How Individuals Differ in Response to the COVID Crisis: The Role of Social Functioning

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Introduction

In this research, we address the general question of how social functioning ability impacts people's reactions to the current COVID epidemic, economically, emotionally and socially.

In our study we use both a sample of the "general population" as well as participants who are selfidentified with ASD (autism spectrum disorder) as a way of extending the range of social functioning and using a new measure called Quality of Social Life Index (QSLI) to measure participants' social functioning ability. (Items include: How well did you get along with your fellow students?, How satisfied are you with your current employment environment?, How satisfied are you with your living arrangement? etc.)

Correlation between items and QSLI (n=223)

Methods

- 223 subjects recruited from Mturk, in two phases, one with the requirement that participants are selfidentified as having ASD and one with no restrictions
- Participants answered the QSLI, then they answered questions relevant to how COVID-19 impacts their:
 - 1) Consumer Behavior
 - 2) Social Life
 - 3) Emotions towards Social Isolation

Results

We correlate responses to each survey item with participants' QSLI scores and find:

Making **fewer** changes in their social activities.

People with lower social irritable, nervous, jittery, afraid and anxious about the social isolation due

to COVID-19.

Feel lonelier.

People with higher social functioning ability

Think COVID is **overly_depicted** in the media.

COVID-19.

Feel **more** optimistic about the duration of COVID-19 and

Feel impacted less economically by

the duration of COVID-19 and how the pandemic will impact the economy.

No difference in how much people have socially isolated themselves.

Discussion

In this study we provide strong evidence that individual differences occurring in reaction to the COVID epidemic are related to their social function ability.

People with lower social functioning ability make fewer changes in activities, possibly due to the lower baseline they experience.

We find those lower on social functioning react more negatively and are more pessimistic than those scoring higher. This suggests that those with poorer social-life quality feel even more impacted by a restricted social environment.

Implications: People who are already socially dissatisfied may be particularly vulnerable to the negative impact caused by isolation.

Results

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How much have you been socially isolating yourself due to the COVID-19?	0.295	P<0.01
Given the social isolation described above, how has it made you feel? (PANAS)		
Distressed	-0.205	P<0.01
Upset	-0.206	P<0.05
Scared	-0.164	P<0.05
Irritable	-0.255	P<0.01
Nervous	-0.260	P<0.01
Jittery	-0.365	P<0.01
Afraid	-0.227	P<0.01
Anxious	-0.279	P<0.01
Compared to your friends, how much have you socially isolated?	0.030	P>0.10
How lonely do you feel due to the COVID-19 outbreak?	-0.217	P<0.01
Do you feel the COVID-19 outbreak is accurately depicted in the media (news/social media)?	0.168	P<0.05
How impacted have you been economically by COVID-19?	-0.182	P<0.01
How many years do you think the infections from the COVID-19 outbreak will last?	-0.181	P<0.01
How many years do you think the economic impact of the COVID-19 outbreak will last?	-0.150	P<0.05

References

American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. Washington, DC: Author. Baron-Cohen, S., Leslie, A., & Frith, U. (1985). Does the autistic child have a "theory of mind"? *Cognition*, *21*, 36–47: 10.1016/0010-0277(85)90022-8

Baron-Cohen, S., Tager-Flusberg, H., & Cohen, D. (1994) *Understanding other minds: Perspectives from autism*, Oxford University Press, New York, NY.

Baron-Cohen, S., Wheelwright, S., Skinner, R., Martin, J., & Clubely, E. (2001). The Autism Spectrum quotient (AQ): Evidence from Asperger syndrome/high-functioning autism, male and female, scientists and mathematicians. *Journal of Autism Developmental Disorder*, 31, 5-17: 10.1023/A:1005653411471.

Levin, I.P., Gaeth, G. J., Foley-Nicpon, M., Yegorova, V., Cederberg, C., & Yan, H. (2015). Extending the study of decision making competence to special populations: A case study of persons on the autism spectrum. *Frontiers in Psychology, 6*, 539: 10.3389/fpsyg.2015.00539.

Levin, I.P., Gaeth, G.J., Levin, A.M., & Burke, E.V. (2020). Decision making processes of high-functioning adults on the autism spectrum. In K. Morsanyi & R.M.J. Byrne (eds.), *Thinking and Reasoning in Autism*. Psychology Press/Routledge series on Current Thinking and Reasoning.

Levin, I.P., Gaeth, G. J., Levin, A.M., Burke, E.V., & Chen, S. (2019). The risky decision making processes of high-functioning adults on the Autism Spectrum. Paper presented at the Subjective Probability, Utility and Decision Making Conference, Amsterdam, the Netherlands, November 2019.

Luke, L., Ring, H., Redley, M., & Watson, P. (2012). Decision-making difficulties experienced by adults with autism spectrum conditions. *Autism*, 16, 612-621.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of personality and social psychology*, 54(6), 1063.