

How Loneliness affects the elderly

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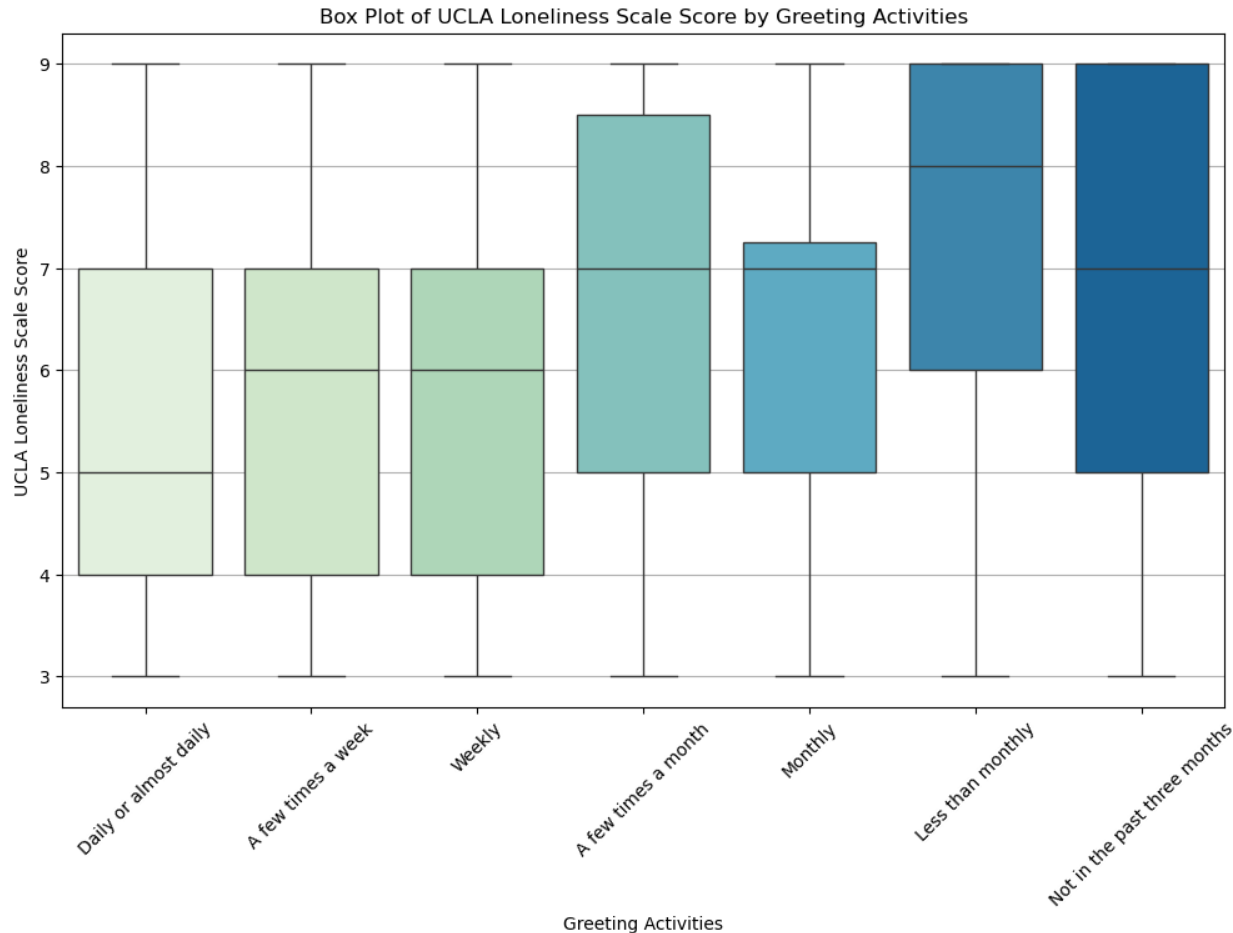
Correlation between Social Interactions and Loneliness



The Loneliness Epidemic is real

- Loneliness increases the risk of premature death by 26%, the risk of heart disease by 29%, and the risk of stroke by 32%. (Thomas S.P., 2024)
- Produces a diminished sense of community and loosens bonds that help people find a shared sense of direction on many issues such as poverty, health, food security, violence, and racial conflict that plague society. (Williams & Braun, 2019)
- Social connectedness protects adults in the general population from depressive symptoms and disorders (Wickramaratne et al., 2022)

Variables and parameters in use



- Dependent variables:

UCLA Loneliness Scale Score is loneliness measured that ranges from 3-9, 9 being you feel extremely lonely

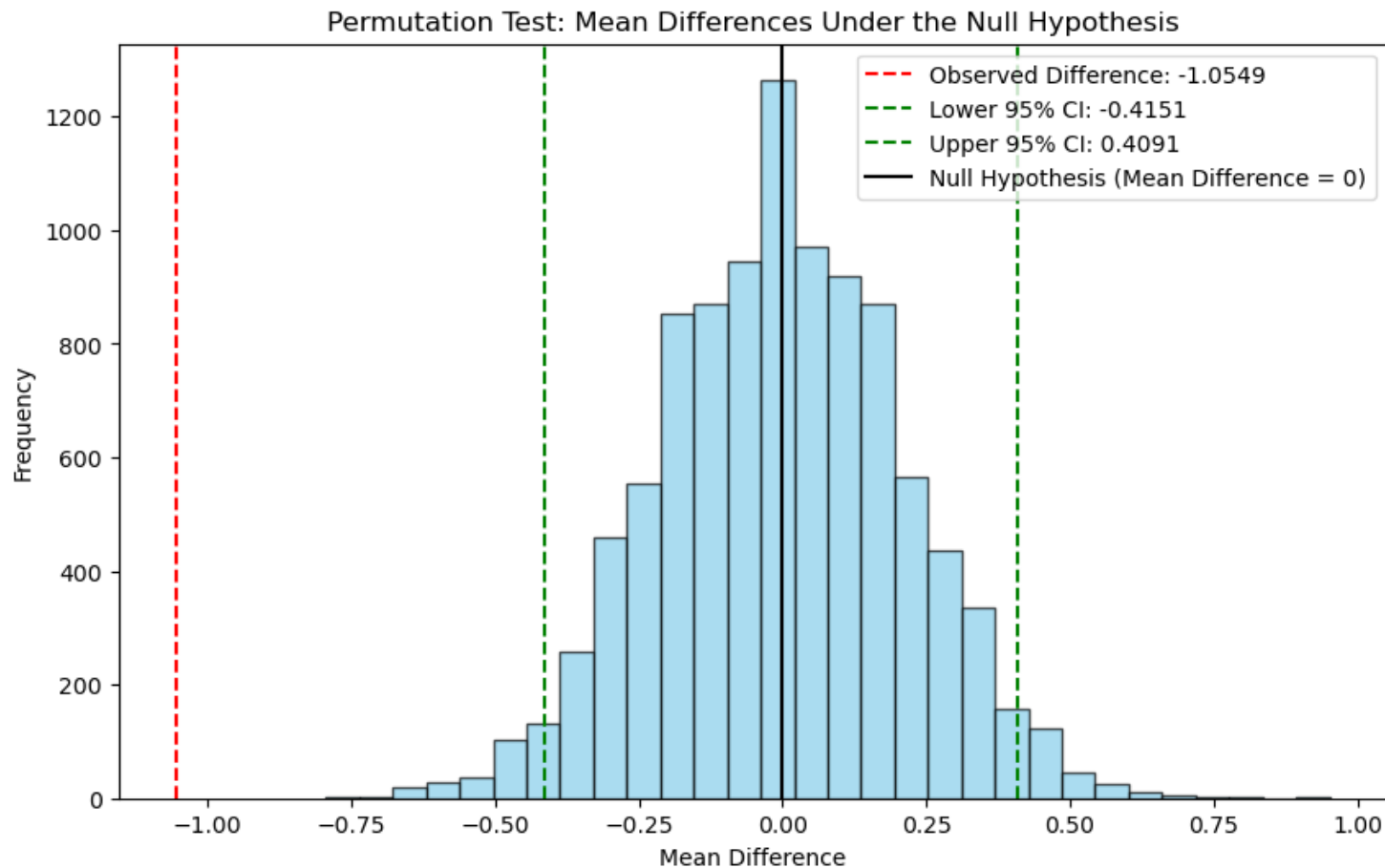
- Independent variables:

Greeting Activities is a categorical variables of how frequently individuals greeted strangers or neighbours in the past 3 months

Age is the individual's age in years



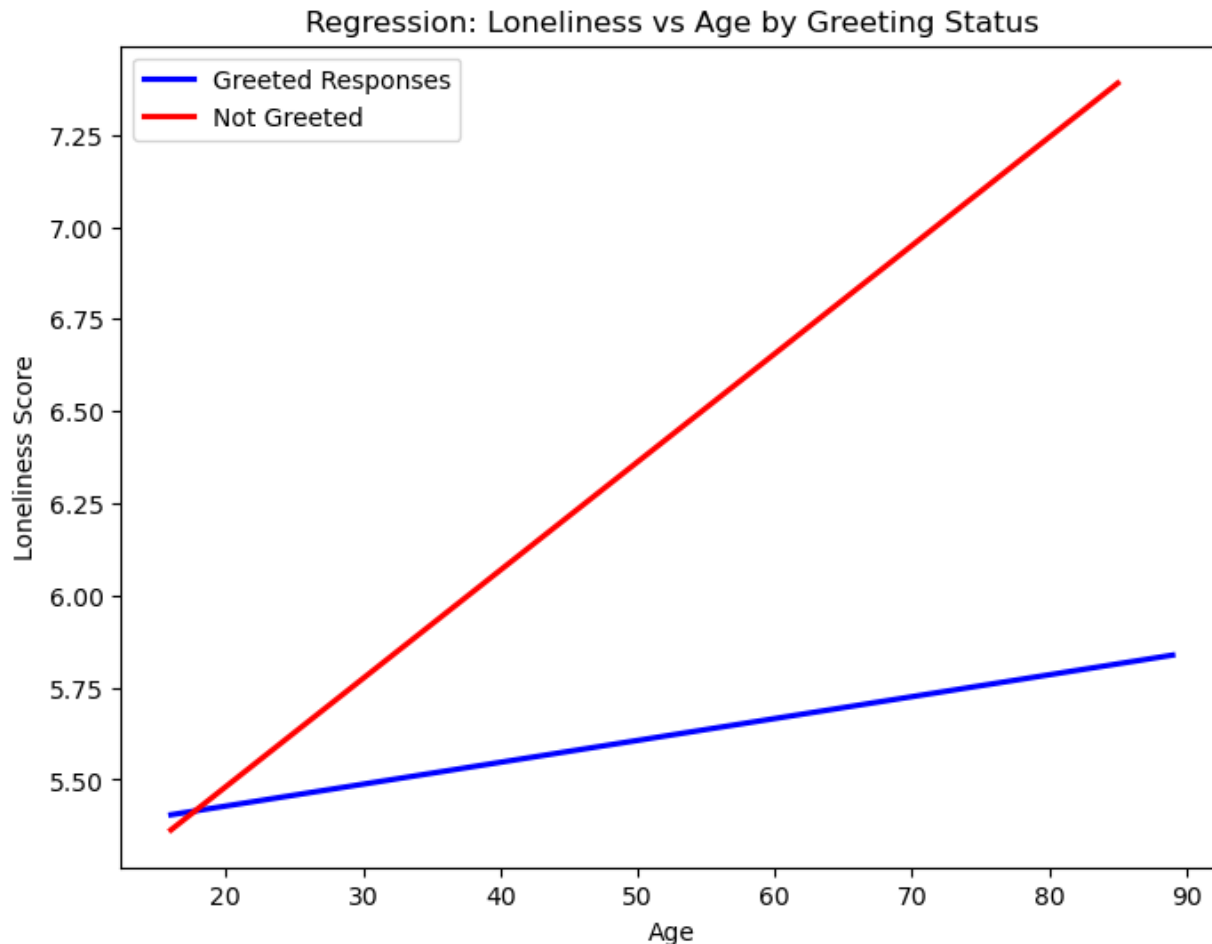
Significant association between social interactions(greeting) and loneliness levels



Observed mean difference: **-1.0549**
P-value from permutation test: **0.0000**
Reject the null hypothesis: There is a significant association between greeting activities and loneliness scores.



Loneliness increases with age especially when people don't interact socially



| | Coefficient | P value |
|-------------------|-------------|---------|
| Intercept | 5.3094 | 0.000 |
| Not greeted | -0.4160 | 0.126 |
| Age | 0.0059 | 0.002 |
| Age – Not greeted | 0.0234 | 0.001 |

R-squared 0.014

Positive value on the interaction between age and the 'Not Greeted' group suggests that as age increases loneliness **increases more** for people who don't frequently interact socially

Conclusion

- Frequent family visits is positively associated with mental health, especially during personally challenging periods.
- Increased social interaction frequency, such as greeting neighbors or strangers, is linked to reduced loneliness.
- Frequent social interactions with family and friends significantly reduce feelings of isolation.

All three analyses performed has shown a general trend supporting the notion that more frequent social interactions has a positive impact on mental health and well-being.



Reference:

- Thomas, S. P. (2024). The loneliness epidemic and its health consequences. *Issues in Mental Health Nursing*, 45(1), 1–2. <https://doi.org/10.1080/01612840.2024.2302786>
- Williams, S. E., & Braun, B. (2019). Loneliness and Social Isolation—A private problem, a public issue. *Journal of Family & Consumer Sciences*, 111(1), 7–14. <https://doi.org/10.14307/jfcs111.1.7>
- Wickramaratne PJ, Yangchen T, Lepow L, Patra BG, Glicksburg B, Talati A, Adekkanattu P, Ryu E, Biernacka JM, Charney A, Mann JJ, Pathak J, Olfson M, Weissman MM. Social connectedness as a determinant of mental health: A scoping review. PLoS One. 2022 Oct 13;17(10):e0275004. doi: 10.1371/journal.pone.0275004. Erratum in: PLoS One. 2024 Nov 15;19(11):e0314220. doi: 10.1371/journal.pone.0314220. PMID: 36228007; PMCID: PMC9560615.
- National Institute on Aging. (2019, April 23). *Social isolation, loneliness in older people pose health risks*. U.S. Department of Health and Human Services. <https://www.nia.nih.gov/news/social-isolation-loneliness-older-people-pose-health-risks>



Special Thanks to our TA, Amanda Ng,
Professor. Scott and most importantly, Dr.
Kiffer Card and Christine Ovcaric!!!

THANK YOU!