European Commission

SCIENCE FOR POLICY BRIEFS

Loneliness in Europe before and during the COVID-19 pandemic*

Headlines

- **The COVID-19 pandemic has magnified already worrying levels of loneliness in Europe.** Survey data show that the proportion of EU citizens feeling lonely more than half of the time doubled in the first months following the COVID-19 outbreak.
- **Young adults have been hit most severely by social distancing measures.** The share of people aged 18-25 reporting that they frequently felt lonely almost quadrupled in the first months of the pandemic (April-July 2020). The prevalence of loneliness among older people (65+), who were the most lonely in 2016, also increased over the same period, but less sharply.
- **Living alone has made social distancing measures more painful.** People living alone experienced an increase in the prevalence of loneliness of more than 22 percentage points compared with levels observed in 2016. In comparison, the incidence of loneliness among those living with a partner, children or both increased by 9 percentage points.
- **People who find it difficult to make ends and those in poor health are at greater risk of loneliness.** This was true both before and during the pandemic.
- **Females are about as likely as males to feel lonely**, regardless of time period.
- There is **no sign of a rural-urban divide**. Living in cities or in a rural area does not make a significant difference in measured levels of loneliness.

Policy context

On 11 March 2020, the World Health Organization first described COVID-19 as a pandemic. Since the outbreak of the pandemic, lockdowns, quarantines, curfews, distancing measures and the cancellation of community activities and events have been implemented across Europe. While these measures were needed to control the spread of the virus, they have also led to forms of social isolation never experienced by present generations. The long-term effects on mental health are still unclear. However, experts have already warned that the toll of loneliness could have consequences long after the virus recedes.

Loneliness is associated with physical and psychological health problems (Hawkley and Cacioppo, 2010; Baarck et al., 2021). Lonely adults tend to suffer from higher levels of cortisol (the 'stress hormone'), raised blood pressure, impaired sleep and cardiovascular resistance compared with non-lonely individuals (Hertz, 2020; Hawkley et al., 2010). Over time, this translates into chronic inflammation and higher morbidity and mortality rates. Loneliness is also associated with depressive symptoms and unhealthy behaviours (Cacioppo et al., 2006). Furthermore, individuals suffering from loneliness tend to display lower levels of empathy and feel more threatened by unexpected life situations compared with their non-lonely counterparts. These risks may translate into higher levels of distrust, intolerance towards others and ultimately pose a risk to social cohesion (Hertz, 2020; Murthy, 2020).

Against this background, loneliness is increasingly recognised as an issue of public importance, with significant ramifications for social, economic and healthcare policies. This policy brief compares the incidence of loneliness in 2016 and during the first months of the COVID-19 pandemic.

*This policy brief has been prepared by Julia Baarck, Béatrice d'Hombres and Guido Tintori. It is based on Chapter 2 of the JRC report *Loneliness in the EU – Insights from surveys and online media data* (2021).

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The purpose is to identify the socio-demographic characteristics frequently linked with loneliness, and examine whether the risks factors associated with loneliness changed after the outbreak of the pandemic. Therefore, this analysis contributes to assess the potential consequences for the population of extended periods of forced social isolation. The ultimate goal is to support the design of targeted and effective intervention strategies.

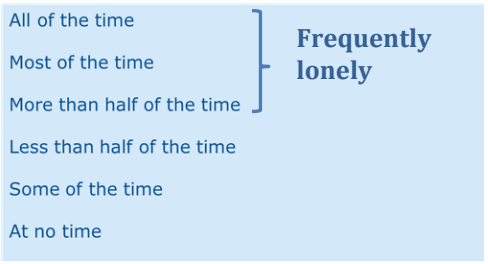
Defining and surveying loneliness

Loneliness is a subjective feeling referring to an unpleasant experience which derives from the low quality and/or quantity of a person's social network (Perlman and Peplau, 1984). Loneliness is thus not only about having too few social contacts per se but also about the perception that these relationships are not satisfying enough. In other words, loneliness does not mean being alone but being deeply distressed by feeling alone (Perlman and Peplau, 1984). A person with many social contacts may still experience feelings of loneliness (De Jong Gierveld et al., 2016). In addition, loneliness can be **transient** when it involves occasional feelings of loneliness, **situational** if triggered by specific events in life, and **chronic** when it persists for extended periods of time

The findings reported in this policy brief are based on two Eurofound surveys, namely the 2016 European Quality of Life Survey (EQLS) and the Living, working and COVID-19 (LWC) online survey which took place between April and July 2020. Both surveys collected information on self-reported loneliness (see the Quick Guide for additional information on the data). For the purpose of this brief, individuals are considered frequently lonely if they report feeling lonely 'all of the time', 'most of the time' or 'more than half of the time' in the two weeks preceding the interview (see Figure 1).

Figure 1: Loneliness question in the EQLS and LWC surveys

'[...] please tell me how much of the time during the last two weeks you felt lonely?'



Note: In both surveys, it was also possible to decline to answer the question or reply 'don't know'. Respondents falling into either of these two categories were not included in the analysis. They represent less than 0.5% of the original sample.

Loneliness before and during the COVID-19 pandemic

What has changed with the COVID-19 pandemic?

The prevalence of loneliness rose sharply in the first months following the COVID-19 outbreak. In 2016, around 12% of EU citizens reported feeling frequently lonely in the two weeks preceding the interview. In the first months of the pandemic, this proportion increased to 25%.

Country-specific figures show that loneliness increased by more than 15 percentage points in Bulgaria, Estonia, France, Germany, Poland, Portugal and Sweden. In contrast, Belgium, Croatia, the Czech Republic, Greece, Hungary, Romania and Spain experienced a loneliness increase of less than 10 percentage points over the same time period.

Young adults were hit most severely last spring. The pandemic had a significant impact on the way different age groups experienced loneliness. **In the pre-pandemic period, loneliness increased with age.** While 9% of young adults (aged 18-25) and 10% of 26-45 year olds felt frequently lonely, the prevalence of loneliness rose to 12% among 46-64 year olds

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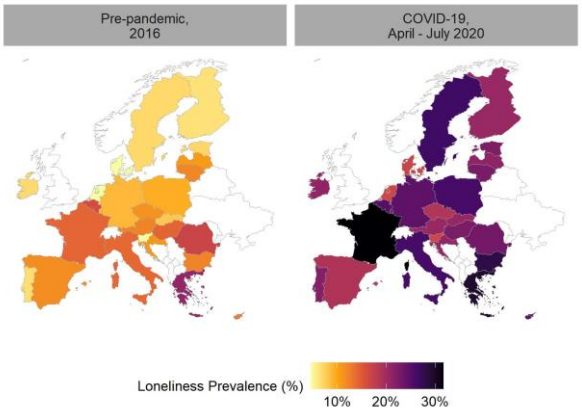
and to 15% among respondents aged 65 and above.

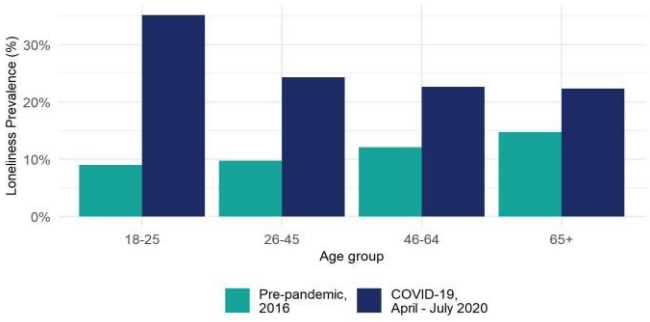
Figure 2. Loneliness in the EU



Data sources: Eurofound, 2016 EQLS and 2020 LWC surveys. The figure displays by country the share of individuals who frequently felt lonely over the two weeks preceding the interview.

This relationship turned around during the COVID-19 pandemic. **In the first months of the pandemic, young adults were the loneliest group**, scoring levels even higher than the oldest group before the pandemic. The share of people experiencing loneliness among respondents aged 18-25 increased from 9% to 35% during the first months of the pandemic, and thus almost quadrupled. Among the other generations, loneliness increased less sharply: by 15, 11 and 8 percentage points respectively for the 26-45, 46-64 and 65 and over age groups.

Figure 3. Loneliness by age group

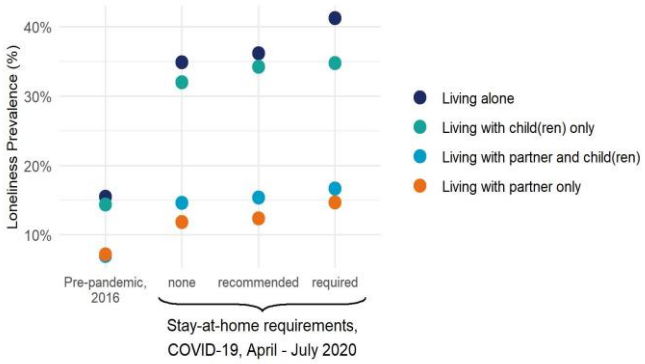


Data sources: Eurofound, 2016 EQLS and 2020 LWC surveys. The histogram displays, by age group and time period, the share of individuals who frequently felt lonely over the two weeks preceding the interview.

The type of loneliness experienced by young people may be transient or situational, and hopefully therefore will be largely reversed with the lifting of social distancing measures. However, we are currently navigating through uncharted territory. Young adulthood is a key formative period in a person's life. It implies gaining autonomy and developing peer support outside the close circle of the family. We currently do not know what long-term effects, if any, will result for those who have experienced an extended period of loneliness at this crucial stage of their lives. Moreover, moving out of the family home to a different city, region or country can be an isolating experience, which, when compounded by social distancing measures to limit the spread of the virus, could result in emotional upheaval with unpredictable future consequences for society.

Living alone made social distancing measures more painful. Frequent loneliness is strongly linked to family arrangements. Face-to-face connections with close family lower the incidence of loneliness. This was true both before and during the pandemic. In the pre-pandemic period, about 7% of respondents living with a partner (with or without children) felt lonely more than half of the time, while single parents and those living alone were lonelier (see Figure 4). Single parents often bear a large part of the burden of childcare by themselves, while also working, and this may reduce opportunities for socialising. The data also suggest that having children does not compensate for a lack of relationships with other adults.

Figure 4: Loneliness and family arrangements



Data sources: Eurofound, 2016 EQLS and 2020 LWC surveys, Oxford COVID-19 Government Response Tracker database. The figure displays the share of individuals who frequently felt lonely over the two weeks preceding the interview by type of household, time period and stay-at-home policy (during the pandemic).

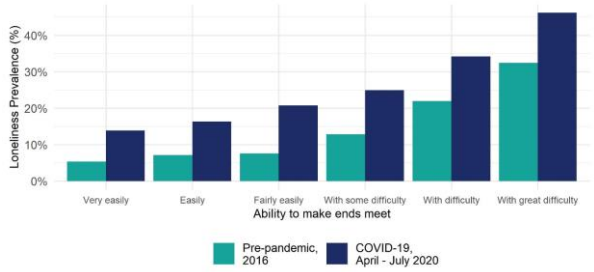
During the pandemic, living with family became more important as a factor helping to stave off loneliness. Loneliness rose for all groups, but the gap between those who live alone and those with a partner widened. For people living alone, the prevalence of loneliness rose by between 19 and 26 percentage points in the first months of the pandemic, depending on the stay-at-home requirements in place in the country of residence of the surveyed respondents. In comparison, loneliness among those living only with a partner increased by 5 to 8 percentage points.

Some factors associated with loneliness are unrelated to the pandemic

While the first months of the pandemic were particularly difficult for young adults and for those living alone, **there are a number of other risk factors associated with loneliness that are not specific to the pandemic.**

Favourable economic conditions shield against loneliness. In 2016, individuals reporting that they found it very difficult or difficult to make ends meet had loneliness levels of 32% and 22% respectively, compared with just 5% for those who were able to make ends meet very easily. During the first months of the pandemic, loneliness rose for every income group by largely the same amount, thus maintaining existing differences between income groups (see Figure 5).

Figure 5. Loneliness by ability to make ends meet



Data sources: Eurofound, 2016 EQLS and 2020 LWC surveys. The histogram displays, by income status and time period, the share of individuals who frequently felt lonely over the two weeks preceding the interview. Income status is measured through the following question: 'A household may have different sources of income and more than one household member may contribute to it. Thinking of your household's total monthly income, is your household able to make ends meet...?' The answer categories for the EQLS survey are: (i) very easily, (ii) easily, (iii) fairly easily, (iv) with some difficulty, (iv) with difficulty and (v) with great difficulty. For the LWC survey, the wording of categories (ii) and (iii) is slightly different.

Poor health is a critical risk factor for loneliness both in normal and exceptional times. In the pre-pandemic period, around 30% of respondents indicating that they were in bad health also reported feeling frequently lonely. This compares with only 8% among people in good health. In the first months of the pandemic, the incidence of loneliness rose to 46% for respondents in poor health and 20% for those in good health. Therefore, the gap in the prevalence of loneliness by health status did not change much following the COVID-19 outbreak.

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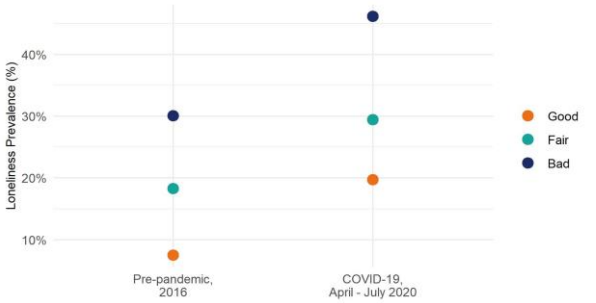
Figure 6. Loneliness by health status



Data sources: Eurofound, 2016 EQLS and 2020 LWC surveys. The histogram displays, by health status and time period, the share of individuals who frequently felt lonely over the two weeks preceding the interview. Health status is measured through the following question: 'In general, how is your health?' The possible answers were: (i) very good, (ii) good, (iii) fair, (iv) bad and (v) very bad. The answer categories 'very good' and 'good' have been grouped together, as have the responses 'bad' and 'very bad'.

There are no significant gender differences and no urban-rural divide in self-reported loneliness. Females and males had about the same likelihood of feeling lonely in the pre-pandemic period as at the outset of the COVID-19 pandemic. In other words, the absence of gender variations in loneliness is not specific to the time period. Furthermore, in the pre-pandemic period, 11% of people in rural areas and 12% of people in urban areas were frequently lonely. During the first months of the pandemic, loneliness increased by

13 percentage points, regardless of urbanisation level.

Concluding remarks

Social connections are critical in our daily lives. This policy brief helps to evaluate how the current pandemic and the resulting limitations on social interactions have exacerbated problems of loneliness and social isolation in the EU. It brings insights on the significance of the problem for different demographic groups before and during the pandemic. While further research is needed to assess the long-term consequences of social distancing measures, public awareness on the societal damage of loneliness and social isolation is gaining momentum. This is an opportunity for scientific evidence to help destigmatise these issues and address them with effective interventions.

Related work

This brief is part of a broader series of activities that will take place in 2021-2023 in the context of a **European Parliament pilot project on monitoring loneliness in Europe**. The **European Commission Directorate-General for Employment, Social Affairs & Inclusion (DG EMPL)**, in collaboration with the **Joint Research Centre (JRC)**, will carry out a number of tasks including the collection of pan-European data on loneliness, a review of existing literature and identification of knowledge gaps, and the establishment of a web platform to monitor loneliness over time and across Europe.

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Quick guide

Data

The 2016 European Quality of Life Survey (EQLS) is the fourth edition of a cross-national survey based on face-to-face interviews with a randomly selected adult population. The survey took place between September 2016 and March 2017. The Living, working and COVID-19 data (LWC) are drawn from an online survey launched in the days following the COVID-19 outbreak in Europe. The recruitment of the participants to the LWC survey was carried out through snowball sampling methods as well as via promotions on social media networks. The first round of the fieldwork took place between 9 April and 11 June 2020 while the second round was carried out from 22 June to 27 July 2020. To explore whether government measures to contain the pandemic have coincided with changes in loneliness, the LWC survey was also combined with data from the Oxford COVID-19 Government Response Tracker database, which provides daily country-level information on stay-at-home requirements.

The analysis is restricted to respondents aged between 18 and 80 and living in one of the 27 EU Member States.

Limitations of the analysis

The characteristics of respondents participating in the EQLS and LWC might differ, because they are based on different sampling frames and survey modes. We partially control for this by using post-stratification weights provided by Eurofound. Notwithstanding the use of weighted statistics, there might be other unobserved differences between the participants in the two surveys which cannot be accounted for. This is particularly likely for the older age group. Indeed, the simple fact of answering an online survey implies that the respondents are already more likely to be connected to social media networks and/or to online media. This suggests that the estimated prevalence of loneliness observed during the first months of the COVID-19 pandemic is likely to be a lower bound estimate of the actual