

Theoretical Perspectives on Social Isolation and Loneliness: Application to Older Adults

Introduction

By 2030, one-fifth of Americans will be over age 65, representing a major demographic shift (ACL, 2021; Census, 2020). Given this change, a need exists to address factors leading to adverse health outcomes in older adults. Social isolation and loneliness are major public health issues and are critical areas of focus given the magnitude of their negative influence on health outcomes (Barnes et al., 2022; Blazer et al., 2020). Both conditions are associated with an increased risk of functional decline and mortality, comparable to other well-established risk factors such as obesity and smoking (Holt-Lunstad et al., 2015; Perissinotto et al., 2012). Older age (i.e., beyond age 60) does not cause social isolation and loneliness; however, factors and events associated with aging, such as the loss of family and friends, sensory impairment, and chronic health conditions, can increase the risk of experiencing social isolation and loneliness.

The first reference to the concept of loneliness in English literature dates back to the 17th century (Worsley, 2015). Social isolation and loneliness have been discussed across philosophy, literature, and the arts (Hou & De Vleeschauwer, 2023; Taylor, 2020), but social isolation and loneliness were first empirically examined in the social sciences by researchers in the 1970s, beginning with the work of Robert Weiss (1975). Since that time, some areas of research, particularly those related to health outcomes, have been well-studied (Cacioppo & Cacioppo, 2012). In empirical work, theory has served an essential role in informing the focus of research. Underscoring the value of theory, a recent report on social isolation and loneliness among older adults commissioned by the National Academy of Sciences emphasized the importance of theory, particularly for intervention work; it recommended that future research should explicitly ground their work in existing theoretical frameworks (Blazer et al., 2020).

Multiple theoretical perspectives have been applied to the empirical study of social isolation and loneliness in the social sciences, including strength and vulnerability integration (Charles, 2010) and socioemotional selectivity theory (Carstensen, 1992). This prelim response will focus on two theoretical models applied widely in prior work, the cognitive approach and the bioecological model. These two theories were selected on the basis of their historical and current influence. This response will explore the basis of these theories and their application to work with older adults. It will critically examine their values and limitations while suggesting future areas of research where these theories can be applied.

Cognitive Approach

The cognitive approach draws from the work of multiple scholars including Weiss (1975), de Jong Gierveld (2006), and Perlman (1988). According to de Jong Gierveld et al. (2006), researchers adopting the cognitive approach are united by a focus on (a) descriptive characteristics of the social network; (b) relationship standards, (c) personality characteristics; and (d) background characteristics. The cognitive approach proposes that social relationships are essential to well-being and that social isolation and loneliness are connected to life course events (e.g., loss of a spouse, transition to retirement, or a move to a new city). Social isolation and loneliness result from poor-quality relationships and the demands of contemporary society. The cognitive approach focuses on the individual and their subjective experience of loneliness; it recognizes social isolation and loneliness as distinct constructs but foregrounds loneliness, which is seen as the result of "perceived social isolation" (Hawkley & Capitanio, 2015). As such, the main focus is on the impact of loneliness rather than social isolation.

Theoretical Antecedents and Foundation

The cognitive approach draws on attachment theory (Bretherton, 1992) and cognitive dissonance theory (Greenwald & Ronis, 1978). Attachment theory proposes that early life

experiences with attachment figures, such as parents, provide a blueprint for future relationships such that those with secure and close relationships will seek out and develop similar bonds throughout their lives. In contrast, those with insecure or avoidant attachment styles with early caregivers will have difficulty forming and maintaining socially and emotionally fulfilling relationships. As described by Weiss (1975), relationships are believed to address six distinct social needs: (1) safety and security, (2) social cohesion and bonding, (3) nurturance and responsibility, (4) emotional validation, (5) assistance, and (6) guidance. When individuals do not have these needs met through their current relationships, their perceptions of social isolation are experienced as loneliness.

Further influencing the cognitive approach, cognitive dissonance theory, developed by Leon Festinger in the 1950s, offered a framework for understanding the nature and consequence of psychological tensions that emerge when a person's internal experience and external behavior are inconsistent with their desired experience and behavior (Aronson, 1969). In the cognitive approach, loneliness results from a discrepancy between desired and experienced social involvement, creating a distressing subjective experience (Burholt et al., 2016). Since loneliness is experienced subjectively, the cognitive approach employs theory-driven self-report forms of measurement to allow for empirical exploration.

Application to Research

Weiss (1975) distinguished between emotional loneliness (the absence of close attachments like a spouse and friends) and social loneliness (the lack of a broader group of attachments like neighbors and work colleagues). These two loneliness subtypes were used in developing the de Jong Gierveld Short Scale (de Jong Gierveld & van Tilburg, 2008), which is widely used. The scale is specific to older adults and has been validated in multiple countries and languages (de Jong Gierveld & Van Tilburg, 2010). Additionally, qualitative work has found

general consensus around the definition and the experience of loneliness in multiple countries (Heu et al., 2021). Though loneliness can be reported unidimensionally by collapsing into one score, emotional and social loneliness are only moderately correlated, with a value of $r = .39$ in older adults (Green et al., 2001). Additional scales, such as the Social and Emotional Loneliness Scale for Adults (SELSA), have also been developed following Weiss's typology (DiTommaso & Spinner, 1993).

Use of the de Jong Gierveld scale has shown that, among community-dwelling older adults, loneliness generally increases over time. However, this trend has a large amount of intra-individual variability (Dykstra et al., 2005). In their study, which examined 7-years of longitudinal data in nearly 3,000 participants born between 1908 and 1937, Dykstra et al. (2005) noted that increases in loneliness were most pronounced among the oldest old participants (e.g., above age 85) and those who had lost a partner. Loneliness decreased over time for those participants who expanded their social networks and those with improved functional status. More generally, social and emotional loneliness has been studied in older adults in relation to functional impairment (Weinstein et al., 2016), mental health conditions (Kelly et al., 2017), and overall well-being (de Jong Gierveld, 1998).

Benefits and Limitations

The direct relationship between theory and measurement in the cognitive approach is both a strength and limitation. It allows for a clear definition of loneliness which can be tested empirically across studies. However, the emphasis on internal and individual-level experiences may overlook broader socio-historical, environmental, and cultural context that can significantly contribute to feelings of loneliness (Luhmann et al., 2023). For instance, the cognitive approach may overlook factors such as the availability and accessibility of transportation or social services. The cognitive approach strongly emphasizes loneliness and does not pay the same level

of attention to social isolation. Previous work has found that social isolation is more impactful in predicting mortality than loneliness and that this impact is independent of the emotional experience of loneliness (Stephoe et al., 2013). The cognitive approach overlooks the importance of simultaneously considering loneliness and social isolation (Newall & Menec, 2019).

Research on social isolation and loneliness using the cognitive approach has focused on partnered relationships; this work has largely examined binary gender roles and heterosexual relationships (de Jong Gierveld et al., 2009; Hsieh & Hawkley, 2018). Because of this focus, research informed by the cognitive approach has overlooked how loneliness may differ among LGBTQIA+ populations (Luhmann et al., 2023). Of note, researchers based in European countries commonly use instruments informed by Weiss's formulation (i.e., de Jong Gierveld and SELSA). Further, research on social isolation and loneliness is primarily based in WEIRD (i.e., Western, educated, industrialized, rich, and democratic) countries (Surkalim et al., 2022). This overreliance on a limited sample is problematic in that WEIRD countries account for only 12% of the global population, so basing findings on work from a limited subset of countries risks missing nuanced dynamics in other cultural and societal contexts. While the cognitive approach has been influential in advancing the study of social isolation and loneliness, it presents an ethnocentric view, potentially overlooking culturally and socially specific variations in experience.

Bioecological Theory

Bioecological theory has also been used in research on social isolation and loneliness in adults. Bioecological theory, which is also referred to as ecological systems theory or the bioecological model, initially grew out of work in developmental psychology (Bronfenbrenner & Morris, 2007) but has been adopted and expanded across multiple fields (Eriksson et al., 2018; Ferguson et al., 2019). The bioecological model situates the individual within a complex system

of relationships affected by multiple levels of their surrounding environment. An adaptation of the bioecological model specific to older adults has been described previously (Blazer et al., 2020). The model presented by Blazer can function as a framework that allows researchers and clinicians to identify risk factors and mechanisms in order to guide research and intervention work that reduces the adverse health impacts of social isolation and loneliness. The bioecological model views social isolation and loneliness as separate but closely related constructs. The model is more flexible than the cognitive approach in that work using it does not need to focus on an individual level. Additionally, the bioecological model is agnostic to measurement approach, which allows researchers from diverse disciplinary backgrounds to employ the theory.

Theoretical Antecedents and Foundation

Based on ecological systems theory (Bronfenbrenner, 1977), the bioecological model views social isolation and loneliness in older adults as simultaneously an individual problem and the result of systemic issues arising from interactions between individuals and their environments. An individual is located within multiple concentric systems, including the microsystem, mesosystem, exosystem, macrosystem, and chronosystem. The microsystem encompasses the individual's close relationships and immediate settings like family, work, or neighborhood. The mesosystem involves the interaction between these microsystems. The exosystem represents settings and factors indirectly affecting the individual, such as public policy and community services. The macrosystem refers to the broader sociocultural context, including societal norms, values, and customs, while the chronosystem pertains to the dimension of time in individual and historical contexts.

Application to Research

The bioecological model has been applied in exploring the complex interactions between individual characteristics, social environment, and societal influences. Individual characteristics

and risk factors, such as cognitive impairment, have been explored using the bioecological model (Cohen-Mansfield & Parpura-Gill, 2007). Macro and mezzo-level work has included the impact of the immediate social environment through the availability and quality of social support networks (Antonucci & Akiyama, 1987) and the role of community ties in mental health outcomes (Kawachi & Berkman, 2001). Research has also probed societal-level influences on social isolation and loneliness in older adults, particularly the role of policies in advancing health promotion (Cattan et al., 2005).

Similar to the cognitive approach, at the individual level, the bioecological model provides a framework for investigating personal characteristics that contribute to social isolation and loneliness in older adults. The bioecological model can be used to emphasize the role of social relations and social networks. Factors such as physical health, psychological well-being, and socioeconomic status can be explored in relation to social isolation and loneliness (Cacioppo & Cacioppo, 2012). In one seminal study probing the interplay between health status, sociodemographic factors, and living conditions, Hawkey et al. (2008) found several independent risk factors for loneliness. These included male gender, physical health conditions, network size, and poor social relationships. Education and income protected against loneliness, and race/ethnicity did not predict loneliness after controlling for covariates. Further than examining personal characteristics, the bioecological model also focuses on mechanisms (Cacioppo & Hawkey, 2003), which can be used to inform intervention work.

From a community level (exosystem and macrosystem), the bioecological model can highlight the role of the immediate social environment, policy, and culture in shaping experiences of social isolation and loneliness among older adults. Availability, quality, and utilization of social support networks are impactful at this level (Antonucci & Akiyama, 1987; Victor & Pikhartova, 2020). For instance, Kawachi & Berkman (2001) focused on how

community ties influence mental health outcomes, specifically depression and loneliness. They found that older adults who were embedded in supportive community networks reported lower levels of depression and loneliness and that neighborhoods characterized by trust and mutual aid had lower rates of depression among older adults. With respect to policy, policies advancing health promotion, such as age-friendly initiatives and universal healthcare, have been found to reduce social isolation and loneliness in older adults (Cattan et al., 2005). As another example of the influence of policy, one recent study (Tapia-Muñoz et al., 2022) examined the prevalence of loneliness in older adults across 17 countries (the majority of which were located in Europe). Countries with more generous public pension systems had lower levels of loneliness among older adults. Lastly, culture can also shape experiences of loneliness.; cultures with stronger societal norms of respect and care for older adults tend to have lower levels of loneliness even after controlling for confounds (Lykes & Kemmelmeier, 2014).

Benefits and Limitations

The bioecological model offers several benefits to researchers. It can be used to study a wide range of influences on social isolation and loneliness, offering a more holistic view than individual-centered theories such as the cognitive approach. Given its broad focus, the bioecological model can be used to explore the impact of social determinants of health, such as neighborhood environment. The bioecological model complements individual-centered theories, like the cognitive approach, by contextualizing individual experiences.

The bioecological model also has several limitations. While superior for examining influences outside the individual, its broad perspective can sometimes lean towards overly general, offering limited specificity in directional predictions about individual behavior or experiences. The broad scope of bioecological theory can render it challenging to pinpoint which levels of influence are most impactful or should be the primary focus of intervention strategies.

Additionally, operationalizing and measuring constructs within this model can be difficult due to its expansive scope and flexibility, potentially leading to inconsistencies across research studies.

Future Directions

While the cognitive approach and the bioecological model have significantly advanced scholarly knowledge of social isolation and loneliness among older adults, further theoretical innovation is warranted. A combined approach that leverages the strengths of both perspectives may contribute to a more comprehensive understanding of the impact of social isolation and loneliness among older adults. Applications of this approach in future work would involve examining both individual-level psychological variables and community-level factors. For instance, studies could explore how individual-level experience of social isolation and loneliness interacts with social policies or cultural norms. This would involve measurement on the individual level and can rely on instruments and approaches already established through the cognitive approach. Examining this alongside consideration of community-level factors offers a more detailed understanding of social isolation and loneliness. This is consistent with the social work approach of person-in-environment (Green & McDermott, 2010) and has also been recommended by transdisciplinary scholars (Blazer et al., 2020).

More empirical work has been dedicated to loneliness than social isolation. Both constructs result in adverse health outcomes, and when possible, the two should be considered simultaneous due to their conceptual relatedness. The disproportionate focus on loneliness within the two theories reviewed in this response is likely due to the presence of well-established measurements for loneliness. In measuring social isolation, standardized instruments or measurement practices beyond simply classifying someone as socially isolated based on their household membership or marital status is needed, and comprehensive approaches to measurement have been proposed (Berkman & Syme, 1979; Cornwell & Waite, 2009).

Most work on social isolation and loneliness has used Western samples, and future studies should prioritize including more diverse populations. In undertaking this work, the bioecological model can provide a valuable framework given its focus on cultural and societal differences and their impacts on loneliness and social isolation. Future research should also prioritize the translation of theory into direct practice and intervention work. While the content of this prelim response has been concerned with the cognitive approach and bioecological theory, this does not preclude the importance of additional theoretical frames. Many of these frameworks, such as socioemotional selectivity theory (Carstensen, 1992), strength and vulnerability integration (Charles, 2010), evolutionary theory (Hawkley & Capitanio, 2015), and the buffering hypothesis (Cohen & Wills, 1985), are also compatible with the bioecological model.

Conclusion

Since work in the social sciences on social isolation and loneliness began in the 1970s, both the cognitive approach and the bioecological model have served as a theoretical foundation for research. The cognitive approach, focusing on individual experiences with an emphasis on loneliness, offers insight into individual-level experience. In contrast, with its ecologically nested framework, the bioecological model provides a more expansive perspective that considers the interplay between individuals and their various environmental contexts.

Both theoretical perspectives have strengths and limitations. The cognitive approach is ideal when examining personal experience but tends to overlook broader systemic influences. Conversely, the bioecological model can examine the impact of social isolation and loneliness on multiple levels. However, findings can be inconsistent due to the multiple forms of measurement being used. Taking elements from each of these approaches has value; the cognitive approach's focus on individual experience and the bioecological model's attention to broader systemic

influences provides a promising direction for future research and intervention work. While individual-focused interventions may be valuable (Paquet et al., 2023), they may not adequately address broader systemic issues contributing to social isolation and loneliness. Such an approach would allow for the development of multi-level intervention strategies that are responsive to both individual needs and account for broader systemic influences.

From a social work perspective, the ultimate goal of research on social isolation and loneliness among older adults ought to be fostering a society where all older adults feel connected and socially engaged; theory plays a role in guiding this effort. Understanding the impact of social isolation and loneliness among older adults requires an approach that examines individual-focused factors alongside broader system-level influences.

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