

THE GENEVA CHALLENGE 2023

The International Contest for Graduate Students to Advance Development Goals "The Challenges of Loneliness"

Last year, 279 teams composed of 1,065 graduate students from 64 countries took part in the 2022 Geneva Challenge. Building on this success, the Geneva Graduate Institute continues to encourage interdisciplinary problem-solving among graduate students from around the world. Thanks to the vision and support of Ambassador Jenö Staehelin, a long-standing partner and friend of the Geneva Graduate Institute, we are now proud to launch the 10th edition of the Geneva Challenge – Advancing Development Goals Contest – to address:

"The Challenges of Loneliness".

A substantial proportion of people worldwide, from young adults to seniors, experience problematic levels of loneliness¹, including social, emotional and physical loneliness.² Loneliness impacts people's physical and mental wellbeing, as well as their ability to fully participate in political, social and economic life. The experience of loneliness is prevalent in all parts of societies, among people from all socio-economic backgrounds, ages, and genders. Socially excluded and marginalised groups experience higher levels of loneliness, further exacerbating existing societal inequalities.³ For example, shocks, forced displacement, war, migration, and poverty all have profound links with loneliness and the negative effects of loneliness. As the COVID-19 pandemic has shown, shocks and crises can increase the number of people experiencing some form of loneliness, especially among vulnerable groups, but the issue is prevalent in all parts of the world and societies.

¹ Daniel L. Surkalim et al., "The Prevalence of Loneliness across 113 Countries: Systematic Review and Meta-Analysis," *BMJ* 376 (February 9, 2022): e067068, https://doi.org/10.1136/bmj-2021-067068.

² Helen Landmann and Anette Rohmann, "When Loneliness Dimensions Drift Apart: Emotional, Social and Physical Loneliness during the COVID-19 Lockdown and Its Associations with Age, Personality, Stress and Well-Being," *International Journal of Psychology* 57, no. 1 (2022): 63–72, https://doi.org/10.1002/ijop.12772.

³ Lena Dahlberg et al., "A Social Exclusion Perspective on Loneliness in Older Adults in the Nordic Countries," *European Journal of Ageing* 19, no. 2 (June 1, 2022): 175–88, https://doi.org/10.1007/s10433-022-00692-4.

Furthermore, loneliness is linked to many of the Sustainable Development Goals (SDGs), including SDG 3 (Good Health and Well-Being), SDG 1 (No Poverty), SDG 8 (Decent Work and Economic Growth), SDG 5 (Gender Equality), SDG 10 (Reduced Inequalities), SDG 11 (Sustainable Cities and Communities), and SDG 16 (Peace, Justice and Strong Institutions). Therefore, addressing loneliness is crucial in order to achieve the SDGs.

To address this highly critical and complex issue, we invite graduate students from around the world to develop and present innovative and interdisciplinary solutions. Successful strategies today require being interdisciplinary and analysing the ways in which individuals, governments, civil society, international organisations and private sector organisations can and should respond. For this Geneva Challenge, we are seeking innovative and crosscutting proposals. The competition could not be more timely.

To aid participants, below are some details about specific pressing issues being experienced worldwide:

Loneliness:

Loneliness is "a situation experienced by the individual as one where there is an unpleasant or inadmissible lack of (quality of) certain relationships". Or, in other words, it is the "perception of discrepancy between one's desired and actual relationships" (p.63). Most often, loneliness is divided into emotional loneliness and social loneliness. Emotional loneliness is the lack of feeling emotionally connected to other people while social loneliness is the perceived lack of a larger social network. After the experience of physical distancing rules around the world during the COVID-19 pandemic, researchers have proposed adding the concept of physical loneliness to describe the perceived lack of physical company of others. Further, loneliness is linked to an experience of isolation in a community, the feeling of being an outsider and perceived as being different. Importantly, social, individual and cultural differences around the world impact people's understanding of loneliness and require specific methods of alleviation that match a society's specificities.

⁴ Jenny de Jong Gierveld, "A Review of Loneliness: Concept and Definitions, Determinants and Consequences," *Reviews in Clinical Gerontology* 8, no. 1 (February 1998): 73–80, https://doi.org/10.1017/S0959259898008090, p.73.

⁵ Landmann and Rohmann, "When Loneliness Dimensions Drift Apart."

⁶ Landmann and Rohmann.

⁷ James Duggan and Janet Batsleer, eds., "The Experience of Loneliness," in *Young and Lonely: The Social Conditions of Loneliness* (Bristol University Press, 2020), 71–72, https://doi.org/10.46692/9781447355366.009.

⁸ Sonia Lippke and Lisa Marie Warner, "Understanding and Overcoming Challenges in Times of Personal or Global Crisis—Editorial on the Special Issue on Loneliness and Health," *Applied Psychology: Health and Well-Being* n/a, no. n/a (2023), https://doi.org/10.1111/aphw.12420.

Around the world, problematic levels of loneliness are being experienced by a substantial proportion of the population. Yet there is only a limited amount of reliable data available. Scales to measure loneliness have limitations, including poor test-retest reliability and measurement invariance, and problems with how loneliness is conceptualised. 10 Similarly, social desirability may lead to lower reported levels of loneliness since most measurements rely on self-reported loneliness. 11 The data gap is particularly high in some regions. For example, no low-income countries and only five lower-middle-income countries have reported nationally representative data on loneliness in adults, limiting our insights into the situation in these countries. 12 Additionally, data for all age groups except adolescents are lacking for non-European countries, meaning analyses are only available for European countries.¹³

Health & mental health:

Loneliness has impacts on people's mental and physical health. Recent research shows that loneliness increases the risk of mortality¹⁴ and negatively affects people's life satisfaction.¹⁵ Existing evidence suggests that loneliness increases the risk of death from 26% to 45%16, and increases the likelihood of developing coronary heart disease and stroke¹⁷, high blood pressure.¹⁸ and dementia.¹⁹ Additionally, poor self-perceived health is seen to be an additional risk factor for loneliness, especially among older adults.²⁰ Loneliness is also associated with depression, anxiety, psychosis,²¹ perceived stress, hopelessness, suicidality, fatigue²² and other mental health outcomes. Furthermore, mental health conditions may increase the likelihood of isolation and

⁹ Surkalim et al., "The Prevalence of Loneliness across 113 Countries."

¹⁰ Marlies Maes et al., "How (Not) to Measure Loneliness: A Review of the Eight Most Commonly Used Scales." *International Journal* of Environmental Research and Public Health 19, no. 17 (August 30, 2022): 10816, https://doi.org/10.3390/ijerph191710816.

¹¹ Andrea Caputo, "Social Desirability Bias in Self-Reportèd Well-Being Measures: Evidence from an Online Survey," *Universita*s Psychologica 16, no. 2 (June 2017): 245-55, https://doi.org/10.11144/javeriana.upsy16-2.sdsw.

¹² Surkalim et al.. "The Prevalence of Loneliness across 113 Countries."

¹³ Surkalim et al.

¹⁴ Farhana Mann et al., "Loneliness and the Onset of New Mental Health Problems in the General Population," Social Psychiatry and Psychiatric Epidemiology 57, no. 11 (November 1, 2022): 2161-78, https://doi.org/10.1007/s00127-022-02261-7.

¹⁵ E. M. Klein et al., "Loneliness and Its Relation to Mental Health in the General Population: Validation and Norm Values of a Brief Measure," Journal of Affective Disorders Reports 4 (April 1, 2021): 100120, https://doi.org/10.1016/j.jadr.2021.100120.

¹⁶ Julianne Holt-Lunstad et al., "Loneliness and Social Isolation as Risk Factors for Mortality: A Meta-Analytic Review," Perspectives on Psychological Science: A Journal of the Association for Psychological Science 10, no. 2 (March 2015): 227-37, https://doi.org/10.1177/1745691614568352.

¹⁷ Nicole K Valtorta et al., "Loneliness and Social Isolation as Risk Factors for Coronary Heart Disease and Stroke: Systematic Review and Meta-Analysis of Longitudinal Observational Studies," Heart 102, no. 13 (July 1, 2016): 1009-16, https://doi.org/10.1136/heartjnl-2015-308790.

¹⁸ Louise C. Hawkley et al., "Loneliness Predicts Increased Blood Pressure: Five-Year Cross-Lagged Analyses in Middle-Aged and

Older Adults," *Psychology and Aging* 25, no. 1 (March 2010): 132–41, https://doi.org/10.1037/a0017805.

19 John Cacioppo and Stephanie Cacioppo, "Older Adults Reporting Social Isolation or Loneliness Show Poorer Cognitive Function 4 Years Later," Evidence-Based Nursing 17 (June 8, 2013), https://doi.org/10.1136/eb-2013-101379.

²⁰ Lena Dahlberg et al., "A Systematic Review of Longitudinal Risk Factors for Loneliness in Older Adults," Aging & Mental Health 26, no. 2 (February 1, 2022): 225-49, https://doi.org/10.1080/13607863.2021.1876638.

²¹ Mann et al., "Loneliness and the Onset of New Mental Health Problems in the General Population."

²² Klein et al., "Loneliness and Its Relation to Mental Health in the General Population."

loneliness.²³ Therefore, loneliness and mental health conditions have negative effects on each other, reinforcing the importance of understanding and tackling loneliness and mental health issues jointly.

Material well-being, prosperity & employment:

Having social connections is instrumental in our ability to share information, learn from others and seize economic opportunities.²⁴ Poverty has been shown to increase the risk of loneliness²⁵ and loneliness is higher among individuals from lower-income households.²⁶ The rates of loneliness among people from more disadvantaged socio-economic status and with low levels of educational attainment are significantly higher than among more affluent people with higher educational degrees, suggesting an important link between socioeconomic factors and loneliness.²⁷

Feeling lonely has been associated with a higher likelihood of unemployment from 16% to 19%, thus being an important contributor to unemployment, which has increased in significance over time.²⁸ Preventing or reducing loneliness may potentially decrease unemployment²⁹, which could positively effect a person's economic situation and increase the population share contributing to the workforce. Viewed from a different perspective, unemployment has also been shown increase to feelings of loneliness.³⁰

Vulnerable populations's social exclusion:

Loneliness is a pressing issue among deprived communities and within groups that are socially excluded in society or being discriminated against (for example people with disabilities, ethnic minorities, and others).³¹

a. Forced Displacement, Migration & Refugees:

²³ "COVID19 and Mental Health & Wellbeing," United Nations (United Nations), accessed January 19, 2023, https://www.un.org/en/coronavirus/mental-health-and-wellbeing.

²⁴ Esteban Ortiz-Ospina and Max Roser, "Loneliness and Social Connections," *Our World in Data*, February 14, 2020, https://ourworldindata.org/social-connections-and-loneliness.

²⁵ Kieran Walsh et al., eds., *Social Exclusion in Later Life: Interdisciplinary and Policy Perspectives*, vol. 28, International Perspectives on Aging (Cham: Springer International Publishing, 2021), https://doi.org/10.1007/978-3-030-51406-8.

²⁶ Robyn J. McQuaid et al., "The Burden of Loneliness: Implications of the Social Determinants of Health during COVID-19," *Psychiatry Research* 296 (February 1, 2021): 113648, https://doi.org/10.1016/j.psychres.2020.113648.

²⁷ Claryn S. J. Kung, Johannes S. Kunz, and Michael A. Shields, "Economic Aspects of Loneliness in Australia," *The Australian Economic Review* 54, no. 1 (2021): 147–63, https://doi.org/10.1111/1467-8462.12414.

²⁸ N. Morrish, R. Mujica-Mota, and A. Medina-Lara, "Understanding the Effect of Loneliness on Unemployment: Propensity Score Matching," *BMC Public Health* 22, no. 1 (April 28, 2022): 740, https://doi.org/10.1186/s12889-022-13107-x.

³⁰ N. Morrish and A. Medina-Lara, "Does Unemployment Lead to Greater Levels of Loneliness? A Systematic Review," *Social Science & Medicine* 287 (October 1, 2021): 114339, https://doi.org/10.1016/j.socscimed.2021.114339.

³¹ Ade Kearns et al., "Loneliness, Social Relations and Health and Wellbeing in Deprived Communities," *Psychology, Health & Medicine* 20, no. 3 (2015): 332–44, https://doi.org/10.1080/13548506.2014.940354; Dahlberg et al., "A Social Exclusion Perspective on Loneliness in Older Adults in the Nordic Countries."

Direct exposure to war-related violence and loss, and stress related to their displacement negatively affects the mental health and feelings of loneliness among displaced persons.³² In addition, forced displacement due to other factors, for example, climate disasters or the destruction of housing³³, impacts people's experiences of loneliness and isolation. Loneliness experienced by internally displaced persons is often exacerbated by the trauma of the events leading to their displacement and the stigma and exclusion resulting from the displacement.³⁴ For example, the forced displacement of indigenous communities due to a climate-related disaster, has been shown to strongly effect their perception of loneliness because of their close ancestral ties to land and nature.³⁵ Evidence suggests a higher proportion of perceived loneliness exists among indigenous people that were displaced from their lands, and this is related to the disruption of their social connectedness and the loss of their connection to cultural traditions.³⁶

Migrants and refugees experience higher levels of loneliness compared to host populations,³⁷ with some studies suggesting that up to 73% of refugees and asylum seekers feel that their need for companionship is not being met.³⁸ It has been shown that loneliness is relatively higher among refugee children, especially those exposed directly to the impacts of war,³⁹ and among young individuals who flee alone.⁴⁰ Further, the experience of displacement, flight, and resettlement contribute to people feeling lonely and hopeless.⁴¹ Migrants experience massive disruptions in their social networks and often encounter barriers in new countries.⁴² Additionally, even immigrants living in countries for a long time are prone to higher levels of loneliness, as has been

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 ³² K. E. Miller and A. Rasmussen, "The Mental Health of Civilians Displaced by Armed Conflict: An Ecological Model of Refugee Distress," *Epidemiology and Psychiatric Sciences* 26, no. 2 (April 2017): 129–38, https://doi.org/10.1017/S2045796016000172.
 ³³ Alan Morris, "Communicide': The Destruction of a Vibrant Public Housing Community in Inner Sydney through a Forced Displacement," *Journal of Sociology* 55, no. 2 (June 1, 2019): 270–89, https://doi.org/10.1177/1440783318815307.
 ³⁴ Iryna Nesterenko, "LONELINESS OF INTERNALLY DISPLACED PERSONS OF UKRAINE: THEORETICAL ANALYSIS OF THE PROBLEM," *Baltic Journal of Legal and Social Sciences*, no. 1 (August 1, 2022): 151–60, https://doi.org/10.30525/2592-8813-2022-

³⁵ Myrle Ballard, Juliana Coughlin, and Donna Martin, "Reconciling with Minoaywin: First Nations Elders' Advice to Promote Healing from Forced Displacement," *Canadian Journal on Aging / La Revue Canadienne Du Vieillissement* 39, no. 2 (June 2020): 169–77, https://doi.org/10.1017/S0714980819000412.

³⁶ Donna E. Martin et al., "Two-Eyed Seeing in Research and Its Absence in Policy: Little Saskatchewan First Nation Elders' Experiences of the 2011 Flood and Forced Displacement," 2017, https://doi.org/10.18584/iipj.2017.8.4.6.

³⁷ Lea-Maria Löbel, Hannes Kröger, and Ana Nanette Tibubos, "Social Isolation and Loneliness in the Context of Migration: A Cross-Section- al Study of Refugees, Migrants, and the Native Population in Germany," April 13, 2021.

³⁸ Patricia J. M. Strijk, Berno van Meijel, and Claudia J. Gamel, "Health and Social Needs of Traumatized Refugees and Asylum Seekers: An Exploratory Study," *Perspectives in Psychiatric Care* 47, no. 1 (2011): 48–55, https://doi.org/10.1111/j.1744-6163.2010.00270.x.

³⁹ Filiz Solmaz et al., "Depression, Loneliness and Factors Influencing in Syrian Refugee Children," *International Journal of Clinical Practice* 75, no. 5 (2021): e14039, https://doi.org/10.1111/jjcp.14039.

⁴⁰ Strijk, van Meijel, and Gamel, "Health and Social Needs of Traumatized Refugees and Asylum Seekers."

⁴¹ G. Hassan et al., "Mental Health and Psychosocial Wellbeing of Syrians Affected by Armed Conflict," *Epidemiology and Psychiatric Sciences* 25, no. 2 (April 2016): 129–41, https://doi.org/10.1017/S2045796016000044.

⁴² Max Stick, Feng Hou, and Lisa Kaida, "Self-Reported Loneliness among Recent Immigrants, Long-Term Immigrants, and Canadian-Born Individuals," July 28, 2021, https://www150.statcan.gc.ca/n1/pub/36-28-0001/2021007/article/00001-eng.htm; Solmaz et al., "Depression, Loneliness and Factors Influencing in Syrian Refugee Children."

shown for immigrant and refugee seniors.⁴³ However, social support interventions have been shown to reduce the experience of loneliness among refugees, as long as they are culturally relevant to their respective backgrounds.⁴⁴

b. Age:

Loneliness is generally higher among the elderly. Estimates show that around one-quarter of elderly people in high-income countries experience loneliness. Other studies have found even higher rates of loneliness among people of old age, with proportions ranging from 39% people of 43%. The percentage of people feeling lonely increases with advancing age. By 2050, one in six people in the world will be over the age of 65, by then making up 16% of the world population. Loneliness is understood to increase the risk of several mental and physical illnesses that are already more prevalent among older adults, including higher rates of dementia, frailty, functional decline and death. Among the elderly, factors such as living alone, being female, being recently widowed, having a disability, living in rural areas, living in a residential home, having poor income and having low education are all associated with higher levels of loneliness. Thus, loneliness among seniors intersects with other factors of exclusion. Importantly, older adults report the lack of social contact with real friends and family members as contributing the most to their loneliness, as well as life changes such as the death of a spouse or moving residences. Common intervention themes to combat loneliness among older adults include face-to-face and digital

⁴³ Shanthi Johnson et al., "Social Isolation and Loneliness among Immigrant and Refugee Seniors in Canada: A Scoping Review," *International Journal of Migration, Health and Social Care* 15 (August 29, 2019): 177–90, https://doi.org/10.1108/IJMHSC-10-2018-0067.

⁴⁴ Miriam J. Stewart, "Social Support in Refugee Resettlement," in *Refuge and Resilience: Promoting Resilience and Mental Health among Resettled Refugees and Forced Migrants*, vol. 7, International Perspectives on Migration (Dordrecht: Springer Netherlands, 2014), https://doi.org/10.1007/978-94-007-7923-5.

⁴⁵ Theo G van Tilburg, "Emotional, Social, and Existential Loneliness Before and During the COVID-19 Pandemic: Prevalence and Risk Factors Among Dutch Older Adults," *The Journals of Gerontology: Series B* 77, no. 7 (July 1, 2022): e179–84, https://doi.org/10.1093/geronb/gbab101.

⁴⁶ Kavita Chawla et al., "Prevalence of Loneliness amongst Older People in High-Income Countries: A Systematic Review and Meta-Analysis," *PLOS ONE* 16, no. 7 (July 26, 2021): e0255088, https://doi.org/10.1371/journal.pone.0255088.

⁴⁷ N. Savikko et al., "Predictors and Subjective Causes of Loneliness in an Aged Population," *Archives of Gerontology and Geriatrics* 41, no. 3 (November 1, 2005): 223–33, https://doi.org/10.1016/j.archger.2005.03.002.

⁴⁸ Anne Day, Ariel Laudermith, and Gauri Khatkhate, "THE MOST TERRIBLE POVERTY: ADDRESSING AND TREATING THE EPIDEMIC OF LONELINESS IN OLDER ADULTS: Session 319," *The American Journal of Geriatric Psychiatry*, Abstracts from the 2019 AAGP Annual Meeting, 27, no. 3, Supplement (March 1, 2019): S33–34, https://doi.org/10.1016/j.jagp.2019.01.182.

⁴⁹ G. Clare Wenger and Vanessa Burholt, "Changes in Levels of Social Isolation and Loneliness among Older People in a Rural Area: A Twenty–Year Longitudinal Study," *Canadian Journal on Aging / La Revue Canadienne Du Vieillissement* 23, no. 2 (2004): 115–27, https://doi.org/10.1353/cja.2004.0028.

⁵⁰ Nations, "Ageing," United Nations (United Nations), accessed January 19, 2023, https://www.un.org/en/global-issues/ageing.

⁵¹ Day, Laudermith, and Khatkhate, "THE MOST TERRIBLE POVERTY."

⁵² Dee A Jones, Christina R Victor, and Norman J Vetter, "The Problem of Loneliness in the Elderly in the Community: Characteristics of Those Who Are Lonely and the Factors Related to Loneliness," *Journal of the Royal College of General Practitioners*, 1985.

⁵³ Savikko et al., "Predictors and Subjective Causes of Loneliness in an Aged Population."

⁵⁴ Wenger and Burholt, "Changes in Levels of Social Isolation and Loneliness among Older People in a Rural Area."

⁵⁵ Savikko et al., "Predictors and Subjective Causes of Loneliness in an Aged Population."

connections that build skills and create new social connections, the improvement of infrastructure to make communities more age-friendly and policies to close the digital divide.⁵⁶

c. Youth, Education & Unemployment:

Since the pandemic, the question of loneliness among young adults has come to the forefront and it is becoming clear that they are among the groups most affected by loneliness and social isolation.⁵⁷ Loneliness is high among young adults (<30 years)⁵⁸ and school loneliness was already increasing before the pandemic around the world.⁵⁹ Around one-third of young adults report problematic levels of loneliness.⁶⁰ School loneliness is associated with lower life satisfaction and lower well-being among adolescents.⁶¹ Research suggests that loneliness is the highest among young adults, lowest among middle-aged people and then increases again with old age.⁶² One reason for the high levels of loneliness among young adults is the high amount of significant life events (e.g., moving away from home or starting a new job...), which can trigger the feeling.⁶³

Young people not engaged in education, employment or training (NEET) are particularly vulnerable economically, socially and in terms of their health. This phenomenon occurs when young people finish full-time education, but are not yet otherwise employed or engaged in training, a status that is often exacerbated by part-time jobs, short-term employment and personal factors such as child-caring duties.⁶⁴ NEET youth, especially women⁶⁵, have a higher likelihood of experiencing loneliness, mostly because of the lack of social relations and friendships that would normally be created during education, employment or training.⁶⁶

d. Geographic Isolation, Rural Areas & Urbanisation:

⁵⁶ "Social Isolation and Loneliness among Older People: Advocacy Brief" (World Health Organization, July 29, 2021).

⁵⁷ Richard Weissbourd et al., "How the Pandemic Has Deepened an Epidemic of Loneliness and What We Can Do About It," *Making Caring Common*, 2021.

⁵⁸ Louise C. Hawkley et al., "Loneliness from Young Adulthood to Old Age: Explaining Age Differences in Loneliness," *International Journal of Behavioral Development* 46, no. 1 (January 1, 2022): 39–49, https://doi.org/10.1177/0165025420971048.

⁵⁹ Jean M. Twenge et al., "Worldwide Increases in Adolescent Loneliness," *Journal of Adolescence* 93 (December 1, 2021): 257–69, https://doi.org/10.1016/j.adolescence.2021.06.006.

⁶⁰ Michelle Lim, "Loneliness Has Become a Global Epidemic among Young People Today," World Economic Forum, October 24, 2019, https://www.weforum.org/agenda/2019/10/1-in-3-young-adults-are-lonely-and-it-affects-their-mental-health/.

 ⁶¹ Twenge et al., "Worldwide Increases in Adolescent Loneliness."
 ⁶² Lippke and Warner, "Understanding and Overcoming Challenges in Times of Personal or Global Crisis—Editorial on the Special Issue on Loneliness and Health."

⁶³ Lim, "Loneliness Has Become a Global Epidemic among Young People Today."

⁶⁴ John Bynner and Sam Parsons, "Social Exclusion and the Transition from School to Work: The Case of Young People Not in Education, Employment, or Training (NEET)," *Journal of Vocational Behavior* 60 (April 1, 2002): 289–309, https://doi.org/10.1006/jvbe.2001.1868.

⁶⁵ Raúl Alejandro Gutiérrez García et al., "Narrations of Mental Health of Young Women Not in Education, Employment or Training (NEET) from Mexico and Spain," *Salud y Drogas* 17, no. 2 (2017): 115–23.

⁶⁶ Netta Achdut and Tehila Refaeli, "An Ethnocultural Perspective on Loneliness in Young Adulthood: A Population-Based Study in Israel," *Sociology of Health & Illness* 43, no. 5 (2021): 1154–74, https://doi.org/10.1111/1467-9566.13277.

Living alone in urban areas increases the likelihood of experiencing loneliness, ⁶⁷ especially among older adults.⁶⁸ By 2050, 66% of the world's population will live in urban areas. Living in overcrowded environments increases loneliness by up to 38%.69 This trend is particularly pronounced in the Global South, with urbanisation taking place far more rapidly.⁷⁰ However, one billion urban people live in informal settlements, overcrowded environments and areas with little access to social and economic opportunities.⁷¹ Additionally, both in the Global South and the Global North, crowded urban areas give rise to conflicts and precarious living situations, such as higher exposure to pollution.⁷² Interestingly, green spaces in cities make people 28% less likely to feel lonely, suggesting this as one among the possible pathways for the mitigation of loneliness in urban areas.73

While the experience of loneliness is often linked to large cities and urban centres, the experience of loneliness in small communities, rural areas and small villages can be more prevalent, especially among younger people.⁷⁴ Smaller communities, while sometimes an important and helpful social network for people, can leave certain people to feel like outsiders, for example those with different values may experience particularly high levels of loneliness. 75 Thus, remoteness can also affect people's experience of loneliness as it limits people's options of finding people they relate to and feel and supported by. The likelihood of loneliness is particularly high among older adults living in remote areas far away from family members where the feeling of reduced mobility exacerbates the feeling of loneliness.⁷⁶ Additionally, higher levels of loneliness have been reported in more deprived areas.⁷⁷

e. Gender, Race & Sexuality:

Gender is a marker of loneliness, although the percentages of people from certain genders reporting loneliness can vary across cultures, age and other factors. Women have greater odds

⁶⁷ Betty Havens et al., "Social Isolation and Loneliness: Differences between Older Rural and Urban Manitobans," Canadian Journal on Aging = La Revue Canadienne Du Vieillissement 23 (February 1, 2004): 129-40, https://doi.org/10.1353/cja.2004.0022.

⁶⁸ Jones, Victor, and Vetter, "The Problem of Loneliness in the Elderly in the Community: Characteristics of Those Who Are Lonely and the Factors Related to Loneliness."

⁶⁹ Andrea Mechelli, "People Feel Lonelier in Crowded Cities – but Green Spaces Can Help," World Economic Forum, April 1, 2022, https://www.weforum.org/agenda/2022/01/lonely-study-green-space-city/.

⁷⁰ Garth Myers, "Urbanisation in the Global South," in *Urban Ecology in the Global South*, ed. Charlie M. Shackleton et al., Cities and

Nature (Cham: Springer International Publishing, 2021), 27–49, https://doi.org/10.1007/978-3-030-67650-6_2.
71 "Urban Development," Text/HTML, World Bank, June 10, 2022, https://www.worldbank.org/en/topic/urbandevelopment/overview. 72 "Urban Development."

⁷³ Mechelli, "People Feel Lonelier in Crowded Cities – but Green Spaces Can Help."

⁷⁴ Janet Batsleer and James Duggan, Young and Lonely: The Social Conditions of Loneliness, 1st ed. (Bristol University Press, 2020), https://doi.org/10.46692/9781447355366.

⁷⁵ Batsleer and Duggan.

⁷⁶ Havens et al., "Social Isolation and Loneliness."

⁷⁷ Christina R. Victor and Jitka Pikhartova, "Lonely Places or Lonely People? Investigating the Relationship between Loneliness and Place of Residence," BMC Public Health 20, no. 1 (May 27, 2020): 778, https://doi.org/10.1186/s12889-020-08703-8.

of loneliness than men do⁷⁸, with higher rates of loneliness, depression and anxiety symptoms, especially prevalent among young females.⁷⁹ The relationship between loneliness and depression is higher among females, suggesting that women are not only lonelier but also more likely to experience negative effects from loneliness.⁸⁰ Further, single migrant mothers report higher rates of loneliness.⁸¹

Any breakaway from established social norms, such as coming out as a member of the LGBTQAI+ community, can lead to social isolation, loneliness and the experience of being an outsider. This is particularly prevalent among more conservative and smaller communities. ⁸² Individuals that identify as belonging to a sexual minority report higher ratings of loneliness than heterosexuals, ⁸³ a finding that is especially true for older LGBTQAI+ adults who are significantly more likely to be lonely. ⁸⁴ A likely cause for this is the lesser likelihood of living together with a partner and lower levels of family support. ⁸⁵

Ethnic minorities and people experiencing discrimination and isolation because of their race show higher experiences of loneliness through this marginalisation. This factor is especially prevalent among communities with a very small proportion of a racial minority, which exacerbates their isolation within society.⁸⁶

f. Disability:

People with disabilities are at an increased risk of experiencing loneliness and social isolation.⁸⁷ One study found that over 50% of people with disabilities experienced loneliness (compared to only 15% among non-disabled respondents).⁸⁸ However, the experience of loneliness varies between different types of disabilities, with people with mental health issues (63%), some form of learning impairment (73%) or intellectual impairment (73%) experiencing higher rates of loneliness

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⁷⁸ Christine M. Wickens et al., "Loneliness in the COVID-19 Pandemic: Associations with Age, Gender and Their Interaction," *Journal of Psychiatric Research* 136 (April 2021): 103–8, https://doi.org/10.1016/j.jpsychires.2021.01.047.

⁷⁹ McQuaid et al., "The Burden of Loneliness."

⁸⁰ McQuaid et al.

⁸¹ India J. Ornelas et al., "Challenges and Strategies to Maintaining Emotional Health: Qualitative Perspectives of Mexican Immigrant Mothers," *Journal of Family Issues* 30, no. 11 (November 1, 2009): 1556–75, https://doi.org/10.1177/0192513X09336651.

⁸³ Paul Gorczynski and Fabio Fasoli, "Loneliness in Sexual Minority and Heterosexual Individuals: A Comparative Meta-Analysis," *Journal of Gay & Lesbian Mental Health* 26, no. 2 (April 3, 2022): 112–29, https://doi.org/10.1080/19359705.2021.1957742.

Ning Hsieh and Hui Liu, "Social Relationships and Loneliness in Late Adulthood: Disparities by Sexual Orientation," *Journal of Marriage and Family* 83, no. 1 (2021): 57–74, https://doi.org/10.1111/jomf.12681.
 Hsieh and Liu.

⁸⁶ Batsleer and Duggan, Young and Lonely.

⁸⁷ Stephen J. Macdonald et al., "'The Invisible Enemy': Disability, Loneliness and Isolation," *Disability & Society*, September 19, 2018, https://www.tandfonline.com/doi/full/10.1080/09687599.2018.1476224.

⁸⁸ Macdonald et al.

than people with physical and sensory impairments (50%) do.⁸⁹ Young adults and children with disabilities experience loneliness through exclusion from regular schools and social activities due to their impairment.⁹⁰ More generally, barriers for people with disabilities such as inaccessible communities, poorly resourced social care and the psychosocial emotional impact increase their experience of loneliness.⁹¹ Furthermore, people with disabilities are much more likely to be unemployed or experience a living situation that increases the likelihood of loneliness.⁹²

Consequences of Shocks and Crises:

In times of crisis, people experience higher levels of loneliness⁹³, as crises may exacerbate existing inequalities and increase levels of vulnerability and marginalisation.⁹⁴ The crises that can affect the levels of loneliness include, but are not limited to, climate change, natural disasters, conflict, war, and economic and health crises.⁹⁵

a. Conflict & War:

The experience of armed conflict and war can influence a person's feeling of loneliness, both among civilians and combatants.⁹⁶ Higher levels of loneliness have been shown to lead to higher severity of PTSD symptoms.⁹⁷ Children Born of War⁹⁸ and female victims of human rights abuses during conflict all report higher feelings of loneliness.⁹⁹ Among war veterans, loneliness and subjective physical health influence each other, showing how loneliness can both be increased by poor physical health and increase the subjective feeling of poor health.¹⁰⁰ Therefore, decreasing loneliness among veterans could help their mental and physical health and positively affect their recovery. Furthermore, addressing the experiences of loneliness caused by war and conflict could help in larger efforts to rebuild communities and communal ties during post-conflict reconstruction.

⁸⁹ Macdonald et al.

⁹⁰ Batsleer and Duggan, Young and Lonely.

⁹¹ Macdonald et al., "The Invisible Enemy."

⁹² Macdonald et al.

⁹³ Lippke and Warner, "Understanding and Overcoming Challenges in Times of Personal or Global Crisis—Editorial on the Special Issue on Loneliness and Health."

⁹⁴ Bas van Bavel and Marten Scheffer, "Historical Effects of Shocks on Inequality: The Great Leveler Revisited," *Humanities and Social Sciences Communications* 8, no. 1 (March 17, 2021): 1–9, https://doi.org/10.1057/s41599-021-00763-4.

⁹⁵ Lippke and Warner, "Understanding and Overcoming Challenges in Times of Personal or Global Crisis—Editorial on the Special Issue on Loneliness and Health."

⁹⁶ Zahava Solomon, Mario Mikulincer, and Stevan Hobfoll, "Effects of Social and Battle Intensity on Loneliness and Breakdown during Combat," *Journal of Personality and Social Psychology* 51 (January 1, 1987): 1269–76, https://doi.org/10.1037/0022-3514.51.6.1269.

⁹⁷ Alma Jeftić et al., "Connection between the COVID-19 Pandemic, War Trauma Reminders, Perceived Stress, Loneliness, and PTSD in Bosnia and Herzegovina," *Current Psychology*, October 22, 2021, https://doi.org/10.1007/s12144-021-02407-x.

⁹⁸ Saskia Mitreuter et al., "Loneliness and Lack of Belonging as Paramount Theme in Identity Descriptions of Children Born of War," *Frontiers in Political Science* 4 (September 13, 2022): 851298, https://doi.org/10.3389/fpos.2022.851298.

⁹⁹ Maitane Arnoso Martínez et al., "Armed Conflict, Psychosocial Impact and Reparation in Colombia: Women's Voice," *Universitas Psychologica* 16, no. 3 (November 14, 2017): 1, https://doi.org/10.11144/Javeriana.upsy16-3.acpi.

¹⁰⁰ Noga Tsur et al., "Loneliness and Subjective Physical Health among War Veterans: Long Term Reciprocal Effects," *Social Science & Medicine* 234 (August 1, 2019): 112373, https://doi.org/10.1016/j.socscimed.2019.112373.

b. Economic Crises:

It has been suggested that financial shocks can influence the rates of loneliness, for example by reducing people's ability to consume and participate in social activities. 101 This effect is more prevalent among poorer households and people as they are more critically affected by financial shocks, such as inflation. Financial strain is associated with greater loneliness¹⁰² and financial strain is more pronounced in times of economic crisis. The number of unemployed people and higher federal government debt significantly affect people's psychological distress.¹⁰³ Financial losses and negative income shocks increase the levels of loneliness, as experienced during times of recession. 104

c. Health Crises:

The COVID-19 pandemic has increased the rates of loneliness in countries around the world due to physical distancing rules, increased stress and social isolation. 105 The experience has shown how health crises can have a profound impact on how people experience loneliness¹⁰⁶ and how social isolation rules lead to an increase in personal stress and loneliness. 107 Already isolated and lonely groups and individuals, 108 such as members of the LGBTQAI+ community 109 felt the isolating impact of the pandemic most strongly. Similarly, the pandemic's negative effects were felt differently depending on marital status, migration background and employment status, 110 and among young adults and women. 111 Thus, health crises like pandemics can increase the experience of loneliness, especially among populations that are already more likely to experience

¹⁰¹ Kung, Kunz, and Shields, "Economic Aspects of Loneliness in Australia."

¹⁰² Tehila Refaeli and Netta Achdut, "Financial Strain and Loneliness among Young Adults during the COVID-19 Pandemic: The Role of Psychosocial Resources," *Sustainability* 13, no. 12 (January 2021): 6942, https://doi.org/10.3390/su13126942.

103 Shuyan Liu et al., "Long-Term Impact of Economic Downturn and Loneliness on Psychological Distress: Triple Crises of COVID-

¹⁹ Pandemic," Journal of Clinical Medicine 10, no. 19 (October 6, 2021): 4596, https://doi.org/10.3390/jcm10194596.

¹⁰⁴ L. C. Hawkley, B. Zheng, and X. Song, "Negative Financial Shock Increases Loneliness in Older Adults, 2006-2016: Reduced Effect during the Great Recession (2008-2010).," *Social Science & Medicine (1982)* 255 (June 2020): 113000–113000, https://doi.org/10.1016/j.socscimed.2020.113000.

¹⁰⁵ Mostafa Saidur Rahim Khan and Yoshihiko Kadoya, "Loneliness during the COVID-19 Pandemic: A Comparison between Older and Younger People," International Journal of Environmental Research and Public Health 18, no. 15 (July 25, 2021): 7871, https://doi.org/10.3390/iierph18157871.

¹⁰⁶ Lena Dahlberg, "Loneliness during the COVID-19 Pandemic," *Aging & Mental Health* 25, no. 7 (July 3, 2021): 1161–64, https://doi.org/10.1080/13607863.2021.1875195.

¹⁰⁷ Madison Van Beek and Roger Patulny, "The Threat Is in All of Us': Perceptions of Loneliness and Divided Communities in Urban and Rural Areas during COVID-19," Journal of Community Psychology 50, no. 3 (2022): 1531-48, https://doi.org/10.1002/jcop.22732.

¹⁰⁸ Van Beek and Patulny.

¹⁰⁹ Lippke and Warner, "Understanding and Overcoming Challenges in Times of Personal or Global Crisis—Editorial on the Special Issue on Loneliness and Health.'

¹¹⁰ Hena Thakur et al., "Adolescent Loneliness during the COVID-19 Pandemic: The Role of Pre-Pandemic Risk Factors," Child Indicators Research, October 22, 2022, https://doi.org/10.1007/s12187-022-09984-8.

¹¹¹ Nora Hettich et al., "Impact of the COVID-19 Pandemic on Depression, Anxiety, Loneliness, and Satisfaction in the German General Population: A Longitudinal Analysis," Social Psychiatry and Psychiatric Epidemiology 57, no. 12 (December 1, 2022): 2481– 90, https://doi.org/10.1007/s00127-022-02311-0.

loneliness and exclusion. Additionally, the COVID-19 pandemic triggered a global economic crisis leading to a dramatic increase in inequality within and across countries, impacting disadvantaged groups and countries with low-income the most. This way, a situation of multiple crises emerged, further impacting people's experiences of exclusion, loneliness and uncertainty.

d. Natural Disaster & Climate Change:

In situations of disaster and shock, such as natural disasters, people experience an increased need for social support and higher levels of loneliness.¹¹³ The effect of natural disasters has been shown to lead to higher levels of mental health issues, including post-traumatic stress disorder, depression, suicide and anxiety.¹¹⁴ The effects of natural disasters, such as forced displacement and the destruction of one's home, can lead to additional experiences of loneliness.¹¹⁵ Climate change influences loneliness in general as higher climate anxiety has been shown to increase the level of loneliness a person experiences.¹¹⁶ Reducing loneliness can also enable people to adapt to climate change.¹¹⁷

Technology & Social Media:

What is the role (both positive and negative) of technology, social media and social networks when it comes to loneliness? While many technology-based solutions could help sustain social connections amid crises and over long distances, are the contacts are then more superficial and less meaningful?¹¹⁸ Research suggests that high-frequent use of social media could be associated with poorer mental and psychosocial health as well as higher rates of loneliness.¹¹⁹ However, these effects appear to differ between different age groups. Young people tend to experience social media in a more negative and isolating way, while among older adults social media use seems to reduce loneliness.¹²⁰

¹¹² World Bank, *World Development Report 2022: Finance for an Equitable Recovery* (The World Bank, 2022), https://doi.org/10.1596/978-1-4648-1730-4.

¹¹³ Lippke and Warner, "Understanding and Overcoming Challenges in Times of Personal or Global Crisis—Editorial on the Special Issue on Loneliness and Health."

Marianne Hrabok, Aaron Delorme, and Vincent I. O. Agyapong, "Threats to Mental Health and Well-Being Associated with Climate Change," *Journal of Anxiety Disorders* 76 (December 1, 2020): 102295, https://doi.org/10.1016/j.janxdis.2020.102295.
 Ballard, Coughlin, and Martin, "Reconciling with Minoaywin."

André Hajek and Hans-Helmut König, "Climate Anxiety, Loneliness and Perceived Social Isolation," *International Journal of Environmental Research and Public Health* 19, no. 22 (November 14, 2022): 14991, https://doi.org/10.3390/ijerph192214991.
 Hrabok, Delorme, and Agyapong, "Threats to Mental Health and Well-Being Associated with Climate Change."

¹¹⁸ Ortiz-Ospina and Roser, "Loneliness and Social Connections."

¹¹⁹ Amy Østertun Geirdal et al., "Mental Health, Quality of Life, Wellbeing, Loneliness and Use of Social Media in a Time of Social Distancing during the COVID-19 Outbreak. A Cross-Country Comparative Study," *Journal of Mental Health* 30, no. 2 (March 4, 2021): 148–55, https://doi.org/10.1080/09638237.2021.1875413.

¹²⁰ Tore Bonsaksen et al., "Loneliness and Its Association With Social Media Use During the COVID-19 Outbreak," *Social Media + Society* 7, no. 3 (July 1, 2021): 20563051211033820, https://doi.org/10.1177/20563051211033821.

Studies show that technology-based solutions, such as robots and computer agents, can help combat loneliness, particularly among Older People by enabling direct companionship and social interactions¹²¹ and among caregivers and parents.¹²² Additionally, solutions like smart homes can help detect and predict loneliness and social isolation, and could therefore play a role in loneliness prevention and identification.¹²³ However, current solutions provide mixed results, with some technology-based interventions leading to only limited results or even reversed impacts.¹²⁴

Additionally, access to technology-based solutions is unequal due to the global digital divide that leaves 2.9 billion people lacking access and abilities to make use of technologies and online offerings. This lack of access is much more pronounced among groups that are being excluded and marginalised within societies. For example, women in the Global South have significantly lower technology participation rates, and more generally, the digital divide is based on gender disparities. Additional factors that impact people's access to digital resources and technology are education, income, and generational status, showing how the digital divide is most pronounced among those who are also more likely to experience loneliness. 127

Communities:

There is an increase in loneliness in cases where communities were destroyed or forcibly relocated, for example, due to a natural disaster. Thus, community relocation and dissolution can leave its members socially vulnerable unless relocation measures also take into account the communities' cultural roots and foster community activities and resilience. Additionally, the forced relocation of community members, into public housing for example, is associated with a loss of social capital in such communities, showing how communal ties within deprived

121 Norina Gasteiger et al., "Friends from the Future: A Scoping Review of Research into Robots and Computer Agents to Combat Loneliness in Older People," *Clinical Interventions in Aging* Volume 16 (May 2021): 941–71, https://doi.org/10.2147/CIA.S282709. 122 Melissa L. Bessaha et al., "A Systematic Review of Loneliness Interventions Among Non-Elderly Adults," *Clinical Social Work Journal* 48, no. 1 (March 1, 2020): 110–25, https://doi.org/10.1007/s10615-019-00724-0.

¹²³ Rita Latikka et al., "Older Adults' Loneliness, Social Isolation, and Physical Information and Communication Technology in the Era of Ambient Assisted Living: A Systematic Literature Review," *Journal of Medical Internet Research* 23, no. 12 (December 30, 2021): e28022, https://doi.org/10.2196/28022.

¹²⁴ Barbara Barbosa Neves, Jenny Waycott, and Alexia Maddox, "When Technologies Are Not Enough: The Challenges of Digital Interventions to Address Loneliness in Later Life," *Sociological Research Online*, August 24, 2021, 13607804211029298, https://doi.org/10.1177/13607804211029298.

¹²⁵ Vaishali Rastogi, "This Is How to Counter the Global Digital Divide," World Economic Forum, May 29, 2022, https://www.weforum.org/agenda/2022/05/how-to-counter-the-global-digital-divide/.

¹²⁶ Amy Antonio and David Tuffley, "The Gender Digital Divide in Developing Countries," *Future Internet* 6, no. 4 (December 2014): 673–87, https://doi.org/10.3390/fi6040673.

¹²⁷ Mei Lan Fang et al., "Exploring Privilege in the Digital Divide: Implications for Theory, Policy, and Practice," *The Gerontologist* 59, no. 1 (January 9, 2019): e1–15, https://doi.org/10.1093/geront/gny037.

¹²⁸ Morris, "Communicide."

¹²⁹ Pei-Shan Lin and Wei-Cheng Lin, "Rebuilding Relocated Tribal Communities Better via Culture: Livelihood and Social Resilience for Disaster Risk Reduction," *Sustainability* 12, no. 11 (June 3, 2020): 4538, https://doi.org/10.3390/su12114538.

communities can be important sources of social capital, agency and change.¹³⁰ Similarly, in areas that experience depopulation, communities are also said to experience a loss of social capital and resilience.¹³¹

The maintenance and creation of strong social bonds and community belonging could help fight loneliness, ¹³² with positive family interaction and general social support being shown to alleviate loneliness. ¹³³ Furthermore, community-based solutions for people with mental health issues experiencing loneliness have shown to be successful in alleviating loneliness. ¹³⁴ Additionally, culturally specific and community-based interventions against loneliness are shown to be more successful, for example among indigenous communities experiencing loneliness due to forced displacement where traditional procedures for healing and reconciliation helped reduce loneliness in the community. ¹³⁵ The experience of loneliness is closely linked to a person's sense of belonging to a community or being positioned as an outsider. ¹³⁶ Thus, interventions and projects that are tailored towards those parts of a community perceived to be outsiders could be particularly helpful. For example, providing spaces where members of socially excluded communities could come together and connect with like-minded people was shown to help isolated and lonely young adults an opportunity to connect and build social bonds. ¹³⁷

¹³⁰ Susan Greenbaum, "Poverty and the Willful Destruction of Social Capital: Displacement and Dispossession in African American Communities," *Rethinking Marxism*, September 26, 2008, https://doi.org/10.1080/08935690701739956.

¹³¹ Shannon Elizabeth Bell, "'There Ain't No Bond in Town Like There Used to Be': The Destruction of Social Capital in the West Virginia Coalfields1," *Sociological Forum* 24, no. 3 (2009): 631–57, https://doi.org/10.1111/j.1573-7861.2009.01123.x.

¹³² Kelly Beaver, "Loneliness on the Increase Worldwide, but an Increase in Local Community Support," Ipsos, February 3, 2021, https://www.ipsos.com/en/loneliness-increase-worldwide-increase-local-community-support.

María Montero-López Lena, Diego Luna-Bazaldúa, and Laura Ann Shneidman, "Loneliness in the Elderly in Mexico, Challenges to the Public Policies," *The Journal of Chinese Sociology* 6, no. 1 (July 30, 2019): 16, https://doi.org/10.1186/s40711-019-0106-0.
 Bessaha et al., "A Systematic Review of Loneliness Interventions Among Non-Elderly Adults."

¹³⁵ Ballard, Coughlin, and Martin, "Reconciling with Minoaywin."

¹³⁶ Batsleer and Duggan, Young and Lonely.

¹³⁷ Batsleer and Duggan.