

## Loneliness & Social Isolation

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### Social Isolation

- Reduced Social Networks (Seeman, 1996)
- Degree of social integration (e.g. amount of contact, living alone, socially excluded)
- Distressing state for most
- Solitude – A non-distressing aloneness that may include self-discovery, happiness, rest a relaxation.

### Social Isolation and Loneliness

- Social isolation increases the risk of loneliness
- The relationship is weaker in older populations ( $r_s = .20$  to  $.30s$ )
- The relationship is stronger in young population ( $r_s .50$ )
- Younger people value quantity of relationships over quality (Carmichael et al., 2015)
  
- Food Example: When you are hungry, you look for food. However, everyone has varying nutritional needs. Just because someone has access to food, does not mean that they will feel satisfied or become any healthier. Some people do not need a lot of food to feel satisfied. Same can be said in terms of loneliness. A socially isolated person may not feel lonely and a person who is socially connected may still feel lonely.

## Loneliness and biology

- Loneliness activates the Hypothalamo- Pituitary- Adrenocortical (HPA) Axis) which increases cortisol levels in the body.
- Reduces white matter structures
- Candidate Genes

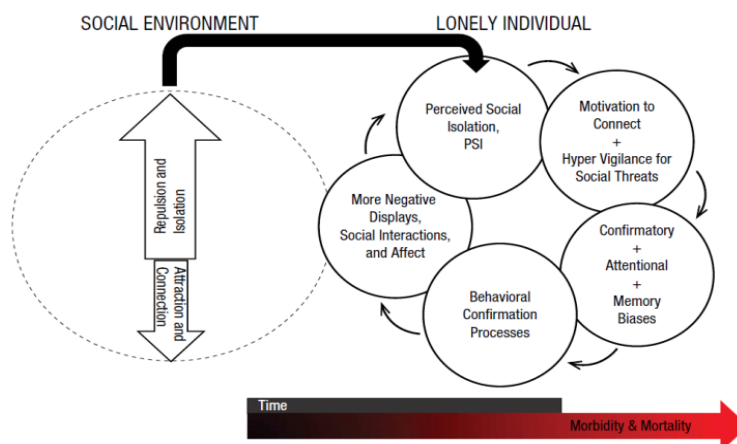
Seeman (2000); Caspi, Harrington, Moffitt, Milne, & Poulton (2006); Hawkley, Thisted, Masi & Cacioppo (2010); Hawkley & Cacioppo (2010); Cacioppo, Capitano, & Cacioppo (2014)

## Loneliness and health

- Loneliness is associated with a 26% increased likelihood of mortality and morbidity.
- a) Poorer cardiovascular health
- b) Reduced immunity responses
- c) Reduced physical activity
- d) Higher risk of developing Alzheimer’s Disease
- e) Poorer sleep quality

Cacioppo et al. (2002); Hawkley et al. (2003); Holt-Lunstad et al. (2016); Luo et al (2012); Wilson et al. (2007); Lim, Rodebaugh, Zyphur, & Gleeson (2016)

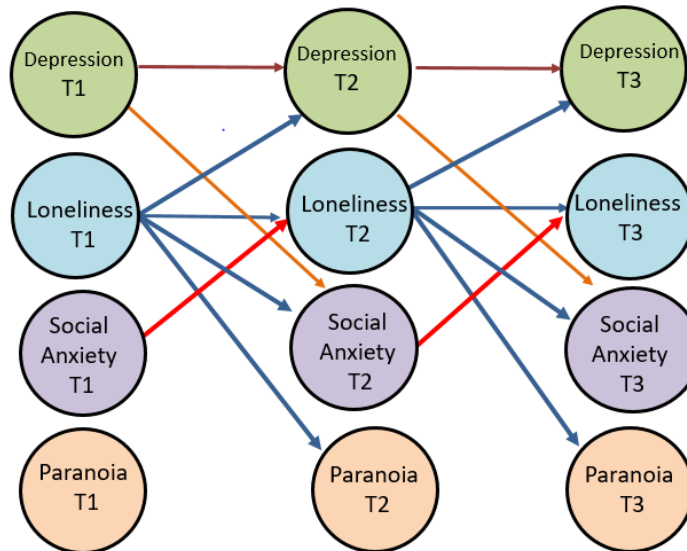
## A model of loneliness



The effects of loneliness on social cognition - Cacioppo et al. (2015)

## Loneliness & mental health

- Loneliness has links to depression, social anxiety and paranoia



- Note: SL refers to state loneliness; SSA refers to state social anxiety; SDEP refers to state depression and SPA refers to state paranoia. Specific time points are indicated by numbers after SL, SSA, SDEP and SPA; 1 = Time 1, 2 = Time 2, 3 = Time 3. Adapted and modified from "Loneliness Over Time" by M.H Lim, T.L.R. Rodebaugh, M.J. Zyphur, & J.F.M Gleeson, *Journal of Abnormal Psychology*, 125, 2016, 620-630.

## Australian Loneliness Report summary

- Included 1678 Australians aged 18-85
- Loneliness affected on in four Australians
- Those with loneliness had poorer psychological health (increase in depression and social anxiety)
- 15.2% increase in risk of developing depression
- 13.1% increase in risk of developing social anxiety
- Australians were shown to regularly speak to friends and family
- Australians were less likely to speak to neighbours
  - a) A third of Australians had no neighbours they heard from on a monthly basis
  - b) 47 % had no neighbours they could call for help

- Australian Loneliness Report (2018)  
<https://researchbank.swinburne.edu.au/items/c1d9cd16-ddbe-417f-bbc4-3d499e95bdec/1/>

## Loneliness is a threat to physical, psychological and community wellbeing

### Targeted solutions

- Reducing loneliness by targeting the individual, their relationships, the community and society

#### What is effective?

- Cognitive- behavioural approach + safe social opportunities – changing views and addressing negative beliefs formed about others
- Strengths-based approach
  - Encourages hope, agency and control
  - Focus on interpersonal relationships – gratitude, building intimacy via active constructive, positive body language, showing positive affect and kindness

### Where to from here?

- Health, social, education, workplace policies and urban planning
- Develop, evaluate and roll out evidence-based solutions – appropriate for current service delivery models
- Using technology to facilitate not inhibit the development of meaningful social relationships

### Peer Tree

- A positive Psychology intervention delivered by smartphone application
- Able to be personalised, monitor mood, offer video based material, and offer a moderated chat forum
- Targeted at 16-25 year olds for a period duration of 10-12 weeks.

## References

- Cacioppo, S., Capitanio, J., & Cacioppo, J. (2014). Toward a neurology of loneliness. *Psychological Bulletin*, *140*, 1464-1504. doi: 10.1037/a0037618
- Cacioppo, J., Hawkley, L., Crawford, L., Ernst, J., Burleson, M., Kowalewski, R., ... Berntson, G. (2002). Loneliness and health: potential mechanisms. *Psychosomatic Medicine*, *64*(3), 407-417
- Cacioppo, S., Grippo, A. J., London, S., Goossens, L., & Cacioppo, J. T. (2015). Loneliness: clinical import and interventions. *Perspectives on psychological science: a journal of the Association for Psychological Science*, *10*, 238–249. doi:10.1177/1745691615570616
- Carmichael, C., Reis, H., & Duberstein, P. (2015). In your 20's it's quantity, in your 30's it's quality: The prognostic value of social activity across 30 years of adulthood. *Psychology and Aging*, *30*, 95-105. doi: 10.1037/pag0000014
- Caspi, A., Harrington, H., Moffitt, T., Milne, B., & Poulton, R. (2006). Socially Isolated Children 20 Years Later. *Archives Of Pediatrics & Adolescent Medicine*, *160*, 805. doi: 10.1001/archpedi.160.8.805
- Gable, S., Reis, H., Impett, E., & Asher, E. (2004). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. *Journal Of Personality And Social Psychology*, *87*, 228-245. doi: 10.1037/0022-3514.87.2.228
- Hawkley, L., & Cacioppo, J. (2010). Loneliness matters: a theoretical and empirical review of consequences and mechanisms. *Annals of Behavioral Medicine*, *40*, 218-227. doi: 10.1007/s12160-010-9210-8
- Hawkley, L., Burleson, M., Berntson, G., & Cacioppo, J. (2003). Loneliness in everyday life: Cardiovascular activity, psychosocial context, and health behaviors. *Journal Of Personality And Social Psychology*, *85*, 105-120. doi: 10.1037/0022-3514.85.1.105
- Hawkley, L., Thisted, R., Masi, C., & Cacioppo, J. (2010). Loneliness predicts increased blood pressure: 5-year cross-lagged analyses in middle-aged

- and older adults. *Psychology And Aging*, 25, 132-141. doi: 10.1037/a0017805
- Holt-Lunstad, J., & Smith, T. (2016). Loneliness and social isolation as risk factors for CVD: implications for evidence-based patient care and scientific inquiry. *Heart*, 102, 987-989. doi: 10.1136/heartjnl-2015-309242
- Lim, M. (2018). *Australian loneliness report: a survey exploring the loneliness levels of Australians and the impact on their health and wellbeing*. Retrieved from <https://psychweek.org.au/wp/wp-content/uploads/2018/11/Psychology-Week-2018-Australian-Loneliness-Report.pdf>
- Lim, M., Rodebaugh, T., Zyphur, M., & Gleeson, J. (2016). Loneliness over time: The crucial role of social anxiety. *Journal Of Abnormal Psychology*, 125, 620-630. doi: 10.1037/abn0000162
- Luo, Y., Hawkey, L., Waite, L., & Cacioppo, J. (2012). Loneliness, health, and mortality in old age: A national longitudinal study. *Social Science & Medicine*, 74, 907-914. doi: 10.1016/j.socscimed.2011.11.028
- Masi, C. M., Chen, H.-Y., Hawkey, L. C., & Cacioppo, J. T. (2011). A meta-analysis of interventions to reduce loneliness. *Personality and Social Psychology Review*, 15, 219–266. doi: 10.1177/1088868310377394
- Meyer, P., Johnson, D., Parks, A., Iwanski, C., Penn, D. (2012). Positive living: A pilot study of group positive psychotherapy for people with schizophrenia. *The journal of positive psychology* 7, 239-248. doi:10.1080/17439760.2012.677467
- Seeman, T. (2000). Health promoting effects of friends and family on health outcomes in older adults. *American Journal of Health Promotion*, 14, 362-370. doi: 10.4278/0890-1171-14.6.362
- Seeman, T. (1996). Social ties and health: The benefits of social integration. *Annals of Epidemiology*, 6, 442-451. doi:10.1016/s1047-2797(96)00095-6
- Sin, N., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: a practice-

friendly meta-analysis. *Journal of Clinical Psychology*, 65, 467-487. doi: 10.1002/jclp.20593

Victor, C., & Yang, K. (2012). The prevalence of loneliness among adults: a case study of the United Kingdom. *The Journal of Psychology*, 146, 85-104. doi: 10.1080/00223980.2011.613875

Wilson, R., Krueger, K., Arnold, S., Schneider, J., Kelly, J., Barnes, L., Tang, Y., & Bennet, D. (2007). Loneliness and risk of Alzheimer's disease. *Archives of General Psychiatry*, 64 (2), 234-240.

Wood, A. M., Froh, J. J., & Geraghty, A. W. A. (2010). Gratitude and well-being: A review and theoretical integration. *Clinical Psychology Review*, 30, 890-905.