

Examining the Impacts of the COVID-19 Pandemic on Mental Health Outcomes Among Canadian Adults

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Mental Health & COVID-19 Pandemic

- COVID-19 pandemic → negative mental health impacts
 - Research suggests that 30-77% of the population are experiencing elevated depression, anxiety and loneliness relative to pre-pandemic estimates (Luo et al., 2020; Shah et al., 2020; Varma et al., 2021)
 - Days spent in social isolation can increase risk (Shah et al., 2020)
 - Canadians - Increased distress, loneliness, sadness, anxiety, depression, suicidal ideation, substance use and overall decline in mental health since pandemic onset (Best et al., 2020; Dozois, 2020; Jenkins et al., 2021)



Mental Health & COVID-19 Pandemic

- Younger Canadians are experiencing worse mental health than older adults (El-Gabalaway & Sommer, 2020; Nwachukwu et al., 2020)
 - highest rates of anxiety, stress, depression across age groups
 - highest engagement in maladaptive health habits (e.g., substance use) across age groups
 - most COVID-19 related concerns (e.g., health, society, social ties, supporting others)



Knowledge Gaps

- Differential age effects on mental health are poorly understood
- Perceived ability to cope during and after the pandemic generally increases with age, and may help explain age-related trends (El-Gabalaway & Sommer, 2020)
- Limited population-based research among Canadians on mental health and the pandemic

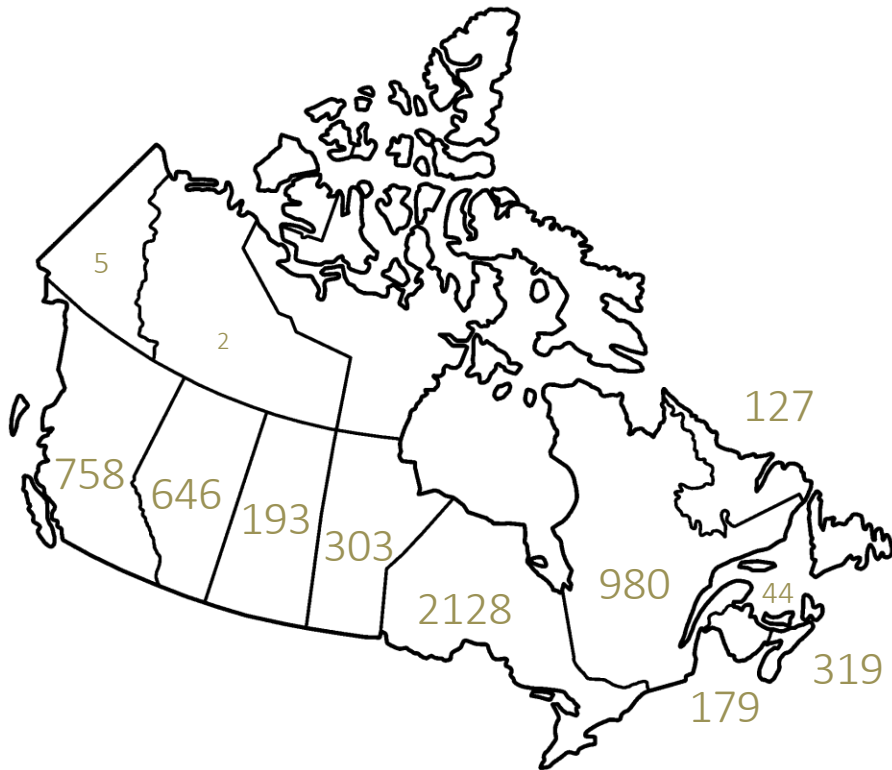
Research Aims

Examine mental health impacts of COVID-19 pandemic on Canadian adults:

1. Changes in overall mental health functioning, drug & alcohol use, and suicidal ideation across age groups
2. Scores on depression, anxiety and loneliness across age groups
3. Whether perceived ability to cope mediates associations between age and depression, anxiety and loneliness



Methods



- Nation-wide online, self-report survey: August-September 2020
- Balanced on age, sex, and geographic location (province/territory)
- Participants (N = 6,629)
 - *Age groups: 17-20, 21-25, 36-34, 35-44, 45-54, 55-64, 65+*
 - *59.6% female*
 - *82% White*

Methods

- “Have you noticed a change in your **mental health** symptoms since the start of the coronavirus outbreak?”

My mental health has improved/...got worse/no change/not sure

- “Has your **drinking** changed since the start of the coronavirus outbreak?”

Increased/decreased/stayed the same/not sure

- “Has your **drug use** changed since the start of the coronavirus outbreak?” Increased/Decreased/Stayed the same/Not sure

Increased/decreased/stayed the same/not sure

- “Have these **thoughts** got worse or increased since the start of the coronavirus outbreak?”

Yes/no/not sure



Methods

- **Anxiety** – Generalized Anxiety Disorder (GAD-7; Spitzer et al., 2006)
- **Depression** – Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001)
- **Loneliness** – UCLA 3-item Loneliness Scale (Hughes et al., 2004)
- **Coping** – “How confident are you that you can support yourself to cope well during the current situation?”

Not at all/a little bit/moderately/quite a bit/extremely

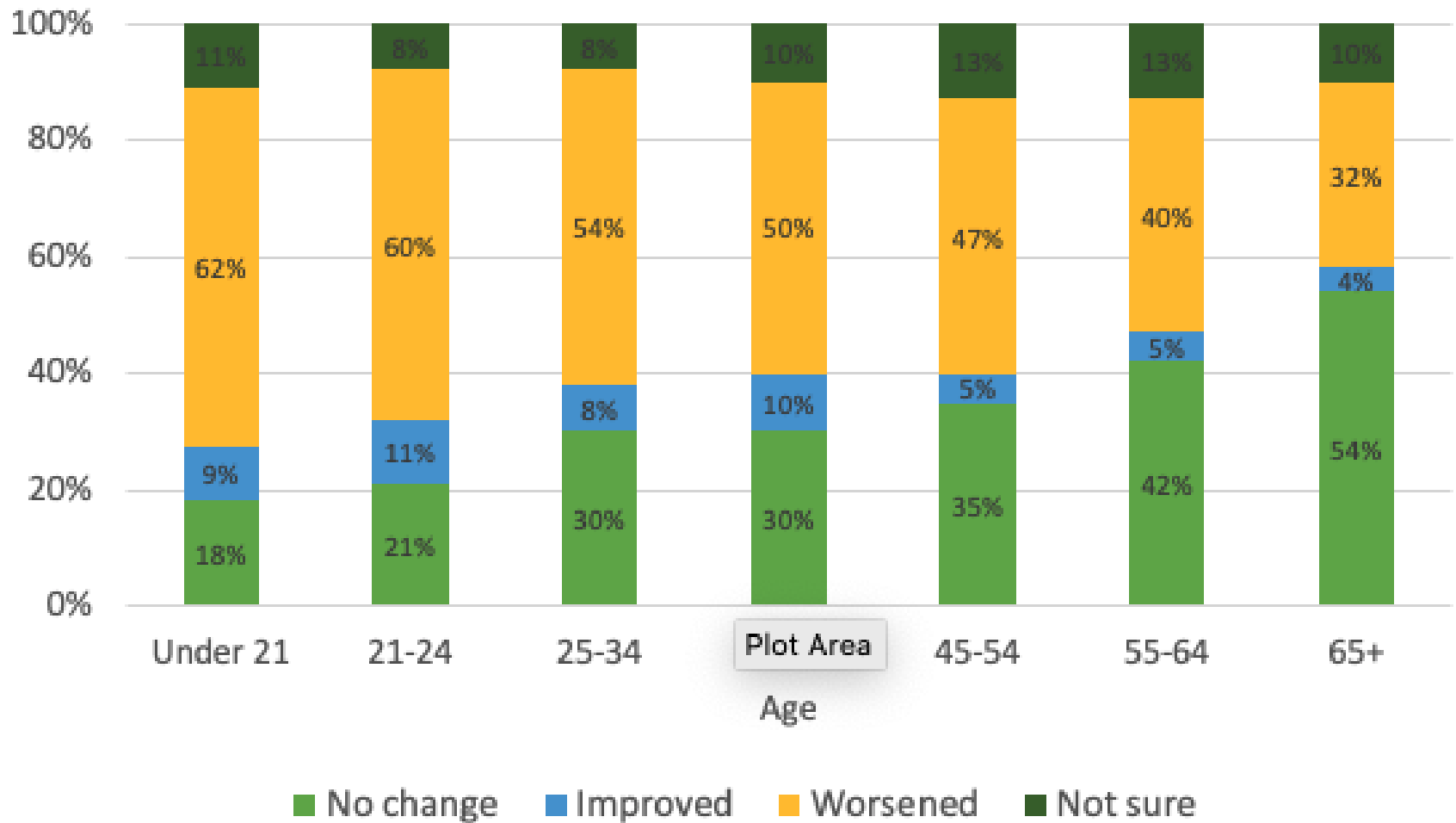


Analyses

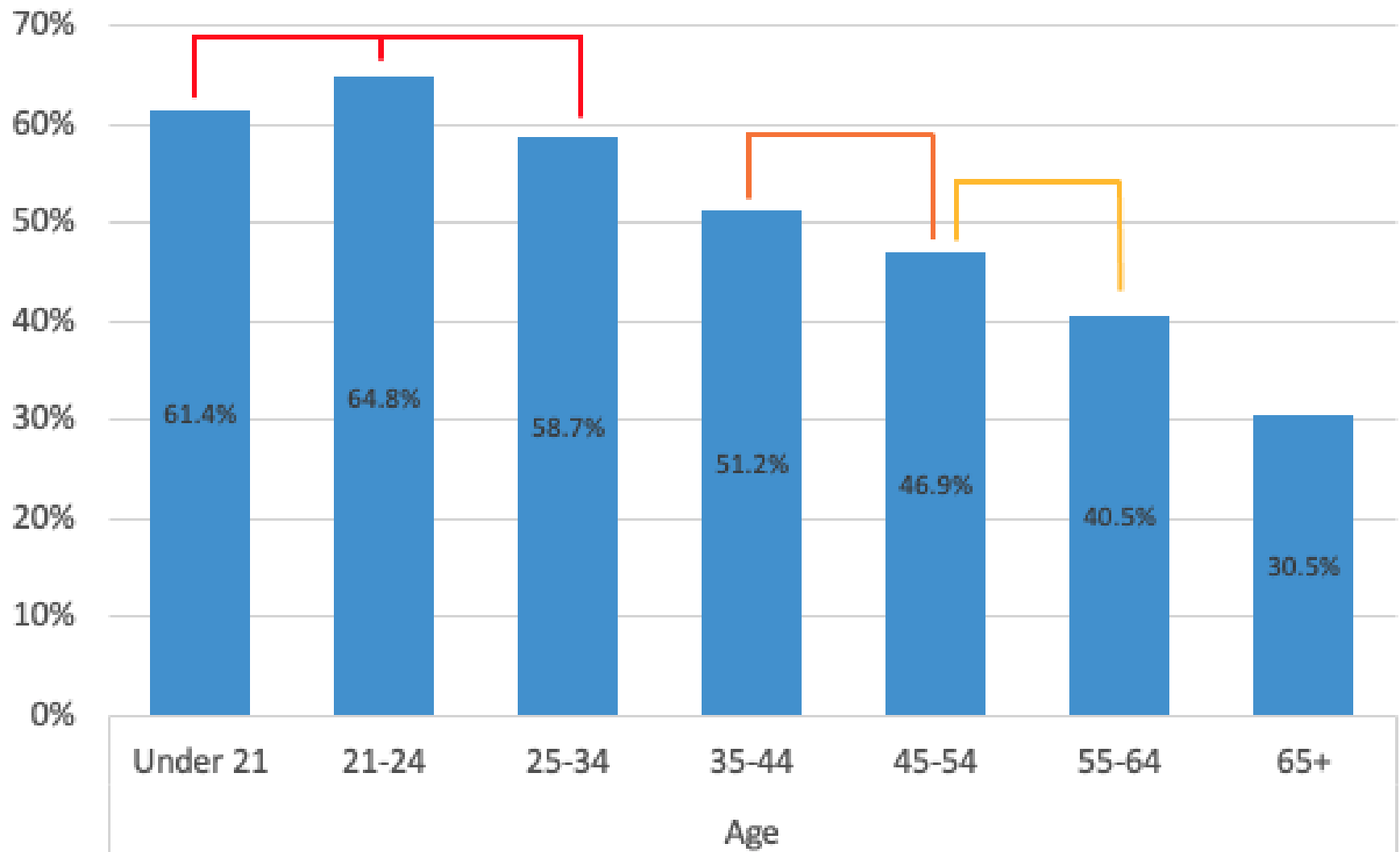
- Chi-square analyses: mental health functioning, drug and alcohol use, and suicidal ideation across age groups
- Multivariate Analysis of Variance (MANOVA): depression, anxiety and loneliness across age groups
- Non-parametric bootstrapped ($k = 1,000$) mediation analyses: mediating effect of perceived ability to cope



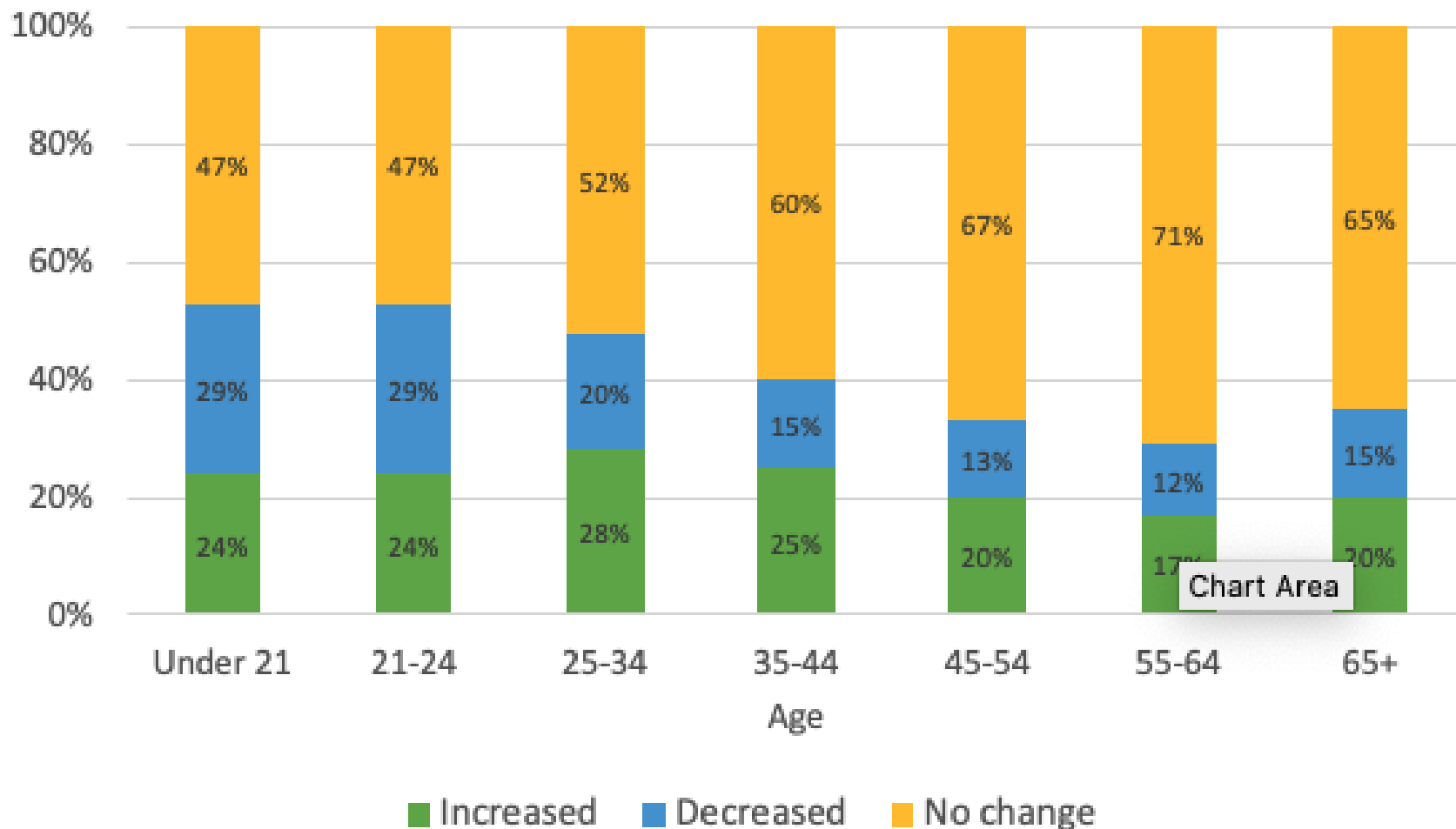
Changes in Mental Health Functioning



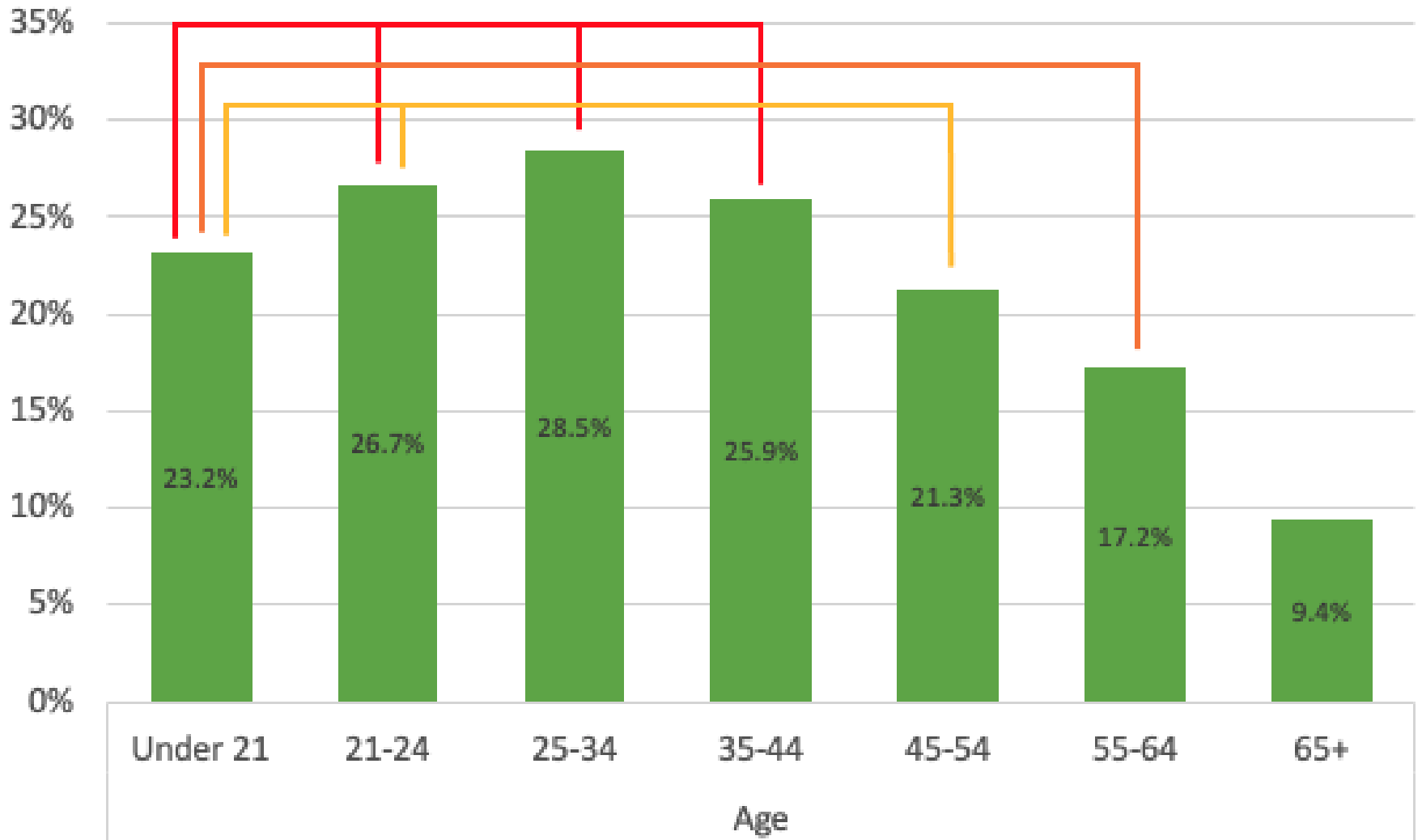
Worsened Mental Health



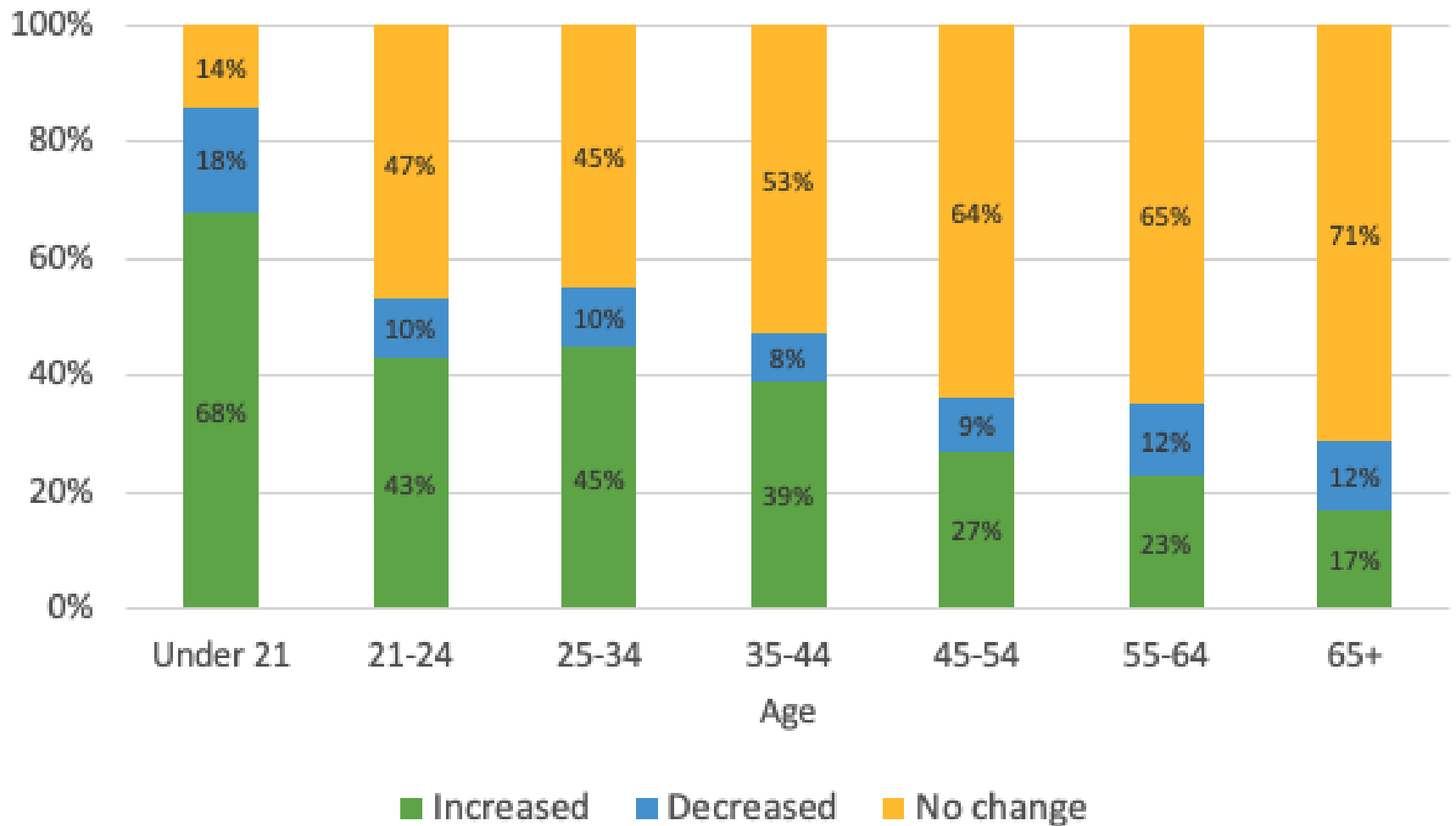
Changes in Alcohol Use



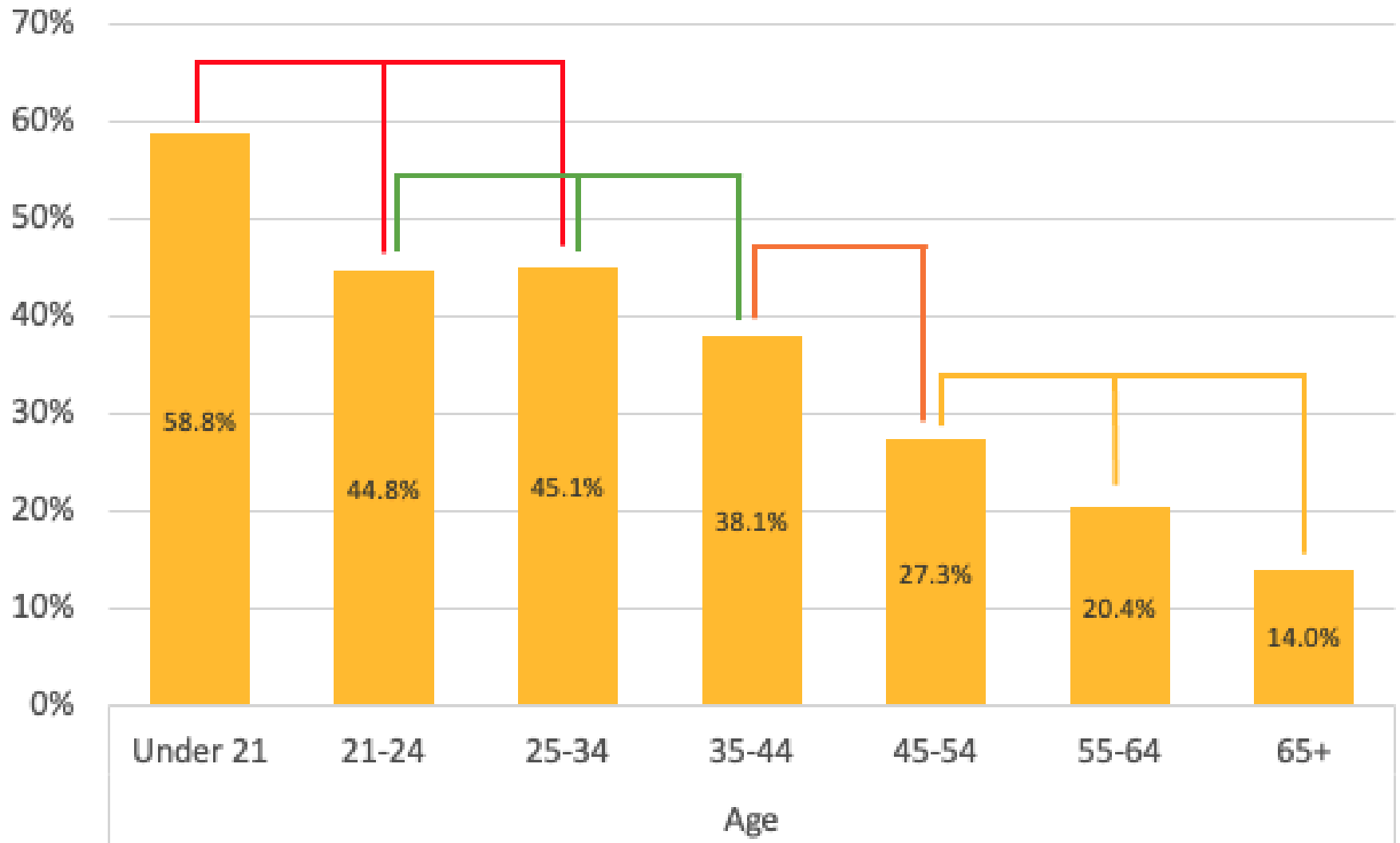
Increased Alcohol Use



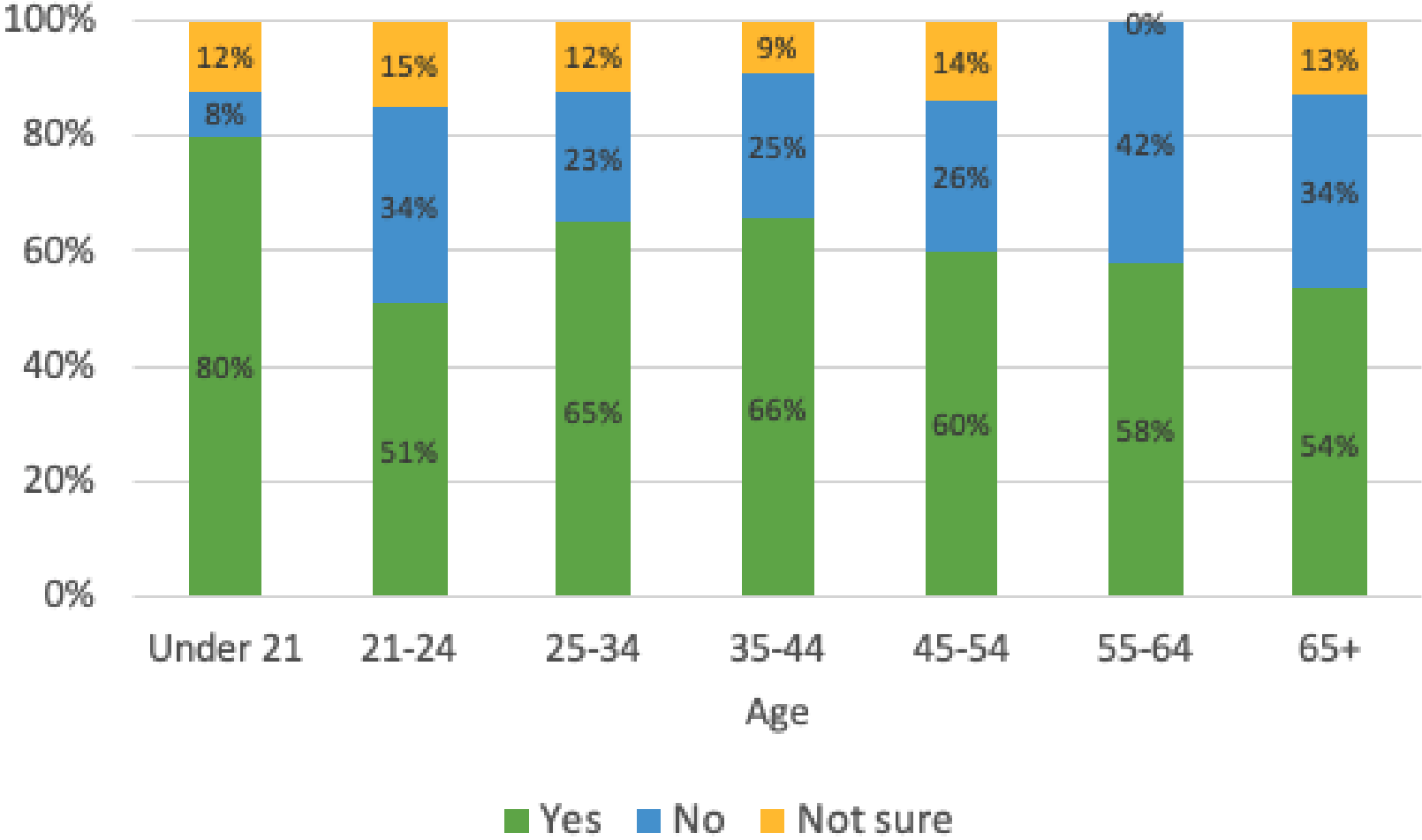
Changes in Drug Use



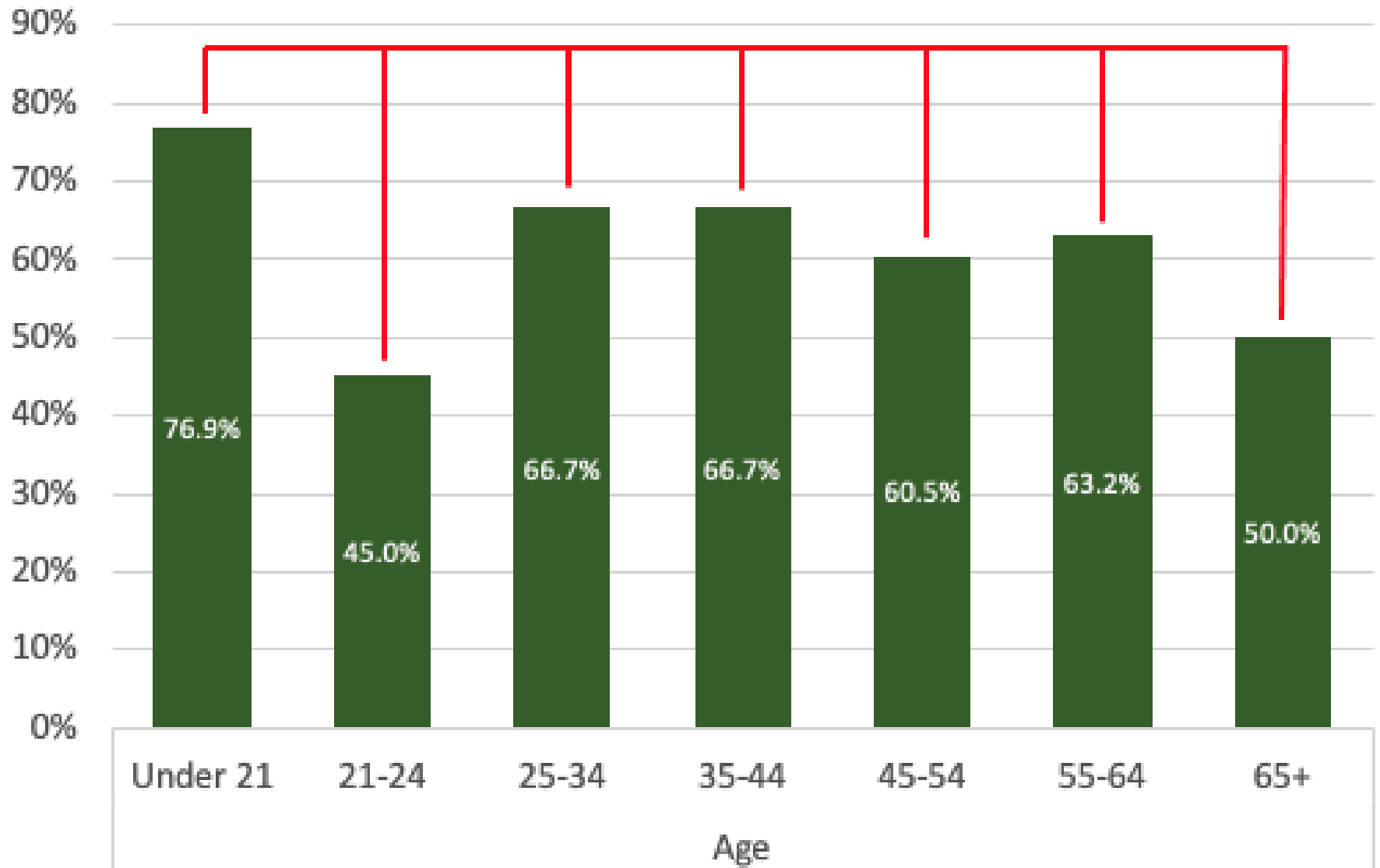
Increased Drug Use



Worsened Suicidal Ideation



Endorsed Worsened Suicidal Ideation



MANOVA

Depression, anxiety and loneliness consistently decreased as age increased

Depression: $F(6) = 148.6, p < .001, \eta p^2 = .13$ (large)

Anxiety: $F(6) = 132.7, p < .001, \eta p^2 = .11$ (large)

Loneliness: $F(6) = 32.6, p < .001, \eta p^2 = .07$ (medium)

Post-hoc analyses generally revealed non-significant differences between age groups under 35 years old, but significant differences between older age groups compared to all age groups (corrected p 's $< .01$)

Perceived ability to cope mediated:

30.8% of the association between age and depression, 95% [26-36], $p < .001$

29.7% of the association between age and anxiety, 95% CI [25-35], $p < .001$

44.2% of the association between age and loneliness, 95% CI [39-50], $p < .001$

Discussion

- Canadians aged 34 years and younger – highest proportions of worsened mental health
- Oldest age group is faring the best on multiple mental health outcomes
- Perceived coping may help to explain age-related trend
 - Life experience
 - Social expectations

Implications & Future Directions

- Mental health supports and programming for Canadian young adults
- Research investigating mechanisms of resiliency
- Examine mental health over course of pandemic
- Combine with other datasets to examine more robust temporal and age-related trends



Limitations

- Outcomes at specific time point in pandemic
- Self selecting sample
- Single item questions
- Small cell sizes in some chi-square analyses



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