

What's in the Scales? A Systematic Review of Content Overlap in Well-being and Quality of Life Scales for Older Persons

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Abstract

Objectives: To systematically review and analyse the content of scales used to measure well-being and quality of life (QoL) among older persons. Secondary aims were to examine content overlaps between scales developed specifically for older persons (age-specific) and age-generic scales psychometrically evaluated in older populations, as well as between positively and negatively worded items and between scales targeting well-being and QoL.

Methods: A literature search was conducted in PubMed, PsycInfo, and CINAHL. Items from included scales were categorised using a framework for well-being and QoL scales. Descriptive statistics illustrate the content distribution, and Jaccard index estimates content overlap.

Results: A total of 744 items from 35 scales were included. Among the age-specific scales for older persons (n =19), the most common dimensions were *personal circumstances*, *personal relationships*, and *physical health*. For age-generic scales (n =16), *activities and functioning*, *personal relationships*, and *self-acceptance* were most prominent. Average content overlap was 0.42 (range 0.22–0.55) for age-specific scales, indicating moderate overlap.

Conclusion: While there is some consistency in content across age-specific well-being and QoL scales for older persons, notable heterogeneity remains. In addition, this study sheds light on the operational similarities and distinctions between scales aimed at generic and older populations.

Keywords

Aging, Assessment, Content analysis, Content validity, Measurement, Surveys and Questionnaires

1 Introduction

2 The proportion of older persons in the population has steadily increased over the past decades
3 and is expected to continue rising in the coming years (Europäische Kommission, 2019;
4 United Nations, 2024). This demographic shift raises important questions about older persons'
5 well-being and quality of life, as aging is often associated with changes in physical health,
6 social connections, and autonomy (Foster & Walker, 2021; Gianfredi et al., 2025; Gonnord et
7 al., 2023; Moilanen et al., 2021; Velaithan et al., 2024). Understanding and addressing these
8 factors is crucial for promoting healthy and fulfilling experiences of aging.

9 To ensure equitable aging, identifying health risks and tailoring interventions
10 accordingly is essential for designing policies and services that support older persons' QoL
11 and well-being and an equitable aging. Moreover, evaluating the effectiveness of such
12 initiatives ensures not only targeted benefits for individuals but also delivers clear societal
13 returns on investment. In line with this, interest in measuring well-being, QoL, and related
14 latent traits is steadily growing. Despite this, there is no widely accepted theoretical
15 framework for QoL (Halvorsrud & Kalfoss, 2007; Haraldstad et al., 2019; Leeuwen et al.,
16 2019), and researchers have been questioning whether the conceptualisations for QoL are the
17 same for different age groups (Etxeberria et al., 2019; Holzhausen et al., 2010; Power et al.,
18 2005). In a review of QoL scales among older persons, Halvorsrud and Kalfoss (2007)
19 highlighted a considerable heterogeneity regarding the underlying conceptual frameworks and
20 definitions of QoL. Similarly, in a review of well-being scales, a striking variability was
21 shown, and it concludes that there is an inability within the field to establish an agreed-upon
22 definition (Linton et al., 2016). This conceptual ambiguity threatens both the validity of the
23 latent trait intended to be measured and the validity of the scales used to measure the specific
24 latent trait.

25 Beyond theoretical concerns, methodological challenges also arise. It is often
26 assumed that questionnaires designed to measure the same latent trait can be used
27 interchangeably and provide comparable information about respondents. However, a growing
28 body of research across different fields on content overlap between scales reveals
29 considerable heterogeneity among scales intended to capture the same latent trait. This
30 requires careful consideration when selecting scale(-s), as they cannot be assumed to be
31 interchangeable (Kook et al., 2024; Lampe et al., 2024; Leung & Molnar, 2024; Visontay et
32 al., 2019; Wall & Lee, 2022), advises caution when interpreting findings from studies using
33 different scales (Kook et al., 2024; Lampe et al., 2024), and discourages combining or

aggregating results from such studies (Ong et al., 2025a). Ultimately, this reduces the generalisability (Christensen Pacella et al., 2025; Chrobak et al., 2018; Fried, 2017) and limits the replicability (Chrobak et al., 2018; Fried, 2017; Karstoft & Armour, 2023) of the research. In addition, this variability may have clinical implications for diagnostics (Gauld et al., 2023), and, consequently, for patients' access to appropriate treatment.

A recent review of 155 scales for positive mental health identified as many as 410 unique dimensions, which were subsequently synthesised into 21 dimensions and 3 umbrella concepts (well-being, QoL, and resilience/coping; Iasiello et al., 2024). However, there was a strong interrelation between those 21 synthesised dimensions and a considerable overlap between the dimensions included in each umbrella concept. While not specific in terms of which dimensions are *important* for older persons, the synthesised dimensions are likely to capture most dimensions *included* when measuring older persons' well-being and QoL.

Altogether, there is a growing interest in measuring well-being and QoL among older persons, but challenges with definition and heterogeneity among items in scales purported to measure the same phenomena exist. This highlights a knowledge gap regarding how these latent traits among older persons can be validly and consistently measured. A first step toward improving such measurements is to better understand the content and content overlap in existing scales. Therefore, this study aimed to provide a systematic overview and content analysis of currently used scales for measuring older person's well-being and QoL. In particular, the study aimed to explore similarities and potential differences in the most prominent dimensions between scales specifically developed for older persons and generic scales psychometrically evaluated among older populations, between scales targeting well-being and QoL, and between positively and negatively worded items in the identified scales.

Materials and method

Study design

This study employed a literature search and systematic review to identify, extract, and analyse the content of scales used to measure well-being and QoL among older persons. Items from included scales were qualitatively categorised into the framework proposed by Iasiello et al. (2024), and statistical analyses were used to illustrate content distribution and overlap.

Search strategy and process for inclusion

A comprehensive search for articles describing scales assessing well-being or QoL in older persons was conducted across PubMed, PsycInfo, and CINAHL. We searched for articles that focused on older populations and psychometric studies of self-reported well-being or QoL. Inclusion criteria were: i. written in English or Swedish, ii. include participants aged 65 or older, and iii. addressed well-being or QoL. Exclusion criteria included disease-specific scales and anything that was not an original study (e.g., conference abstracts and dissertations).

The searches were built on four blocks: i. the population (i.e., older persons), ii. concept (i.e., well-being or quality of life), iii. measurements (i.e., self-reports or questionnaires), and iv. methods (i.e., psychometrics). Detailed search strategies for each database were formulated in collaboration with an information specialist and are available in Supplement 1.

All articles from the three databases were uploaded to Rayyan (Ouzzani et al., 2016). Duplicates were then identified and removed using the deduplication function in Rayyan by one of the authors (J.M.), following the approach described by Bramer et al. (2016) for handling duplicates in systematic reviews. The remaining records were independently screened using Rayyan by two of the three authors involved in this step (M.P., M-L.M., J.M.). Each author screened at least 3,000 records. In cases of differing judgments, the authors discussed their decisions and reached a consensus on whether to include or exclude each article. Articles were selected for full-text review if they described the development of a self-reporting scale for assessing the well-being or QoL of older persons or psychometric evaluation of such a scale. If an abstract did not provide enough information about the sample or the latent trait intended to be measured, or specified whether a psychometric evaluation was conducted, the article was retained for full-text review.

In the next step, two of the three authors involved in this step (M.P., M-L.M., J.M.) read all included articles in the full text (Supplement 2). Each author read at least about two-thirds of the articles. Each article included was labelled with the scale used. Judgment discrepancies were resolved through discussion and consensus as in the initial step.

Content analysis

To systematically assess the conceptual content of the existing well-being and QoL scales, this study employed a content analysis approach informed by methodologies from prior scale comparison research (Christensen Pacella et al., 2025; Chrobak et al., 2018; Fried 2017; Gauld

et al., 2023; Halvorsrud & Kalfoss, 2007; Karstoft & Armour, 2023; Kook et al., 2024; Lampe et al., 2024; Leung & Molnar, 2024; Ong et al., 2025a; Visontay et al., 2019; Wall & Lee, 2022). Collectively, these studies provide a robust framework for evaluating scale content and ensuring alignment with intended constructs.

All items from the identified scales were compiled into a structured Excel spreadsheet. Subsequently, two of the three authors involved in the content analysis (M.P., M-L.M., J.M.) independently categorised each item based on the dimensions defined by Iasiello et al. (2024), and the items were coded as positively or negatively stated. In cases where none of the dimensions applied to the item, items that did not align with any of the predefined dimensions were assigned to a 'not applicable' category. These typically included items related to environmental prerequisites, individual preferences, or general health ratings. A third researcher (M-L.M., or J.M.) reviewed the categorisations for consensus and provided feedback in cases of disagreement. Any discrepancies were subsequently discussed, and a final consensus was reached collaboratively. Supplement 2 outlines these scales, items, and dimensions.

Descriptive statistics were computed when all items were categorised, and visualisations were made in R version 4.4.2 (R Foundation for Statistical Computing, Vienna, Austria). Main packages used were ggplot2 (Wickham et al., 2025), proxy (Meyer & Buchta, 2022) and vegan (Oksanen et al., 2025). The scales were presented in terms of whether they were specific for older persons or generic as well as targeting well-being or QoL. Content overlaps were analysed according to the proposal of Fried (2017), including the usage of the Jaccard index. The Jaccard index is a measure that can be used to quantify the similarity and diversity between two sets—in this case sets of scales—by calculating the ratio of the intersection to the union of the sets. In this context, it was applied to assess the overlap in the content between different scales. A higher Jaccard index indicates a greater similarity between the scales, suggesting that they measure similar aspects of well-being and QoL, while a lower value indicates more distinct content between the scales. More specifically, based on previous studies of content overlaps (Christensen Pacella et al., 2025; Chrobak et al., 2018; Fried, 2017), the proposed interpretations were made according to Evans (1996): 0.00–0.19= very weak, 0.20–0.39= weak, 0.40–0.59= moderate, 0.60–0.79= strong, and 0.80–1.00= very strong. This code is available in Supplement 3.

Results

Searches

The PRISMA flow chart (Figure 1) provides an overview of the number of records and articles identified, screened, included, and excluded during each phase of the review process. The initial database search retrieved 17,242 records, which were reduced to 11,871 after removing duplicates. Following the initial screening, 11,476 records were excluded due to not fulfilling the predefined inclusion criteria. This implies that 395 articles were sought for retrieval. Three full-text articles could not be retrieved, and subsequently, 45 articles were excluded due to foreign languages, 204 due to applying to the wrong population, 5 due to wrong outcome, and 19 due to not being original studies. This left 119 articles.

Insert Figure 1 about here

Scales and items identified and included

In the 119 articles, a total of 49 different scales were identified. Authors were contacted if items were unavailable in the identified articles and not accessible in another way; in three cases, no response was received (SHARE, QOLPSV, QUILL); and in one case, the author was unable to share the items (WHOWBS22). Several of the identified scales were short forms (CASP11SG/CASP12/CASP12V2 derived from CASP19, OPQOLBRIEF derived from OPQOL35, and SF12/SF12V2/YORKSF12 derived from SF36), while others were language versions (WHOQOLBREFPT derived from WHOQOLBREF, WHO5J derived from WHO5, and OPQOL35SF derived from OPQOL35). The short forms, the different language versions, and cases in which the scales' subdomains did not address well-being or QoL were excluded entirely from the content analysis, resulting in the inclusion of 35 scales comprising 744 items (Table 1).

Insert Table 1 about here

Content analyses

The 744 items across all 35 scales were categorised based on their content according to the 21 dimensions proposed by Iasiello et al. (2024), except for 36 items that did not fit any of the dimensions (these 36 items were categorised as not applicable, as they addressed environmental prerequisites, personal preferences, or overall health ratings). The hierarchical

content distribution of the scales is illustrated in two figures: one for scales developed explicitly for older persons (age-specific for older persons; Figure 2a), and one for age-generic scales (Figure 2b). As the number of items in a scale increases, the likelihood of certain dimensions being repeated across different scales increases. For age-specific scales for older persons (n =19), the most prominent dimensions were *personal circumstances*, *personal relationships*, and *physical health*. In contrast, the most represented dimensions for age-generic scales (n =16) were *activities and functioning*, *personal relationships*, and *self-acceptance*.

Insert Figures 2a-b about here

Five of the 19 age-specific scales for older persons focused on well-being, and 14 on QoL (Table 1). When comparing scales targeting well-being and QoL, the three most common dimensions were the same in both target concepts. However, in the well-being scales, *personal relationships* appeared more frequently than *personal circumstances*, whereas the opposite was true for the QoL scales (Figure 3a–b). Moreover, *engagement* was the fifth most frequently represented dimension among items in well-being scales but ranked 16th in QoL scales. *Optimism*, *development*, *problem-focused coping*, and *sense of community* were each present in only one well-being scale, apart from *optimism*, which appeared in eight QoL scales. Nevertheless, these dimensions were also among the least represented in the QoL scales.

Five of the 19 age-specific scales for older persons contained only positively phrased items (Table 1). When comparing positively and negatively phrased items separately, the overall distribution of dimensions remained largely consistent, with a few notable exceptions (Figure 3c-d). *Self-Congruence* was the fifth most frequently represented dimension among positively phrased items, but ranked 16th among negatively phrased items. Conversely, *calmness* was the fourth most common dimension among negatively phrased items, but dropped to 15th among positively phrased items.

Insert Figures 3a-d about here

Table 2 show Jaccard indices for content overlaps among age-specific scales for older persons. Twelve scales had moderate content overlaps, and seven had weak content overlaps. The scale with the highest degree of overlap with the other scales was the VITOR

QLSE (average 0.55), followed by EQOLI (average 0.52), and LEIPAD (average 0.51). There is a very strong content overlap between VITOR QLSE and LEIPAD (0.80), and VITOR QLSE and QLIYS (0.80). On the contrary, the scale with the lowest degree of overlap was the SWIO (average 0.22), followed by WOOP (average 0.29) and SWBS (average 0.33). The total average content overlap was 0.42 for age-specific scales for older persons. When dividing those scales for targeting well-being and QoL, the average content overlap was 0.38 and 0.48, respectively (Supplementary 2).

The total average content overlap was 0.33 for age-generic scales; that is, there is less content overlap between the age-generic scales than between the age-specific scales for older persons. One scale GPCORE (average 0.41) had moderate content overlap, and the remaining fifteen scales had weak content overlaps (Table 3). Very weak content overlaps were observed between 36 (27%) pairs of scales, while very strong content overlaps were observed between one pair of scales (GHQ20 and WEMWBS 0.82).

Insert Table 2 about here

Insert Table 3 about here

Discussion

Through a systematic review and content analysis of currently used scales for measuring older person's well-being and QoL, this study has identified scales revealing important patterns in the overlap of scale items, and a lack of overall heterogeneity. Thus, this study reveals an enhanced understanding of the degree of uniqueness—and possible redundancy—in the latent trait purported to be measured by the different scales. In addition, this study sheds light on the operational similarities and distinctions between scales aimed at generic and older populations, which may have implications for scale selection in both research and clinical practice.

When comparing age-specific scales for older persons with age-generic scales, the content analysis reveals dimensional distinctions. First of all, age-specific scales for older persons more often include items related to *personal relationships*, *personal circumstances*, and *physical health*, which are dimensions particularly relevant for well-being in later life (Almevall et al., 2022; Hossen & Salleh, 2024; Nyqvist et al., 2013; Terraneo, 2021). In contrast, age-generic scales more often comprised broader dimensions such as *activities and functioning* and *self-congruence*, which can encompass a wide variety of behaviours and experiences (Linton et al., 2016; Longo et al., 2017). This generality supports for applicability

1 across diverse individuals and life stages. Secondly, the dimensions of *activities and*
2 *functioning* and *self-congruence* relate more to aspects that involve an individual's activities
3 and actions, while dimensions such as *personal relationships*, *personal circumstances*, and
4 *physical health* are often shaped by a combination of personal agency and external influences
5 to a larger extent, including social, environmental, and relational factors (Iasiello et al., 2024;
6 Linton et al., 2016; Longo et al., 2017). These aspects may be less directly modifiable by the
7 individual alone, as they frequently depend on interactions with others and broader contextual
8 conditions. Thus, it appeared that age-generic scales place greater emphasis on active,
9 changeable aspects of life, whereas the age-specific scales for older persons tend to focus
10 more on passive or externally influenced aspects. We interpret this as an indication that the
11 generalist orientation allows for broader applicability but may also overlook challenges that
12 are more specific to aging. This is in part corroborates earlier findings questioning whether
13 QoL is the same for different age groups (Etxeberria et al., 2019; Holzhausen et al., 2010;
14 Power et al., 2005). Moreover, the broad design of age-generic scales can lead to a diffuse
15 measurement focus, potentially capturing overly heterogeneous aspects of well-being or QoL
16 in an attempt to suit multiple groups.

17 *Personal relationships* emerged as one of the most prominent domains in both
18 the age-specific scales for older persons and the age-generic ones. This may be explained by
19 the fact that social relationships are a fundamental human need across the lifespan (Holt-
20 Lunstad et al., 2010). As inherently social beings, humans derive emotional support, identity,
21 and a sense of belonging from their relationships (Baumeister & Leary, 1995; Haslam et al.,
22 2018). In later life, when individuals may face increased risks of isolation due to retirement,
23 bereavement, or reduced mobility, the quality of personal relationships becomes even more
24 central to their overall well-being and quality of life (Courtin & Knapp, 2017; Dahlberg et al.,
25 2022; Scommegna et al., 2024). However, the prominence of this domain in both types of
26 scales suggests that personal relationships are not only contextually relevant for older persons
27 but also a universal determinant of well-being that transcends age.

28 Among the age-specific scales for older persons, regardless of whether they
29 targeted well-being or QoL, the three most frequently represented dimensions were the same:
30 *personal relationships*, *personal circumstances*, and *physical health*. However, some nuanced
31 differences were observed: *engagement* appeared more prominently in well-being scales,
32 while *optimism* was relatively more common in QoL scales. The stronger presence of
33 *engagement* in well-being measures may reflect their theoretical foundation in positive
34 psychology. For example, Seligman (2011) includes engagement as a key pillar of well-being,

describing it as deep absorption or flow-like involvement in meaningful activities. Conversely, *optimism* aligns with the future-oriented aspects of many QoL frameworks. The World Health Organisation's definition of QoL emphasises individuals' perceptions of their position in life in relation to their goals and expectations (The WHOQOL Group, 1995). Still, with only five well-being scales included and interpretations based on qualitative content analysis, these observed differences should be interpreted with caution. It is equally important to acknowledge the substantial conceptual overlap between many of the well-being and QoL scales examined.

Combining positively and negatively worded items has a long tradition in scale development. On the one hand, this approach is commonly used to reduce acquiescence bias, interrupt inattentive or patterned responding (see summary in Podsakoff et al., 2003), and to provide a more comprehensive representation of the construct being measured. On the other hand, studies have shown that mixing item valences can increase cognitive load and elevate the risk of mis-response due to inattention (e.g., Suárez-Álvarez et al., 2018). Notably, such increased cognitive load is likely to be particularly challenging for older persons, who often adopt less cognitively demanding response strategies and lower reporting quality (Schneider et al., 2024; Ziniel, 2008), likely due to the common age-related decline in cognitive abilities. Moreover, as an example, if only positive well-being items were included, issues were observed with acquiescence bias, while the combination of positive and negative items resulted in a worse situation with a negative effect on the scales' internal consistency (Solís Salazar, 2015). It is important to distinguish between items that are negatively worded purely for methodological reasons (e.g., to counter response bias), and those that are negatively framed due to reflecting a negative dimension of the underlying construct. Combining positively and negatively worded items can also clearly affect the dimensionality of the scale (Lindwall et al., 2012; Rozental et al., 2023). These findings raise broader theoretical questions about whether well-being and 'ill-being', or, similarly, QoL and 'poor QoL', represent opposite ends of a single continuum or constitute distinct constructs. Although such questions lie beyond the scope of the current study, it corroborate earlier critiques that focus has to a large extent been on dimensions rather than on definitions (Christopher, 1999), and consequently, a lack of agreed-upon definitions (Halvorsrud & Kalfoss, 2007; Haraldstad et al., 2019; Linton et al., 2016).

When comparing the content overlap observed in this study with findings from other studies employing a similar method for scales on related constructs, the average content overlap of 0.42 for age-specific scales for older people suggests a relatively high degree of

heterogeneity. This figure is higher than what has been reported for depression scales (average content overlap 0.36; Fried, 2017), anxiety scales (average content overlap 0.31; Wall & Lee, 2022), and psychological flexibility (average content overlap 0.19; Ong et al., 2025b). In contrast, the age-generic scales in our study demonstrated a lower content overlap, comparable to the depression and anxiety scales. A plausible explanation is that condition- or context-specific instruments tend to share more content, as they should rely on explicit conceptual boundaries and tailored operationalisations. Notably, two other constructs—self-reported sleep disorder screening (average content overlap 0.44; Gauld et al., 2023) and trauma exposure (average content overlap 0.41; Karstoft & Armour, 2023)—have shown comparable levels of overlap with the current study. However, it remains unclear whether their higher content overlap reflects greater construct specificity or other methodological factors. Furthermore, we could not identify relationships between the number of items or scales included in the other studies and the degree of observed content overlap. Taken together, these findings underscore the complexity of explaining content overlap between scales, and once again points to the ongoing issue of a lack of agreed-upon definitions within the field. Although the average content overlap among scales for older people observed in this study was higher than in many previous studies, the levels remain moderate. Consequently, this highlights the persistent challenge of achieving interchangeability or comparability in respondent data across different scales.

Methodological considerations

In the literature search, both well-being and QoL were included, and throughout the study we did not differentiate between scales that addressed either well-being or QoL. This approach was intentional, given that the concepts are frequently used interchangeably in the literature (Dodge et al., 2012; Linton et al., 2016); broader QoL scales often encompass dimensions conceptually related to well-being, and the intended purpose of many scales is not always clearly articulated. On the one hand, this inevitably results in a more fragmented foundation for assessing content overlap among the measurement scales. On the other hand, it more accurately reflects how these scales are commonly applied in practice. In particular, for age-specific scales in older persons, this approach may provide a more reliable representation of the full spectrum of dimensions that are typically assessed.

The literature search yielded 17,242 records. A large proportion of the scales excluded during the initial screening phase were omitted because they focused on health-

1 related QoL. Scales targeting specific health conditions—such as cancer, cardiovascular
2 disease, or dementia—were frequently excluded. In collaboration with the information
3 specialist, we deliberately chose not to include the Boolean operator “NOT” in the search
4 string, as this could have inadvertently excluded relevant scales that met the inclusion criteria.

5 Given the large volume of articles, there is an inherent risk that some relevant
6 records may have been overlooked due to human error during the initial screening phase. In
7 subsequent steps, however, two or three authors were always involved in both screening and
8 classification procedures and discrepancies were resolved through discussions. Moreover, a
9 calibration process was conducted among the authors. Specifically, selected articles and scales
10 were independently reviewed and subsequently discussed as a group to ensure a shared
11 understanding when assessing scale eligibility and categorising content.

12 During the calibration among authors, some differences in interpretation
13 emerged between two pairs of dimensions: *physical health* and *activities and functioning*, as
14 well as *personal relationships* and a *sense of community*. Thus, we clarified that items
15 referring to physical health but focused primarily on its impact on the ability to perform
16 activities were categorised as *activities and functioning*. In contrast, items addressing the
17 health condition itself were categorised as *physical health*. Furthermore, regarding *personal*
18 *relationships* and *sense of community*, discrepancies in our initial categorisation often arose
19 when an item mentioned “friends.” We agreed that if the item described engaging in activities
20 that fostered a sense of belonging, it was categorised as *sense of community*. However, if
21 “friends” were mentioned in a more general or unspecific manner, the item was categorised as
22 *personal relationships*.

23 The use of the Jaccard index provided a straightforward and replicable way to
24 assess content overlap between scales. However, scales with a larger number of items are
25 more likely to cover a broader range of dimensions and therefore have a higher probability of
26 overlapping with other scales, regardless of conceptual closeness. As such, a higher Jaccard
27 index value may partly reflect scale length. Moreover, when interpreting the results, it is
28 important to note that the Jaccard index is based solely on the binary presence or absence of
29 dimensions and does not consider the relative importance, weight, or intensity of specific
30 content.

Further researcher

The deeper understanding of scale content and overlap offered by this study may serve as a foundation for refining definitions and improving the measurement of well-being and QoL among older persons. However, this study does not attempt to propose any revised definitions. The broad range of content identified in existing scales may instead suggest that certain scales align more closely with specific theories or conceptualisations. One potential avenue for future work could involve testing new combinations of items drawn from the item pool identified in this review; essentially a reversed construct theory-building approach.

Although both well-being and QoL scales were included, reflecting current practice, further research is needed to better distinguish these latent traits. Such efforts may support end-users in choosing appropriate scales, while also deepening the understanding of how well-being and QoL relate to one another and to external indicators, whether as antecedents or outcomes.

Furthermore, dimensionality will be a key issue in future research aimed at addressing the current gap in how well-being among older persons can be validly and consistently measured. Recently, VanderWeele and Johnson (2025, p. 861) argued that *well-being cannot be reduced to a unidimensional assessment of life satisfaction or evaluation*. While they do not dismiss the possibility of a satisfactory unidimensional measure, they simultaneously acknowledge that no such adequate measure currently exists. Although the present study did not thoroughly evaluate the scales' psychometric properties, we agree that identifying items with both relevant content coverage and adequate fit to a unidimensional measurement model remains a major challenge for both well-being and QoL. At some level, well-being and QoL may be viewed as higher-order constructs, comparable to a rope of strands woven together (Andrich, 2002). However, such a view does not eliminate the need for conceptual clarity about what constitutes well-being or QoL, versus what may be antecedents. Moreover, even if a set of items fits a unidimensional measurement model, this alone does not guarantee that the construct being measured truly reflects well-being or QoL. We therefore encourage further research that integrates psychometric analyses with qualitative insights to build a stronger conceptual and empirical foundation for defining and measuring these constructs.

Conclusion

While there is some consistency in content across well-being and QoL scales for older persons, considerable heterogeneity remains. This variability calls for caution, as these scales are not interchangeable, and results from different scales are therefore not directly comparable or suitable for aggregation. Such discrepancies threaten both the validity of an underlying construct and the accuracy of the scales. However, identifying this heterogeneity also raises awareness. The deeper understanding of the content and overlap across scales provided in this study may serve as a foundation for refining the definitions and improving the measurement of well-being and QoL in older people.

Additionally, this study highlights both operational similarities and meaningful distinctions between age-generic and age-specific scales. The observed divergence in thematic emphasis reinforces earlier arguments that well-being and QoLs are not universally applicable and must be interpreted with sensitivity to the specific contexts of aging.

Declarations

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AI statement: We used ChatGPT5 (OpenAI) to obtain suggestions on wording and phrasing prior to professional language editing. The authors reviewed and edited all outputs and are responsible for the final text.

Preregistration: The study was preregistered at PROSPERO International prospective register of systematic reviews, CRD42024531400.

Data deposition: Supplementary 1.

Authors' contributions: The manuscript was designed by J.M. and M.P. M.P. and J.M. conducted the literature search. M.P., M-L.M. and J.M. screened articles and categorised items. M.P. and J.M. conducted the statistical analyses and visualisations. M-L.M. and K.Å. validated the analyses. M.P. and J.M. drafted the manuscript. All authors edited and revised the manuscript. All authors read and approved the final manuscript.

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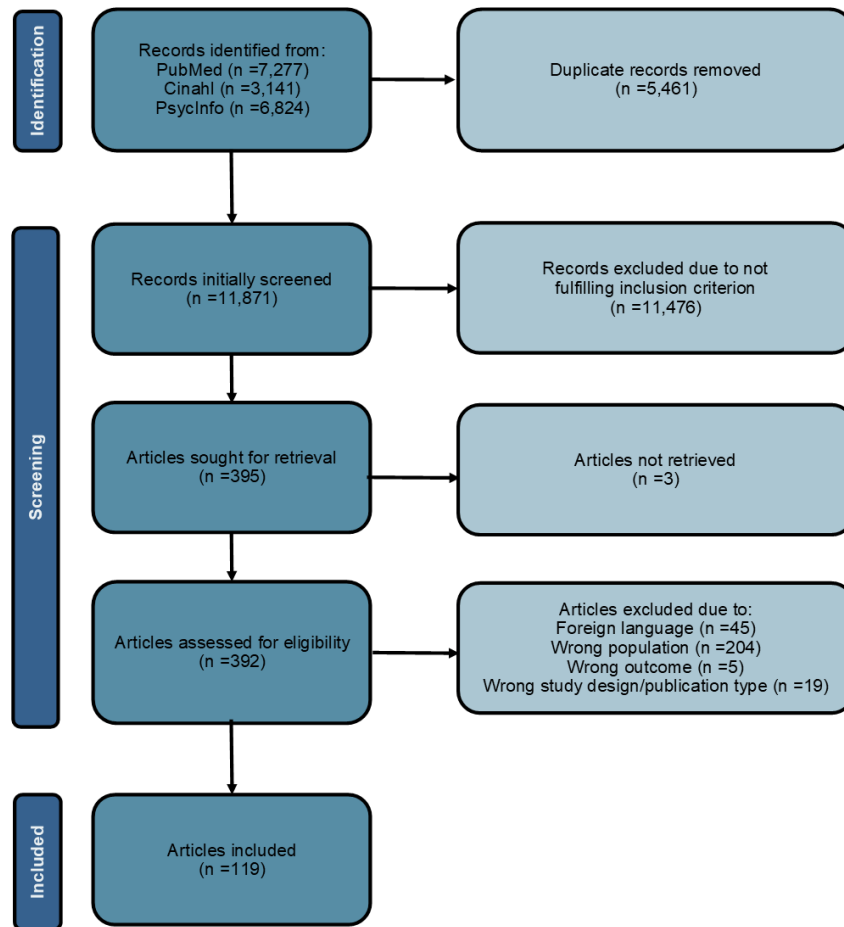
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Figure 1. PRISMA flow chart.



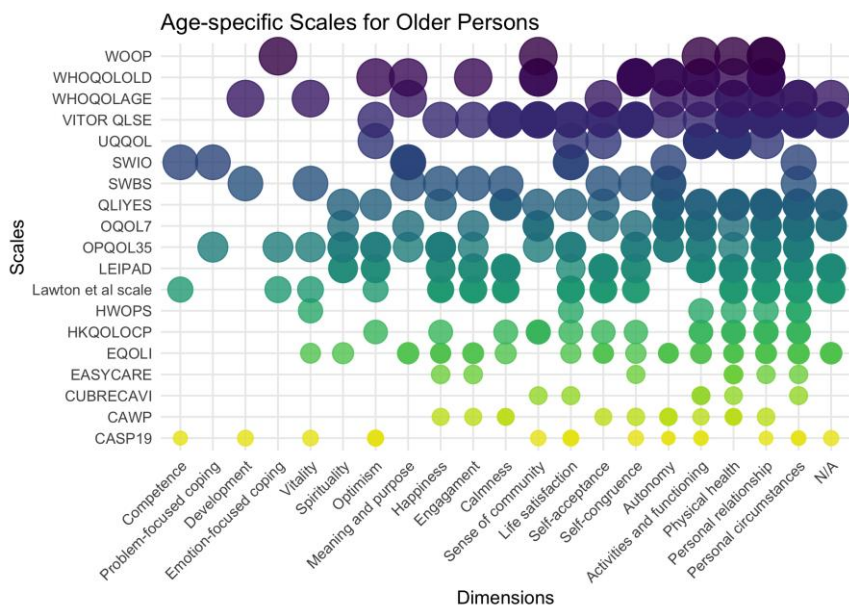
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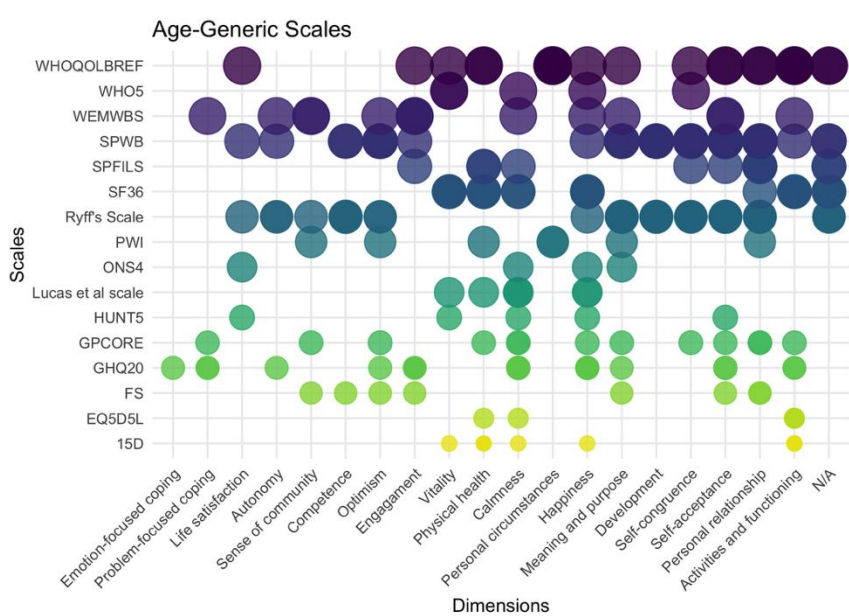
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Figure 2a-b. Hierarchical item content across (a) age-specific scales for older persons and (b) age-generic scales. Scales are listed alphabetically on the y-axis. Domains are displayed along the x-axis, ordered by prominence from left to right, with the most prominent domain second from the right and "N/A" consistently positioned at the far right.

a



b



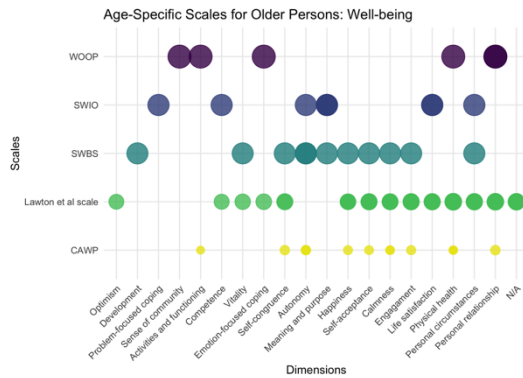
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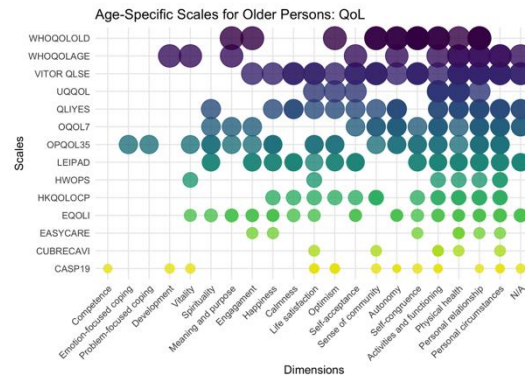
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Figure 3a-d. Hierarchical item content across age-specific scales for older persons, divided by scales targeting (a) well-being and (b) QoL, and (c) positively and (d) negatively stated items. Scales are listed alphabetically on the y-axis. Domains are displayed along the x-axis, ordered by prominence from left to right, with the most prominent domain second from the right and "N/A" consistently positioned at the far right.

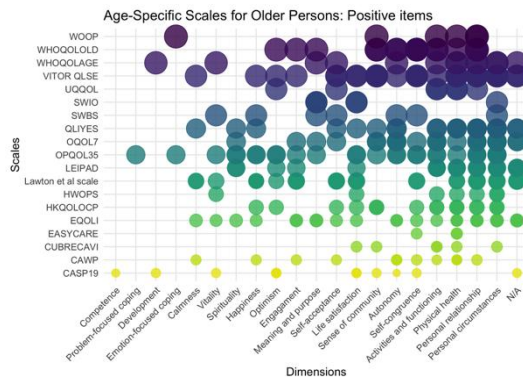
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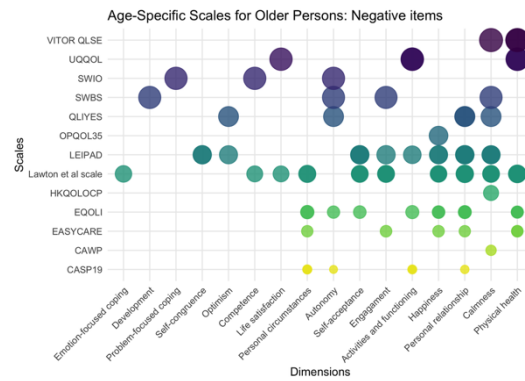
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c



d



2

1 Table 1. Description of included scales.

Scale	Context	Concept	Country of development	Year original publication	No. items (n =744)	Positive/ Negative (n =595 / 234)	No. hits from the literature search
15D (Fifteen-dimensional measure of health-related quality of life)	Age-generic	QoL	Finland	1994	15	2/13	1
CASP19 (Control Autonomy, Self-Realization and Pleasure)	Age-specific	QoL	UK	1996	19	6/13	15
CAWP (Chinese Aging Well Profile)	Age-specific	Well-being	China	2008	15	1/14	1
CUBRECAVI (Cuestionario Breve de Calidad de Vida)	Age-specific	QoL	Spain	2007	6	6/0	1
EASYCARE	Age-specific	QoL	USA	2010	9	3/6	1
EQ5D5L (5-level EQ-5D version)	Age-generic	QoL	Spain, UK	2009	5	4/1	2
EQOLI (Elderly Quality of Life Index)	Age-specific	QoL	Brazil	2008	43	30/13	1
FS (Flourishing Scale)	Age-generic	Well-being	USA	2010	8	8/0	2
GHQ20 (Global Health Questionnaire)	Age-generic	Well-being	UK	1970	20	10 /10	1
GPCORE (General Population Core Outcomes i Routine Evaluation)	Age-generic	Well-being	UK	2005	13	8/5	1
HKQOLOCP	Age-specific	QoL	Hong Kong SAR	2004	21	19/1***	1

(Hong Kong Quality of Life for Older Chinese People) HUNT5							
(Five first items in Nord-Trondelag Health Survey) HWOPS	Age-generic	QoL	Norway	2006	5	4/1	1
(Health and Well-being of Older Persons in Kenya) Lawton et al. scale	Age-specific	QoL	Kenya	2023	7	7/0	1
LEIPAD	Age-specific	Well-being	USA	1984	96	55/41	1
Lucas et al. scale	Age-specific	QoL	Italy, Netherlands, Finland	2010	50	32/18	4
ONS4	Age-generic	Well-being	USA	2013	7	2/5	1
(Office of National Statistics-4.) OPQOL35	Gen Age-generic	Well-being	UK	2011	4	3/1	1
(Older People's Quality of Life Questionnaire) OQOL7	Age-specific	QoL	UK	2009	34	33/1	11
(Older people quality of life-7 domains) PWI	Age-specific	Well-being	Switzerland	2020	28	28/0	1
(Personal well-being index) QLIYES	Age-generic	Well-being	Australia	2013	7	7/0	3
(QoL in the young elderly in Sri Lanka) Ryff's Scale	Age-specific	QoL	Sri Lanka	2015	28	23/5	1
(Ryff's Scale of Psychological Well-being) SF36	Gen Age-generic	Well-being	USA	1989	42	26/16	3
	Age-generic	QoL	USA	1992	36	31/5	26

(Medical Outcome Study 36-item short-form) SPFILS (Social Production Function Instrument for the level of well-being) SPWB	Age-generic	Well-being	Netherlands	2005	15	15/0	1
(Scales of Psychological Well-Being) SWBS (Subjective Well-Being Scale) SWIO (Short well-being instrument for older adults) UQQOL (University of Queensland Quality of Life instrument) VITOR QLSE (Vitor Quality of Life Scale for the Elderly) WEMWBS (Warwick-Edinburgh Mental Wellbeing Scales) WHO5 (World Health Organisation) WHOQOLAGE (World Health Organisation Quality of Life Age) WHOQOLBREF	Age-generic	Well-being	USA	1989	41	25/16	1
	Age-specific	Well-being	USA	2011	11	7/4	2
	Age-specific	Well-being	Belgium	2019	9	6/3	1
	Age-specific	QoL	Australia	2008	15	7/8	1
	Age-specific	QoL	Brazil	2016	53	50/3	1
	Age-generic	Well-being	UK	2007	14	14/0	1
	Age-generic	Well-being	Denmark	1998	5	5/0	4
	Age-specific	QoL	Finland, Poland, Spain	2013	13	13/0	4
	Age-generic	QoL	Multiple countries *	1998	26	25/1	15

(World Health Organisation Quality of Life Bref) WHOQOLOLD (World Health Organisation Quality of Life Old) WOOP (Well-being of Older People)	Age-specific	QoL	Multiple countries **	2005	18	18/0	23
	Age-specific	QoL	Netherlands	2020	6	6/0	4

1

2 * Thailand, Israel, India, Australia, Panama, USA, the Netherlands, Croatia, Japan, Zimbabwe, Spain, England, Russia, France, Hong Kong SAR, Germany,
3 Argentina, Brazil

4 ** Scotland, England, Germany, Spain, Denmark, France, Czech Republic, Hungary, Norway, Canada, Australia, USA, Israel, Japan, China, Brazil, Uruguay,
5 Turkey, Switzerland, Lithuania

6 *** One item from the HKQOLOCP, “Are your relatives concerned about you?”, cannot be clearly interpreted to be either positive or negative.

7

8

1 Table 2. Jaccard indices for content overlaps across the age-specific scales for older persons.

	N items	CASP19	CAWP	CUBRECAVI	EASYCARE	EQOLI	HKQOLOCP	HWOPS	LEIPAD	Lawton et al. scale	OPQOL35	OQOL7	QLIYES	SWBS	SWIO	UQQOL	VITOR QLSE	WHOQOLAG E	WHOQO- LOLD	WOOP
CASP19	19	1.00																		
CAWP	15	0.24	1.00																	
CUBRECAVI	6	0.31	0.17	1.00																
EASYCARE	9	0.20	0.50	0.22	1.00															
EQOLI	43	0.42	0.60	0.25	0.4	1.00														
HKQOLOCP	21	0.44	0.54	0.45	0.42	0.53	1.00													
HWOPS	7	0.38	0.25	0.57	0.33	0.40	0.42	1.00												
Lawton et al. scale	96	0.39	0.57	0.29	0.46	0.75	0.71	0.36	1.00											
LEIPAD	50	0.44	0.44	0.19	0.43	0.61	0.56	0.33	0.69	1.00										
OPQOL35	35	0.47	0.39	0.31	0.38	0.63	0.5	0.38	0.53	0.50	1.00									
OQOL7	28	0.41	0.50	0.31	0.38	0.69	0.44	0.29	0.56	0.37	0.56	1.00								
QLIYES	28	0.47	0.47	0.38	0.27	0.65	0.71	0.36	0.73	0.50	0.53	0.56	1.00							
SWBS	41	0.29	0.46	0.07	0.33	0.56	0.31	0.14	0.35	0.41	0.37	0.38	0.28	1.00						
SWIO	9	0.29	0.07	0.22	0.09	0.24	0.13	0.20	0.12	0.18	0.29	0.2	0.19	0.23	1.00					
UQQOL	15	0.29	0.36	0.38	0.20	0.31	0.55	0.50	0.46	0.33	0.29	0.29	0.46	0.07	0.09	1.00				
VITOR QLSE	53	0.53	0.64	0.36	0.43	0.71	0.79	0.33	0.8	0.65	0.58	0.62	0.8	0.41	0.18	0.43	1.00			
WHOQOLAGE	13	0.47	0.36	0.25	0.23	0.56	0.31	0.45	0.35	0.33	0.37	0.57	0.44	0.43	0.23	0.33	0.41	1.00		
WHOQOLOLD	18	0.40	0.50	0.27	0.36	0.41	0.43	0.25	0.38	0.28	0.56	0.62	0.38	0.27	0.15	0.36	0.53	0.36	1.00	
WOOP	6	0.21	0.27	0.43	0.22	0.18	0.33	0.38	0.2	0.19	0.31	0.31	0.29	0.00	0.00	0.38	0.27	0.25	0.40	1.00
Average content overlap		0.40	0.44	0.34	0.36	0.52	0.50	0.39	0.51	0.44	0.47	0.48	0.50	0.33	0.22	0.37	0.55	0.41	0.41	0.29

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1 Table 3. Jaccard indices for content overlaps across the age-generic scales.

	N items	15D	EQ5D5L	FS	GHQ20	GPCORE	HUNT5	Lucas et al. scale	ONS4	PWI	Ryff's Scale	SF36	SPFILS	SPWB	WEMWBS	WHO5	WHOQOL- BREF
15D	15	1.00															
EQ5D5L	5	0.60	1.00														
FS	8	0.00	0.00	1.00													
GHQ20	20	0.25	0.18	0.31	1.00												
GPCORE	13	0.33	0.27	0.38	0.50	1.00											
HUNT5	5	0.43	0.14	0.09	0.25	0.23	1.00										
Lucas et al. scale	7	0.80	0.4	0.00	0.17	0.25	0.50	1.00									
ONS4	4	0.29	0.17	0.1	0.27	0.25	0.5	0.33	1.00								
PWI	7	0.10	0.12	0.44	0.14	0.42	0.00	0.11	0.11	1.00							
Ryff's Scale	42	0.06	0.00	0.46	0.29	0.44	0.21	0.07	0.23	0.29	1.00						
SF36	36	0.71	0.43	0.08	0.21	0.38	0.33	0.57	0.22	0.18	0.19	1.00					
SPFILS	15	0.20	0.25	0.27	0.21	0.38	0.20	0.22	0.1	0.18	0.27	0.40	1.00				
SPWB	41	0.12	0.07	0.43	0.44	0.41	0.20	0.06	0.21	0.19	0.79	0.25	0.33	1.00			
WEMWBS	14	0.25	0.18	0.42	0.82	0.62	0.25	0.17	0.27	0.23	0.38	0.21	0.21	0.44	1.00		
WHO5	5	0.50	0.17	0.00	0.17	0.25	0.5	0.60	0.33	0.00	0.14	0.38	0.22	0.13	0.17	1.00	
WHOQOLBREF	26	0.31	0.15	0.27	0.29	0.44	0.31	0.23	0.23	0.29	0.41	0.46	0.46	0.56	0.29	0.23	1.00
Average content overlap		0.37	0.26	0.27	0.34	0.41	0.32	0.34	0.29	0.24	0.33	0.38	0.31	0.35	0.37	0.3	0.37

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