

ARTIGO ORIGINAL

SUBJECTIVITIES OF BODY DYNAMICS AMONG GAY AND HETEROSEXUAL OLDER ADULTS: INTERPRETATIONS FROM ARTIFICIAL INTELLIGENCE

SUBJETIVIDADES DA DINÂMICA CORPORAL ENTRE IDOSOS GAYS E HETEROSSEXUAIS: INTERPRETAÇÕES A PARTIR DA INTELIGÊNCIA ARTIFICIAL

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Resumo

O uso crescente de sistemas de inteligência artificial generativa em temas sensíveis, como envelhecimento, corpo e sexualidade, exige análise crítica dos discursos produzidos por essas ferramentas. Este estudo teve como objetivo analisar como diferentes chatbots descrevem a dinâmica corporal de idosos gays e heterossexuais e verificar a convergência desses discursos com a literatura científica. Trata-se de estudo qualitativo, exploratório e documental, com corpus textual produzido a partir de dez perguntas padronizadas aplicadas aos chatbots Copilot, Meta AI, Gemini, ChatGPT, Claude, Sider e DeepSeek. O material foi submetido à análise de conteúdo temática de Bardin. Os resultados indicaram categorias relacionadas à experiência de vida, estética, interseccionalidade, redes de apoio, saúde mental, movimento, cultura, identidade e relacionamentos. Conclui-se que a IA generativa sintetiza repertórios sociais sobre a velhice masculina, mas não opera como fonte neutra.

PALAVRAS-CHAVE

inteligência artificial generativa; Envelhecimento; Sexualidade; Imagem corporal; Idosos.

Abstract

The growing use of generative artificial intelligence systems in sensitive topics, such as aging, the body, and sexuality, requires critical analysis of the discourses produced by these tools. This study aimed to analyze how different chatbots describe the bodily dynamics of gay and heterosexual older adults and to examine the extent to which these discourses converge with the scientific literature. This was a qualitative, exploratory, and documentary study, with a textual corpus produced from ten standardized questions applied to the chatbots Copilot, Meta AI, Gemini, ChatGPT, Claude, Sider, and DeepSeek. The material was subjected to Bardin's thematic content analysis. The results indicated categories related to life experience, aesthetics, intersectionality, support networks, mental health, movement, culture, identity, and relationships. The study concludes that generative AI synthesizes social repertoires about male old age but does not operate as a neutral source.

KEYWORDS

Generative artificial intelligence; Aging; Sexuality; Body image; Older adults.

1 Introduction

Male body image is produced through interaction with sociocultural norms, media discourses, and values that define which bodies are more socially legitimized. Among men, youth, muscularity, and an athletic appearance occupy a privileged place in this symbolic repertoire, shaping how the body is perceived, evaluated, and desired across the life course (DAFFERNER; CAMPAGNA; RODGERS, 2019; FREDERICK; FESSLER; HASELTON, 2005). In old age, these demands do not disappear; rather, they come to coexist with functional, aesthetic, and identity-related transformations inherent to aging.

When sexual orientation is incorporated into this debate, bodily experience becomes more complex. Studies indicate that gay men tend to report greater centrality of appearance, greater sensitivity to aesthetic pressure, and greater body dissatisfaction than heterosexual men, although these experiences are neither homogeneous nor reducible to a single variable (FREDERICK et al., 2020; FREDERICK; ESSAYLI, 2016). Among older gay men, the articulation between aging, sexuality, visibility, and community belonging is further traversed by specific historical trajectories, such as the impact of HIV/AIDS, the cultural value attributed to youth, and the double exposure to age-related and sexual stigma (DRUMMOND, 2010; LYONS et al., 2015; SCHALLER; KVALEM; TRÆEN, 2023).

More recent evidence reinforces this interpretation. A systematic review of 136 studies on body image among sexual minority men showed that this population generally reports more negative body image than heterosexual men, although the magnitude and direction of findings may vary according to the specific body image construct assessed (NOWICKI et al., 2022). In later life, these experiences are also shaped by social isolation, reduced family support, stigma, discrimination across the course, and barriers to health and social care, which are central issues in the literature on LGBTQIA+ aging (PEREIRA; BANERJEE, 2021).

At the same time, chatbots have come to occupy an increasing place in the search for information and interpretation on sensitive social topics. Systems based on language models produce responses that appear coherent and neutral, but they operate through the probabilistic recombination of massive amounts of data, which makes them capable of retrieving consensuses, tensions, and prejudices already sedimented in prior discourses (ROSSINI; SANTOS; VELOSO, 2024; LEAVY; O'SULLIVAN; SIAPERA, 2020). In the case of older adults, this scenario requires additional caution, since excessive trust in decontextualized, imprecise, or insufficiently sensitive answers may amplify risks of misinterpretation and inappropriate use of information (REBUSTINI, 2024).

Against this background, the present study analyzes how different chatbots describe the body dynamics of gay and heterosexual older adults and examines the extent to which such discourses converge with the scientific literature, as well as which stereotypes, silences, and vulnerabilities are reiterated by artificial intelligence.

2 Methods

This is a qualitative, exploratory, documentary-based study centered on textual responses produced by generative artificial intelligence systems, with a chatbot/interface sample defined intentionally and by convenience. The sample comprised seven publicly available tools—Microsoft Copilot, Meta AI, Gemini, ChatGPT, Claude, Sider, and DeepSeek—selected for their broad public circulation, accessibility to end users, presence in large-scale digital ecosystems, international visibility, and diversity of models, architectures, and modes of access. Between February 2 and 3, 2025, ten standardized questions in Portuguese were submitted to each of these systems.

At the time of data collection, the systems were recorded according to the model or version publicly visible or identifiable in the interface: Copilot was accessed through the Microsoft Copilot web interface; Meta AI assistant based on the Llama 3 model family; Gemini was version 2.0 Flash was being made available to app users; ChatGPT version GPT-4o; Claude 3.5 Sonnet; Sider was accessed as a multi-model chatbot aggregator, without stable disclosure of a single underlying model in the interaction interface; and DeepSeek R1. When the platform did not explicitly display a fixed model version, the commercial name, interface, access date, and collection conditions were recorded to improve methodological transparency.

The script addressed differences in body image, stereotypes, ageism, homophobic manifestations, risks, benefits, aesthetic construction, and body dynamics among gay and heterosexual older adults. Ten questions were asked directly to the chatbots, without any type of parameterization or explicit command beyond the questions themselves. We preliminarily understand this to be the most common way these platforms are used. The questions asked were: 1) What are the main differences in body image between gay older adults and heterosexual older adults? 2) How can the experience of aging affect body perception among older gay and heterosexual men? 3) What stereotypes about the body, appearance, and aging are commonly associated with gay older adults and heterosexual older adults? 4) How can ageism influence the way gay and heterosexual older adults perceive and experience their bodies? 5) In what ways can homophobia affect body image and self-esteem among older gay men? 6) What are the main psychosocial risks associated with body image among gay and heterosexual older adults? 7) What factors can promote a more positive relationship with the body among gay and heterosexual older adults? 8) How are aesthetics, appearance, and body care socially constructed among gay and heterosexual older adults? 9) How can body dynamics, including movement, physical activity, bodily expression, and sexuality, differ between gay and heterosexual older adults? And 10) What professional, social, and ethical considerations should be considered when discussing the body, aging, and sexuality with gay and heterosexual older adults?

The responses were organized into a single corpus and subjected to Bardin's (2020) thematic content analysis, including the stages of pre-analysis, coding, categorization, and interpretation. The theme was adopted as the unit of record because it allows comparison among convergences, divergences, omissions, and marks of stereotyping present in the outputs of the different systems. The incorporation of Rebustini's (2024) discussion also methodologically supports the need to critically examine chatbot responses when directed to the field of aging.

The analysis was conducted manually with the support of an electronic spreadsheet. The responses were organized by chatbot, question, analyzed excerpt, initial code, thematic category, and critical interpretation. First, all material was read in full, and the responses were then organized by system and by question. Next, the most relevant excerpts were coded, using the themes identified in the responses as the main unit of analysis, while the complete response from each chatbot was used as the context for interpretation. The codes were developed in two ways: first, based on the study objective, considering themes such as body image, aging, sexuality, stereotypes, discrimination, and biases; and second, based on elements that emerged during the reading of the corpus itself. Similar codes were then grouped into thematic categories, considering similarities and differences among the responses, as well as omissions, generalizations, and possible signs of stereotyping. Finally, the categories were interpreted considering the literature on aging, body image, sexuality, sexual and gender minorities, and biases in generative artificial intelligence.

To qualify the cross-sectional reading of the material, four analytical criteria were adopted: proximity to the scientific literature; presence of generalizations about sexual orientation and old age; use of inappropriate or outdated terminology; and degree of differentiation among the systems. As the corpus was produced by automated tools and did not involve interaction with identifiable human participants, submission to a Research Ethics Committee was not required.

3 Results

The first regularity observed was the understanding that body image in male old age is not restricted to appearance, but is traversed by life trajectory, culture, health, discrimination, and social bonds. In most responses, gay older adults were associated with double exposure to ageism and sexual stigma, whereas heterosexual older adults more frequently appeared linked to conjugal and family roles. The idea also emerged recurrently that support networks interfere with how the body is perceived and experienced in old age.

Despite these convergences, the chatbots varied greatly in the way they constructed differences between the groups. ChatGPT, Claude, and Sider emphasized aesthetic pressure, youth, and visibility of appearance among gay men. Meta AI and DeepSeek added more typifying elements, associating gay old age with the HIV/AIDS epidemic, the use of bright colors, accessories, and fashion as activism, while heterosexual older adults were described through sober clothing, tradition, and aesthetic invisibility. In the opposite direction, Copilot even suggested a lack of concern among gay older adults regarding appearance, producing an important contradiction within the corpus.

When asked about benefits and risks, several systems diluted the bodily focus and answered generically about old age. Even so, the category of mental health emerged strongly: depression, anxiety, stress, and isolation were identified for both groups, but with greater emphasis on the trajectory of discrimination among gay older adults and on loss of partners or social ties among heterosexuals. Inadequate terminological uses also appeared, such as “nursing home” used in an imprecise way, in addition to formulations that naturalized traditional gender expectations.

In the construction of body dynamics, movement, culture, identity, and relationships stood out. Some chatbots attributed to gay older adults a greater openness to bodily practices considered expressive, such as dance and yoga, and to heterosexual older adults a greater adherence to activities taken as conventional. Although physical activity was correctly recognized as a common factor in health and mobility, the distribution of these practices by sexual orientation revealed traces of essentialization and behavioral normativization.

The categories of culture and identity showed a double face. On the one hand, the systems recognized that beauty standards, heteronormative norms, and experiences of discrimination interfere with the way the body is signified. On the other hand, part of the responses converted these mediations into fixed profiles, attributing to gay old age an almost uniform repertoire of visibility, aesthetic resistance, and gender nonconformity, while heterosexual old age was described as synonymous with discretion, family, and conventionality.

Taken together, the results indicate that artificial intelligence retrieves socially available repertoires about male aging but reorganizes them with different levels of refinement. In the most consistent passages, the responses synthesize discussions already present in literature; in the weakest passages, they reproduce stereotypes, simplify trajectories, and transform historical and contextual differences into almost natural attributes of subjects.

4 Discussion

The findings partially converge with the literature indicating greater aesthetic pressure, greater centrality of appearance, and greater body dissatisfaction among gay men, including in old age (FREDERICK et al., 2020; FREDERICK; ESSAYLI, 2016). They also dialogue with studies describing the negotiation of sexuality, the body, and aging under double exposure to age and sexual orientation, especially among older gay men (DRUMMOND, 2010; LYONS et al., 2015; SCHALLER; KVALEM; TRÆEN, 2023). From this perspective, part of the responses produced by chatbots do not emerge arbitrarily; rather, they mirror themes effectively present in scientific production and in broader social discourses.

Recent evidence strengthens the interpretation that body image among sexual minority men is a multidimensional and socially situated phenomenon. A systematic review of 136 studies showed that sexual minority men tend to report more negative body image than heterosexual men, although findings vary according to the specific construct assessed (NOWICKI et al., 2022). In later life, these experiences are further shaped by social isolation, reduced family support, stigma, discrimination across the life course, and barriers to health and social care, which are central issues in the literature on LGBTQIA+ aging (PEREIRA; BANERJEE, 2021). The dimension of body dynamics also requires caution, since physical activity among older LGBT+ adults remains insufficiently documented and is influenced by barriers, facilitators, discrimination, and the availability of inclusive environments for healthy aging (PISTELLA et al., 2025). Therefore, when chatbots attribute fixed bodily practices, aesthetic repertoires, or behavioral styles to gay and heterosexual older adults, they may transform contextual and historically situated processes into simplified or stereotyped profiles.

However, the partial correspondence with the literature does not eliminate the problem of algorithmic bias. When responses displace gay older adults into fixed markers of aesthetics, activism, or HIV/AIDS and heterosexual older adults into traditional conjugal roles, chatbots simplify complex trajectories and reinforce normative expectations. This effect is consistent with analyses that describe generative AI as a technology trained in probabilistic patterns rather than on situated social understanding (ROSSINI; SANTOS; VELOSO, 2024; LEAVY; O'SULLIVAN; SIAPERA, 2020). In other words, the system may retrieve true elements from the public and academic debate, but articulate them in a hierarchical, incomplete, or stereotyped manner.

These findings also dialogue with recent debates on generative conversational AI in vulnerable or socially marginalized groups. In a scoping review focused on the LGBTQ+ community, Bragazzi et al. (2023) observed that chatbots and AI-enhanced platforms may offer support, information, and inclusive interaction spaces, but the field remains incipient and requires more robust evaluation, improved content quality, and attention to engagement and safety. In the context of older adults, Emmer De Albuquerque Green (2024) emphasizes that responsible use of AI chatbots in social care requires ethical caution, accountability, privacy protection, and recognition of the specificities of care relationships. Similarly, Van Kolschooten and Pilottin (2024) argue that generative AI may reinforce stereotypes in health-related representations, supporting the need for critical evaluation of how automated systems describe bodies, identities, aging, and vulnerability.

The main implication is both practical and epistemological. Users who consult chatbots about sexuality, the body, and aging may receive answers that appear neutral, but are structured by statistical syntheses of social discourses, including prejudiced ones. In sensitive topics, artificial intelligence works better as a starting point for reflection than as a final interpretive authority, requiring confrontation with evidence, critical reading, and qualified human mediation. This point becomes even more important in the field of gerontechnology, in which the promise of digital support may obscure informational asymmetries and risks of improper interpretation.

For professionals, researchers, and students, this implies recognizing that the use of chatbots in literature review, hypothesis formulation, or interpretive support cannot dispense with external validation. In specific cases of aging and sexuality, critical mediation is indispensable to avoid invisibility, prejudice, or pathologizing framings.

From a methodological standpoint, the study reinforces the usefulness of comparing multiple systems instead of treating generative artificial intelligence as a homogeneous block. Future investigations may deepen this agenda by analyzing variation by language, prompt reformulation, temporal updating of responses, and modes through which older adults receive the outputs in concrete consultation situations.

5 Conclusions

Chatbots describe the body dynamics of gay and heterosexual older adults through repertoires that combine convergence with the literature and reproduction of stereotypes. The corpus recognizes discrimination, aesthetic pressure, and support networks, but also presents conceptual instability, generalizations, and biases.

It is concluded that the use of these tools in gerontechnology, sexuality, and aging requires critical reading, confrontation with evidence, and qualified human mediation. System responses do not constitute a neutral interpretation of reality; they reorganize socially available discourses under a probabilistic logic of language.

It is recommended that future research compare responses across platforms, test different formulations of questions, and examine how older adults interpret, accept, or contest this content in real consultation situations.

This study should be interpreted considering some limitations. First, the responses analyzed correspond to a temporal snapshot of the platforms evaluated between February 2 and 3, 2025, since generative artificial intelligence systems are continuously updated and may produce different answers at later moments. Second, not all platforms publicly disclosed the specific model or version in use at the time of data collection, which limits strict reproducibility, although the presentation of prompts, dates, platforms, and collection conditions increases methodological auditability. Third, the corpus was produced exclusively in Brazilian Portuguese and from a single round of interaction with each chatbot, without testing linguistic variations, prompt reformulations, or repeated replications. Finally, the study analyzed the output produced by the systems, but did not examine how older adults, professionals, or lay users would interpret, accept, or contest these responses in real use situations.

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Submissão: 31/07/2026

Aceite: 12/08/2026

Como citar o artigo:

LEITE, Jamil Oliveira; REBUSTINI, Flávio. Subjectivities of Body Dynamics among Gay and Heterosexual Older Adults: Interpretations from Artificial Intelligence. **Estudos Interdisciplinares sobre o Envelhecimento**, Porto Alegre, v. 31, e 2316-2171, 2026. DOI: 10.22456/2316-2171.157127