



Commentary

Social Isolation and Loneliness in Older Adults: Why Proper Conceptualization Matters

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Abstract: The problems of social isolation and loneliness in older adults have been widely researched but there are still issues regarding their conceptualizations and use in academic research. The terms social isolation and loneliness have often been used interchangeably in research, but evidence suggests they are not the same and sometimes have different implications for health outcomes in older adults. This paper attempts to highlight why proper conceptualization of these terms in research is important.

Keywords: conceptualization; social isolation; loneliness; older adults



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1. Introduction

Social relationships are central to human health and wellbeing. Two important concepts related to social relationships that have been studied widely in the social, behavioral, and medical fields are social isolation and loneliness [1]. Both concepts have been studied in relation to the health and wellbeing of older adults. Research has documented that social isolation and loneliness are associated with poor physical and mental health outcomes, including increased risk of cardiovascular disease, cognitive deterioration, depression, heightened inflammatory and metabolic responses to stress, and mortality in older adults [2–5]. While research on the effects of social relationships and health have been well documented for decades in the scientific community, the topics of social isolation and loneliness have, over the last few years, become subjects of discussion in the mass media and gained much traction in the height of the COVID-19 pandemic. For instance, articles in the Washington Post have recently featured headlines such as “Loneliness Can Increase the Risk of Heart Disease by 27% for Older Women” [6], “Senior Loneliness is a Disease That Can and Should be Treated” [7], and “How Technology Can Help Seniors Beat Loneliness and Isolation” [8].

Social isolation and loneliness in older adults are serious public health concerns that affect a considerable number of people around the world. For instance, a 2020 report on social isolation and loneliness issued by the National Academies of Sciences, Engineering, and Medicine (NASEM), indicated that almost one-fourth (24%) of adults in the United State, aged 65 years and older, were considered socially isolated [9]. Using data from the nationally representative U.S. Health and Retirement study, Perissinotto et al. [10] found that 43 percent of American adults, aged 60 years and older, reported feeling lonely. The incidence of social isolation and loneliness among older adults in the United States is not an isolated case. The World Health Organization (WHO) has noted how widespread the problem of social isolation and loneliness are in an advocacy brief issued in 2021 [11]. In the brief, the WHO identified social isolation and loneliness among older adults as growing health, social, and economic concerns. Although no global estimates of the proportion of older adults experiencing social isolation and loneliness exist, the WHO estimates, using data available for some regions, that in some countries (e.g., India, China, Mexico, Ukraine,

Hungary [12,13]) one in three older people are lonely and between 10 and 43 percent of older adults in the world are socially isolated [11].

As important as the concepts of social isolation and loneliness are to both the scientific community and the general public, issues abound regarding the understanding and accurate usage of these terms. A review of both terms in academic literature reveals a conflation of terminologies, where both social isolation and loneliness are often blurred in their definitions and usage [14–16]. Failing to account for their uniqueness as concepts that relate to two distinct experiences, both social isolation and loneliness have often been used interchangeably in research [1,9,14,17]. The challenges that this conflation of terms pose have rarely been addressed, if at all, in empirical research.

Older adults are at an increased risk for social isolation and loneliness due to changes in health (chronic illness, hearing, vision, and memory loss, disability and loss of mobility) and social connections (living alone, loss of family and friends) [18]. As the number of older adults increase around the world, one can expect an increase in the prevalence of social isolation and loneliness in this demographic block. Social isolation and loneliness will likely impact the health, wellbeing, and quality of life of many older adults around the world now and in the foreseeable future. As researchers are trying to understand the differences between social isolation and loneliness and the mechanisms by which they influence the health and well-being of older adults [19], a clear conceptualization of each term is warranted. This is relevant for early detection of social isolation and loneliness and a possible avoidance or delay of morbidity and mortality through prevention and mitigation efforts specifically designed to address social isolation and loneliness in older adults [15].

2. Social Isolation and Loneliness in Research

Like other social determinants of health, social isolation and loneliness have been widely studied in relation to different health outcomes in older adults [9]. Decades of studies have produced a considerable amount of knowledge regarding the prevalence, risk factors, and effects of social isolation and loneliness. The development of interventions and strategies, ranging from in-person (individual-, group-, community-based) to technology-focused programs, aiming to reduce social isolation and loneliness has also been a major focus of most studies in the last few years [14,20]. Research has documented two major risk factors for social isolation and loneliness: individual factors (e.g., living alone, being unmarried, having inadequate family relations or support, being male, having lower income and assets, having poorer physical and mental health, having lower educational attainment, socio-economic status, belonging to a sexual minority group (LGBTQ), being socially disengaged from the community, and being in retirement), and social environmental factors (e.g., limited access to transportation, housing situation—living in private residence, exposure to community violence, and living in rural settings) [21–26].

Despite the breadth of information available, the literature is difficult to disentangle because social isolation and loneliness are often used interchangeably in research [10]. In some studies, social isolation was assumed if older adults lived alone and it was believed living alone and being disconnected from others suggested one was lonely [15,27]. In others, loneliness and social isolation were examined in the context of social support where the lack of social support indicated a disconnect from others and thus the presence of loneliness feelings [14,28]. Although both concepts seem to have more in common than separate them and the years of research have also established that both carry significant risks to health, social isolation and loneliness are not the same [10,16,17].

One reason underlying the interchangeable use of social isolation and loneliness in research stems from the definition of both concepts. On the one hand, social isolation has been described across studies as: a unidimensional concept referring to lack of social integration [29]; a multidimensional concept that emphasize both structural (objective assessment of quantity of) and functional (subjective assessment of quality of) social support [14]; and being lonely [27]. On the other hand, loneliness has been described as

a perceived absence or loss of companionship [10]; perceived social isolation [2]; feeling lonely [27]; a discrepancy between a person's desired and actual social relationships [16]; a 'debilitating psychological condition characterized by feelings of isolation, emptiness, worthlessness, lack of control, and personal threat' ([30], p. 2); 'a psychological embodiment of social isolation' ([5], p. 5797); or an experience of social and emotional isolation [16].

What is common to the definitions for both social isolation and loneliness and often makes conceptualizing these conditions difficult, and hence, their interchangeable use in research, is the reason for their existence: a lack of human connection [31]. There is a seeming association between social isolation and loneliness, where the presence of social isolation makes inevitable the existence of loneliness. But studies document an absence of direct link between social isolation and loneliness [9,32]. Social isolation and loneliness, as NASEM [9] reports, are often not significantly correlated. In their study on social isolation, loneliness, and mortality, Steptoe et al. [5] reported that the significant association between social isolation and mortality remained unchanged when loneliness was statistically adjusted for. Both social isolation and loneliness were independently, significantly associated with increased mortality. In a similar study, Holwerda et al. [33] found loneliness significantly increased the risk of mortality, especially in men; however, no higher risk of mortality was found for social isolation in either men or women, when confounding variables, including loneliness, were controlled for. Valtorta et al. [27] in their study, found loneliness was associated with an increased risk of cardiovascular disease. Social isolation, however, was not associated with the disease incidence. Although similar social integration indices (such as living arrangement, marital status, frequency of interaction with others, and level or degree of connectedness to others) have been reported as ways to assess social isolation and loneliness, it is important to recognize that both concepts are distinct [14,15]. For example, it is possible for people to live a somewhat solitude life and not feel lonely, while others can live rich social life and will still experience loneliness [1].

Another underlying reason for the interchangeable use of social isolation and loneliness lies in how they are assessed in research. The experience of social isolation and loneliness are complex and adding to that complexity are the methods of measurement of both concepts in empirical studies. In research, social isolation and loneliness are assessed with tools that incorporate elements of both social isolation and loneliness, which blur the differences between these two concepts [9]. The measurement of these concepts and how studies report outcomes as being either related to social isolation or loneliness may underlie the range of prevalence rates and inconsistencies in study conclusions [15,16]. This, of course, has consequences not only for the research community but also public health and clinical settings, as it impacts the development and implementation of interventions to address social isolation and loneliness [11,14].

The result of the conflation of terms and the interchangeable use of these concepts in research is the confusion surrounding the health and medical impacts of social isolation and loneliness, as well as the interventions to address them [9,33]. Regarding the effects of social isolation and loneliness on the health and wellbeing of older adults, NASEM noted the unique challenge posed by the variability in definitions and the interchangeable use of these concept [9]. Both social isolation and loneliness are known to be associated with poor physical and mental health in older adults. What remains to be established clearly, however, as NASEM has noted (stemming from concerns over the variability in definitions and subsequent interchangeable use), is which concept has the greater influence on the health and wellbeing of older adults [9]. As noted already, social isolation and loneliness are measured with a variety of instruments in research. The measurement tools, while they determine how social isolation or loneliness is defined in the research, more often than not include items that assess not just one concept but both [14–16]. This presents a unique challenge where a study, for instance, on social isolation, may inadvertently incorporate loneliness due to the measurement tool used. This creates a situation in which the effects of

social isolation and loneliness on health are demonstrated, making it difficult to determine which concept's effects are truly indicated [9].

On the subject of intervention targeting social isolation and loneliness, Dickens et al. [14] have suggested that the multi-dimensional definitions of social isolation and loneliness could be a recipe for poorly developed interventions, which not only lack appropriate theoretical basis but are also devoid of components needed to produce the desired outcome or effect. Similarly, lamenting the little high-quality evidence of social isolation and loneliness interventions that work, the WHO pointed out the problem of merging social isolation and loneliness into a single concept and cautioned against assuming that intervention designed for social isolation will work for loneliness ([11], p. 8). It is important to acknowledge that both social isolation and loneliness represent distinct concepts, each with its definition and measurement. Thus, it is necessary to properly conceptualize these terms whenever they are used in research.

3. Conceptualizing Social Isolation and Loneliness

Conceptualization involves the process of identifying key concepts in a study and providing a unified explanation of those concepts to enhance their meaning and usage in research as well as the audience's understanding of the concepts [34]. Conceptualization also involves measurements of key concepts identified and explained in research. Measurement relates to identifying and describing concepts to be measured in a study and assigning operational definition to allow the concepts to be empirically observed ([34], p. 54).

A continuing challenge for scholars in social and behavioral sciences relates to the fact that many important topics of study involve abstract concepts or ideas that are at times difficult to define ([34], p. 52). While some concepts are relatively easy to define, others are more ambiguous. Defining concepts—mental images—clearly can be quite difficult because concepts can have several meanings and can be measured in multiple ways ([34], p. 53). Like most social concepts, social isolation and loneliness, by their nature and the close connection between them, are difficult to clearly define and measure [16,17]. As pointed out earlier, social isolation and loneliness have been described variously across studies, but empirical evidence often fails to define social isolation and loneliness, and both terms have, in some cases, been used interchangeably as one concept [16,17]. As previously explained, one reason underlying the interchangeable use of social isolation and loneliness stems from the methods of assessment. Most of the research examining social isolation and loneliness have largely been carried out using the UCLA Loneliness Scale, constructed for the measurement of social isolation and emotional isolation (loneliness) [17], and the De Jong Gierveld Loneliness Scale—designed to assess loneliness but which also has items measuring the structural aspect of one's relationship [35,36]. These instruments and many others (e.g., Duke-UNC Functional Social Support Questionnaire, Lubben Social Network Scale, etc.) that have been used to examine social isolation and loneliness “obscure the differences between these two concepts” ([9], p. 107).

When it comes to social isolation and loneliness in older adults, how should they be defined and measured? Living in solitude? Having too few relationships? Lacking social contact? Lacking interaction with others? Being in unsupportive relationships? Lacking a close intimate partner? Being emotionally disconnected from others? The absence of close emotional attachment? The problem of conceptualizing social isolation and loneliness is made manifest even from this incomplete list.

Social isolation and loneliness are more diverse, complex constructs that lend themselves to varying definitions informed by various aspects of social relationships—structural (e.g., size of social network, living arrangement), functional (e.g., received social support), qualitative (e.g., satisfaction with or quality of relationship) [25]. Both concepts have their foundation in social relationships (connectedness). As complex as these concepts are and as multifaceted as their definitions appear to be, the issues of social isolation and loneliness indicate a problem in one or more ways older adults want to be connected to others socially, either through physical (structural) or behavioral/emotional (functional/qualitative)

channels [31]. By their nature, social isolation relates to the structural/physical aspect of social relationship, whereas loneliness relates to the emotional/functional aspects of social relationship.

Social isolation, therefore, is a state of being disconnected from others; it is about lack of social contact or having few people to interact with regularly. Conceptualization, both definition and assessment, should take into consideration what can be objectively measured and quantified. For instance, the frequency of social interactions, participation in social activities, the degree or level of engagement with others, and size of one's social network [1,25,31].

Loneliness, on the other hand, is an emotional feeling, a state of feeling lonely, a condition of feeling alone that is not necessarily triggered by being separated from others. Conceptualization, both definition and assessment, should take into consideration that which can be subjectively assessed and expressed qualitatively. For instance, feeling completely alone, feeling starved for company or companionship, feeling withdrawn, left out, or disconnected from the world around you, and believing ties to others are superficial or that people are around you but not with you [2,16,25,27].

4. Implications—Why Proper Conceptualization Matters

Proper conceptualization is important for the following reasons:

- **Research:** Social isolation and loneliness are two different concepts that are often blurred in research both in definition and measurement [9,14–16]. Definitions of social isolation and loneliness are problematic and compounding the difficulty with the accurate definitions of these terms is how both social isolation and loneliness are measured in research. A review of the literature on social isolation and loneliness reveals several assessment tools (e.g., the UCLA Loneliness Scale and the De Jong Gierveld Loneliness Scale) that capture both elements of social isolation and loneliness, but which obscure the differences between these two concepts [9]. This gives the appearance that both concepts are the same and can therefore be used interchangeably. Being distinct and independently associated with health outcomes, proper conceptualization is needed, as it may inform the refining of existing instruments or the development of new ones to assess social isolation and loneliness in older adults. The effects of social isolation on the health and wellbeing of older adults are well documented [2–5], but it is not always clear which has greater detrimental effect on older adults [9]. Proper conceptualization and measurement of social isolation and loneliness may help determine the unique influence of each concept on the health of older adults. Proper conceptualization may also guide research in uncovering the mechanisms by which social isolation and loneliness are related to health and wellbeing of older adults and help address inconsistencies in study conclusions resulting from variability in measurement of social isolation and loneliness [9]. Further research is needed to help determine a framework to use in distinguishing between social isolation and loneliness and to establish the evidence of each concept's unique and independent influence on the health and wellbeing of older adults.
- **Practice and/or policy intervention:** Numerous interventions, including individual, group, community-based programs and technology-focused strategies (e.g., social media groups, video conferencing, artificial intelligence (AI) applications) have been developed to address social isolation and loneliness [9,11,20,23]. But as NASEM [9] has noted, “the overall quality of evidence for specific clinical or public health intervention for social isolation and loneliness in older adults is mixed” (p. 7). NASEM attributes this in part to the “heterogeneity of older adults and the underlying cause of social isolation or loneliness” (p. 7). It should, however, be noted that the effectiveness of intervention may depend on their specific content, whether the intervention is specifically designed to address social isolation or loneliness. The likelihood of intervention producing the desired effect is dependent on how the problem the intervention is to address is conceptualized. For instance, an intervention to address loneliness may

prove ineffective if loneliness is conceptualized as social isolation [14]. With both concepts appearing to focus on different aspects of social relationships, proper conceptualization can enhance the understanding of the risk factors and health impacts of social isolation and loneliness and thus the selection of appropriate interventions to address these issues at the individual level. Proper conceptualization creates a sense of reliability [34], which is critical to the selection of instrument to assess social isolation and loneliness among older adults in clinical settings. Proper conceptualization is also essential for the development and the implementation of policy actions aimed at identifying, preventing, and reducing social isolation and loneliness in older adults [20]. While further research is needed to strengthen the evidence base for interventions that have proven to work, it is important to note that interventions, whether practice or policy, to address social isolation or loneliness are likely to be effective if their conceptual measures focus on the right social context (i.e., social isolation or loneliness).

- **Education:** Different measures have been adopted to improve social connections for community-dwelling adults who are socially isolated or lonely [14,20,23], but the prospects of intervening in time may be difficult for those who are at highest risk. For instance, people who do not have regular engagement with others (e.g., do not have significant personal relationships, or do not belong to any organized social or religious groups) may go unnoticed even in their own communities [25]. Before older adults who are socially isolated and lonely can be helped, they must be identified. Luckily, almost all older adults, 60 years and older, interact with the health care system in some way. Health care professionals are vital in the effort to promote the health and wellbeing of older adults [9–11,23]. Increased knowledge of health care professionals on the issues of social isolation and loneliness and their health and medical impacts is important. Given the complexity of terms used in relation to social isolation and loneliness, educating health care professionals on these concepts and how distinct each one is from the other can aid in the proper identification of these problem, as well as the selection and implementation of interventions to prevent, alleviate, or eliminate the negative impact of social isolation and loneliness among older adults [9]. It is recommended that health care professionals and researchers examine improved measures to identify community-dwelling older adults who are most prone to suffer from social isolation or loneliness. It will also be necessary, as NASEM [9] notes, to educate and train (in addition to the health care workforce) family caregivers and members of the community, such as mail carriers and police officers, who provide services to or regularly interact with community-dwelling older adults how to identify those at risk for social isolation or loneliness.

5. Conclusions

The need for proper conceptualizations of social isolation and loneliness in research and practice cannot be overemphasized. Each study conceptualizes them to meet the objectives of research. As difficult as it is to separate both terms because of their nature and close association between them, one thing remains true; that both loneliness and social isolation relate to unique experiences that older adults face. With both concepts having to do with human connectedness and relating uniquely to structural and functional aspects of social relationships, it is important that the concepts of social isolation and loneliness be not used interchangeably in research.

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