

# Survey of Health and Wellbeing – Monitoring the Impact of COVID-19

Lead Institution: Iverson Health Innovation Research Institute

Contact: [shaw@swin.edu.au](mailto:shaw@swin.edu.au)





Dr Michelle Lim, Prof Gavin Lambert, Ms Lily  
Thurston, Ms Taylah Argent, Dr Robert Eres  
Swinburne University of Technology



Prof Pamela Qualter, Dr Margarita Panayiotou, Dr Alexandra  
Hennessey  
University of Manchester



Prof Johanna Badcock  
University of Western Australia



Prof Julianne Holt-Lunstad  
Brigham Young University

# Brief background and study aim

- One in four Australians (12-89) report problematic levels of loneliness in two national Australian surveys run in 2018 and 2019<sup>1 2</sup>.
- In the UK, in 2018, the Office of National Statistics reported comparable high levels of loneliness at a population level<sup>3</sup>.
- COVID-19 pandemic has further magnified social and economic vulnerabilities in our community. Public health measures taken to flatten the curve is likely to increase loneliness, social isolation, poor mental health, and lower quality of life.
- The overall study aim is to understand the impact of the COVID-19 pandemic on relationships, health, and quality of life.

1 Australian Loneliness Report (2018) Australian Psychological Society

2 Young Australian Loneliness Survey (2019) VicHealth

3 Office for National Statistics (2018)

# What do we measure?

## Part 1 – Who is the individual?

- Age, gender, nationality, work status, income, household and carer status, education and income level, and postcode.

## Part 2 – How do they feel, live, and relate to others?

- Mental health – depression and social anxiety.
- Relationships – loneliness, social isolation risk, perceived social support.
- Stress, positive and negative affect, coping styles.
- Quality of life.

## Part 3 – How has COVID-19 impacted the individual?

- Assessing level of social restrictions at time of survey.
- Measuring changes to loneliness, social isolation risk, worry, work status, social media use, health status.

# Study design

Prospective cohort study involving 3 surveys over a 6-month period:



- Ethics approval from the Swinburne Human Research Ethics Committee HREC 20200728-4307.
- Recruitment activities commenced via social media channels and partners.
- Data collection currently occurring via internet-based survey.
- 2,666 participants consented to date.

# Wave 1 details

- Wave 1 data collection from April 3rd to June 18th 2020.
- Wave 1 findings are intended to display cross-sectional trends only.
- Data analysis is ongoing. Additional analyses are required to fully understand the impact of COVID-19 on loneliness, social contact, mental health, and physical health.
- Not all data measured are presented in this summary.
- No causal claims can be made at this stage of data collection.
- While findings are global, we conduct subgroup analyses for residents living in Australia, United Kingdom, and the United States.

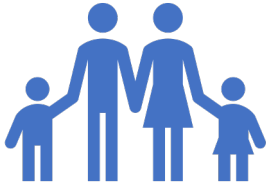
# Take Home Messages



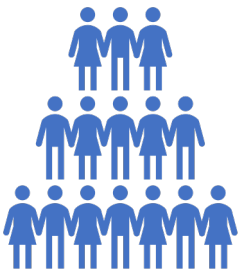
# Wave 1 Summary Findings



**Loneliness** was associated with more mental health symptoms, less social contact, and more physical health concerns.



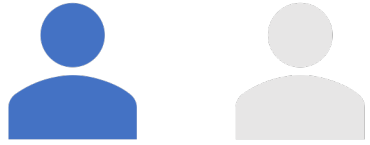
**Living with family** during COVID-19 seems to be most beneficial for protecting against feelings of loneliness, depression, social anxiety, and stress.



**Social contact** was similar across all ages and countries, with respondents having the least contact with their neighbours.



# Wave 1 Summary Findings



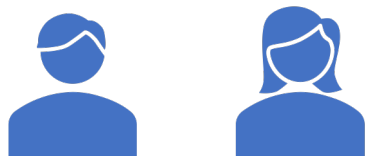
**1 in 2 Australians** report feeling more lonely since COVID-19.



**2 in 3 American/British** residents report feeling more lonely since COVID-19.



Those who **reported feeling more lonely because of COVID-19** also reported more mental health concerns.



**Young adults** report more loneliness, depression, anxiety, and stress than other adults.

# Sample Characteristics

Number of participants, age, gender, education level, marital status, carer status, parental status

# Sample characteristics

## Participants

2,666

Australia: 701

Britain: 483

United States: 378

## Average Age

47.31 Years

Range:

18 to 101 years

## Gender Identity

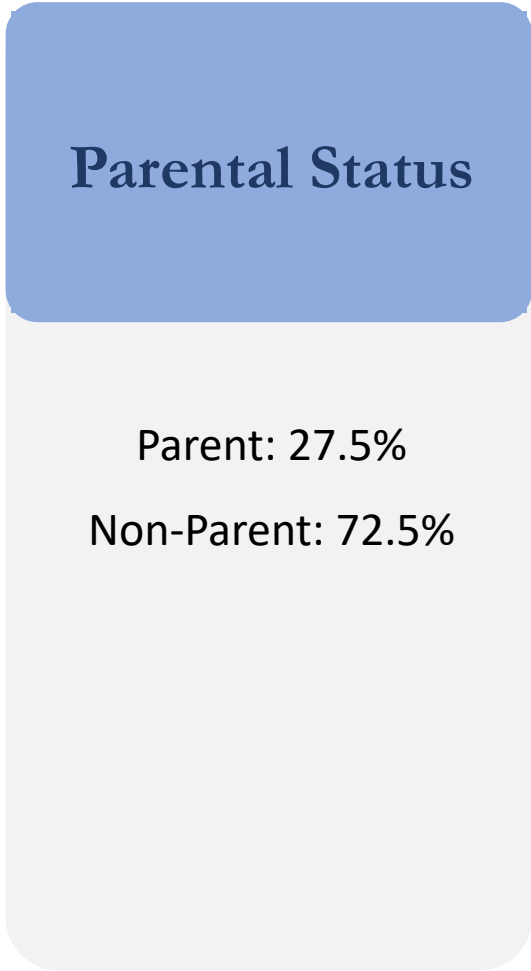
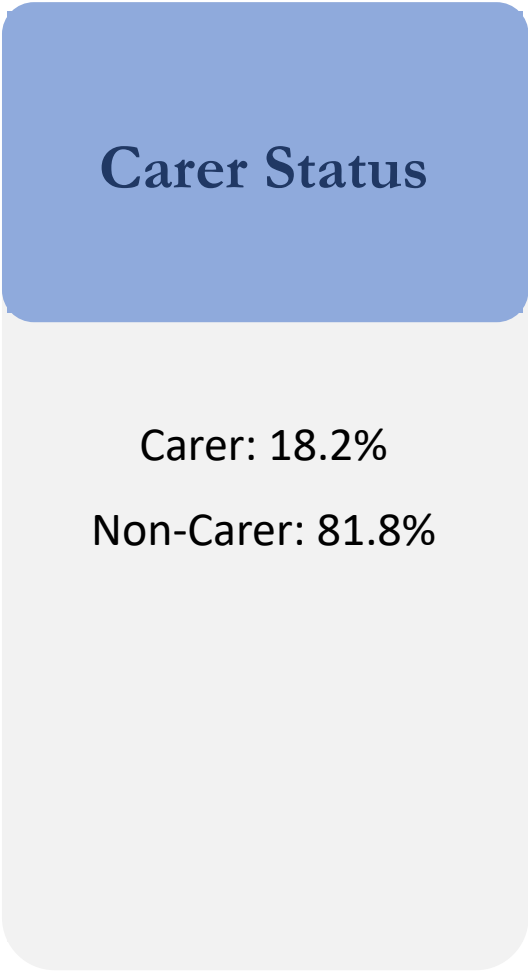
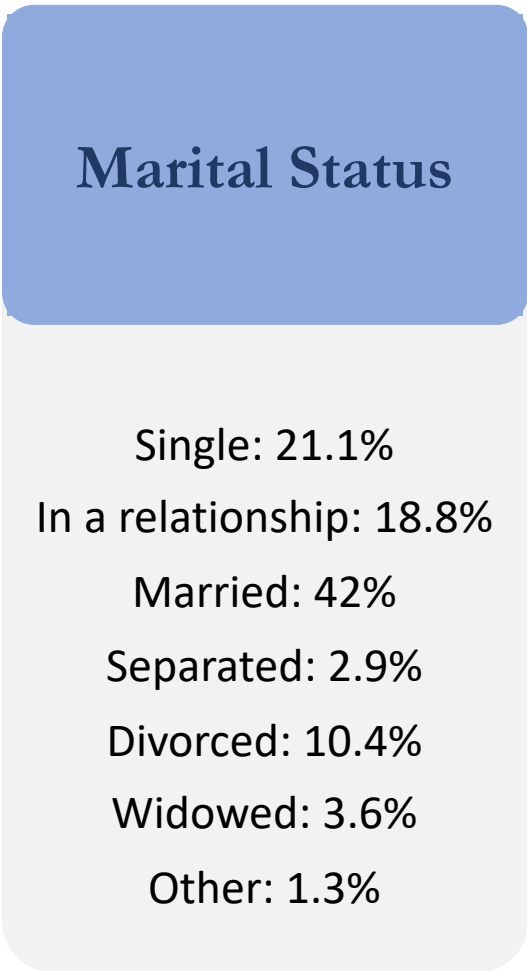
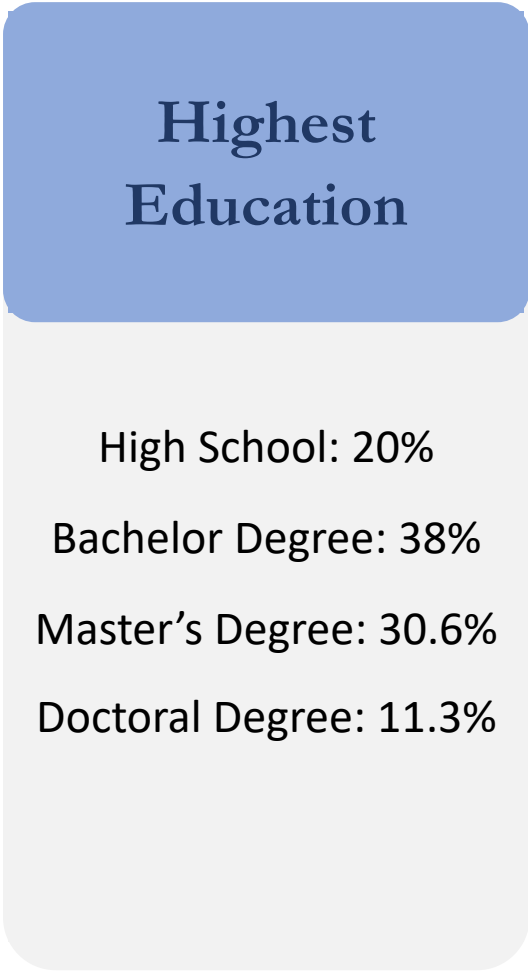
Male: 16.7%

Female: 81.4%

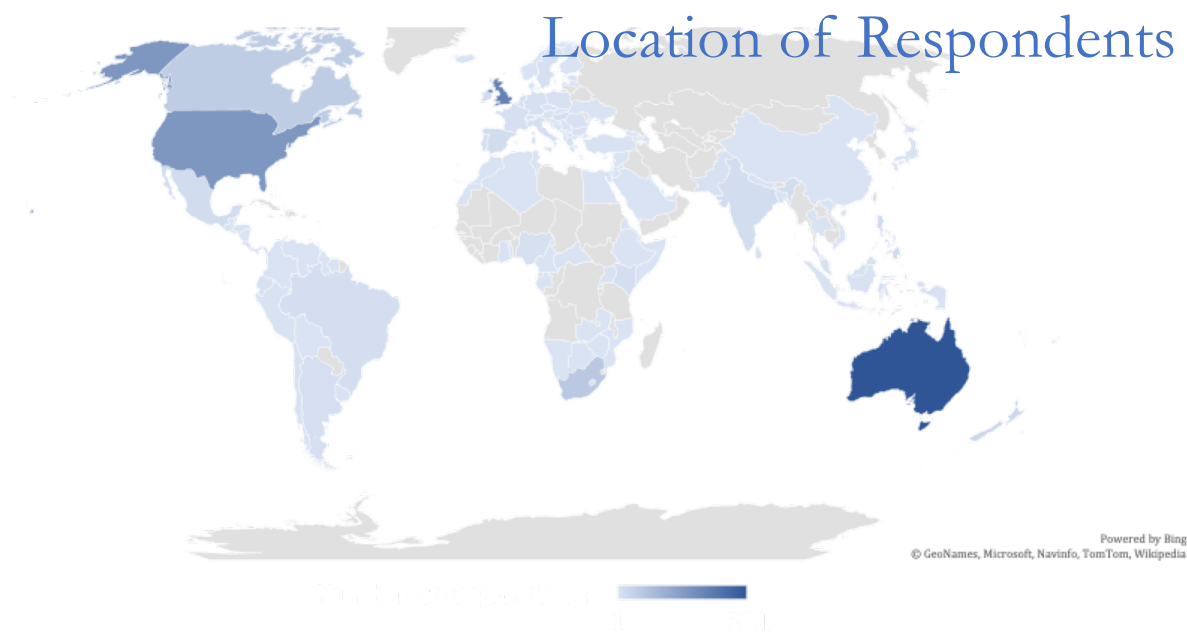
Other\*: 2%

*\*Other includes people who identified as non-binary, agender, gender fluid, or transgender without additional detail of their preferred gender profile*

# Sample characteristics



# Who has participated?



NUMBER OF RESPONDENTS

1

701

# Loneliness & Social Contact

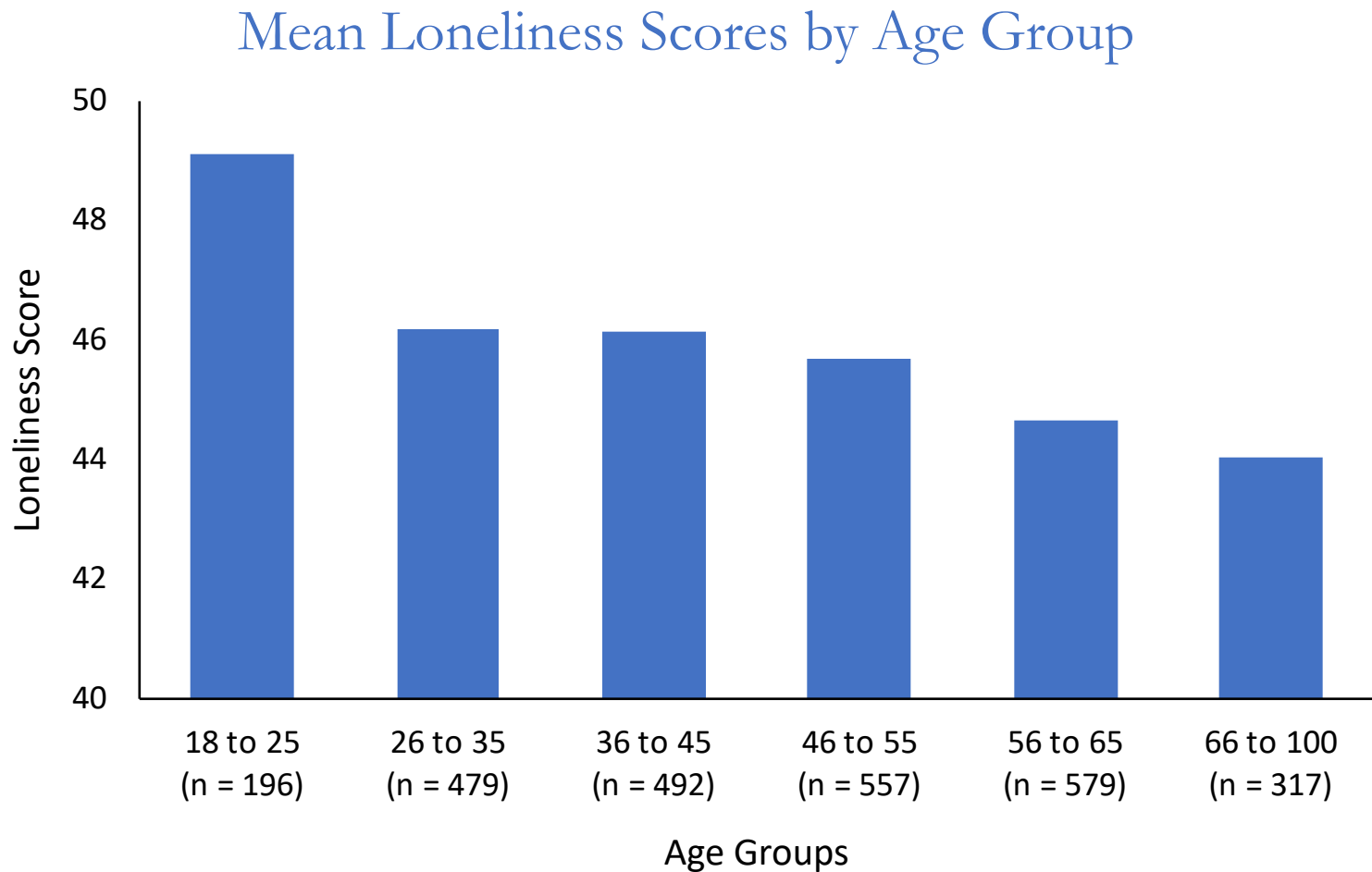
Loneliness – *UCLA-LS; UCLA loneliness scale*

Social contact – *LSNS; Lubben social network scale*

# Loneliness during COVID-19

Over 1 in 6 people reported problematic levels of loneliness (17.34%).

Young adults aged 18-25 years reported the highest levels of loneliness compared with other age groups.

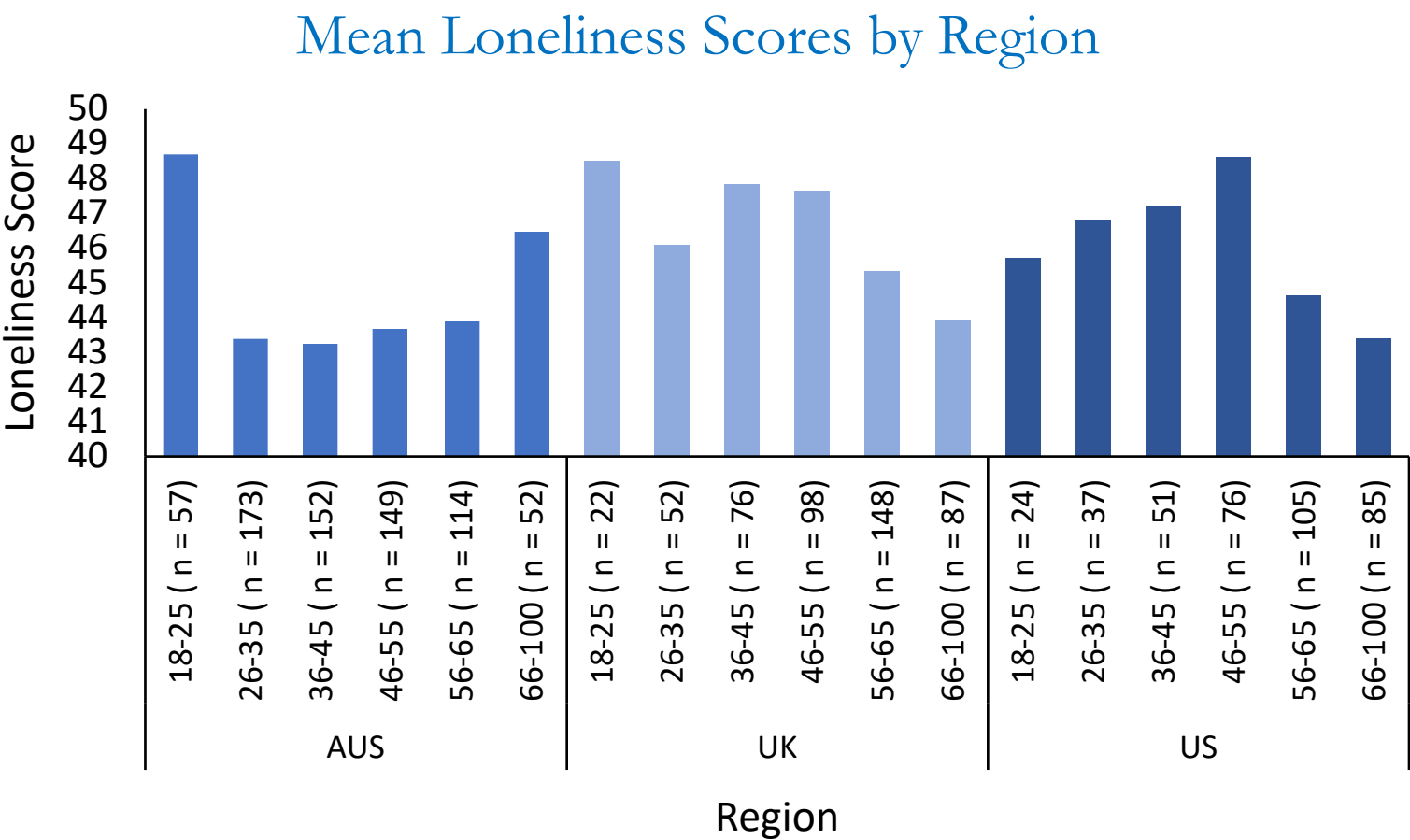


*Note: Problematic levels of loneliness were calculated based on 1 standard deviation above the mean. Higher scores indicate more loneliness*



# Loneliness during COVID-19

Loneliness appears to be differentially represented across age groups within each region.



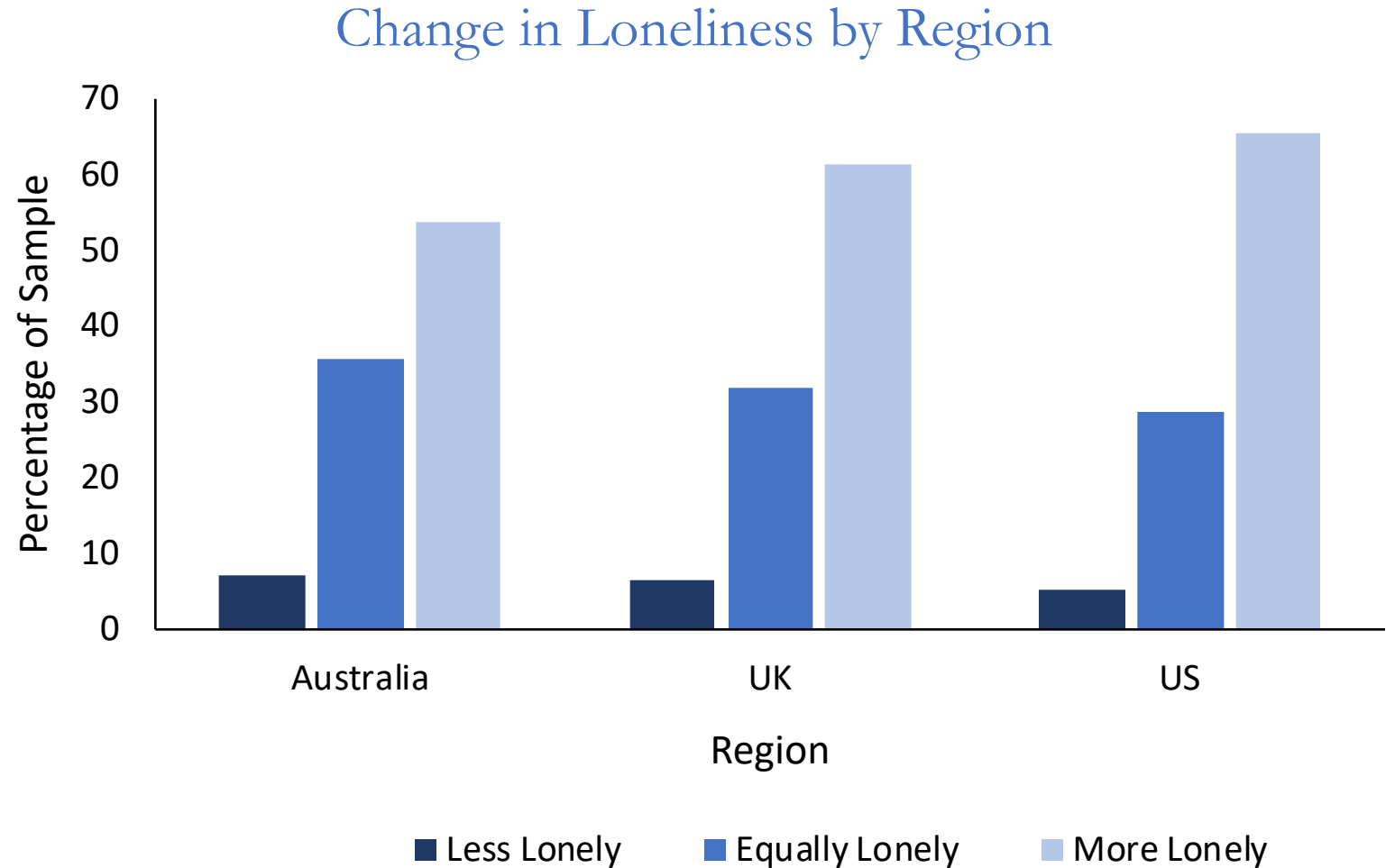
*Note: There are discrepant numbers of participants in each age group within each region. These findings should be taken with caution and only tentative conclusion can be made*

# Loneliness during COVID-19

1 in 2 Australian residents reported feeling lonelier since COVID-19 (54%).

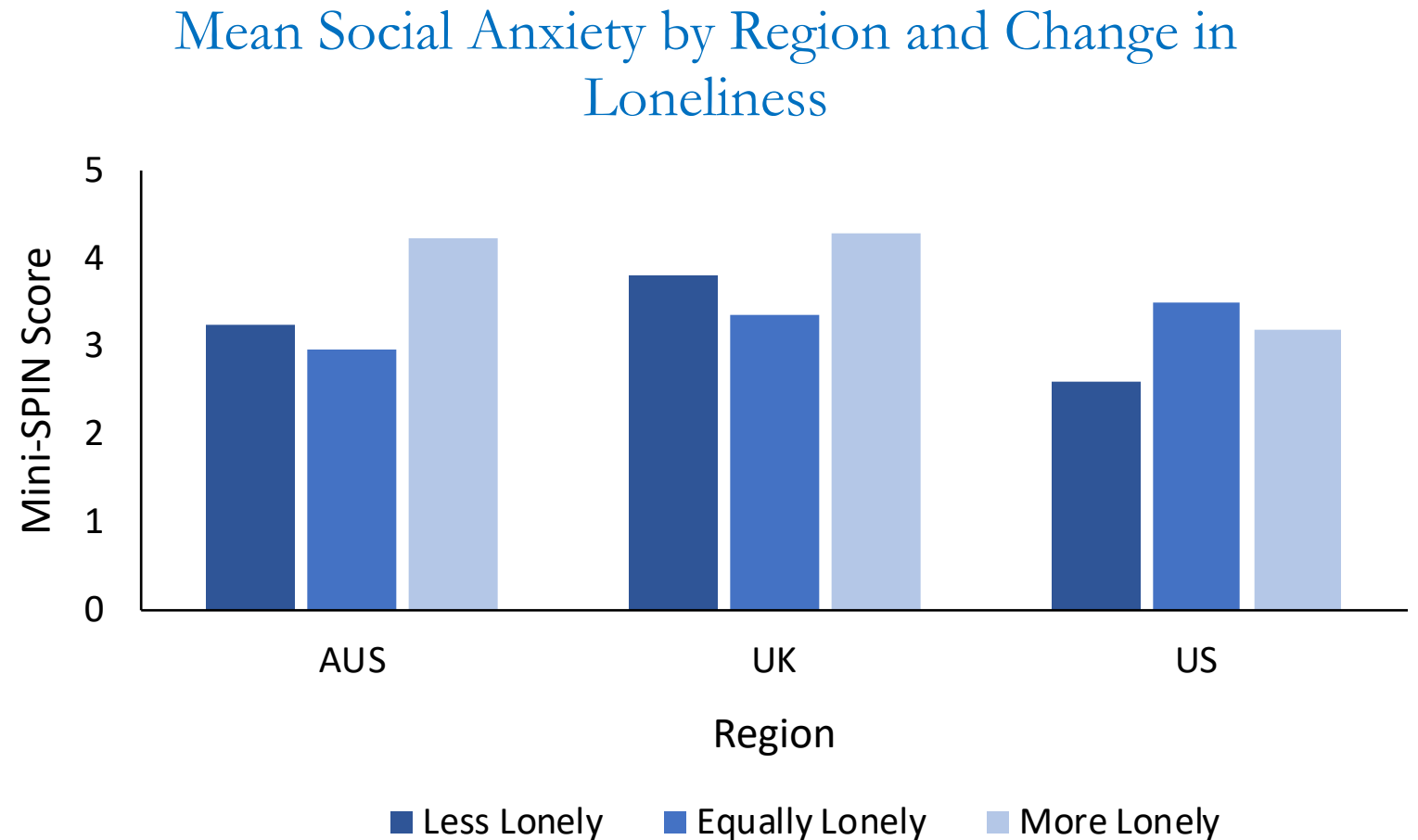
2 in 3 British residents reported feeling lonelier since COVID-19 (61%).

2 in 3 American residents reported feeling lonelier since COVID-19 (66%).



# Loneliness during COVID-19

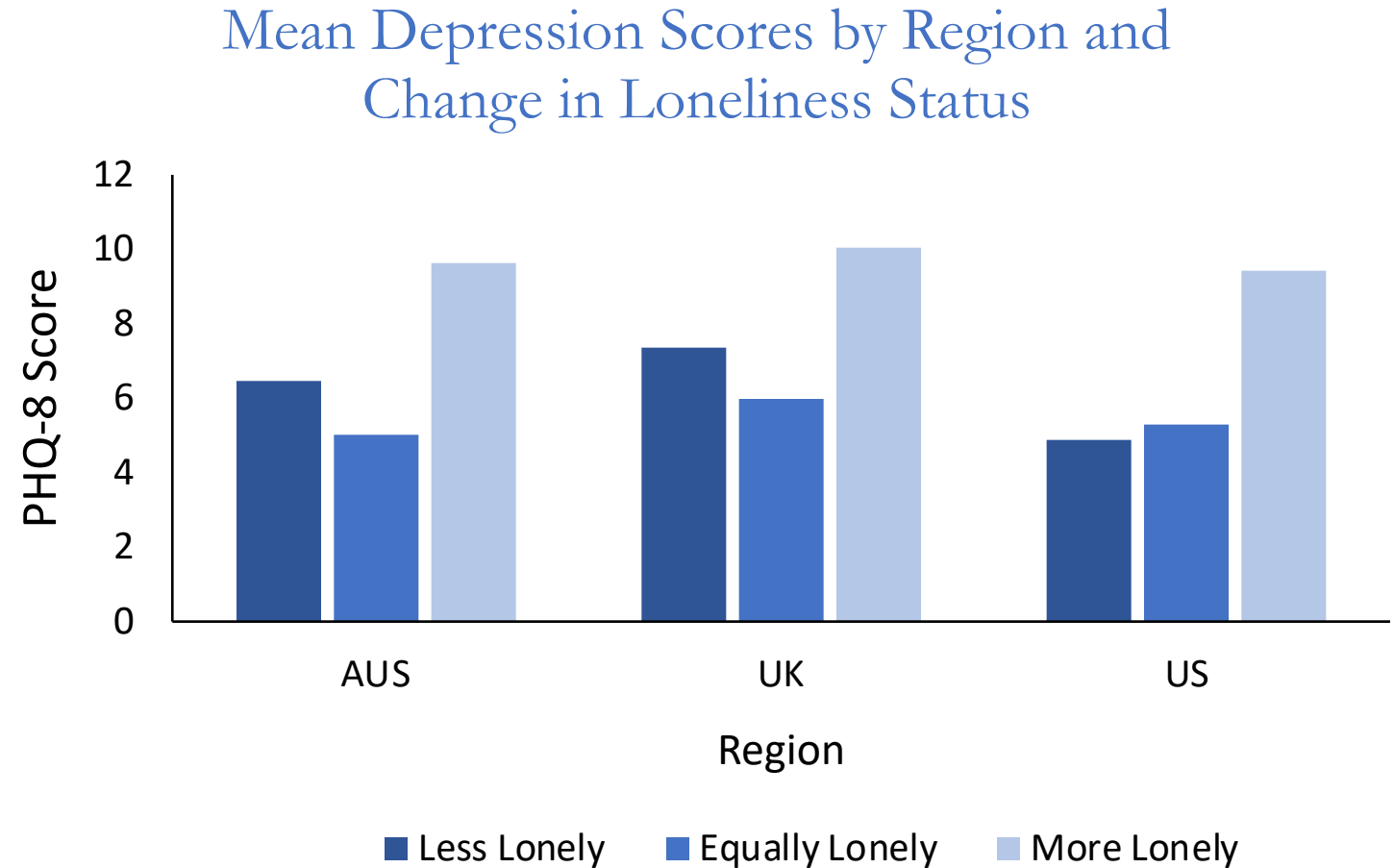
Those who reported feeling more lonely since the start of the pandemic also reported higher social anxiety.



*Note: A score of 6 on the Mini-SPIN is indicative of problematic social anxiety (Connor et al. 2001)*

# Loneliness during COVID-19

Those who reported feeling more lonely since the start of the pandemic also reported more depression.

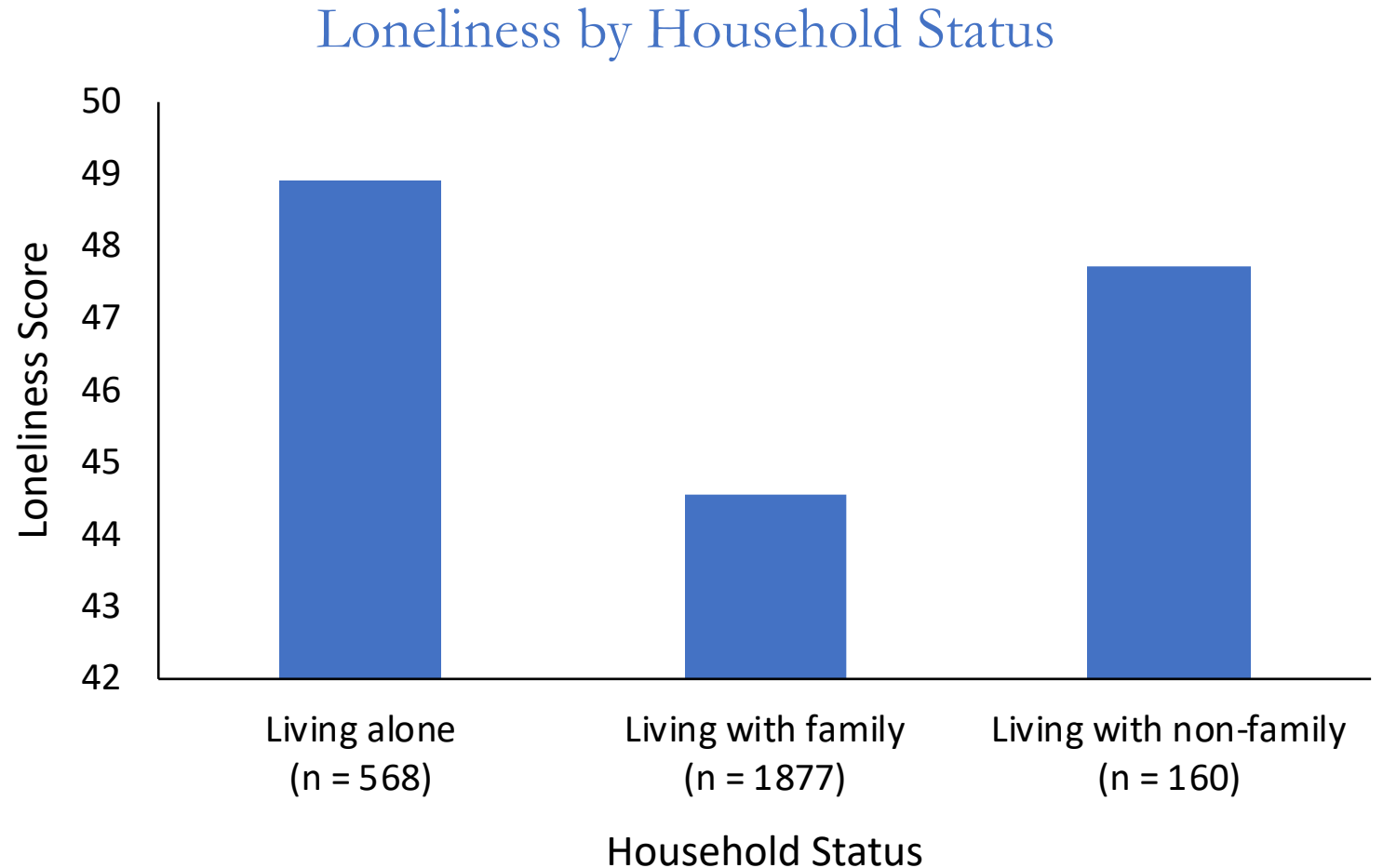


*Note: A score of 10 on the PHQ-8 is indicative of problematic levels of depression (Kroenke et al., 2009)*

# Loneliness by household status

Most respondents (72.5%) lived with family during the pandemic and reported the lowest level of loneliness.

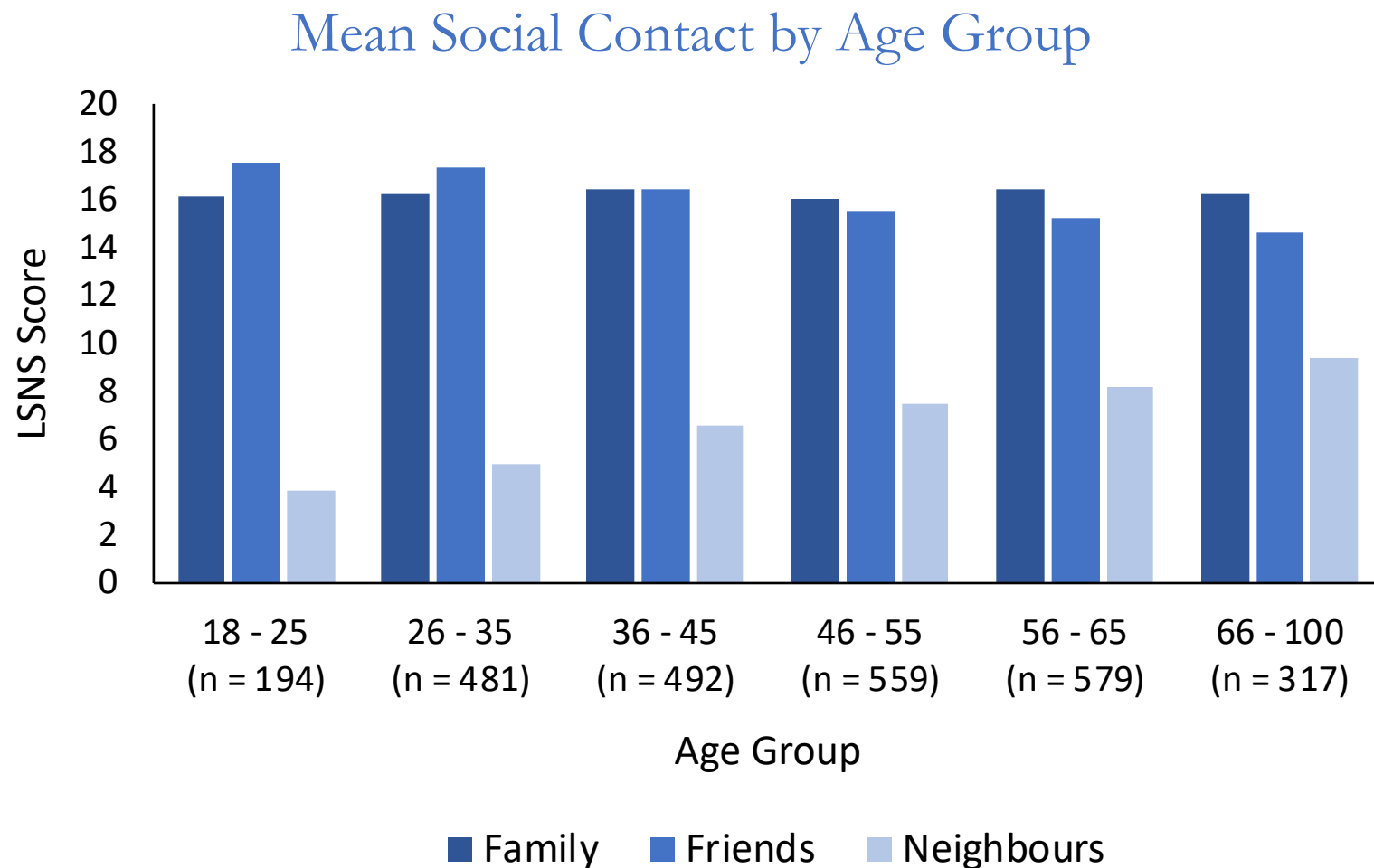
People living alone reported the highest level of loneliness.



# Social contact during COVID-19

Social contact was similar across all age groups.

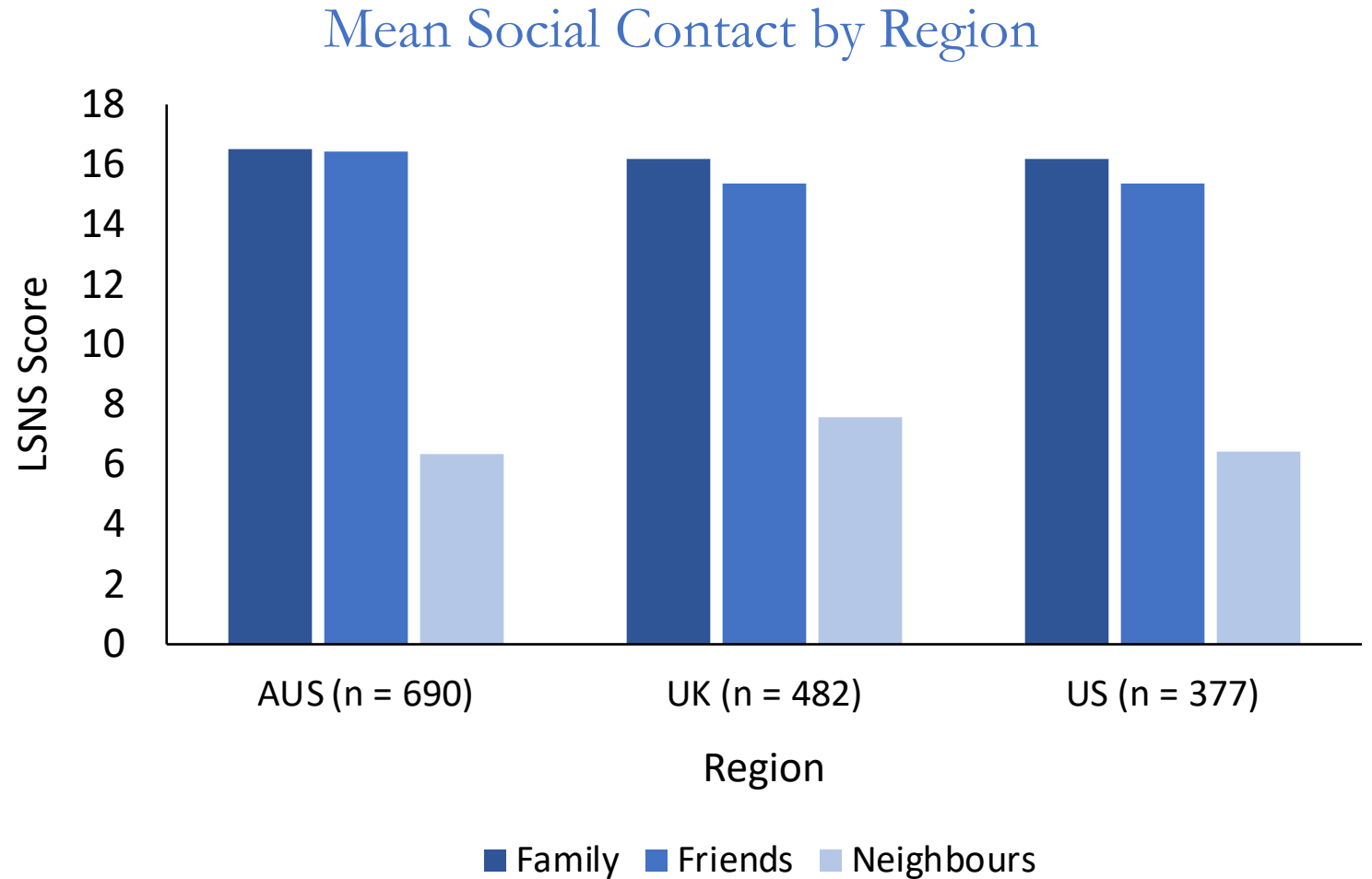
Contact with neighbours was consistently low across all age groups.



# Social contact during COVID-19

Social contact was similar across all three regions.

Social contact with neighbours was consistently low.





# Mental Health

Depression – *PHQ-9; Patient health questionnaire - only 8 items administered*

Social Anxiety – *Mini SPIN; Mini-social phobia inventory*

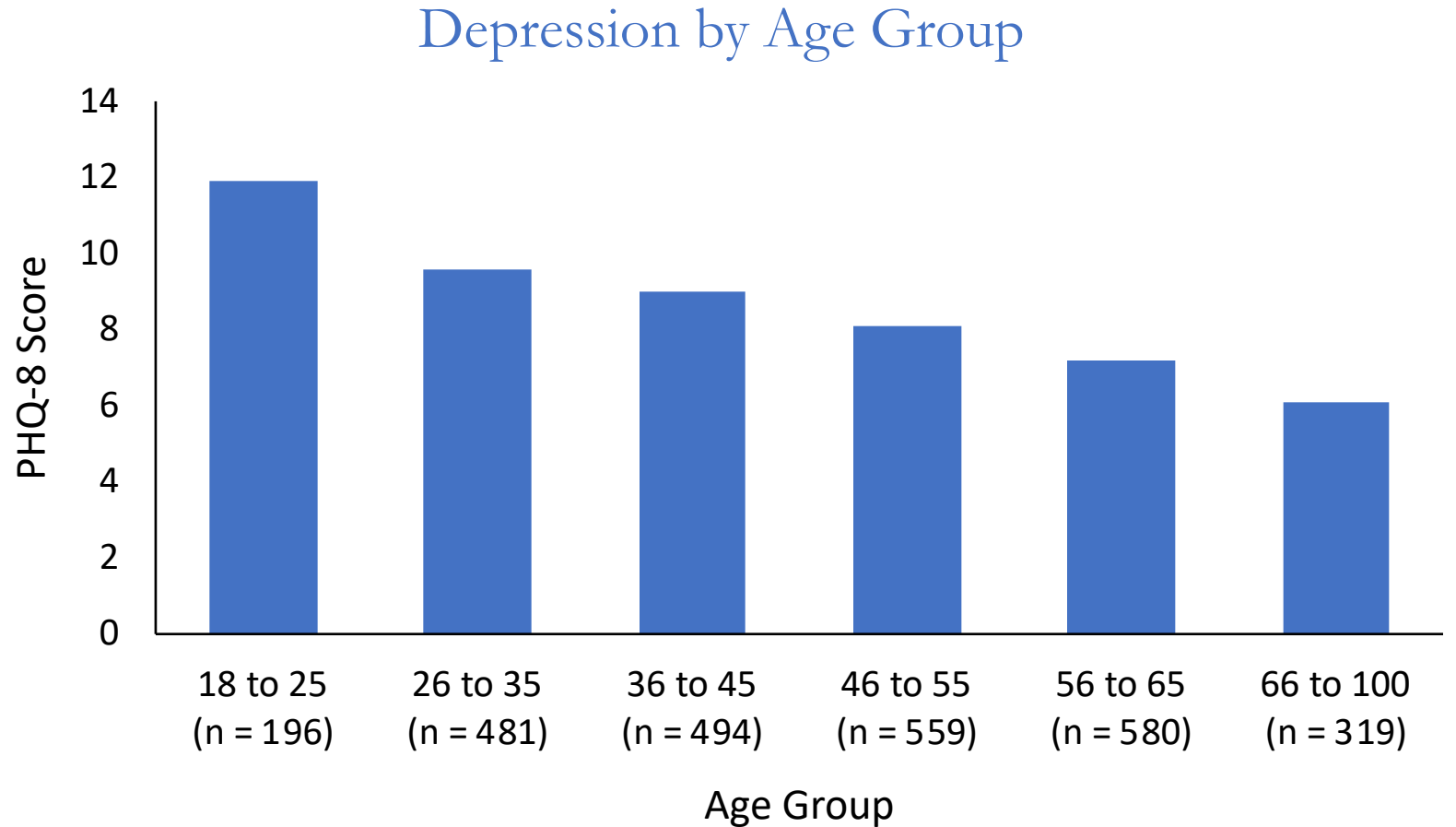
Perceived Stress – *PSS; Perceived stress scale*

Quality of Life – *EUROHIS; European health interview survey*

# Depression across age during COVID-19

Approximately 1 in 3 people (36.1%) reported problematic levels of depression.

Young adults (18-25 years) report the highest levels of depression.

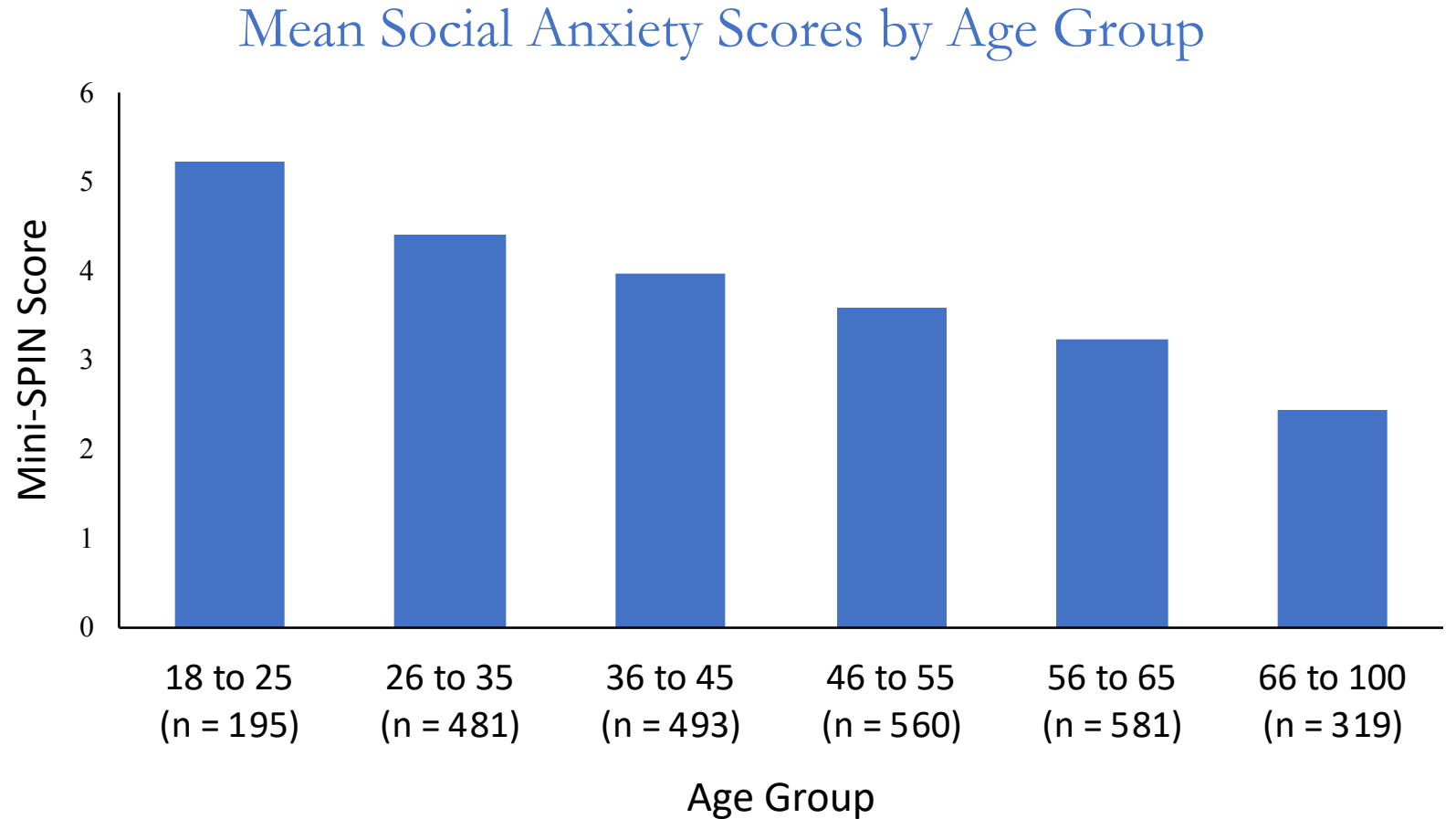


*Note: A score of 10 on the PHQ-8 is indicative of problematic levels of depression (Kroenke et al., 2009)*

# Social anxiety across age during COVID-19

Approximately 1 in 4 people (28.4%) reported problematic levels of social anxiety.

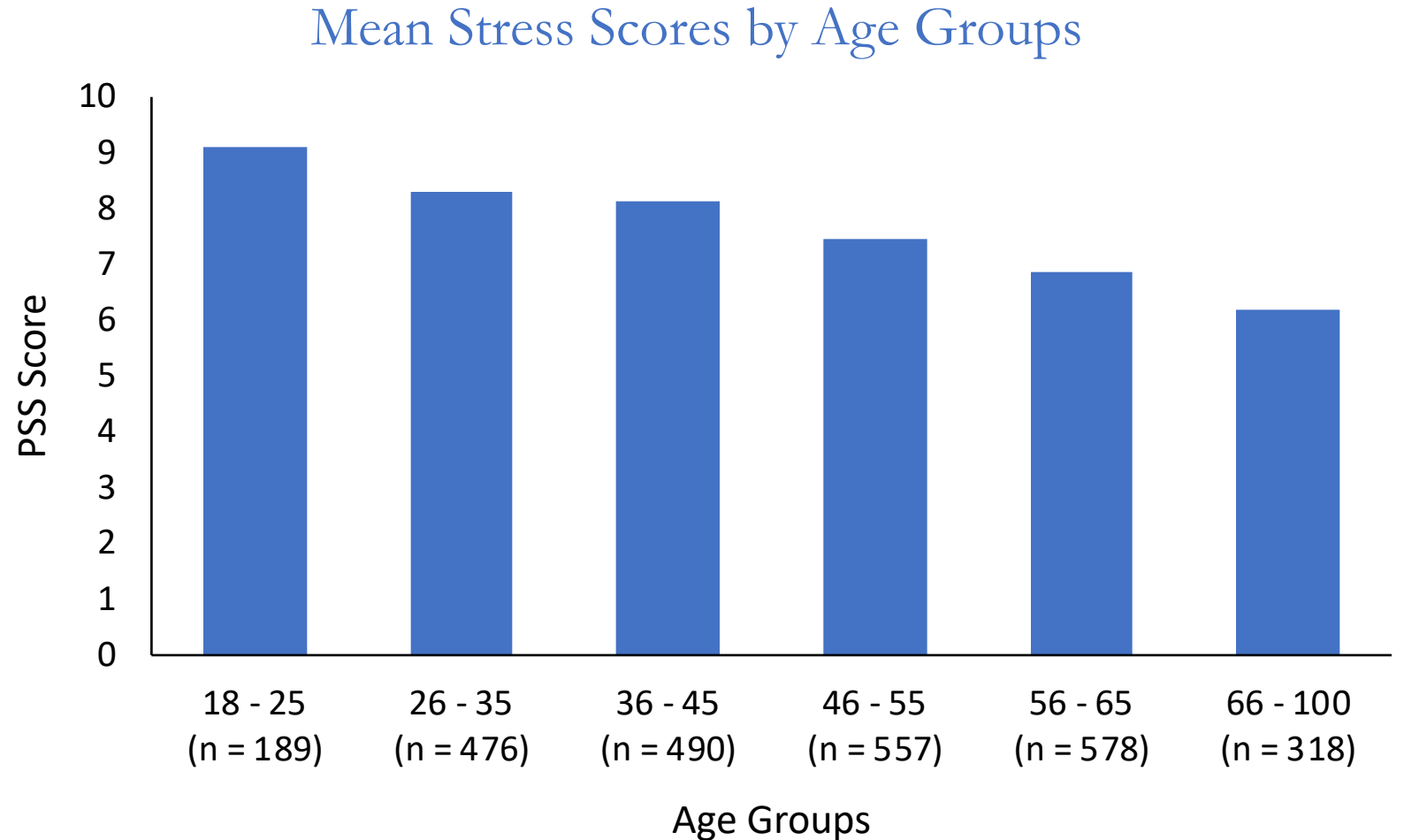
Young adults (18-25 years) reported the highest levels of social anxiety.



*Note: A score of 6 on the Mini-SPIN is indicative of problematic levels of social anxiety (Connor et al. 2001)*

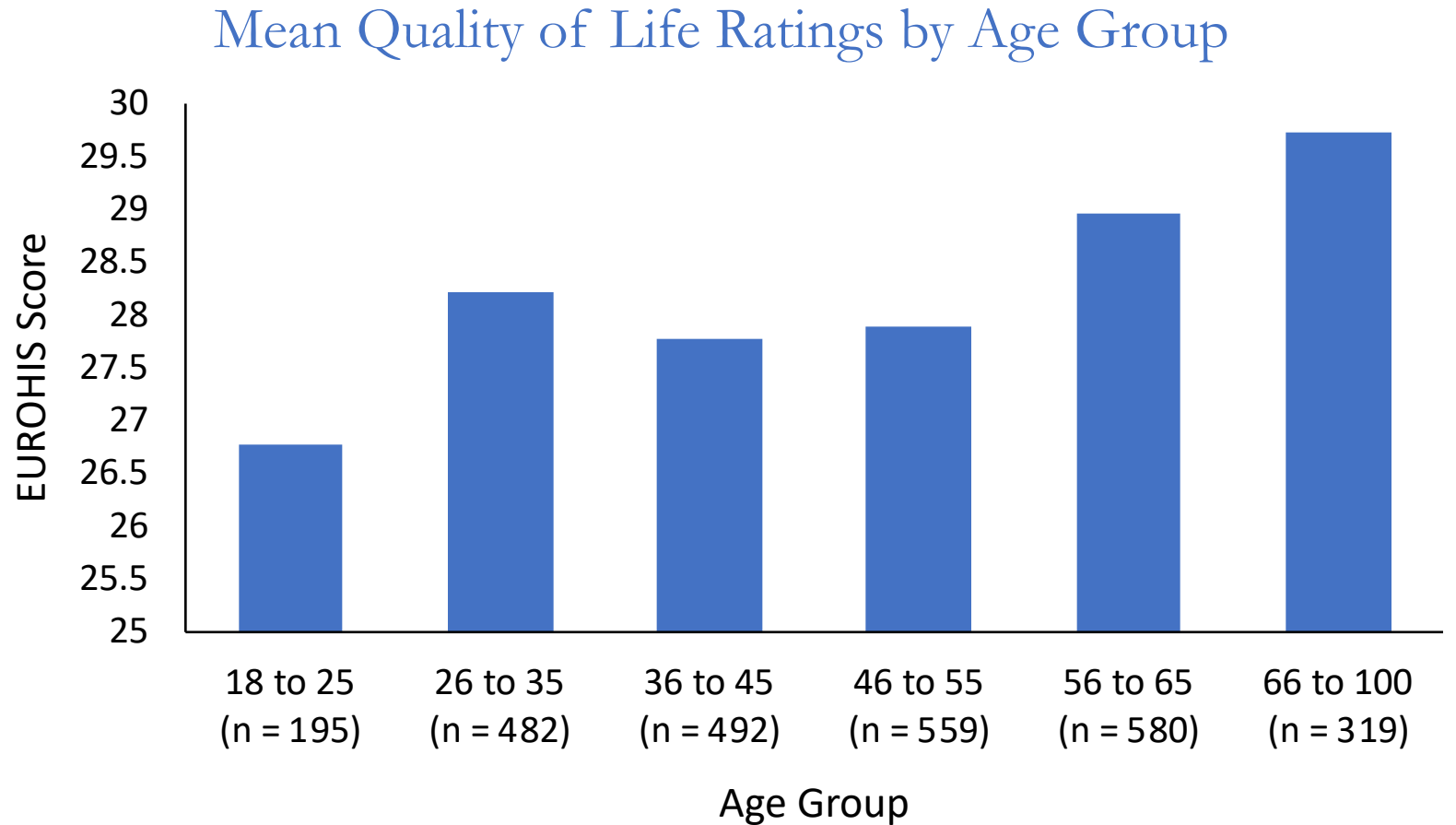
# Perceived stress across age during COVID-19

Young adults reported the highest levels of stress.



# Quality of life across age during COVID-19

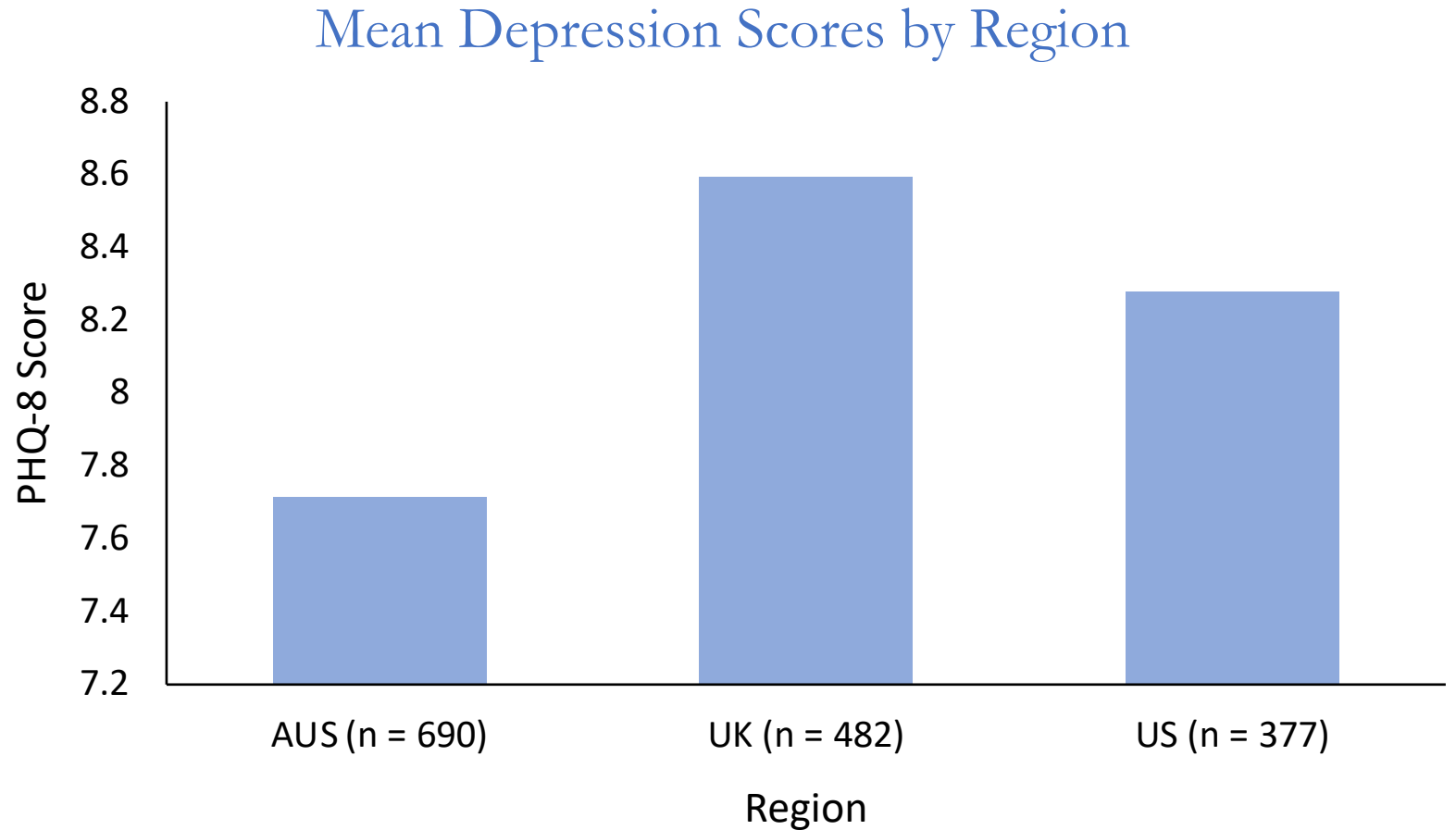
Older adults (66-100 years) reported the highest quality of life of all participants.



*Note: Higher scores represents higher quality of life*

# Depression in each region during COVID-19

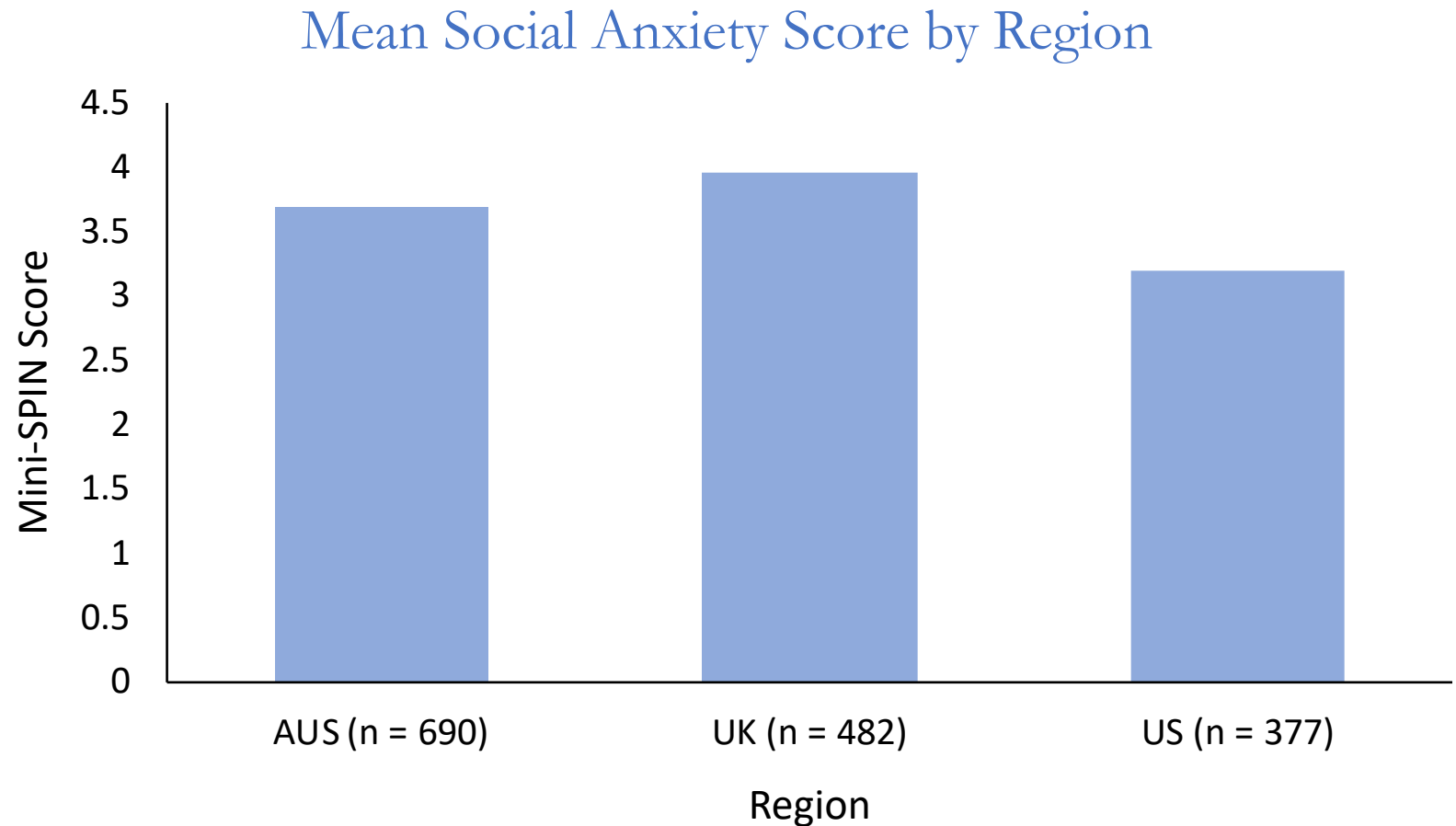
Australians reported having the least severe depression scores.



*Note: Higher scores indicate more depression. A score of 10 or more is indicative of problematic depression (Kroenke et al., 2009)*

# Social anxiety in each region during COVID-19

All regions reported similar levels of social anxiety symptoms.

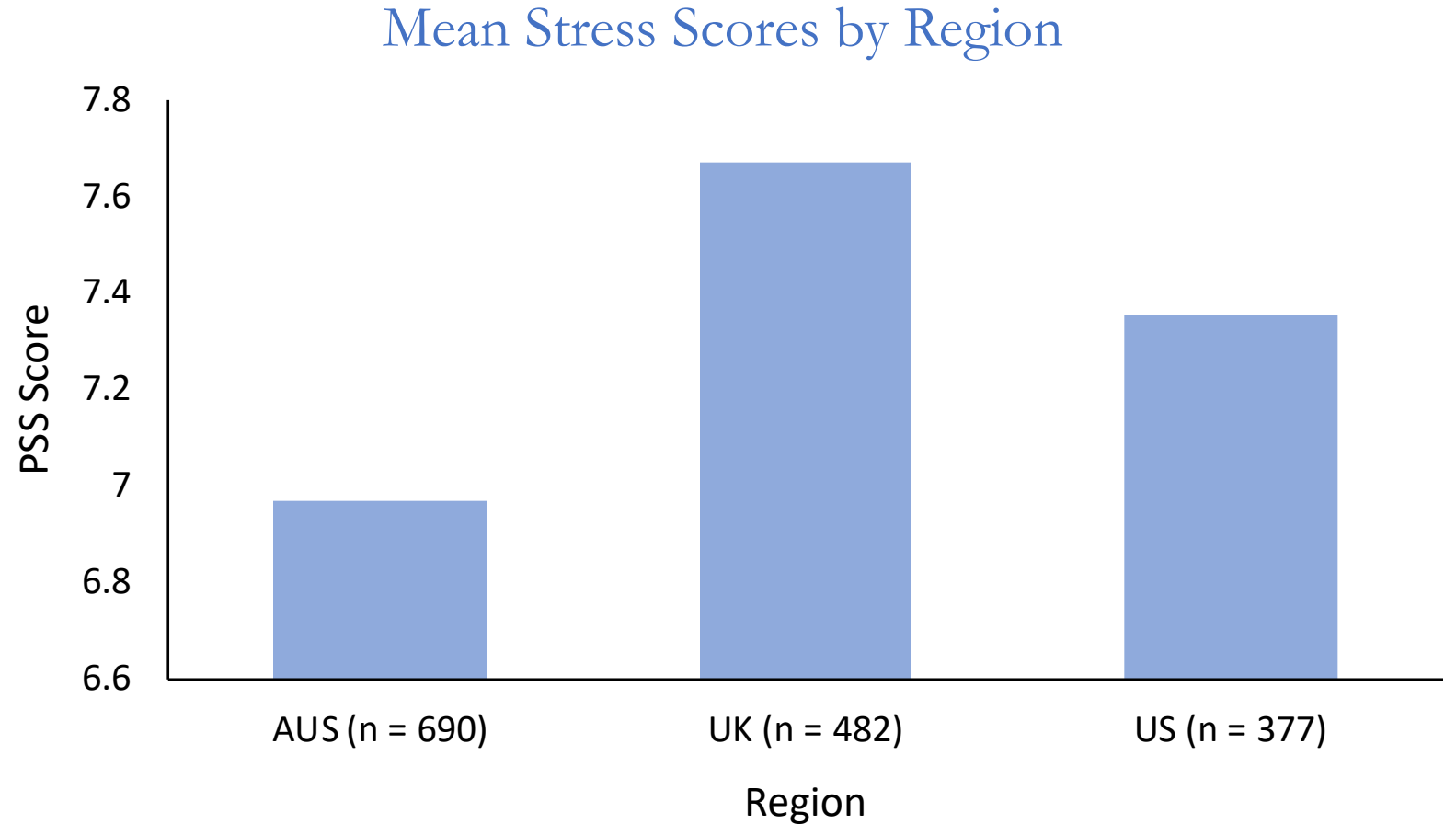


*Note: Higher scores indicate more social anxiety severity. A score of 6 or more is indicative of problematic social anxiety (Connor et al. 2001)*



# Perceived stress in each region during COVID-19

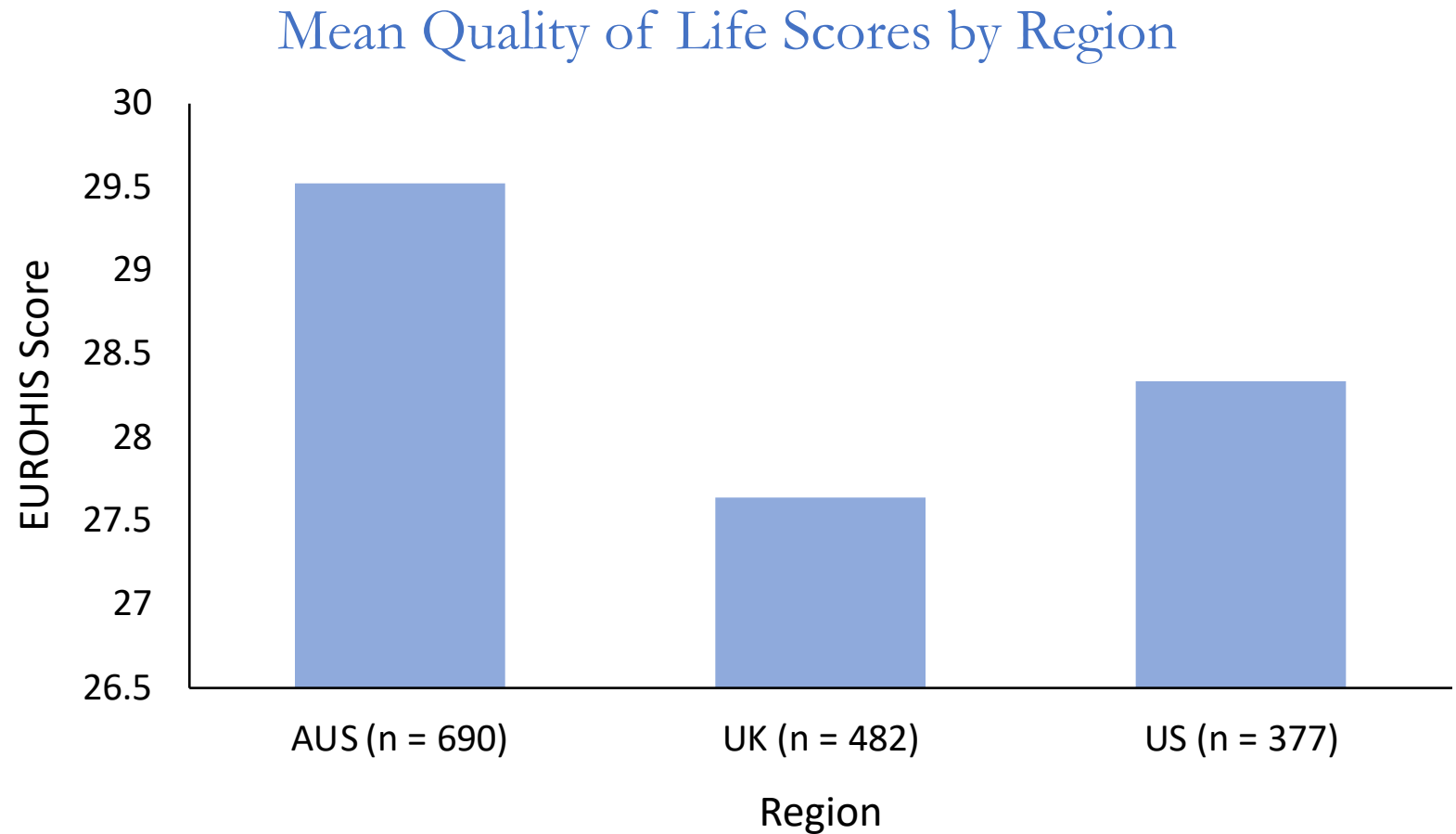
All regions reported similar levels of perceived stress.



*Note: Higher scores indicate more perceived stress*

# Quality of life in each region during COVID-19

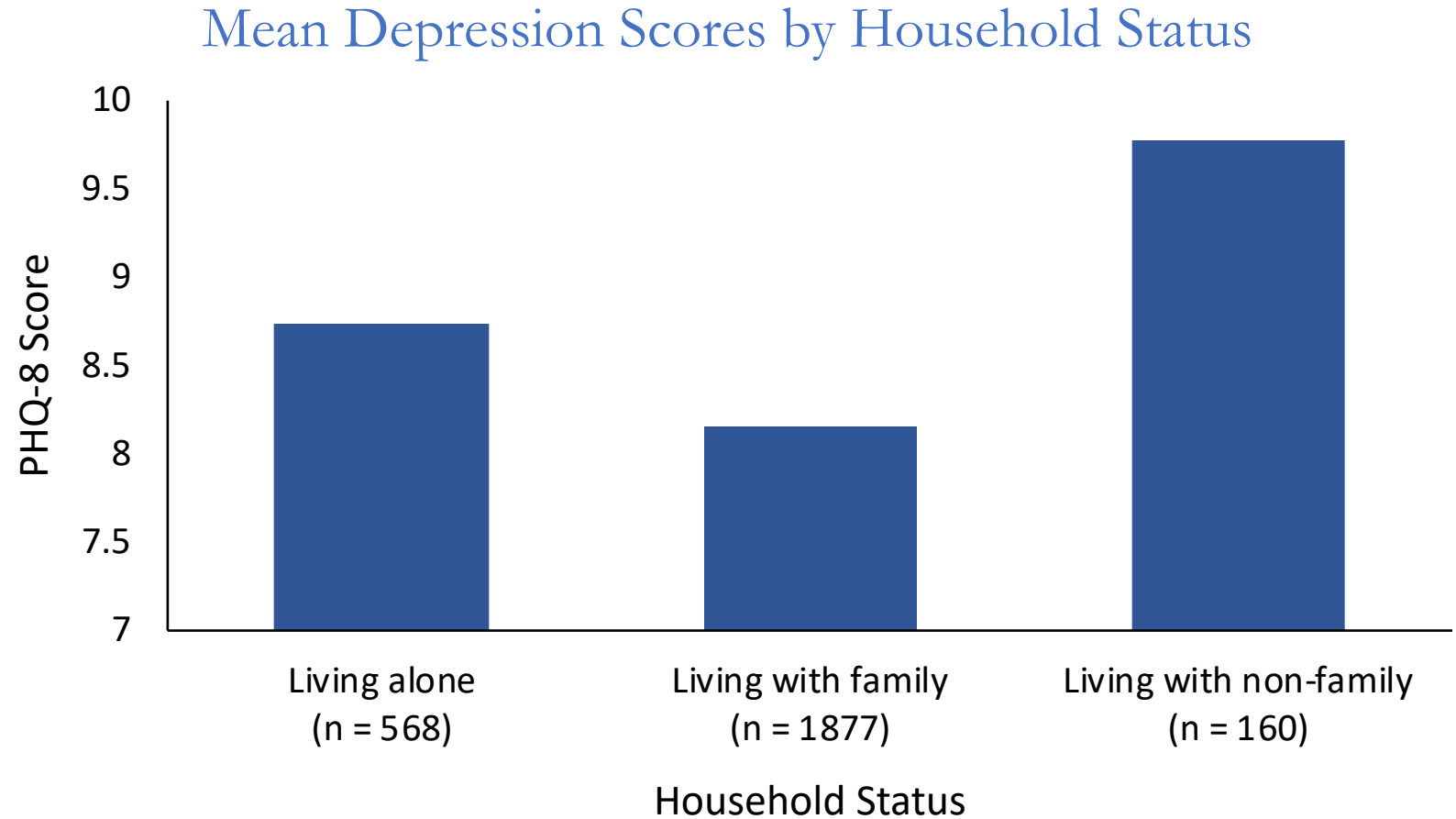
Australians reported higher quality of life compared with people in the US and UK.



*Note: Higher scores indicate better quality of life*

# Living situation and depression during COVID-19

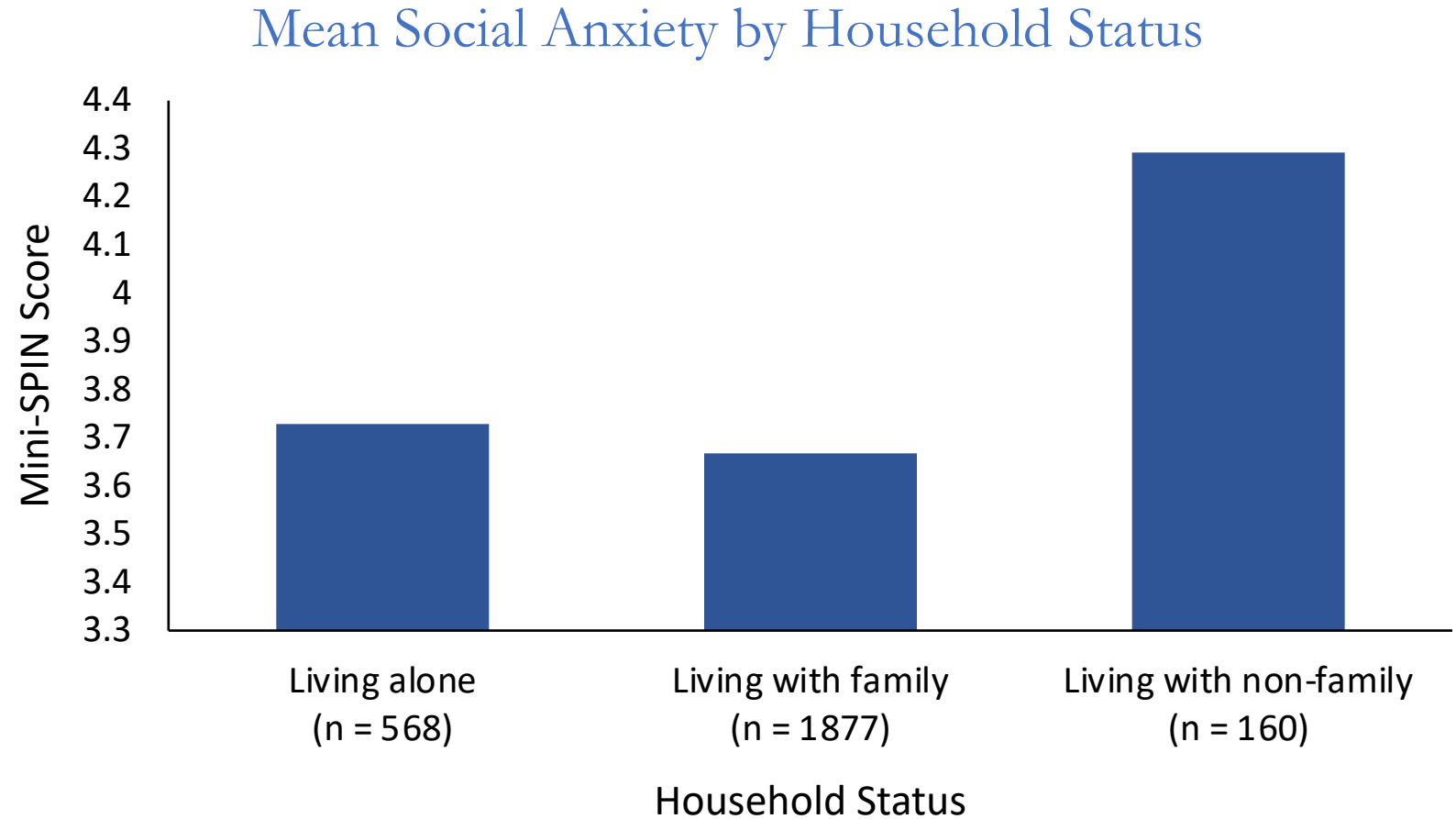
Those living with non-family members during the COVID-19 pandemic reported having the most severe depression symptoms.



*Note: Higher scores indicate more depression. A score of 10 or more is indicative of problematic depression (Kroenke et al., 2009)*

# Living situation and social anxiety during COVID-19

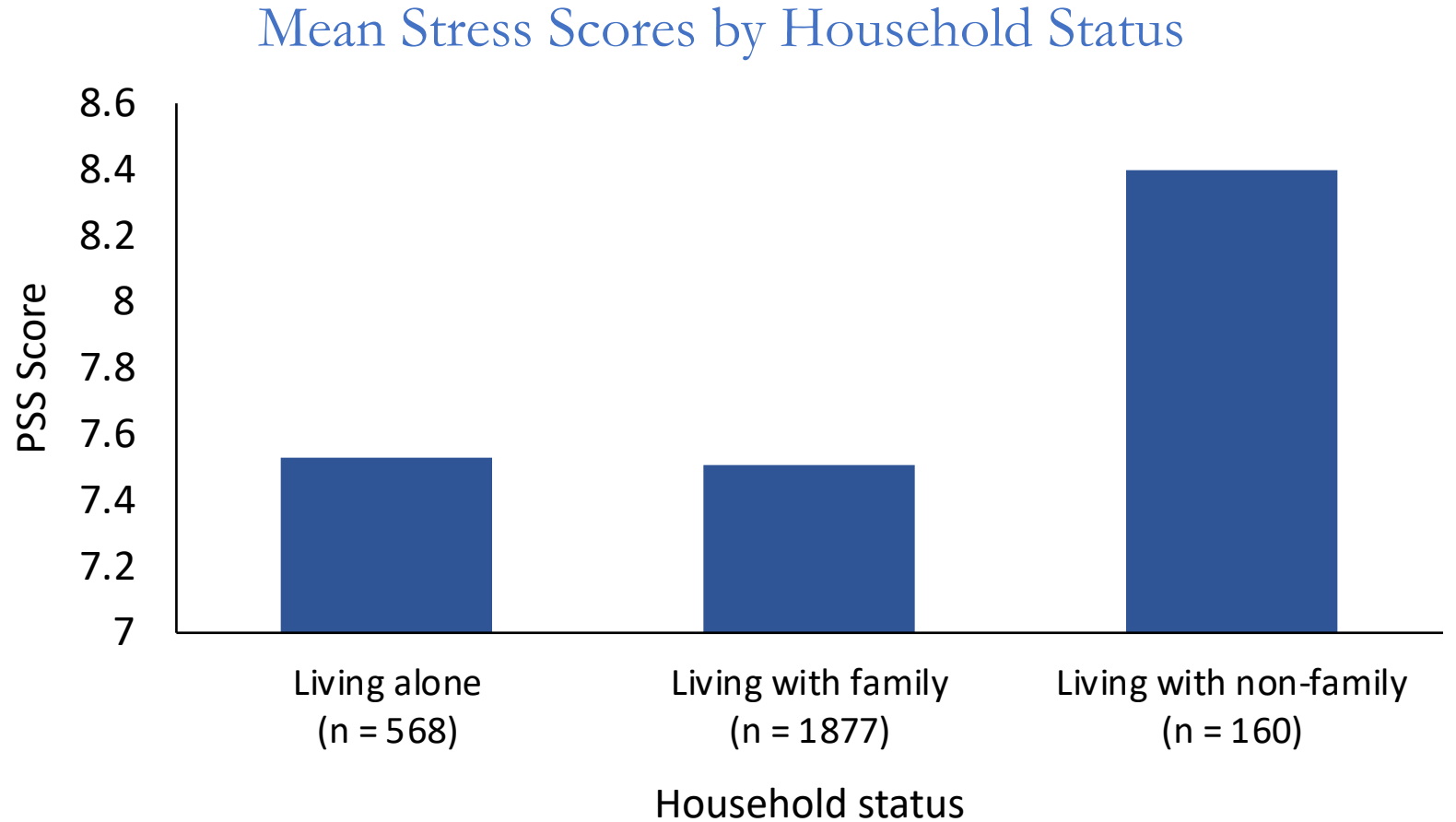
Those living with non-family members during the COVID-19 pandemic reported having the most severe depression symptoms.



*Note: Higher scores indicate more social anxiety severity. A score of 6 or more is indicative of social anxiety disorder (Connor et al. 2001)*

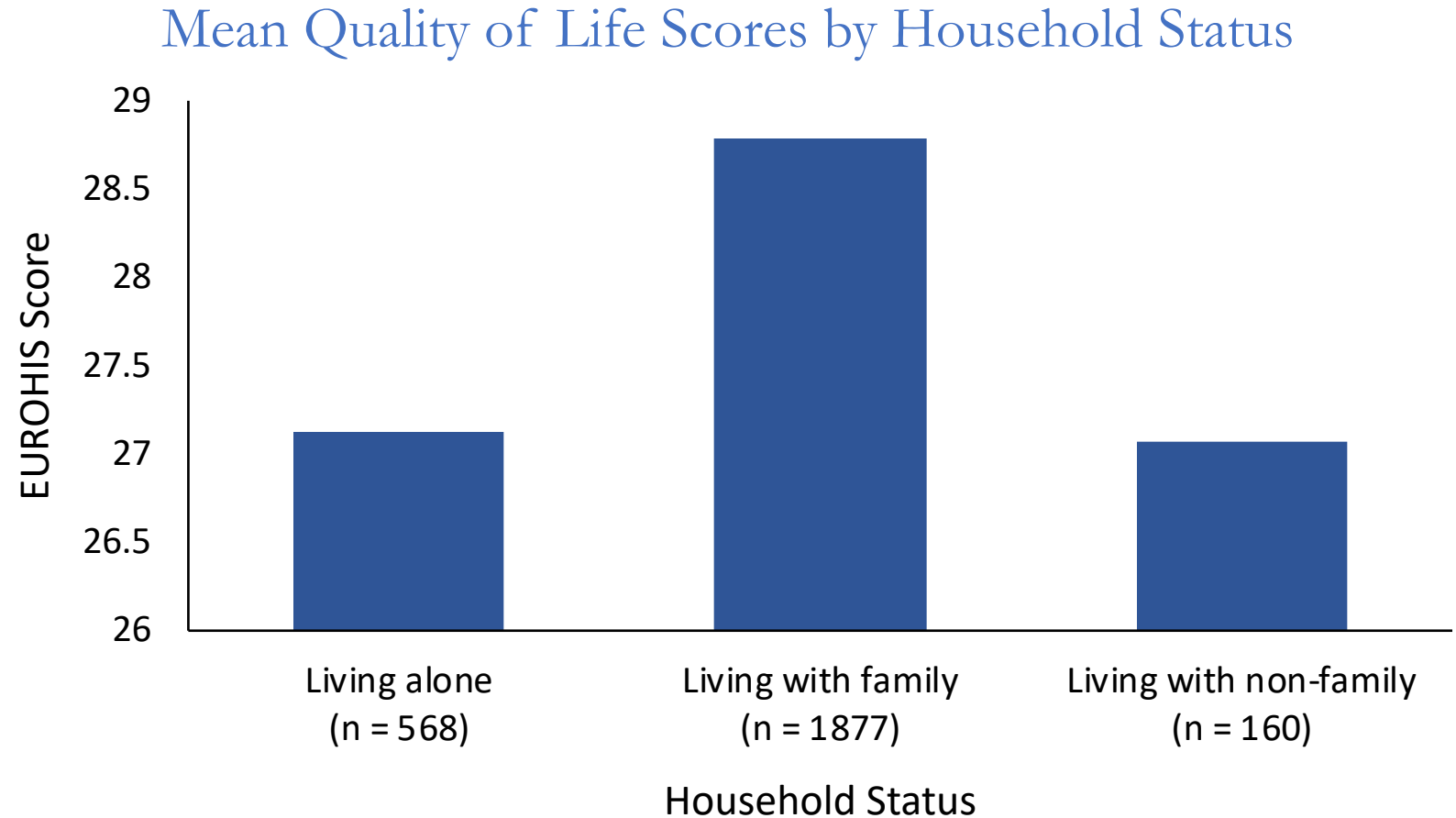
# Living situation and perceived stress during COVID-19

Those living with non-family members during the pandemic reported having the highest perceived stress score.



# Living situation and quality of life during COVID-19

Those living with family members during the COVID-19 pandemic reported having the highest quality of life.



# Physical Health

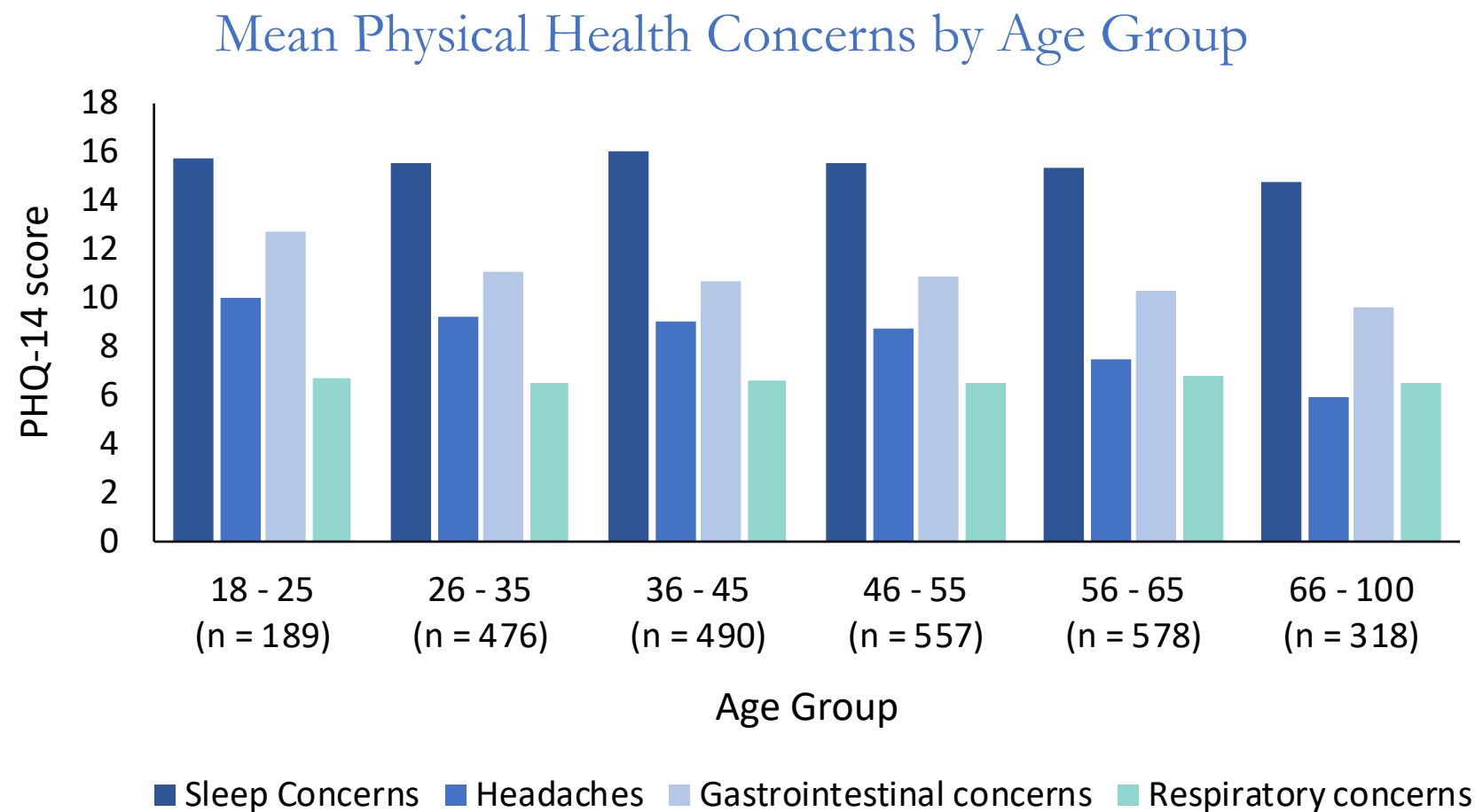
Physical Health Questionnaire – *PHQ-14*; *Physical health questionnaire – 14 items*

Number of physical health conditions



# Physical health concerns across age group

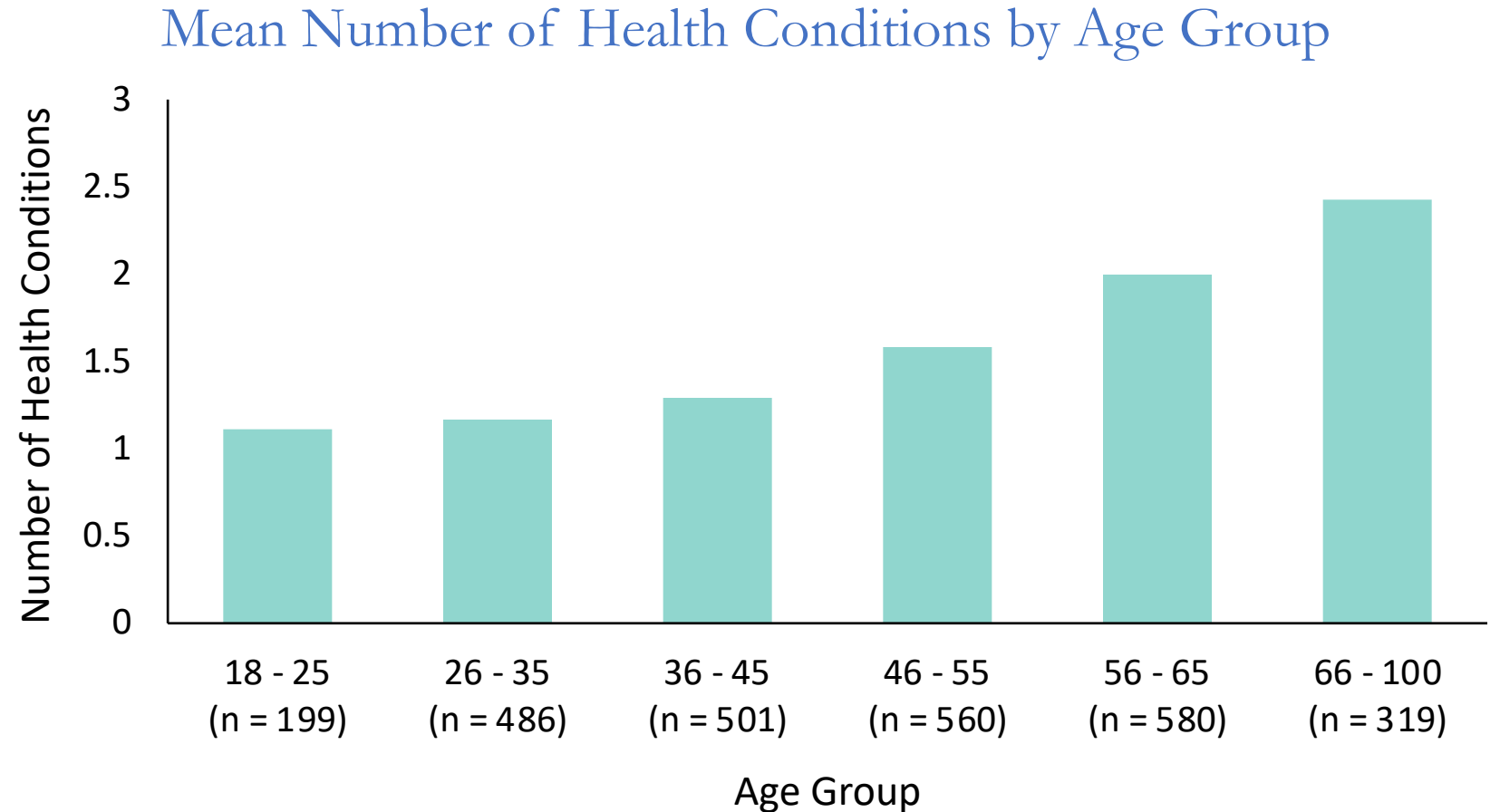
Each age group reported similar patterns of physical health concerns.



*Note: Higher scores indicate more somatic physical health concerns*

# Total Number of Health Conditions

Older adults (66-100 years) reported twice as many health conditions as young adults (18-25 years).



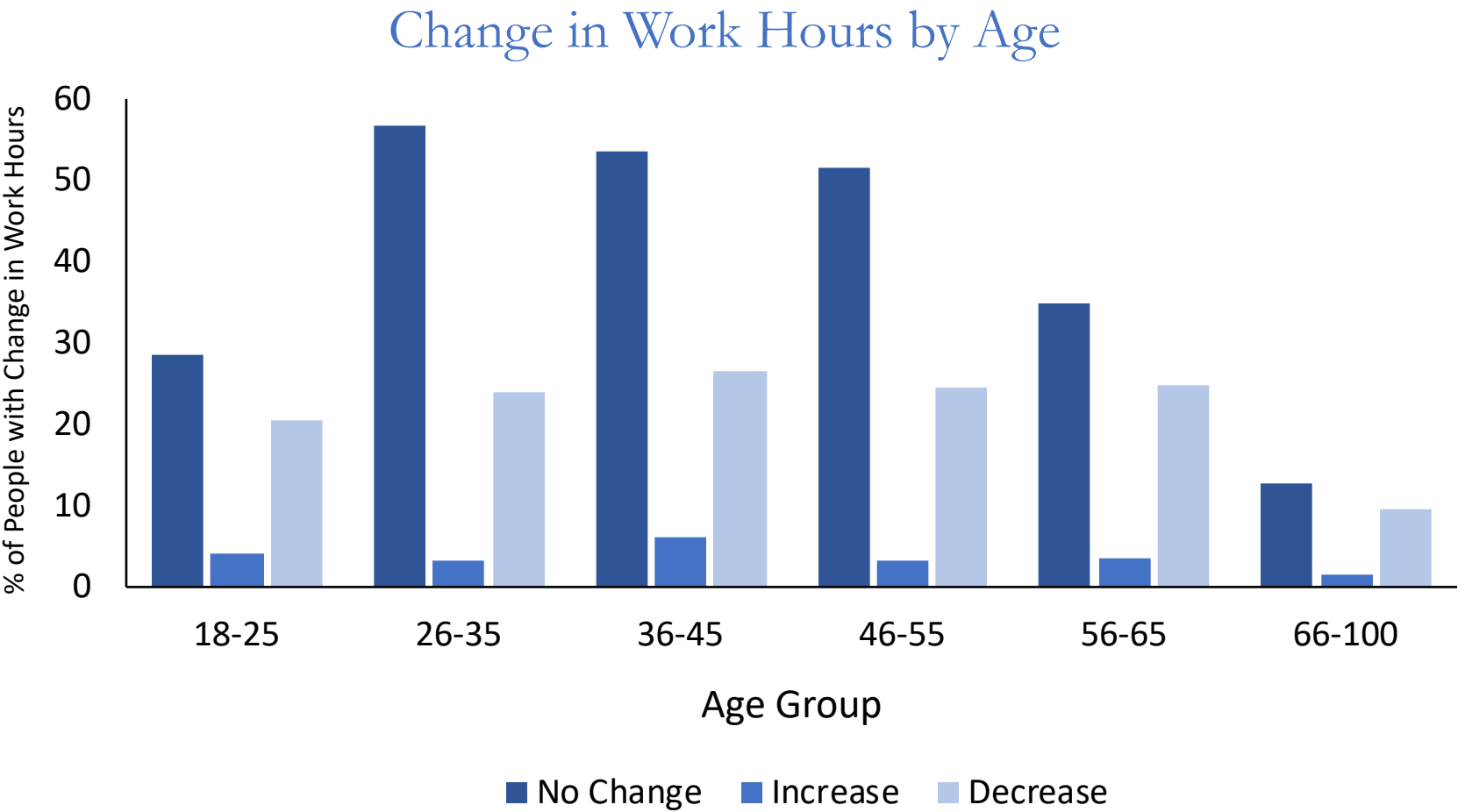
# Occupational Status

Change in workhours

# Change in work hours by age

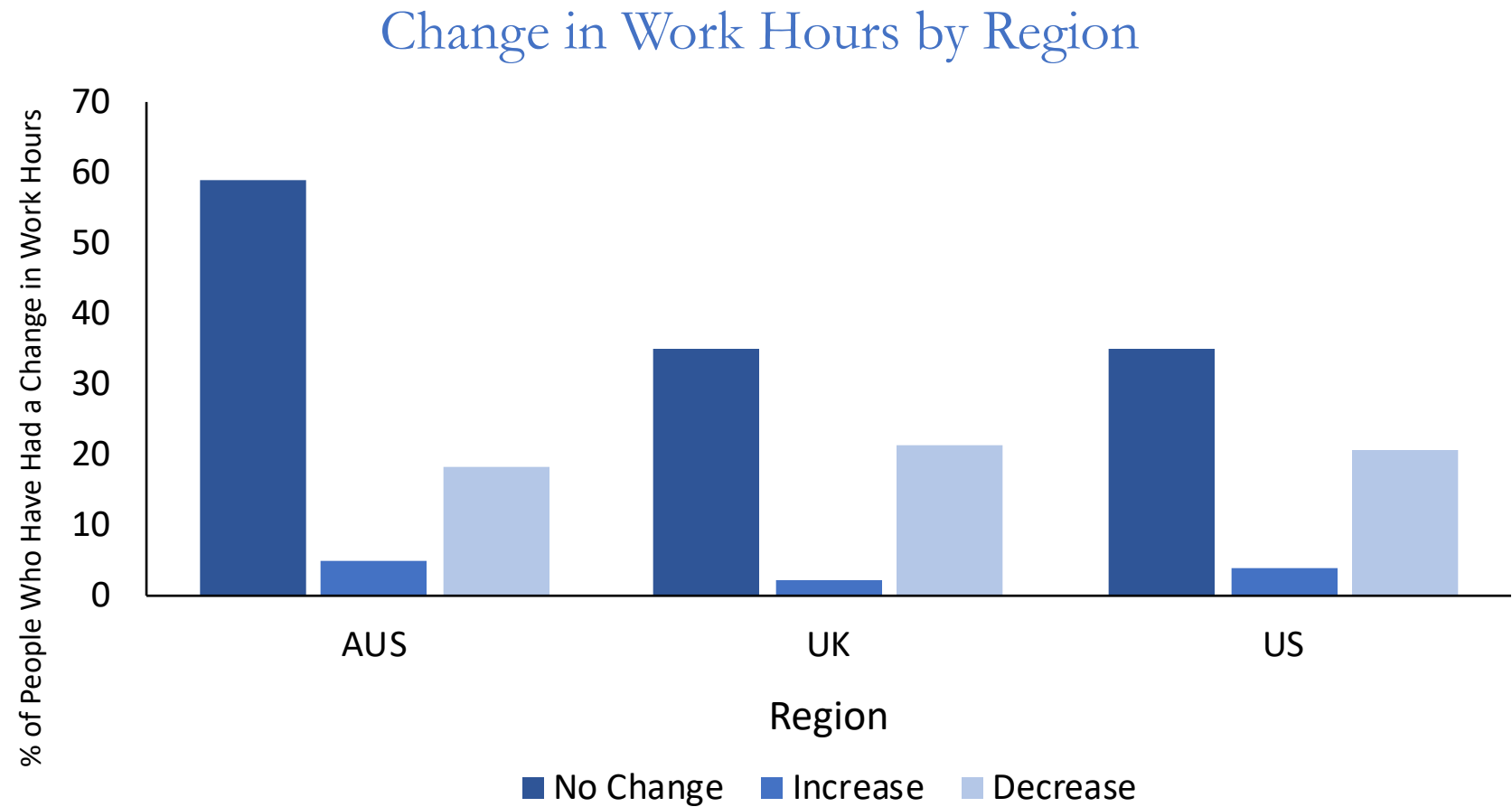
1 in 5 young adults (18 – 25 years) reported a decrease in in work hours.

1 in 4 adults (26 – 65 years) reported a decrease in work hours.



# Change in work hours by region

1 in 5 people reported a reduction in work hours during COVID-19 across all regions.



# Relationships Between Variables

# Relationships Between Variables

| Higher levels of loneliness are associated with: | Strength of relationship | Pearson's r |
|--|--------------------------|-------------|
| Higher levels of social anxiety                  | Large                    | .48         |
| Higher levels of depression symptoms             | Large                    | .55         |
| Less contact with friends                        | Large                    | -.57        |
| Less contact with family                         | Moderate                 | -.33        |
| Less contact with neighbours                     | Large                    | -.52        |
| Fewer approach coping strategies                 | Moderate                 | -.38        |
| More avoidant coping strategies                  | Moderate                 | .34         |
| Living alone                                     | Small                    | .15         |
| Lower quality of life                            | Large                    | -.65        |
| More perceived stress                            | Large                    | .54         |
| More physical health conditions                  | Small                    | .18         |
| More sleep related problems                      | Moderate                 | .33         |
| More headaches                                   | Moderate                 | .26         |
| More gastro-intestinal problems                  | Moderate                 | .27         |
| More respiratory problems                        | Small                    | .11         |

*Note: Relationships between variables were assessed using Pearson correlation coefficients for the whole dataset. Each region of interest displayed the same relationships with comparable strengths. Relationships are significant against  $p < .001$*

# List of Measures

| Measure   | Acronym   | Description   |
|---|-----------|---|
| UCLA Loneliness Scale                               | UCLA-LS   | A 20-item measure of loneliness                         |
| Mini-Social Phobia Inventory                        | Mini-SPIN | A 3-item measure of social anxiety                      |
| Patient Health Questionnaire                        | PHQ-8     | An 8-item measure of depression                         |
| Lubben Social Network Scale                         | LSNS-18   | An 18-item measure of social contact                    |
| Perceived Stress Scale                              | PSS       | A 4-item measure of perceived stress                    |
| European Health Interview Survey of Quality of Life | EUROHIS   | An 8-item measure of quality of life                    |
| Physical Health Questionnaire                       | PHQ-14    | A 14-item measure of somatic physical health complaints |



# References

- Carver, C.S. (1997). You want to measure coping but your protocol's too long: Consider the brief cope. *International Journal of Behavioral Medicine*, 4(92).
- Cohen, S., Kamarck, T., & Mermelstein, R., (1983). A global measure of perceived stress. *Journal of health and social behaviour*, 24(4), 385-396.
- Connor, K. M., Kobak, K. A., Churchill, L. E., Katzelnick, D., & Davidson, J. R. (2001). Mini-SPIN: A brief screening assessment for generalized social anxiety disorder. *Depression and anxiety*, 14(2), 137-140.
- Kroenke K, Strine TW, Spitzer RL, Williams JBW, Berry JT, & Mokdad AH. (2009). The PHQ-8 as a measure of current depression in the general population. *Journal Affective Disorders*, 114:163-173.
- Lim, M.H., Australian Psychological Society. (2018). *Australian Loneliness Report: a survey exploring the loneliness levels of Australians and the impact on their health and wellbeing*. Australian Psychological Society, Psychology Week 2018, 'The Power of Human Connection' campaign. <https://psychweek.org.au/wp/wp-content/uploads/2018/11/Psychology-Week-2018-Australian-Loneliness-Report.pdf>. Accessed 15 July 2020
- Lim M.H., Eres, R., & Peck, C. (2019). *The Young Australian Loneliness Survey: understanding loneliness in adolescents and young adults*. <https://www.vichealth.vic.gov.au/loneliness-survey>. Accessed 15 July 2020

# References

- Lubben, J.E. (1988). Assessing social networks among elderly populations. *Family and Counselling Health: The journal of health promotion and maintenance*, 11(3), 43-52.
- Office for National Statistics. (2018). *National Measurement of Loneliness: 2018*. London, United Kingdom: Office for National Statistics.
- Russell, D., Peplau, L.A., & Cutrona, C.E. (1980). The revised UCLA Loneliness Scale: concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology*, 39(3), 472.
- Schat, A.C.H., Kelloway, E.K., & Desmarais, S. (2005). The Physical Health Questionnaire (PHQ): Construct validation of a self-report scale of somatic symptoms. *Journal of Occupational Health Psychology*, 10(4), 363-381.
- Schmidt, S., Muhlan, H., & Power, M. (2006). The EUROHIS-QOL 8-item index: psychometric results of a cross-cultural field study. *European Journal of Public Health*, 16(4), 420-428.