Vaccine Hesitancy: Social Norms, Risk Perception, and Information Source

Brooke Bier¹, Michaela Kotarba¹,², Alejandra Mella-Velazquez³, Don Nguyen⁴, Taylor Parker⁵, Kartik Pejavara², Danielle Smith⁶
Faculty Advisors: Cheryl Lin, Lloyd Michener, John Paat, Ann Reed, Pikuei Tu
¹Psychology ²Computer Science ³Program II: Latinx Health Disparities ⁴Global Health ⁵Chemistry ⁶Neuroscience

1. Risk Perceptions:
- Adolescent vaccine uptake and hesitancy are influenced by risk perception > age/motivation
- Perceived knowledge moderates the relationship; risk perception differed by vaccination status only for those with low perceived knowledge

2. Social Norms/Pressure:
- Perceptions of friends' choices often matched parent's choices for their own children, regardless of whether the parent was vaccinated or not

3. Sources of Information:
- High hesitancy individuals more likely to list social media and personal sources over healthcare professionals and official sources
- Sources of information also varied across education and political affiliation

Methods:
- **Quantitative & Qualitative Studies**: 1,887 survey respondents, 4 focus groups (n = 21), and 12 individual in-depth interviews
- Chi-squared, linear regression, One-way ANOVA, and sample t-tests were used to evaluate associations

Conclusions:
- Informing adolescents of the risks of diseases to them and those around them may increase risk perception and improve vaccine acceptance
- Social influence was observed but could also be a result of people choosing to associate with others who share their attitudes and beliefs
- Sources of information are related to varying levels of vaccine hesitancy. Shifting individual reliance on social media and personal sources to healthcare professionals and medical organizations could increase vaccine acceptance and reduce hesitancy

What factors influence decisions to get the COVID-19 vaccine?

Hesitancy Associations

Do parents believe most of their friends would vaccinate their children?

In relation to parent-child vaccination concordance

Acknowledgements: Our team greatly appreciates Laura Bayle, Jessica Caffrey, Claire Murray, and Elizabeth Sigarto at The Link Group for their generous support and advice throughout the quantitative and qualitative studies. We also thank Rachel Clark for her perspectives and guidance on data interpretation and manuscript revisions.

Vaccine Hesitancy is defined by the WHO as the reluctance or refusal to vaccinate despite the availability of vaccines.

Only 66% of Americans are Fully Vaccinated

Over 978,000 Americans have died due to COVID-19.