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The ‘Timbre’ of Loneliness in Late Life

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The social distancing restrictions associated with the SARS-COV-2/COVID-19 pandemic brought increased attention to the issue of social isolation and loneliness among older adults.^{1,2} The body of empirical research on loneliness among older adults goes back over half a century,³ but in the past decade has seen uptick in attention in the professional and lay-press, as well as government and public policy circles.^{4,5} Much of the focus over the past decade has been grounded in concern about the adverse downstream biological effects of loneliness in terms of medical comorbidity, dementia, and early mortality.^{2,6,7} Although the biological impact of loneliness is of course important, it is at least equally if not more critical to consider the adverse effects of loneliness on quality of life and mental well-being.

Loneliness by definition is a form of psychological distress, i.e. distress about a perceived discrepancy in the quality or quantity of one’s relationships relative to those the person desires.⁸ The distress of loneliness can take many forms, and be triggered by different types of discrepancies between one’s desired vs. perceived social relationships and environment. The triggers or social focus of loneliness may vary from a longing for relationships that do not (yet) exist to grief for relationships that have fundamentally changed or are no longer available. Moreover, the emotional distress of loneliness can be experienced as any combination of unpleasant feelings such as anxiety, sadness, resentment/anger, or despair.

There have been a variety of efforts to categorize types of loneliness. The most frequently cited is that proposed in 1973 by Weiss⁹ in terms of emotional vs. social loneliness. Although originally couched in terms of attachment theory, *emotional loneliness* may be understood as an unmet desire for a close/intimate (not necessarily, but possibly romantic) relationship. In contrast, *social loneliness* may be experienced as a self-perceived deficiency in one’s broader social network of friends.^{8,9} Alternatively, based on factor analyses of responses to items on the 20-item version of the UCLA Loneliness Scale (UCLA-LS),¹⁰ Hawkey et al.¹¹ differentiated three loneliness factors: intimate, relational, and collective loneliness. Hawkey and colleagues noted that these factors are not necessarily categories of loneliness that differentiate individuals, but rather are different dimensions within which a

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lonely person may conceptualize and experience loneliness. Another dimensional example was suggested by de Jong Gierveld in which she posited three dimensions: feelings of deprivation (longing for intimate attachment, feelings of emptiness or abandonment), time perspective (hopeless or changeable), and the emotional aspects of loneliness (e.g. sadness, shame, guilt, frustration or desperation).¹² There remains a relative dearth of research on the changes of these various types or dimensions of loneliness over the age span, although the Hawkley et al.'s three-factor solution that was first identified in an undergraduate students was replicated in a sample of older adults.¹¹

Aging also brings other challenges that can contribute to a more solitary life, such as age-related relationship changes and losses of life-partners, friends, and family through either death, disability, or changes in residence. Other relevant risks include changes in mobility, and physical health, and cognitive decline, which can reinforce social isolation and loneliness. In addition, advancing age brings an increased risk of declines in hearing and vision that can make communication, transportation, and socialization efforts more challenging if uncorrected. The ubiquity of such changes with advancing age would seem to place older adults at increased risk for social isolation and loneliness. However, the empirical data show a more complex relationship between age and loneliness.

Studies of the association between age and loneliness have reported a complexity of inconsistent findings, but one conclusion is clear—the relationship between age and loneliness is not a simple linear function (reviewed in Lee et al.¹³). For example, based on the third edition of the UCLA-LS¹⁴ in a survey of adults ages 27 to 101 years, our research group found peaks among those in their 20s, mid-50s, and late 80s.¹³ This finding was partially replicated using a 4-item short form of the UCLA-LS in a separate sample of adults ages 20 to 69 years; in the latter study we found the highest levels of loneliness to be by respondents in their 20s and 60s, with an additional peak among those in their 50s.¹⁵ Unfortunately, the latter study did not include persons ages 70 or above. There remains a need for longitudinal studies focused on temporal changes in loneliness from the “young-old” (~ 65-74 years) to “oldest-old” (~ 85 years and above) periods.

The question of loneliness and well-being in later life also relates to a well-documented pattern that has been termed “the paradox of aging.” Empirical research has consistently shown that, despite declines in physical functioning, older adults report higher levels of well-being and mental health compared to middle-aged and younger adults.^{16,17} Of note, this pattern is not limited to older adults in the general population as it has also been documented among persons living with serious mental illnesses.¹⁸ The mechanisms underlying this paradox are not fully understood, but part of the answer appears to be in age-related changes in emotional regulation and social preferences. Carstensen and colleagues^{19,20} social-emotional selectivity theory posits, and considerable empirical research supports, a pattern in which perceptions of future time become more finite in later life (i.e. the sense of time left to live one’s life). Due to the shift in future time perspective, older adults tend to focus on current and emotionally important relationships, with less interest in broadening their superficial social network. There tends to a pruning of the social network in later-life, such that one may have a smaller network of relationships, but those retained are more meaningful—in essence, there tends to be a shift in focus to quality over

quantity. In addition, in terms emotional processing and regulation, positive emotions may be more readily attended and processed than negative ones.

Another psychological construct that may be relevant to responses to social isolation in later life is wisdom. Recent research has shown wisdom to be protective against loneliness and its adverse health effects.^{13,21} There is a strong inverse correlation between measures of wisdom and measures of loneliness, and this relationship appears to have at least some degree of cross-cultural generalizability. For example, in a study comparing middle-age adults (50 to 65 years) to older adults (age > 90 years) in San Diego county U.S.A and in Cilento Italy, Jeste and colleagues²² found consistently significant inverse correlations between each of six domains of wisdom and scores on the UCLA-LS. There were no significant differences of the magnitude of these associations in the different age and country groups. Although the relationship of age to wisdom is not a simple linear increase as was once traditionally believed, there may be certain functions such as emotional regulation and pro-social behavior that improve at least up to the late-60s and early 70s.

As noted above, there have been numerous studies examining the relationship of age to prevalence of loneliness. However, there has been substantially less research attention on possible evolution of the nature, experience, and personal meaning of loneliness to the individual over the life span. Although there is generally more within group than between age group variance in life experience, on average the social pressures and stresses tend to be different life stages. For example, an 18-year-old college freshman in a new geographic location may experience anxiety and distress about the relationships they hope to find but do not yet have. In contrast, an 85-year-old person may experience a sense of loneliness from the loss of relationships that had been present much of their adult life. The societal norms, expectation, and pressures on the individual may also differ in different age cohorts (generations) and in different life stages. Nevertheless, the intersection of the age and/or generational factors with the “timbre” of the individual’s phenomenological experience of loneliness is presently unknown. A more nuanced approach to measuring the nature of loneliness may be helpful in this regard.

The report from Swister et al²³ in this volume provides an excellent example of studying the potential differential associations of subtypes (or subcomponents) of loneliness with well-being among older adults. As part of a larger study, they examined cross sectional survey data from 770 community dwelling adults ages 60 and above who had completed the de Jong Gierveld Loneliness scale, questions regarding the occurrence of six types of negative life events over the preceding 6-months, a 10-item measure subjective well-being, as well as measures of a number of other relevant constructs. Based on their literature review they had hypothesized that loneliness mediates the relationship between negative life events and subjective well-being. Their findings, presented in detail within their report in this volume, suggested that low social loneliness might protect against (moderate) the adverse effects of negative life events on subjective well-being, whereas emotional loneliness may mediate the association of negative life events with lower subjective well-being. They readily acknowledge the interpretative limitations of their cross sectional design, but the paper serves as a potential source from which to develop more specific theory-grounded

models of the differential role of subtypes or subcomponents of loneliness with adverse life events and well-being in older adults.

As we have noted previously, there is an ongoing need for additional psychometrically validated scales that capture different types of loneliness over the life-span.²⁴ The de Jong Gierveld Scale is an excellent beginning, and notably has cut-scores for categorizing severity of loneliness that were derived from and validated against the self-reported severity of participants within their validation study.²⁵ (Caution in application of these cut-scores to English-speaking samples is needed; the validation study was conducted in a Dutch-speaking sample, and the generalizability of these cut-scores to other languages has not yet been established.) One caveat with interpretation of the subscales is that the items on the emotional loneliness subscale are worded in the “lonely” direction, whereas those on the social loneliness subscale are phrased in the “not-lonely” direction. Thus, to some degree the subscales may reflect subtle differences in method variance. Even given the preceding caveat, however, the de Jong Gierveld Scale represents an outstanding example of moving beyond a unidimensional model of loneliness, and Swister et al²³ have demonstrated the potential differential roles of these dimensions on subjective well-being.

Further advances in understanding age-related changes in the nature and internal experience of loneliness require a multiple-pronged approach. Some of the key data will come from longitudinal research with existing and/or yet to be developed loneliness scales. There is also a need to hear the perspectives and lived experiences of older lonely (and formerly lonely) older adults to better understand how they experience loneliness and its changes over time or the course of their lives, as well as identifying factors they found to help prevent, reduce, or cope with loneliness. There are qualitative studies of loneliness that are beginning to emerge in the literature, but much of the experience of older adults in this regards awaits further inquiry and analysis.²⁶⁻²⁹ In addition to standard qualitative research methods, there has also been recent work applying natural language process, machine learning, or other forms of artificial intelligence technologies to free-text interview transcripts or social media posts in examining the presence or components of loneliness.³⁰⁻³²

Loneliness in aging can have deleterious effects on elderly adults, but an emphasis on the protective nature of emotionally stimulating relationships can be critical for the well-being of such persons. The well-being of older adults could be contingent upon their ability to utilize their social networks after a negative life event in order to mitigate loneliness. Unfortunately, those who do not have a fulfilling social network are more susceptible to decreased well-being. In addition to emotionally gratifying social networks, other protective factors such as wisdom, resilience, and acceptance of imperfection that come with aging could also enhance well-being in older individuals. With better understanding of the full spectrum of loneliness and any age-related changes, prevention and intervention efforts can be more readily developed and adapted to the specific needs of individuals rather than a “one-size fits all” approach.

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