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Whose “successful ageing”? Lay- and researcher-driven conceptualisations of ageing well

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ABSTRACT – Background and Objectives: To date, there is no consensus definition of successful ageing (SA). In the literature, conceptualisations of SA are generally researcher-driven operational definitions or layperson perspectives. The current study aims to systematically review and compare quantitative operational definitions of SA with qualitative, layperson perspectives of SA.

Methods: PubMed, PsycInfo, ISI Web of Knowledge, EmBase and CINAHL databases were searched using the words “successful ageing” and related terms. Peer-reviewed studies positing quantifiable operational definitions of SA were included, as were studies that conducted exploratory qualitative study of layperson perspectives of SA.

Results: Marked differences in the focus of SA conceptualizations between researchers and laypersons were revealed. Qualitative studies demonstrated a greater emphasis on psychosocial aspects of SA, such as attitude whilst quantitative studies were generally biomedically focused, e.g. physical functioning/disability.

Conclusions: Little concordance in classification of SA is found across the two perspectives such that an individual may be simultaneously classified as unsuccessfully ageing from a biomedical approach and successfully ageing from a layperson perspective.

Most studies have been conducted in North America and the UK using non-clinical populations, resulting in limitations on generalizability. Alternative perspectives of SA must be taken into consideration in the practical application of SA.

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Introduction

The concept of successful ageing (SA) has existed for centuries in various forms and within the gerontological context for at least half a century. However, there is currently no clear, consensus definition of SA¹. Conceptualizations of SA have generally been derived from two sources: researchers and the “real world”. Researchers often conceptualize SA using frameworks posited by previously defined models, e.g. Rowe & Kahn^{2,3}, operationalizing SA components using psychometrics and cutoffs that are generally developed in the absence of layperson perspectives. Exploratory qualitative studies, conducted with the target population, i.e. older individuals, provide a different perspective with a richness and depth of information that cannot be achieved through researcher-driven quantitative methods. Conceptualizations of SA have been developed using these two very different paradigms each invoking disparate methods of acquiring and interpreting these data. The questions remain: can these differing conceptualizations of SA coexist? And, can they be reconciled?

The current review expands the temporal span of previous reviews^{4,5} as well as eliminates language restrictions. Further, the review focusses specifically on the term “successful ageing” rather than an umbrella term capturing all SA-related terms*, i.e. “healthy ageing”, as per Hung⁵, to facilitate a more direct comparison of perspectives. The current study aims to update, highlight and compare the ways in which SA has been conceptualized by laypersons and researchers.

Method

Search strategy

A systematic review of the literature across PubMed, PsycInfo, ISI Web of Knowledge, EmBase and the CINAHL databases was conducted. Search terms included “successful ageing” along with seven SA-related terms: robust ageing, optimal ageing, positive ageing, healthy ageing, productive ageing, effective ageing and ageing well. All literature published up to March 23, 2013 was eligible

* SA-related terms were included in the search strategy so as to be able to capture studies that used another term in the abstract and keywords, e.g. “healthy ageing”, “active ageing” etc., but operationalized SA in the study, or used a SA-related term and SA interchangeably. Issues surrounding SA nomenclature are described in Cosco, *et al.* 6. Cosco, T.D., B.C.M. Stephan, and C. Brayne, *Letter to the editor: On the success of the successful aging paradigm*. *Journal of Applied Gerontology*, 2013. 32(3): p. 275-276.

for inclusion. (Further details of the search strategy are available in Cosco *et al.*^{7,8}

Study Inclusion

Peer-reviewed studies positing quantifiable operational definitions of SA (that had not been previously described in other included studies) were included, i.e. researcher-defined conceptualizations, as were studies that conducted exploratory qualitative study of layperson perspectives of SA, i.e. real-world conceptualizations. Studies were neither excluded nor weighted based on study characteristics or methodological rigor⁹.

Data Extraction

Independent abstract and full-text reviews were conducted (TDC, AMP, JP), first to identify articles for full-text extraction and secondly for final inclusion. Disagreements regarding inclusion were resolved via discussion. Non-English articles were translated by multilingual staff and students in the Cambridge Institute of Public Health.

Data concerning constituent components of SA and the distribution of these components in qualitative and quantitative studies were extracted. Components of SA were grouped into categories developed via meta-ethnographic integration, noting previous breakdowns of SA components^{1,5}. Meta-ethnography is an inductive method used to synthesise and integrate inter-study themes¹⁰.

Results

The search strategies identified 7285 articles, of which 84 quantitative studies (positing 105 operational definitions**) and 26 qualitative studies met inclusion criteria.

Both qualitative and quantitative studies were conducted using primarily non-clinical North American sample groups. Most qualitative studies were conducted with individuals aged 60 and over, whilst quantitative studies were conducted primarily with individuals aged 40 and over (Table 1).

Component Distribution

Components were synthesised into three domains: biomedical – physical functioning/disability, cognitive functioning/disability, affective status, presence/probability of disease, mental health, longevity; psychosocial – personal resources, engagement, life satisfaction/well-being, support system, independence/autonomy; extrinsic factors – environment/finances.

Component distribution was examined by comparing the percentage of quantitative studies capturing a particular component and the percentage of qualitative studies capturing that component (Figure 2). Differences in the percentage of studies including each of the SA components revealed that quantitative studies included more physical functioning/disability components (33.9%***), affective status components (32.3%), presence/probability of disease components (28.4%), cognitive func-

** 103 studies were captured positing operational definitions of successful ageing. Of these studies 11 used duplicate models of SA and 8 posited a single self-rated successful ageing question as an operational definition of SA; therefore, these studies were not include in the analysis. Of the remaining 84 studies, many posited several definitions of SA, resulting in a total of 105 unique operational definitions of SA.

*** Value shows the difference in percentage of qualitative and quantitative studies including the component.

Table 1.
Included study characteristics

		Qualitative	Quantitative
n	Median	46	684.5
	Mean	180.2	2512.5
	SD	383.3	3834.7
	Range	14-1771	51-15000
Age	<40	11.5%	1.9%
	≥40	0.0%	0.0%
	≥45	0.0%	1.9%
	≥50	7.7%	9.7%
	≥55	7.7%	5.8%
	≥60	6.2%	21.4%
	≥65	3.8%	21.4%
	≥70	3.8%	5.8%
	≥75	3.8%	3.9%
	≥80	0.0%	4.9%
	≥85	0.0%	2.9%
Population	Non-clinical	69.2%	75.7%
	Institutionalised	3.8%	5.8%
	Successful agers	3.8%	2.9%
	Low-income	3.8%	1.0%
	Inuit/Native	11.5%	0.0%
	Women	11.5%	0.0%
	Caregivers	7.7%	0.0%
	Schizophrenia	0.0%	2.9%
	Married	0.0%	1.9%
	HIV	0.0%	1.0%
	White	0.0%	1.0%
	Twins	0.0%	1.0%
	Alzheimer's	0.0%	1.0%
	African-American	0.0%	1.0%
	Amish	0.0%	1.0%
	Disabled	0.0%	1.0%
	Female Nurses	0.0%	1.0%
Origin	North America	76.9%	39.6%
	Asia	7.7%	16.5%
	Australia	7.7%	2.9%
	South America	3.8%	1.0%
	UK	3.8%	5.8%
	EU	0.0%	15.5%

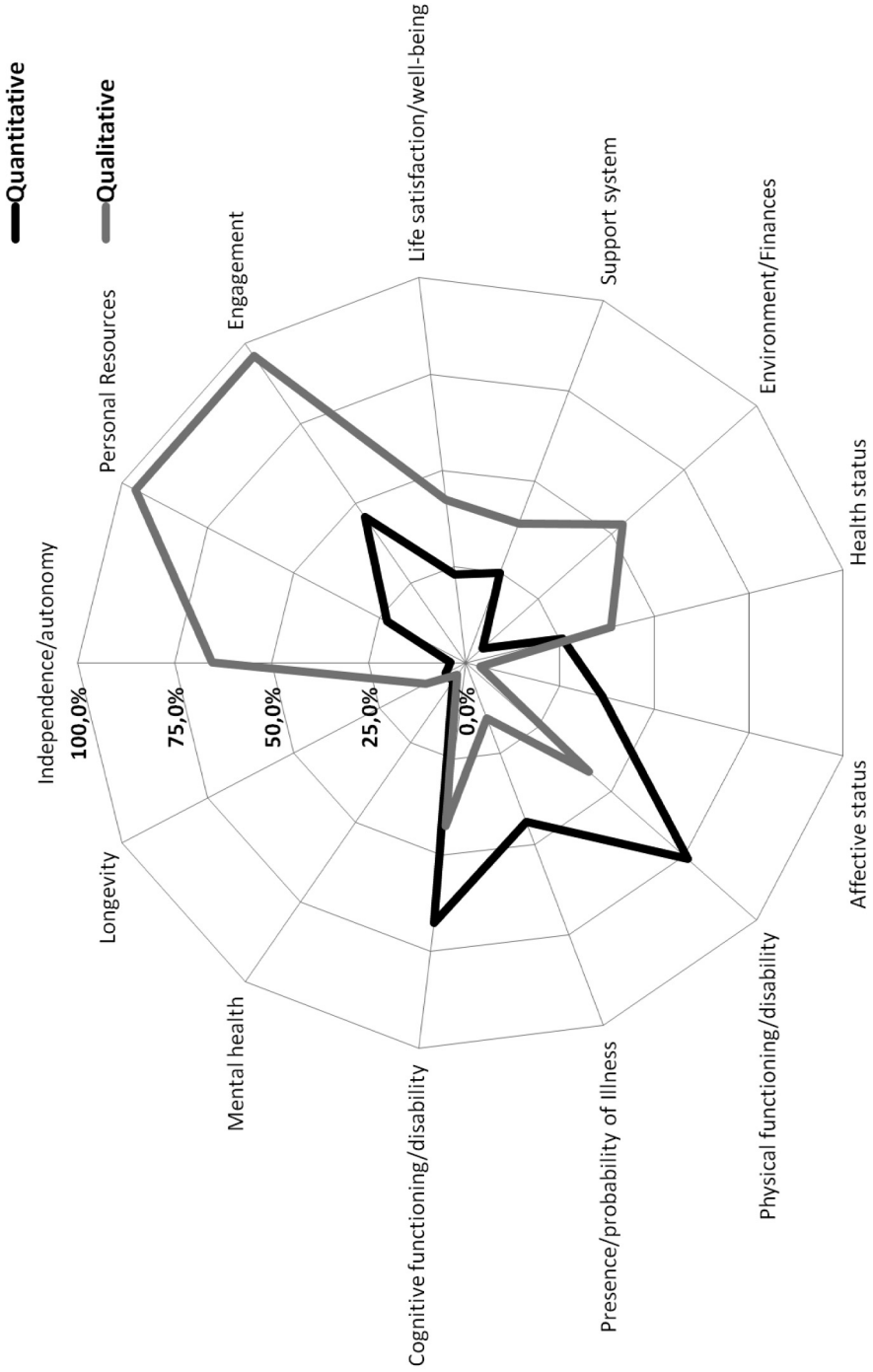


Figure 1. Comparison of the percentage of qualitative and quantitative studies capturing each SA component.

tioning/disability components (25.3%), and mental health components (1.9%) than qualitative studies; conversely, qualitative studies included more personal resource components (73.3%), independence/autonomy components (61.6%), engagement components (50.4%), environmental/finance components (48.1%), life satisfaction components (19.5%), support network components (13.7%), health status components (12.7%), and longevity components (5.8%) than quantitative studies.

Discussion

The disparity between researcher-driven definitions of SA and layperson conceptualizations of SA is marked. Qualitative studies emphasised psychosocial and external factors whilst quantitative studies had a strong biomedical emphasis. As a result, individuals deemed to be successfully ageing by laypersons may not be deemed as such by researchers, and vice versa.

Quantitative studies demonstrate the emphasis researchers have placed on biomedical conceptualizations of SA. The four most commonly used components of SA in researcher-driven operational definitions capture two of the three components constituting Rowe & Kahn's^{2,3} SA model: physical and cognitive functioning and the presence/probability of illness; however, qualitative studies do not emphasise these components. This is an important finding, suggesting that whilst researchers have been concerned with the biomedical aspects of SA, laypersons have not. Similarly, the lack of emphasis on longevity provides strong evidence as to the value laypersons place on the rote pursuit of extension of life. Despite the unprecedented

advances in furthering the length of life, extension of life may be less important to laypersons than the quality of that life.

Despite the many discrepancies between these opposing perspectives, engagement emerged as a common denominator. The active participation of individuals in varying aspects of life, e.g. social, occupational, was a pervasive theme across both research and lay perspectives of SA.

There are some limitations to the methods used. Meta-ethnography involved the subjective interpretation of the original researcher's subjective interpretation which may result in the distortion of the original intent. Further, the ways in which respondents articulated their conceptualizations may have obscured their original intent and were also subject to interpretation. Despite taking care to capture all relevant studies, it is possible that some may have excluded erroneously.

Whilst these data are derived from studies with unequal sample sizes, sample populations and of varying methodological rigour, the overarching perspectives that are captured in this review highlight the complex and multidimensional nature of SA as well as the degree to which researcher-defined operational definitions differ from laypersons' perspectives of SA. Qualitative studies of SA conceptualizations indicate that laypersons view SA through a multidimensional lens with a focus on psychosocial components, whereas quantitative operational definitions of SA have a strong focus on biomedical aspects of SA. These results highlight the heterogeneity of SA and the need to acknowledge differences in the synthesis of SA conceptualizations. Taking into consideration alternative perspectives of SA is a prudent step in the application of SA, for policymakers, clinicians and researchers alike.

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References

1. Depp CA, Jeste DV. Definitions and predictors of successful aging: a comprehensive review of larger quantitative studies. *Am J Geriatr Psychiatry* 2006; 14(1): 6-20.
2. Rowe JW, Kahn RL. Human aging: usual and successful. *Science* 1987; 237(4811): 143-149.
3. Rowe JW, Kahn RL. Successful aging. *Gerontologist* 1997; 37(4): 433-440.
4. Phelan EA, Anderson LA, LaCroix AZ, Larson EB. Older adults' views of "successful aging"—how do they compare with researchers' definitions? *J Am Geriatr Soc* 2004; 52(2): 211-216.
5. Hung LW, Kempen G, De Vries N. Cross-cultural comparison between academic and lay views of healthy ageing: A literature review. *Ageing & Society* 2010; 30(8): 1373-1391.
6. Cosco TD, Stephan BCM, Brayne C. Letter to the editor: On the success of the successful aging paradigm. *J Appl Gerontol* 2013; 32(3): 275-276.
7. Cosco TD, Prina AM, Perales J, Stephan BC, Brayne C. Lay perspectives of successful aging: a systematic review and meta-ethnography. *BMJ Open* 2013; 3(6).
8. Cosco TD, Prina AM, Perales J, Stephan BC, Brayne C. Operational definitions of successful aging: a systematic review. *Int Psychogeriatr* 2014; 26(3): 373-381.
9. Harden A, Garcia J, Oliver S, Rees R, Shepherd J, Brunton G, *et al.* Applying systematic review methods to studies of people's views: an example from public health research. *J Epidemiol Community Health* 2004; 58(9): 794-800.
10. Noblit G, Hare RD. *Meta-ethnography: Synthesizing qualitative studies.* Newbury Park, CA: SAGE Publications; 1988.

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