

# Adverse childhood experiences are associated with increased gambling frequency among Alberta adults during the COVID-19 pandemic

## BACKGROUND



Increases in addictive substance use during COVID-19<sup>1</sup>



Financial strain may promote use of online gambling activities<sup>2</sup>, particularly for vulnerable groups<sup>3</sup>



ACEs associated with addiction<sup>4</sup>  
*abuse, neglect, household dysfunction*

## METHODS

### Online survey

(N = 1,274, 56% female, 35.2 yrs)



0 – 10;  
<4 (Low)  
≥4 (High)



Increased  
Decreased  
No change

### Three logistic regression models

*Controlled age, sex, socio-economic variables*

ACEs 0-10  
Increased /  
Not Increased

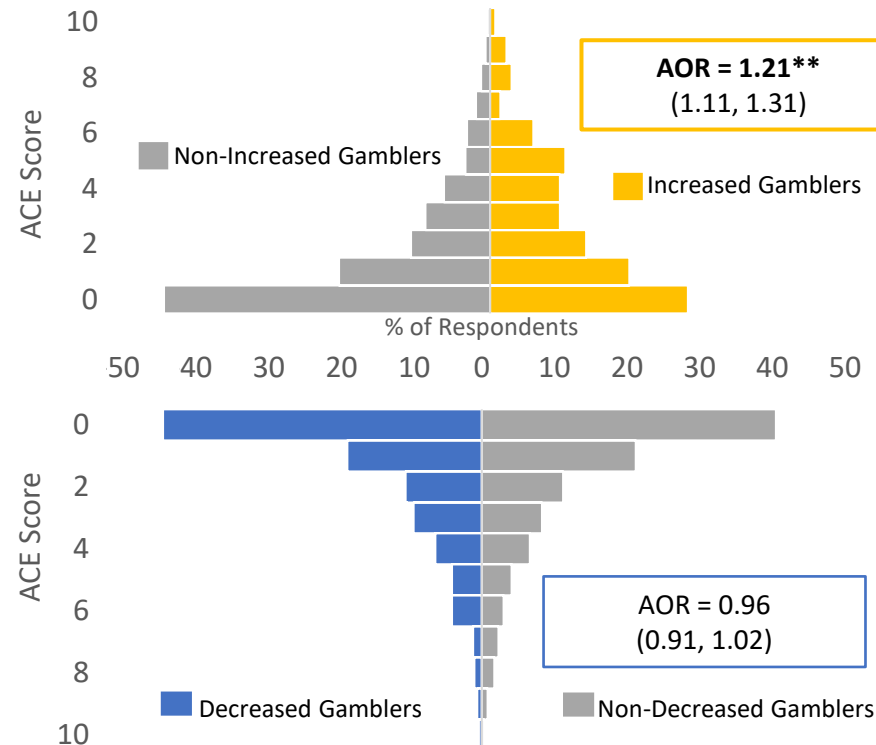
ACEs 0-10  
Decreased /  
Not Decreased

<4, ≥4 ACEs  
Increased /  
Decreased

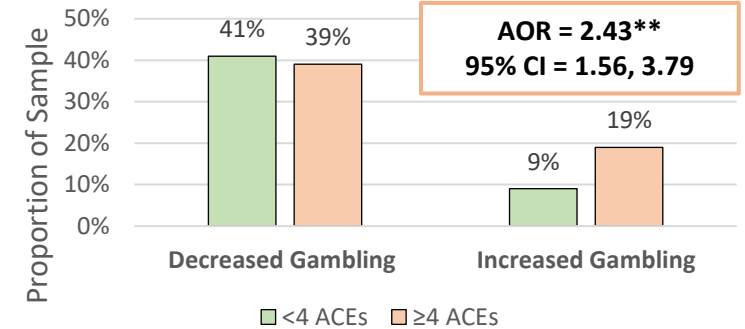
## RESULTS

40% Decreased, 49% Didn't Change, and 11% Increased Gambling

### Distribution of ACE Scores in Non-Increased/Increased and Decreased/Non-Decreased Gamblers



### Gambling Changes by ACE Group



## SUMMARY

- Most had no change in gambling
- ≥4 ACEs 2.5x more likely to increase gambling than <4 ACEs
- Each 1-point increase in ACE score associated with 21% greater odds of increased gambling

### References

[1] Dubey, M. J., ... & Dubey, S. (2020). COVID-19 and addiction. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 14(5), 817-823.  
[2] Håkansson, A., ... & Jiménez-Murcia, S. (2020). Gambling during the COVID-19 crisis—a cause for concern. *Journal of addiction medicine*, 14(4), e10.  
[3] Håkansson, A. (2020). Changes in gambling behavior during the COVID-19 pandemic—a web survey study in Sweden. *International Journal of Environmental Research and Public Health*, 17(11), 4013.  
[4] Felitti, V. J., ... & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American journal of preventive medicine*, 14(4), 245-258.