which, in turn, may contribute to ageism (Barnett & Adams, 2018; Wisdom et al., 2014). Therefore, this may create a cycle where anxiety, internalized ageism, and negative attitudes toward older people are continuously reinforced at both an individual and a collective level.

Aging anxiety and body objectification seem to be a relevant issue across age and gender groups. Aging anxiety and negative attitudes towards aging are observed in all age groups (Donizzetti, 2019; Mendonça et al., 2018; Sargent-Cox et al., 2013). While

some studies report the highest levels of aging anxiety among young adults and the lowest among older adults, which would suggest that aging anxiety decreases over the life course (Brunton & Scott, 2015; Donizzetti, 2019), the results are inconsistent as other studies have found no significant relationship between aging anxiety and age (Bergman et al., 2018). Body objectification has also been observed in all age groups, with some findings suggesting a decrease with age (Rollero et al., 2018; Sherman et al., 2024), but most studies are based on samples of women. Although both aging anxiety and body objectification are experienced regardless of gender (Kahalon et al., 2024; Rollero et al., 2018; Sargent Cox et al., 2013), there is some evidence that women tend to worry more about their aging (Bergman et al., 2018). The Double Standard of Aging Theory (Sontag, 1972) suggests that there is societal pressure for women to adhere to unrealistic appearance expectations and to retain a youthful look, even as they age, while for men, physical signs of aging can be seen as indicators of wisdom or status (Chonody & Teater, 2016). These double standards might explain findings that women often experience more aging anxiety (Brunton & Scott, 2015; Gendron & Lydecker, 2016).

While theoretically it seems that aging anxiety could be related to body objectification, there are not many studies analyzing this connection. Two previous studies found the link between aging anxiety and body objectification, with higher levels of body objectification associated with higher levels of aging anxiety (Gendron & Lydecker, 2016; McKinley & Lyon, 2008). However, McKinley & Lyon's (2008) study analyzed only middle-aged women and only appearance-related aging anxiety. Gendron and Lydecker's (2016) research studied university students and found that all aging anxiety factors, except for fear of old people, were related to body objectification dimensions of self-surveillance and body shame. Even with these studies in mind, there remains a significant gap in knowledge on the relationship between body objectification and aging anxiety, particularly across diverse populations, age and gender wise, and varying dimensions of aging anxiety. This lack of research and contradictory results of existing studies encourage further research on this topic.

The aim of this study was to analyze the associations between aging anxiety and body objectification in a general adult population. The key questions addressed in this study were whether aging anxiety and its four dimensions (Fear of Old People, Psychological Concerns, Physical Appearance, and Fear of Losses) are related to (1) the combined body objectification score, (2) the Self-surveillance subscale, and (3) the Body Shame subscale.

Methods

Procedure and participants

This study is part of the bigger research project that aimed: 1) to prepare Lithuanian versions of established aging anxiety and death anxiety measures, and 2) to explore their associations with theoretically related factors. Previous published analyses of this sample's data explored the aging anxiety and death anxiety scale's reliability and factorial structure along with its associations with some of the related factors for the evidence of convergent

validity (Gegieckaite, Petraškaitė et al., 2025; Gegieckaite, Zamalijeva et al., 2025). This paper has a different aim and exclusively focuses on the new analysis examining the relationships between aging anxiety and body objectification and their associations with some of the sociodemographic factors which were not examined in the earlier-published analyses. The study plan was reviewed and approved by the Vilnius University Committee on Research Ethics in Psychology (Nr. (1.13 E) 250000-KT-187). Data collection of the study took place from January to April, 2024 and was conducted in the Lithuanian language. Adults 18 or older were invited to participate in the study about attitudes towards aging and death. Invitations to the study were disseminated online through social media posts. At the study's website, the participants were given information about the research. They were required to provide an informed consent before starting the online questionnaire. Participants were excluded from the analysis if they failed one of the attention questions, which asked to mark a specific number on the scale (n = 12). For this study's analysis, 3 more participants were excluded as they had more than 2 items missing from both subscales of the Objectified Body Consciousness Scale (OBC) and thus could not be included in the main analysis.

The final sample of the study was 525 participants whose age ranged from 18 to 82 years old, and 75.8% of the sample were women. More detailed information about the participants is reported in Table 1. Almost half (48.8%) of the participants were younger than 30 and had a university degree (48.3%), the majority resided in major cities (64.2%) and were married or cohabiting with a partner (52.8%).

Table 1

Participant characteristics (N = 525)

Gender, *n* (%)	
Men	120 (22.9%)
Women	398 (75.8%)
Other	7 (1.3%)
Age (years)	
Mean (*SD*)	33.64 (14.47)
Range	18–82
Age groups, n (%)	
18–29	255 (48.8%)
30–39	111 (21.2%)
40–49	77 (14.7%)
50–59	44 (8.4%)
60 and more	36 (6.9%)
Education level, *n* (%)	
Higher university education	253 (48.3%)
Higher non-university education or post-secondary education	48 (9.2%)

Gender, *n* (%)	
Unfinished university education or a current university student	151 (28.8%)
Secondary education or lower	72 (13.8%)
Residency type, *n* (%)	
Major city	337 (64.2%)
City	112 (21.3%)
Town	34 (6.5%)
Village	42 (8.0%)
Marital status, n (%)	
Married or cohabiting with a partner	277 (52.8%)
Partnering without cohabitation	55 (10.5%)
Single	161 (30.7%)
Divorced	18 (3.4%)
Widow/widower	14 (2.7%)
Has children, *n* (%)	
Yes	214 (40.8%)
No	311 (59.2%)

Note. Valid percentages excluding missing cases are shown.

Measures

Aging anxiety

Aging anxiety was measured by using the Anxiety about Aging Scale (AAS, Lasher & Faulkender, 1993), which consists of 20 items. The scale includes four subscales, each containing five items: Fear of Older People (e.g., "I enjoy being around old people"), Psychological Concerns (e.g., "I fear it will be very hard for me to find contentment in old age"), Physical Appearance (e.g., "I have never lied about my age in order to appear younger"), and Fear of Losses (e.g., "I fear that when I am old, all my friends will be gone"). The participants were asked to rate their agreement with the statements on a 5-point Likert scale ranging from '1' (definitely disagree) to '5' (definitely agree). The total and subscale scores were calculated by summing up the relevant items, with higher scores indicating greater aging anxiety. Lasher and Faulkender (1993) reported good internal consistency for the scale, with a Cronbach's alpha score of .82. Previous analysis of this study's data tested psychometric properties of the Lithuanian version of this scale and found good reliability and confirmed the original four factor structure which the authors of the scale suggested (Gegieckaite, Petraškaitė et al., 2025). While additional 3 participants were excluded for this analysis, Cronbach's alpha of the AAS matched the one reported in Gegieckaite, Petraškaitė et al (2025) and was .87 for the total AAS and ranged from .72 – .87 for the subscales.

Body objectification

Body objectification was assessed by using the Objectified Body Consciousness Scale (OBC, McKinley & Hyde, 1996). The scale measures the extent of one's objectified body consciousness through three subscales: Self-surveillance, Body Shame, and Appearance Control Beliefs. In this study, only the Self-surveillance (e.g., "I rarely think about how I look"), and Body Shame subscales (e.g., "When I can't control my weight, I feel like something must be wrong with me") (8 items per subscale) were used. Moradi & Varnes (2017) compiled a review of the previous studies which, along with their own analysis of the factorial structure and validity of OBC subscales, found this subscale to have low reliability and also discovered that, theoretically, they feature inconsistent correlations with other constructs. Analysis revealed a two-factor structure model excluding the Appearance Control Beliefs subscale to fit the data better (Moradi & Varnes, 2017). Moradi and Varnes (2017), based on these findings, explicitly recommend not using the Appearance Control Beliefs subscale as an indicator of objectified body consciousness and not including it in the total OBC score. Therefore, this subscale was not used in our study. Even though only two out of the three original subscales were included in this study, we refer to the average of these two subscales as the 'total OBC score' for the purposes of our analyses. Each item is rated on a 7-point Likert scale, from '1' standing for 'strongly disagree' to '7' denoting 'strongly agree', with an 'NA' option for completely inapplicable statements. Both scale and subscale scores are calculated by averaging the responses for non-missing items. A subscale score is considered missing if more than 2 of its items are missing. Higher scores indicate more pronounced Self-surveillance and Body Shame.

A review of the scale's studies found satisfactory psychometric properties of the scale and confirmed the factorial structure (Moradi & Varnes, 2017), the Lithuanian version of the scale showed satisfactory reliability as well (Paluckaitė, 2021). CFA of the scale was performed for this study by using the WLSMV estimator, which confirmed the first-order two-factor structure of Self-surveillance and Body Shame. Model fit indices were CFI = 0.936, TLI = 0.926, and RMSEA = 0.083 (90% CI = 0.075–0.092). The suggested model fit indices showing satisfactory model fit are CFI and TLI above 0.9, and RMSEA below 0.08 (Hu & Bentler, 1999). While RMSEA scores were slightly above the recommended ranges, according to Kline (2023), these ranges should not be treated as strict cut-offs, and thus the overall model was considered to be showing an acceptable fit. All items showed sufficient factor loading above .40 (Brown, 2015) on their intended factors, loading from .43 to .86. In this study, Cronbach's alpha of Self-surveillance was .81 and Cronbach's alpha of the Body Shame scored .80; its combined score was .87.

Data analysis

Data analysis was performed by using *SPSS.29* and *CFA* to test the OBC factorial structure, which was performed by using the *R lavaan* package. Normality of the variables was tested, and all variables showed normal distribution with skewness and kurtosis; all variables were ranging between -2 and + 2 (see Kline (2023)); therefore, parametric tests were

performed. Those participants who were missing more than two items from one of the OBC subscales were excluded from analysis involving that particular subscale score and the total OBC scale score, but their other subscale score was included in the analysis. 1 participant had 3 items of the Self-surveillance subscale missing, and 18 participants had more than two items missing in the Body Shame subscale. In total, 19 participants' total scores of OBC were not calculated for this reason. Only 7 participants marked 'other' for gender, and therefore they were included for correlation analysis, but not in the analysis testing gender differences and regression, where only men and women were compared. Regression analyses were performed to test how the OBC subscales would predict aging anxiety and its subscales while controlling for other sociodemographic control factors. Assumptions of linear regression were tested for all the models: no multicollinearity issues (VIF < 2.5) or extreme outliers (Cook < 0.06) were found, histograms and Normal P-P plots of regression models' standardized residuals did not show significant deviations from normality, and residual plots did not show significant heteroscedasticity or linearity violations. Strengths of correlations' and regressions' coefficients were interpreted according to Cohen's guidelines (1988), with coefficients above .10 being deemed small, above .30 as medium, and coefficients above .50 were perceived as large or strong.

Results

Independent samples t-tests were conducted to explore gender differences in aging anxiety and its subscales, as well as in body objectification, Self-surveillance, and Body Shame. The results revealed that women reported higher overall levels of aging anxiety (except for Fear of Old People), total body objectification, Self-surveillance, and Body Shame compared to men (see Table 2).

Table 2

Gender Differences in Aging Anxiety and Body Objectification Measures

	Women		Men		t (df)	*p*
	M	*SD*	*M*	*SD*		
Total AAS	51.86	12.55	47.22	12.30	3.57 (516)	< .001
Fear of Old People	12.38	4.21	13.29	4.45	-2.06 (516)	.040
Psychological Concerns	12.50	3.74	11.08	4.16	3.57 (516)	< .001
Physical Appearance	12.50	4.50	10.52	4.10	4.32 (516)	< .001
Fear of Losses	14.48	4.46	12.33	4.38	4.65 (516)	< .001
Total OBC	3.63	1.09	3.05	1.01	5.03 (497)	< .001
Self-surveillance	4.05	1.16	3.31	1.10	6.12 (515)	< .001
Body Shame	3.19	1.26	2.79	1.16	3.02 (498)	.003

Note. AAS = Anxiety about Aging Scale; OBC = Objectified Body Consciousness Scale.

Correlations between the AAS (total and subscales) and the OBC (total and subscales), as well as age and subjective health rating, are shown in Table 3. AAS and most of its subscales showed statistically significant moderate positive correlations with the total OBC score, Self-surveillance and Body Shame subscales (r = .29 to .42, p < .001). The Fear of Old People subscale had weak statistically significant correlation only with the total OBC score and Self-surveillance, whereas it showed no significant association with Body Shame. Furthermore, age demonstrated a weak significant negative correlation with the total aging anxiety score as well as with the Psychological Concerns subscale and the Physical Appearance subscale (r = -.14 to -0.19), p < .001), which indicates that aging anxiety and these two dimensions decrease with age. Age also had a moderate negative correlation with the total OBC (r = -.29, p < .001) and Self-surveillance (r = -0.34, p < .001), and a weak negative correlation with Body Shame. Subjective health was negatively associated with the total aging anxiety and all subscales except Fear of Old People (r = -.09 to -.25, p < .001), as well as with the total body objectification and its subscales (r = -.10 to -.20, p < .001).

Table 3

Correlations between Aging Anxiety, Body Objectification, Age and Subjective Health

	Total OBC	Body Shame	Self-surveillance	Age	Subjective health
Total AAS	.42**	.37**	.39**	-.15**	-.23**
Fear of Old People	.10*	.08	.09*	-.03	-.09
Psychological Concerns	.39**	.34**	.35**	-.14**	-.25**
Physical Appearance	.40*	.31**	.41**	-.19**	-.09*
Fear of Losses	.36**	.36**	.29**	-.08	-.25**
Age	-.29**	-.17**	-.34**	-	-.09*
Subjective health	-.17**	-.20**	-.10*	-.09*	-

Note. * p < .05; ** p < .001. AAS = Anxiety about Aging Scale; OBC = Objectified Body Consciousness Scale.

Multiple linear regressions were performed, testing how Body Shame and Self-surveillance would predict aging anxiety and its subscales when controlling for sociodemographic variables: age, gender, having children, relationship status, university degree and subjective health rating (see Table 4). We found that Self-surveillance, Body Shame, and subjective health ratings were all significant predictors of the total aging anxiety. The regression model explained 20% of the aging anxiety variance.

Table 4

Linear regression models predicting aging anxiety and its subscales

	Total AAS	Fear of Old People	Psychological Concerns	Physical Appearance	Fear of Losses
	Beta (b)	*Beta (b)*	*Beta (b)*	*Beta (b)*	*Beta (b)*
Age	.01	-.05	.04	-.03	.06
Gender	.06	-.12*	.05	.11*	.13*
Having children	-.12	-.03	-.13*	-.06	-.15*
Married or cohabiting	.01	.00	.04	-.07	.06
University degree	.08	.16*	.01	.07	-.01
Subjective health	-.16**	-.10*	-.17**	-.04	-.17**
Self-surveillance	.22**	.09	.22**	.27**	.07
Body Shame	.19**	.04	.16*	.11*	.26**
R^2 adj.	*.20*	*.03*	*.18*	*.17*	*.18*
F	*16.59***	*3.10**	*14.61***	*14.04***	*14.12***

Note. AAS = Anxiety about Aging Scale. * $p < .05$; ** $p < .001$.

Neither Self-surveillance nor Body Shame was a significant predictor of Fear of Old people. However, having a university degree and being a male predicted a higher Fear of Old People, as did worse subjective health; however, the model explained only 3% of the variance. Psychological Concerns and Physical Appearance anxiety were significantly predicted by Self-surveillance and Body Shame, thereby indicating that a greater focus on and shame about one's body is linked to a heightened anxiety about the psychological and physical aspects of aging. Not having children and worse subjective health predicted Psychological Concerns, whereas being a woman was a statistically significant predictor of Physical Appearance. For Fear of Losses, Body Shame (but not Self-surveillance) was a significant predictor. Not having children, worse subjective health, and being a woman predicted higher Fear of Losses scores as well. Regression models predicting Psychological Concerns, Physical Appearance and Fear of Losses explained 17% to 18% of each factor's variance.

Discussion

This study aimed to explore the relationship between aging anxiety and body objectification. We have found that body objectification is significantly associated with aging anxiety across all but one of its dimensions. Higher levels of body objectification correspond to a greater aging anxiety, which indicates that aging-related changes are stressful and anxiety-provoking. Although a few studies have found links between aging anxiety and body objectification (Gendron & Lydecker, 2016; McKinley & Lyon, 2008), these have focused on specific populations only. To the best of our knowledge, this study is the first to show these associations in a general adult sample.

Both Self-surveillance and Body Shame were significantly associated with almost all dimensions of aging anxiety. When self-perception is tied to physical appearance, the perceived or anticipated decline in attractiveness associated with aging can elicit anxiety, as individuals may fear to be socially devalued (Panek et al., 2013; Gendron & Lydecker, 2016; Slevec & Tiggemann, 2010). At the same time, shame stems from failing to meet body standards of attractiveness (Paluckaite, 2021). The anxiety, triggered by existing or predicted aging-related physical changes, may not solely come from a loss of attractiveness but from a perceived disintegration of self-concept, especially in societies where youthfulness is integral to one's identity and social value (Chonody & Teater, 2016; Gendron & Lydecker, 2016). As individuals internalize appearance-based standards from an early age, the physical markers of aging can act as visual cues of social decline, threatening not just public perception but self-recognition as well (Carrard et al., 2019; Lasher & Faulkender, 1993; Panek et al., 2013).

As Lasher and Faulkender (1993) observed, psychological concerns stem from internal matters, and thus the loss of attractiveness associated with changes in physical appearance with aging may be perceived as not only an external loss, but also as an internal identity issue. These findings align with lifespan developmental theories which suggest that identity formation and maintenance are dynamic processes influenced by shifting social roles and physical abilities throughout life (Kornadt et al., 2019). Aging may provoke anxiety when it disrupts continuity in self-perception, particularly in individuals whose self-worth has been heavily tied to appearance (Gendron & Lydecker, 2016; Panek et al., 2013). The body objectification's association with fear of losses illustrates the value placed on appearance, assuming that as attractiveness declines with aging, a person's value also declines (Gendron & Lydecker, 2016; Panek et al., 2013). Fear of losing one's value and the status that comes with being young and attractive can cause aging anxiety (Chonody & Teater, 2016; Gendron & Lydecker, 2016; Lasher & Faulkender, 1993).

An exception is the link between old people's fear and body objectification. Even though there was a weak yet significant correlation between Fear of Old People and Self-Surveillance, regression analysis showed that body objectification did not predict Fear of Old People subscale's scores. Although fear of old people may indicate some unconscious anxiety about aging, it is more likely to measure extrinsic aspects – anxiety directed to an out-group (Lasher & Faulkender, 1993). This may suggest that while potentially co-occurring, body objectification and fear of old people are not causally linked in a linear way, which is a result consistent with Gendron and Lydecker's (2016) research. An individual might experience high levels of body shame due to personal appearance concerns (e.g., weight, wrinkles) without necessarily having a strong fear or negative attitude toward older adults as a group.

Looking at significant sociodemographic predictors of aging anxiety, there were some expected and some surprising results. Consistent with prior research, significant gender differences emerged in both aging anxiety and body objectification. We have found that women experience greater body objectification and anxiety about aging in comparison to men. Women are more likely to experience body objectification and are more concerned

about their psychological well-being in old age, changes in physical appearance, and losses associated with the aging process. This is consistent with prior research (Bergman et al., 2018; Donizzetti, 2019) and Sontag's (1972) theory of double standards of aging, emphasizing societal pressure on women to maintain beauty and youthful appearance. Men tended to have a greater fear of older people, which is a result consistent with Brunton and Scott (2015). This might be attributed to men's potentially less frequent contact with older adults (Allen et al., 2022) and potentially fostering higher ageism (Abdelkader et al., 2025; Kaplan Serin & Tülüce, 2021).

Our initial correlation analysis showed aging anxiety to go down with age, which partially matches findings of previous studies, specifically, that- aging anxiety has been found to be related to younger age (Brunton & Scott, 2015; Costa, 2024; Donizzetti, 2019), even though not consistently (Bergman et al., 2018). However, age was not a significant factor in predicting aging anxiety when controlling for body objectification and other sociodemographic factors, indicating that other factors were stronger predictors of aging anxiety. While this was not specifically tested in our study, future studies could investigate a possible mediation effect as it is possible that age association with aging anxiety might be explained by body objectification going down with age. There could also be some cultural effects weakening the effect of aging anxiety lowering with age, as Lithuanian older adults are experiencing high levels of challenges, such as social exclusion and poverty (Eurostat, 2024) and ageism in society (Rapolienė, 2015), which might maintain elevated levels of concern about the future. Our findings that body objectification becomes less strong with age match the findings of previous research (Sherman et al., 2024). Older women might experience less external sexualization and objectification, which, in turn, might reduce the extent to which they themselves objectify their bodies and start to value its function and health more (Sherman et al., 2024). It also might be that women develop stronger coping strategies throughout life, such as self-compassion (Stapleton et al., 2018), which supports the acceptance of inevitable aging and the changing body, potentially reducing body objectification.

Partially related to the question of age were the results that having children was related to having less aging anxiety in some domains. The Social Clock Theory, proposed by Neugarten (1965), posits that societal norms establish age-graded milestones such as childbirth. Even in progressive, Western cultures, parenthood is expected and assumed to endow life with meaning (Corbett, 2016). Research indicates that deviations from these societally sanctioned timelines can precipitate some negative feelings, consequently contributing to anxiety about aging, especially psychological fears (Dykstra & Hagestad, 2007; Momtaz et al., 2021). However, being married or cohabiting with a partner, which might fit into the Social Clock Theory as another milestone, did not reveal any significant relation with aging anxiety in this study. Previous research found that there was a higher likelihood of aging anxiety in separated/divorced women (Barrett & Robbins, 2008), although Barrett and Toothman (2018) did not find being married or cohabiting to operate as a significant predictor of aging anxiety, but found that strain in the relationship with the partner was.

Subjective health was a significant predictor of overall aging anxiety and its subscales – Psychological Concerns, Fear of Losses, and weak, but a significant predictor of Fear of Old People. This aligns with previous research (Costa, 2024; Brunton & Scott, 2015) highlighting health as a key factor in successful aging, influencing both anxiety and well-being (Ngamaba et al., 2017; Steptoe et al., 2015). Interestingly, the results also showed that people with higher levels of education had a greater fear of older adults. At first, this might seem surprising, since education is often thought to reduce stereotypes (Lynch, 2000). However, one possible reason is that higher education is often associated with perceived independence and productivity (Sánchez-García et al., 2019). It can be thought that when older adults appear frail or dependent, they can challenge these ideals, especially for those who fear losing autonomy. This conflict may trigger discomfort or avoidance, contributing to ageist attitudes.

While the present study offers important insights, some limitations should be acknowledged. The usage of self-report measures may be prone to biases, such as social desirability, for example, when measuring the fear of old people. Moreover, the study is of a correlational design, and therefore additional longitudinal and experimental studies would be needed for further in-depth analysis and more information on possible directions of correlations. Furthermore, the composition of the sample imposes some limitations on the interpretation of the findings. A big proportion of the sample was young(er) adults and women, and hence the findings might be leaning towards representing these groups more. While conducting moderation analysis was out of the scope of our study, future studies could look into how gender and age moderate the relationship between aging anxiety and body objectification. With this in mind, caution is needed when extending these results to a more diverse population.

Despite its limitations, this study provides valuable insights into the connection between aging anxiety and body objectification. A better understanding of the effects of body objectification on the aging experience is important in developing effective intervention and prevention programs to reduce aging anxiety. Interventions aimed at improving body appreciation and relationship to one's appearance and beauty standards might be one of the potential avenues to address some aspects of aging anxiety. Future research is needed to deepen the current scientific research and address the challenges coming with aging, bringing attention to the importance of body objectification.

Author contributions

Agota Viskontaitė: contributed to study methodology planning, contributed to data collection, led the writing of the manuscript, wrote the majority of the introduction and discussion, and contributed to writing methodology.

Goda Gegieckaitė: led the study, methodology planning, data collection, formal analysis, writing results, and part of the methodology, review and editing of the original draft.

Kotryna Gulbinaitė: contributed to data collection, contributed to writing the introduction, methods, results, and discussion of the manuscript.

Elena Lapinskaitė-Vvohlfahrt: contributed to writing the introduction, methods, results, and the discussion part of the manuscript.

Karolina Petraškaitė: planned the study, data collection process, as well as the review and editing of the manuscript.

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