Exploring the Demographic and Situational Characteristics of Older British People experiencing Loneliness as positive within the BBC Loneliness Experiment

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Abstract

The aim of this study is to increase the understanding of loneliness experienced as positive, by exploring the demographic and situational characteristics of older people who experience loneliness as positive. Two binary logistic regressions were conducted using data from those aged 60+ from the BBC Loneliness Experiment (N= 5250). The first binary logistic regression compared participants who experience loneliness always as positive (N=219) to those participants who never experience loneliness as positive (N=3004). Spending time alone did not emerge as relevant to experiencing loneliness as positive, but enjoying time alone was important (OR = 1.561 (95% CI = 1.313−1.856)). The lonelier older people were, the less likely they experienced loneliness as positive (OR = 0.708 (95% CI =0.644−0.779)). Men were more likely to experience loneliness as positive compared to women (OR = 1.734 (95% CI = 1.269−2.370)). Lastly, the experience of loneliness as positive was likely to decrease when older people had more years of education (OR = 0.887 (95% CI = 0.853−0.921)) but increased with age (OR = 1.067 (95% CI = 1.037−1.098)). The results of the second binary logistic regression comparing participants who indicated loneliness purely as positive with those participants indicate to experience loneliness sometimes as positive (N=2027), are in line with the first regression analyses. The results are critically discussed by emphasizing the role of

norms and cultures, gerotranscendence, and severity of loneliness, which might influence the experiences of loneliness. Further qualitative research is needed to elucidate the meanings of these positive experiences of loneliness.

Introduction

The notion that loneliness is a negative experience, an unpleasant or inadmissible lack of personal relationships, is common in research and theories (Prohaska et al., 2020), and constitutes a popular assumption about loneliness among older persons. Weiss (1973), one of the earliest and more often-cited authors, described loneliness as a negative feeling and experience that is abnormal. In his definition, "*The loneliness we have been told of is gnawing rather than ennobling, a chronic distress without redeeming features.*" (1973, p. 15). Loneliness has mostly been described as a strong sense of isolation, emptiness, and sadness due to a lack of confidants, social pain, and worthlessness (de Jong Gierveld et al., 2018). This is the definition that best fits the conceptual understanding of loneliness and which currently prevails in research and literature on older adults (de Jong Gierveld et al., 2018).

Conversely, more recent literature also points to the existence of a "positive type" of loneliness (Alberti, 2018; de Jong Gierveld et al., 2018, p. 392). One qualitative study focused on the lived experiences of those who report loneliness and what it means for people aged between 12 and 82 years (Dahlberg, 2007). The study found that people did not only think about loneliness in negative terms: they viewed it in positive terms too, with narratives that loneliness can be creative, restful, and reflective (Dahlberg, 2007). Loneliness can also be experienced as positive when people use it to focus on themselves (Dahlberg, 2007). Dahlberg (2007, p. 197) indicates that: "*When the power of loneliness is given room and loneliness is something voluntary*

another meaning makes a gestalt: Loneliness is restful and creative." This positive type of loneliness is also described by de Jong Gierveld and colleagues (2018) as the voluntary (mostly temporary) disengagement from social contacts, and is related with aspects like reflection, meditation, and creativity. This description of a positive type of loneliness seems to be related to the concept of positive solitude, referring to "aloneness by choice", to spending time on a meaningful, enjoyable activity, or simply to a positive individual experience (Ost-Mor et al., 2020). Despite there currently being no agreement (yet) on the definition or description of positive loneliness, it is reasonable to assume that loneliness can also provide benefits, such as growth and self-development (Graneheum & Lundman, 2010).

The negative approach does not exclude the positive approach, or vice versa; there may be a combination of negative and positive aspects (de Jong Gierveld et al., 2018). Mijuskovic (1979) and Karnick (2005) consider loneliness as a universal, normal, and existential phenomenon that can affect all individuals during their life, with both negative and positive aspects. Karnick (2005) claims that loneliness ''*is considered positive when it is viewed as creative, productive and maturing, and as negative when it is defined as physical, emotional or social alienation, or isolation from self or other.*'' (p. 9). Existential loneliness is described by Moustakas (1961) as the awareness of our fundamental separateness as human beings which can lead to feelings such as unbearable emptiness and sadness. A meta-analysis of existential loneliness among patients with a life-threatening illness (Ettma, 2010) showed that existential loneliness is valued both positively and negatively, whereby the positive valuation refers to the process of inner growth and the negative valuation refers to the actual and painful experience of existential loneliness.

A study focusing on the experiences of loneliness among people 85 and older found that loneliness can be severely negative or enrichingly positive, depending on life circumstances

and individual perspectives on life (Graneheim & Lundman, 2010). Graneheim and Lundman (2010) describe the experiences of loneliness as twofold: the experience of loss or feeling abandoned can be negative, while feeling free and living confidently can reflect the positive aspects of loneliness. Even though considering the possible positive aspects of loneliness might not fit the current dominant conceptualizations (which tend to differentiate solitude, aloneness, isolation, and loneliness), from these descriptions it seems possible that the experience of loneliness can be positive.

Aim of this study

Although the concept of loneliness as a positive experience goes back to publications in the 1960s (Mijuskovic 1979; Moustakas, 1961), theoretical papers have only begun to address it more recently (e.g., Alberti, 2018; de Jong Gierveld et al., 2018), with scarce empirical research on the topic (e.g., Dahlberg, 2007; Ettma, 2010; Graneheim and Lundman, 2010). Different circumstances, demographic and situational characteristics (such as health status, marital status or years of education) have an impact on how older people experience their loneliness (Greineheim & Luhman, 2010; Victor et al., 2005). The current study aims to increase the understanding of loneliness experienced as positive by exploring the demographic and situational characteristics of older people who say they have experienced loneliness as something positive. The following research question was explored: What are the demographic and situational characteristics of older persons who indicated that loneliness could be experienced as something positive?

Method

Data collection

Participants took part in an online worldwide survey, conducted by Prof. Christina Victor (Brunel University London), Prof. Pamela Qualter (University of Manchester), Prof. Manuela Barreto (University of Exeter) and Claudia Hammond (British Broadcasting Corporation, BBC), and funded by the Wellcome Trust. The survey was launched on BBC Radio 4 and BBC World Service, and covered elsewhere on radio, on TV and on social media, disseminating the opportunity to complete the survey more widely. Data were collected between February and May 2018. The online survey took approximately 45 minutes to complete. People who participated did so on a voluntary basis. First, participants were given information about the study. Ethical approval for this study was obtained from the University of Manchester (Reference No.: 2017-2710-4594) and the study was judged to present no risks. The ethical guidelines of the British Psychological Society and the Declaration of Helsinki (2013) were followed for this study. People could stop and exit the survey at any time, without providing a reason. If someone did not wish to answer a question, they could skip it. Those who agreed to participate answered a series of questions about their social lives, their experiences and attitudes toward friendship and community, and their experiences of loneliness, only a small part of which is the focus of this article. A total of 54,988 individuals, aged 16 years or older and with nationalities from all over the world, completed the survey. This paper reports data from a subset of 5250 participants aged 60 years and older who lived in the UK at the time the study was conducted, and who provided data on the variables of interest. Because we expect that cultural differences concerning the meaning and value of aspects like time alone or loneliness feelings might have an impact on the experience of loneliness as positive, we decided to only include older people living in UK (England, Great Britain, Wales, Scotland, and Northern Ireland), as this cohort, residing in the UK, also constituted the majority of participants who completed the BBC loneliness experiment, the survey.

Measures

Dependent variable. Concerning the topic of loneliness in the survey, participants were first asked to answer the following questions: "How often do you feel lonely?", responding on a scale from 1 (= never) to 5 (= always). If participants responded 2 or higher they were asked whether this experience was positive: "Is the experience of loneliness positive?" Participants responded to this question with the following answer categories: Yes, No, Sometimes.

Independent variables consist of gender, age, marital status; second variables related to socioeconomic status, such as years of education and employment status; third variables related to time alone; fourth variables measured loneliness; and fifth variables related to health. Gender was coded as 0 = female and 1 = male. Participants could also respond by answering "other" or "prefer not to say." This study restricted the analyses to participants identifying as "female" or "male", excluding "other" or "prefer not to say" due to the small sample size and the potential ambiguity of such responses. Age was measured continuously (in years) and marital status was categorized as: 1 = married, in civil partnerships, or cohabiting; 2 = divorced, including formerly in a civil partnership which is now legally dissolved or separated but still legally married; 3 = widowed, including surviving partner from a civil partnership; 4 = single, never married, or never in a civil partnership; 5 = in a relationship but not cohabiting. A variable being a parent (0 = No, 1 = Yes) and being a carer (0 = No, 1 = Yes) was included.

Second, socioeconomic variables included level of education (continuous, measured in "How many years of education did you complete?"), employment status (1 = retired, 2 = full-time work, 3 = part-time work, 4 = full-time or part-time student, 5 = non-paid work, 6 =

unemployed), and the subjective feeling that one's financial needs are met (1 = poorly, 2 = fairly well, 3 = very well).

Third, variables related to time alone were measured by asking participants to indicate whether they lived alone by (1 = not living alone, 2 = living alone by choice, 3 = living alone, not by choice), time spent alone (ranging from 1 = never to 4 = always), and enjoyment of spending time alone (ranging from 1 = not at all to 5 = very much so).

Fourth, loneliness was measured by asking participants to answer questions from the UCLA Loneliness Scale (Russell, 1996): "Do you feel a lack of companionship?", "Do you feel left out?", "Do you feel isolated from others?". For each question, participants indicated how often that happened to them on a sliding scale from 1 (never) to 5 (always). The scale, averaged across the three ratings, was reliable (α = .84), minimum score: 3 – maximum score: 9.

Fifth, health measures consisted of questions related to general subjective health and physical health. General subjective health was measured by the following questions: "Would you say that, in general, your health is …?". Participants had to respond on a scale from 1 to 5 (1 = excellent, 2 = very good, 3 = good, 4 = fair, 5 = poor). Lastly, a question concerning physical health was asked: "In the past 30 days, for how many days was your physical health not good? This includes physical illness and injury."

Data analysis

Given the dichotomous nature of the dependent variable ("Is the experience of loneliness positive?" No/Yes and Sometimes/Yes), binary logistic regression analyses were chosen as the appropriate technique to analyze the associations between the different characteristics and

whether the experience of loneliness is positive. As a precondition to conducting the binary logistic regression analyses, descriptive statistics were used to make comparisons between 1) older adults who identified loneliness as either positive or not positive, 2) participants who responded Sometimes or Yes, (those who experienced loneliness as both positive and negative) compared with those who experienced loneliness as purely positive. First, multicollinearity was measured by variance inflation factors (VIF) and tolerance. VIF values were below 2 and tolerance values were higher than 0.5, indicating there is no problem with multicollinearity (Hair et al., 2010). The descriptive analyses consisted of chi-square tests for categorical variables and t-tests for continuous variables. Variables that were significantly related at a level of $p < .05$ (see Table 1) were included in the binary logistic regression analyses and were introduced into the regression using an enter method. In total, 5250 independent cases were included in the analyses. Cases with missing data, according to the valuables used for this study, were excluded within the sample. All data were analyzed using SPSS 26.0.

Results

Sample characteristics

From the data of 5250 participants, 4.2% identified the experience of loneliness as positive, 38.6% as sometimes positive, and 57.2% as not positive. The characteristics of the total data (N = 5250) can be found in Table 1. Our further two binary logistic regressions focused first on those participants who responded Yes or No, namely older people who find loneliness to always be positive and older people who find loneliness to never be positive, consisting of a sample of 3223 participants. Our second binary logistic regression focused on the participants who responded Sometimes or Yes, those who viewed loneliness as both positive and negative

comparing whit those who viewed loneliness as purely positive, consisting of a sample of 2246 participants.

Sample characteristics are presented in Table 1. Mean age of the total sample was 66.41 years, with a majority of 72.6% female, 31.9% married or cohabiting, 31.6% divorced or separated, 15.5% single, and 18.2% widowed. Most participants were inactive in the labor market (72.5%) and most older adults lived alone (63.3%), but this was not a choice for close to half (38.9%) of them. Mean score on the loneliness UCLA 3-item scale was 6.42, indicating people as 'lonely' who score 6 to 9 (Steptoe et al., 2013). Table 1 presents the characteristics separately for older people identifying loneliness as positive (N = 219) not as positive (N = 3004) and sometimes (N = 2027).

< Insert table 1: Sample characteristics >

Binary logistic regression

Results of the first binary logistic regression model are presented in Table 2. As mentioned, 3223 individual cases were included within this model. The variables "time alone", "Physical health" and "financial needs are met" were excluded, as they were not significantly related to the experience of loneliness as positive within the descriptive analyses. We included the variables related to time alone and loneliness in block 1, the variable related to health in block 2, and all the sociodemographic and socioeconomic variables in block 3.

Concerning the variables related to time alone and loneliness, there was a tendency for loneliness to be experienced positively by older adults who enjoyed spending time alone (OR = 1.561, p < .001). The experience of loneliness as positive was more likely to decrease when

older people had higher scores on the three-item loneliness scale (OR = 0.708 p < .001). Concerning health, the predictor of physical health was not significant within the binary logistic regression. Concerning sociodemographic and socioeconomic variables, there was a tendency for loneliness to be experienced as positive by more senior older adults (OR = 1.067, p < .001). Men were more likely than women to experience loneliness as positive (OR= 1.734, p < .001). Loneliness was less likely to be experienced as positive by participants with more years of education (OR= 0.887, p < .001).

< Insert Table 2: Logistic regression enter method >

Results of the second binary logistic regression model are presented in Table 3. As mentioned, 2246 individual cases were included within this model, comparing participants who experience loneliness sometimes as positive with those who experience loneliness purely as positive. The variables "time alone", "enjoy time alone", "being a carer", "physical health", "General subjective health", and "financial needs are met" were excluded, as they were not significantly related to the experience of loneliness as positive within the descriptive analyses.

The results indicate that the experience of loneliness as purely positive was more likely to decrease when older people had higher scores on the three-item loneliness scale (OR = 0.799 p < .001). Concerning sociodemographic and socioeconomic variables, there was a tendency for loneliness to be experienced as purely positive by more senior older adults (OR = 1.057, p < .001). Men were more likely than women to experience loneliness as purely positive (OR= 1.618, p < .001). Loneliness was less likely to be experienced as purely positive by participants with more years of education (OR= 0.890, p < .001).

< Insert Table 3: Logistic regression enter method >

Discussion

To our knowledge, this study is the first to explore the demographic and situational characteristics of older people who experience loneliness as positive. Our results indicate that attitudes toward spending time alone and some sociodemographic and socioeconomic characteristics are connected to the experience of loneliness as positive.

First, people who enjoyed more time alone were more likely to experience loneliness as positive compared with participants indicate loneliness never as positive. Spending time alone does not say much about the quality or quantity of one's relationships, and even less on the existence or absence of a discrepancy between the actual and desired levels of social contact (Maes et al., 2019). The results indicate that time alone is not relevant in order to experience loneliness as positive, but enjoyment (the positive feeling associated with this moment) of time alone is of importance. Although there is very limited research available on the role in loneliness feelings of spending time alone and its enjoyment, recent literature put forward the importance of meaningful time and meaning in life as protective factors for loneliness (Macia et al., 2021). Our findings support that early work.

Second, the experience of loneliness as positive decreased when older people had more feelings of loneliness — that is, the lonelier older people felt, the less likely they were to experience their loneliness as positive. Given that the measure of loneliness focuses on how frequently these feelings are experienced, those who score high on this measure are likely to have a greater variety or mix of experiences, some positive and some negative, than those who only rarely feel lonely. Extensive literature is available on the negative effects of loneliness on health

(Crewdson, 2016) and well-being (Kearns et al., 2015; Patel et al., 2019) among older populations. A recent study found especially older people experiencing chronic loneliness to be at a higher risk for major depression (Martin-Maria et al., 2021). It therefore seems that the severity of loneliness might play an important role in how older people experience loneliness. It is important to note, however, that older people who reported never feeling lonely were excluded, since they were not asked to fill in the question concerning the experience of loneliness as positive.

Third, focusing on the sociodemographic and socioeconomic characteristics, the results indicated that men were more likely than women to experience loneliness as positive. Compared to women men wrestle to talk about loneliness (Franklin, 2019). A recent study found men to perceive more stigma from the community surrounding loneliness than women (Barreto et al., 2022), which means men may be less likely to open up about loneliness or to see or label it differently in order to overcome the stigmatization attached to it. A recent meta-analysis (Maes et al., 2019) did not find any evidence that gender differences in loneliness frequency are present during older age, but our findings suggest that they may indeed label it differently in order to cope with it effectively.

There was also a tendency for loneliness to be experienced as positive by more senior older adults. This might be connected to what Tornstam (2011) terms the theory of gerotranscendence. This theory views ageing as an ongoing development that has the potential of being a positive process, a shift from a rational and materialistic view of life to a more transcendent and cosmic view (Tornstam, 2011). Three levels comprise the basis to understand gerotranscendence: developmental changes in cosmic transcendence, coherence, and solitude (Cozort, 2008; Tornstam, 2003, 2005). It might be that more senior older adults have further

evolved toward gerotranscendence, fearing death less than when they were younger (cosmic transcendence), viewing the pieces of their life as coming together (coherence), and having a decreased need for shallow social encounters (solitude), with the consequence that they experience loneliness as positive.

Lastly, the experience of loneliness as positive is likely to decrease if older people had more years of education. A recent systematic review of risk factors of loneliness indicated that low income and poor financial conditions increase the risk of loneliness, but most studies examining education did not find an association (Dahlberg et al., 2021). The explanation of our results might be found within people's expectations and standards. People's relationship standards or expectations are influenced by the normative environment in which they live (de Jong Gierveld et al., 2018), such that those with better socioeconomic positions or higher level of education may have higher expectations of their social contacts – expectations which might not be met – and therefore experience loneliness less as positive.

Although this study uses an innovative approach, it is not without shortcomings. A large number of participants are included, yet they are not representative of the British 60+ population. Data were collected cross-sectionally, so causal relationships cannot be ascertained. Furthermore, these results might vary across cultures, even within one country (e.g. Barreto et al. 2021). A following important limitation concerns the rather modest levels of explained variance. This clearly points to the fact that understanding experiences of loneliness as positive among older people requires more than just demographical and situational characteristics as investigated in this study. A single focus on such characteristics neglects other potentially relevant aspects of a person's life, including coping styles, personality, and mental health. Furthermore, a qualitative enquiry would provide insights into the meaning of experiencing

loneliness as positive. Lastly, the limited studies available on positive aspects or "positive type" of loneliness integrate the voluntary aspect of disengagement from social contacts within their definition (e.g., Dahlberg, 2007; de Jong Gierveld et al., 2018). Still, in most definitions and models loneliness is currently defined as an unwanted experience (Alexandrova, 2019). Because this study did not focus on the role of "choice" of disengagement from social contacts, any further insight into the role of "choice or voluntary withdrawal from social contacts" concerning the positive experience of loneliness seems to be relevant for further research.

The emphasis in research and policy lies on loneliness as a major public health issue − an epidemic even (e.g. Jeste, 2020; Kar-Purkayastha, 2010). Although it is important to have insights and knowledge on the negative effects and consequences of loneliness, loneliness can be experienced as positive, for example when it functions as a mechanism to promote social relationships – going out and meeting other people might link the experience of loneliness to something positive. This is linked to evolutionary theory (Cacioppo et al., 2014). As scholars we need to be critical about this established, negative representation of loneliness. Exploring the potential for loneliness experienced as positive might create important new insights for developing interventions and initiatives to reduce loneliness. For example, Ost-Mor et al. (2020) poignantly highlighted the need for professional and nonprofessional caregivers to understand what is going on, not only physically but emotionally as well, with older adults by being open to change their preconceived ideas about old age, and how they can wisely cope with conditions that may be daunting for younger people, like loneliness.

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References

Alexandrova, N. H. (2019). Concepts of researching the loneliness of elderly. *Psychology in Education*, 1 (2), 176– 183. DOI: 10.33910/2686-9527-2019- 1-2-176-183

Barreto, M., van Breen, J.,Victor, C., Hammond, C., Eccles, A., Richins, M. and Qualter, P. (2022) 'Exploring the Nature and Variation of the Stigma Associated with Loneliness', *Journal of Social and Personal Relationships*, 0 (in press).

Barreto, M., Victor, C., Hammond, C., Eccles, A., Richins, M. T., & Qualter, P. (2021). Loneliness around the world: Age, gender, and cultural differences in loneliness. *Personality and Individual Differences*, 169, 110066. https://doi.org/10.1016/j.paid.2020.110066

Bound Alberti, F. (2018). This "Modern Epidemic": Loneliness as an Emotion Cluster and a Neglected Subject in the History of Emotions. *Emotion Review*, 10(3), 242-254.https://doi.org/10.1177/1754073918768876

Cacioppo, J. T., Cacioppo, S., & Boomsma, D. I. (2014). Evolutionary mechanisms for loneliness. *Cognition & Emotion*, 28(1), 3– 21. https://doi.org/10.1080/02699931.2013.8 37379

Cozort, R.W. (2008). Revising the Gerotranscendence Scale for use with older adults in the southern United States and establishing psychometric properties of the revised Gerotranscendence Scale.

Crewdson, & Crewdson, J. (2016). The Effect of Loneliness in the Elderly Population: A Review. *Healthy Aging & Clinical Care in the Elderly*, 8, 1. https://doi.org/10.4137/HACCE.S35890

Dahlberg, K. (2007). The enigmatic phenomenon of loneliness. *International Journal of Qualitative Studies on Health and Well-being*, 2:4, 195-207,

DOI:10.1080/17482620701626117

Dahlberg, L., McKee, K. J., Frank, A., & Naseer, M. (2022). A systematic review of longitudinal risk factors for loneliness in older adults. *Aging & Mental Health*, 26(2), 225–249. https://doi.org/10.1080/13607863.2021.1876638

Ettema, E. J., Derksen, L. D., & van Leeuwen, E. (2010). Existential loneliness and end-of-life care: A systematic review. *Theoretical Medicine and Bioethics*, 31(2), 141–169. https://doi.org/10.1007/s11017-010-9141-1

Franklin, A., Barbosa Neves, B., Hookway, N., Patulny, R., Tranter, B., & Jaworski, K. (2019). Towards an understanding of loneliness among Australian men: Gender cultures, embodied expression and the social bases of belonging. *Journal of Sociology*, 55(1), 124–143. https://doi.org/10.1177/1440783318777309

Gierveld, J. de J., Van Tilburg, T. G., & Dykstra, P. A. (2018). New ways of theorizing and conducting research in the field of loneliness and social isolation. In *the Cambridge handbook of personal relationships*, 2nd ed (pp. 391–404). Cambridge University Press. https://doi.org/10.1017/9781316417867.031

Graneheim, U. H., & Lundman, B. (2010). Experiences of loneliness among the very old: The Umeå 85+ project. *Aging & Mental Health*, 14(4), 433–438. https://doi.org/10.1080/13607860903586078

Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate Data Analysis*. Seventh Edition. Prentice Hall, Upper Saddle River, New Jersey.

Hauge, S., & Kirkevold, M. (2012). Variations in older persons' descriptions of the burden of loneliness. Scandinavian *Journal of Caring Sciences*, 26(3), 553–560. https://doi.org/10.1111/j.1471-6712.2011.00965.x

Jeste, D. V., Lee, E. E., & Cacioppo, S. (2020). Battling the Modern Behavioral Epidemic of Loneliness: Suggestions for Research and Interventions. *JAMA Psychiatry*, 77(6), 553–554. https://doi.org/10.1001/jamapsychiatry.20 20.0027

Karnick, P. (2005). Feeling lonely: theoretical perspectives. *Nursing Science Quarterly*, 18(1), 712.

Kar-Purkayastha, I. (2010). An epidemic of loneliness. *The Lancet*, 376(9758), 2114– 2115. https://doi.org/10.1016/S0140- 6736(10)62190-3

Kearns, A., Whitley, E., Tannahill, C., & Ellaway, A. (2015). Loneliness, Social Relations and Health and Wellbeing in Deprived Communities. *Psychology, health & medicine*, 20(3), 332–344. https://doi.org/10.1080/13548506.2014.940354

Macià, D., Cattaneo, G., Solana, J., Tormos, J. M., Pascual-Leone, A., & Bartrés-Faz, D. (2021). Meaning in Life: A Major Predictive Factor for Loneliness Comparable to Health Status and Social Connectedness. *Frontiers in Psychology*, 12, 627547. https://doi.org/10.3389/fpsyg.2021.627547

Maes, M., Qualter, P., Vanhalst, J., Noortgate, W. V. den, & Goossens, L. (2019). Gender

Differences in Loneliness Across the Lifespan: A Meta-Analysis. *European Journal of Personality*, 33(6), 642–654. https://doi.org/10.1002/per.2220

Martín-María, N., Caballero, F. F., Lara, E., Domènech-Abella, J., Haro, J. M., Olaya, B., Ayuso-Mateos, J. L., & Miret, M. (2021). Effects of transient and chronic loneliness on major depression in older adults: A longitudinal study. *International Journal of Geriatric Psychiatry*, 36(1), 76–85.https://doi.org/10.1002/gps.5397

Mijuskovic, B. L. (1979). *Loneliness in philosophy, psychology, and literature*. Assen, The Netherlands: Van Gorcum.

Moustakas, C. E. (1961). *Loneliness*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Ost-Mor, S., Palgi, Y., & Segel-Karpas, D. (2020). The definition and categories of positive solitude: Older and younger adults' perspectives on spending time by themselves. International *Journal of Aging and Human Development*, 1–20. https://doi.org/10.1177/0991415020957379

Patel, R. S., Wardle, K., & Parikh, R. J. (2019). Loneliness: The present and the future. *Age and Ageing*, 48(4), 476–477. https://doi.org/10.1093/ageing/afz026

Perlman, D. and Peplau, L. A. (1981). Toward a social psychology of loneliness. In R. Gilmour and S. Duck (Eds.), Personal Relationships: 3. Relationships in Disorder (pp. 31–56). London: Academic Press.

Prohaska, T., Burholt, V., Burns, A., Golden, J., Hawkley, L., Lawlor, B., Leavey, G., Lubben, J., O'Sullivan, R., Perissinotto, C., van Tilburg, T., Tully, M., Victor, C., & Fried, L. (2020). Consensus statement: Loneliness in older adults, the 21st century social determinant of health? *BMJ Open*, 10(8), e034967. https://doi.org/10.1136/bmjopen-2019-034967

Russell, D. W. (1996). Loneliness scale (version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment*, 66, 20–40.

Steptoe, A., Shankar, A., Demakakos, P., & Wardle, J. (2013). Social isolation, loneliness, and all-cause mortality in older men and women. *Proceedings of the National Academy of Sciences*, 110(15), 5797–5801.

Taylor, H. O. (2020). Social Isolation's Influence on Loneliness among Older Adults. *Clinical social work journal*, 48(1), 140–151. https://doi.org/10.1007/s10615-019-00737-9

Tornstam, L. (2003). *Gerotranscendence from young old age to old old age*. The Social Gerontology United States and establishing psychometric properties of the Revised Gerotranscendence Scale (Unpublished doctoral dissertation). University of North Carolina at Greensboro, Greensboro, NC.

Tornstam, L. (2005). *Gerotranscendence: A developmental theory of positive aging*. New York,NY:Springer.

Tornstam, L. (2011). Maturing into gerotranscendence. *Journal of Transpersonal Psychology*, 43(2),166–180.

Victor, C. R., Scambler, S. J., Bowling, A., & Bond, J. (2005). The prevalence of, and risk factors for, loneliness in later life: A survey of older people in Great Britain. *Ageing & Society*, 25(6), 357–375. https://doi.org/10.1017/S0144686X04003332

Weiss, R. S., Riesman, D., & Bowlby, J. (1973). Loneliness: The experience of emotional and social isolation. Cambridge, MA:The MIT Press.

Table 1: Sample characteristics

Variables			Is the experience of loneliness positive?						Descriptive analyses	
	Total N = 5250		Yes N = 219		Sometimes N = 2027		No N = 3004		No vs Yes	Sometimes vs Yes
	%	M (SD)/Med	%	M (SD)/Med	%	M (SD)/Med	%	M (SD)/Med	P-level	P-level
Sociodemographic variables										
Age		66.41 (5.15)		68.41 (6.11)		66.46 (5.08)		66.23 (5.10)	<.001	<.001
Gender									.004	0.001
Female	72.6		63.5		73.6		72.6			
Male	27.4		36.5		26.4		27.4			
Marital status									.001	0.002
Married or cohabiting	31.9		36.5		33.3		30.7			
Divorced or separated	31.6		26.5		31.4		32.0			
Widowed	18.2		24.7		16.8		18.7			
Single	15.5		8.2		15.4		16.0			
In a relationship (not cohabiting)	2.9		4.1		3.1		2.6			
Are you a parent?									.015	0.013
Yes	69.0		76.7		68.5		68.8			
No	31.0		23.3		31.5		31.2			
Are you a carer?									.048	ns
Yes	9.3		5.5		9.5		9.5			
No	90.7		94.5		90.5		90.5			
Socioeconomic variables										
Years of education		16.93 (3.96)		15.38 (4.17)		17.07 (4.01)		16.94 (3.88)	<.001	<.001
Employment									.016	0.017
Inactive on the labor market	72.5		78.5		73.3		71.6			
Full-time work	11.9		12.8		10.9		12.5			
Part-time work	15.6		8.7		15.9		15.9			
Financial needs are met									ns	ns
Poorly	13.2		11.0		11.6		14.4			
Fairly well	49.6		47.5		50.8		48.7			
Very well	37.4		41.6		37.6		37.0			
Variables related to time alone										
Living alone									.027	ns
Not living alone	36.7		39.3		39.0		35.0			
Living alone, not by choice	38.9		34.2		32.8		43.4			
Living alone by choice	24.4		26.5		28.2		21.6			
How much time alone (1 Never – 4 Always)		3.00		3.00		3.00		3.00	ns	ns
Enjoy time alone (1 Not at all – 5 Very much so)		3.00		4.00		3.00		3.00	<.001	ns
Loneliness measures										
UCLA 3-item scale (Min. score 3 - Max 9)		6.42 (1.74)		5.51 (2.02)		6.06 (1.69)		6.73 (1.67)	<.001	<.001
Health measures										
General subjective health (1 excellent – 5 poor)		3.00		3.00		3.00		3.00	.046	ns
Physical health (0-30 days)		4.00		5.00		4.00		5.00	ns	ns

Table 2: Logistic regression ENTER METHOD (No vs Yes)

	ß	SE	O.R. (95% CI)
BLOCK 1			
Variables related to time alone			
Living alone			
Not living alone (Ref.)	(Ref.)	(Ref.)	(Ref.)
Living alone, not by choice	0.073	0.373	1.076 (0.518-2.237)
Living alone by choice	0.343	0.382	1.410 (0.666-2.982)
Enjoy time alone	**0.445**	**0.088**	**1.561 (1.313-1.856) ****
Loneliness measures			
UCLA 3-item scale	**-0.345**	**0.049**	**0.708 (0.644-0.779) ****
BLOCK 2			
Health measures			
Physical health	-0.038	0.071	0.963 (0.837-1.108)
BLOCK 3			
Sociodemographic variables			
Age	**0.065**	**0.014**	**1.067 (1.037-1.098) ****
Gender (Ref. Female)	**0.551**	**0.159**	**1.734 (1.269-2.370) ****
Marital status			
Married or cohabiting (Ref.)	(Ref.)	(Ref.)	(Ref.)
Divorced or separated	-0.348	0.382	0.706 (0.334-1.491)
Widowed	0.013	0.391	1.013 (0.471-2.178)
Single	-0.882	0.460	0.414 (0.168-1.019)
In a relationship (not cohabiting)	0.019	0.507	1.019 (0.377-2.755)
Being a parent (Ref. no)	-0.120	0.199	0.887 (0.601-1.309)
Being a carer (Ref. no)	0.369	0.317	1.446 (0.776-2.693)
Socioeconomic variables			
Years of education	**-0.120**	**0.020**	**0.887 (0.853-0.921) ****
Employment			
Inactive on the labor market (Ref.)	(Ref.)	(Ref.)	(Ref.)
Full-time work	0.240	0.241	1.272 (0.793-2.039)
Part-time work	-0.364	0.262	0.695 (0.416-1.162)
Constant	-4.631	1.223	0.010
Cox and Snell R^2	0.069		
Nagelkerke R^2	0.175		
H&L1 Chi-Square [df], p	4.208, [8], 0.838		

    *p < .05; ** p <.001

    1 Hosmer and Lemeshow test.

    O.R.: Odds ratio. CI: Confidence interval. df: degrees of freedom.

Table 3: Logistic regression ENTER METHOD (Sometimes vs Yes)

	ß	SE	O.R. (95% CI)
BLOCK 1			
Loneliness measures			
UCLA 3-item scale	**-0.225**	**0.045**	**0.799 (0.732-0.872) ** **
BLOCK 2			
Sociodemographic variables			
Age	**0.055**	**0.015**	**1.057 (1.027-1.088) ** **
Gender (Ref. Female)	**0.481**	**0.158**	**1.618 (1.188-2.204) ** **
Marital status			
Married or cohabiting (Ref.)	(Ref.)	(Ref.)	(Ref.)
Divorced or separated	-0.197	0.189	0.821 (0.567-1.189)
Widowed	0.107	0.213	1.113 (0.733-1.689)
Single	-0.548	0.308	0.578 (0.316-1.057)
In a relationship (not cohabiting)	0.137	0.390	1.147 (0.534-2.464)
Being a parent (Ref. no)	-0.128	0.193	0.880 (0.602-1.285)
Socioeconomic variables			
Years of education	**-0.116**	**0.019**	**0.890 (0.857-0.925) ** **
Employment			
Inactive on the labor market (Ref.)	(Ref.)	(Ref.)	(Ref.)
Full-time work	0.379	0.240	1.461 (0.912-2.340)
Part-time work	-0.364	0.261	0.695 (0.417-1.160)
Constant	-2.807	1.086	0.060
Cox and Snell R^2	0.048		
Nagelkerke R^2	0.102		
H&L1 Chi-Square [df], p	9.127, [8], 0.332		

    *p < .05; ** p <.001

    1 Hosmer and Lemeshow test.

    O.R.: Odds ratio. CI: Confidence interval. df: degrees of freedom.