WHO TRUSTS THE COVID-19 VACCINE: EXPLORING TARGETS FOR SUPPORT OF COVID-19 VACCINE

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1. Introduction

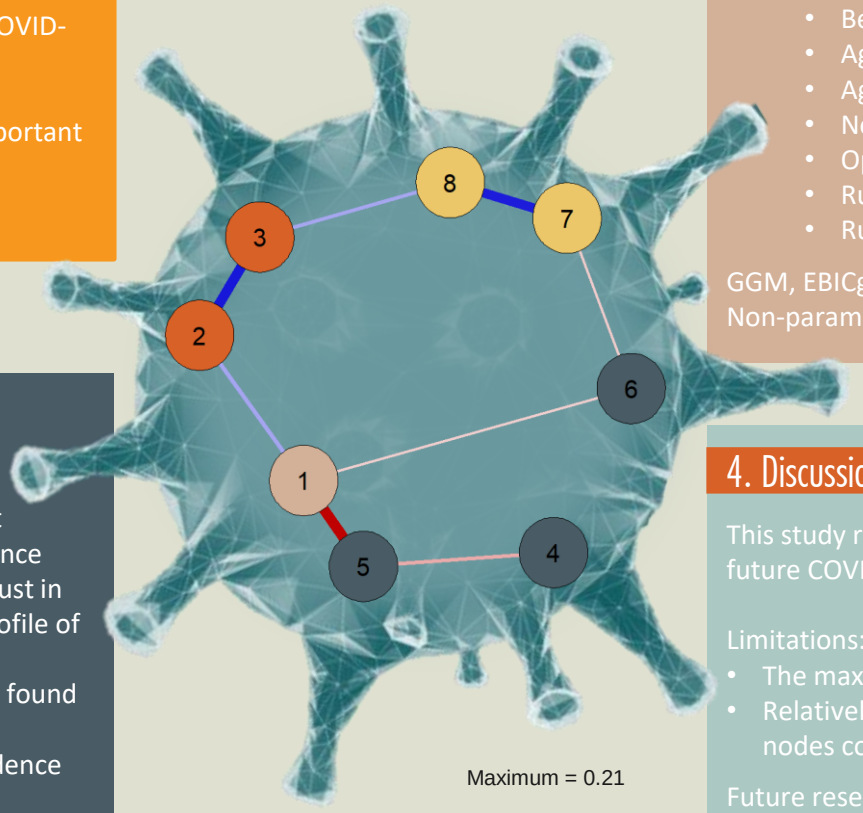
- Distrust in vaccines can lead to the spread of misinformation and hesitancy to get vaccinated when vaccines become available[1,2].
- Hesitancy to get vaccinated against COVID-19 is a major obstacle in ending the pandemic[3].
- Using network analysis to explore important target points for future COVID-19 vaccination campaigns.

Demographics
1: Age

Personality
4: Agreeableness
5: Neuroticism
6: Openness

Living
2: Hometown
3: Current Residence

Science: Belief/trust
7: Belief in science
8: COVID-19 vaccine trust



Maximum = 0.21

2. Methods

517 subjects (343 female, 157 males, 17 other)
Age 31.4 ± 13.6 years, 476 fully vaccinated

8 variables:

- Trust in COVID-19 vaccine
- Belief in Science
- Age
- Agreeableness
- Neuroticism
- Openness
- Rural/urban profile hometown
- Rural/urban profile current residence

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GGM, EBICglasso with Spearman correlations
Non-parametric bootstrap for edge stability

3. Conclusion

- Stable positive relation between trust in COVID-19 vaccine and belief in science
- Unstable positive relation between trust in COVID-19 vaccine and more urban profile of current residence
- Two other stables relations that were found were between age and neuroticism (negative), and between current residence and hometown (positive).

4. Discussion

This study reveals two possible target points for future COVID-19 vaccination campaigns.

Limitations:

- The maximum correlation is only 0.21
- Relatively small sample size -> only a few nodes could be included.

Future research: include more variables, such as science background and health situation.

References:
1. Kumar, D., Chandra, R., Mathur, M., Samdariya, S., & Kapoor, N. (2016). Vaccine hesitancy: understanding better to address better. *Israel Journal of Health Policy Research, 5*, 2.
2. Savoia, E., Piltch-Loeb, R., Goldberg, B., Miller-Idriss, C., Hughes, B., Montrond, A., Kayyem, J., & Testa, M. A. (2021). Predictors of COVID-19 Vaccine Hesitancy: Socio-Demographics, Co-Morbidity, and Past Experience of Racial Discrimination. *Vaccines, 9*(7), 767.
3. Siegler, A. J., Luisi, N., Hall, E. W., Bradley, H., Sanchez, T., Lopman, B. A., & Sullivan, P. S. (2021). Trajectory of COVID-19 Vaccine Hesitancy Over Time and Association of Initial Vaccine Hesitancy With Subsequent Vaccination. *JAMA Network Open, 4*(9), e2126882.

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