

The Relationship Between COVID-19 Social Distancing and Feelings of Anxiety and Depression in the US

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Abstract

People across the USA have faced significant stress and uncertainty since the emergence of COVID-19. These new stressors, such as quarantine and social distancing, can negatively impact one's mental health. This study aimed to understand the effects of social distancing on people's feelings of anxiety and depression. Results showed that 70% (n=102) screened positive for depressive symptoms, and 61% (n=88) screened positive for anxiety symptoms. Women, essential workers, and people 18-24 years old had worse depression or anxiety symptoms than men, non-essential workers, and people 45-54 years old, respectively.

Introduction

Efforts to control the spread of COVID-19 resulted in mandatory curfews, quarantine, and social distancing policies that were enacted by government officials. These changes can result in feelings of loneliness, fear, isolation, and helplessness. Research conducted during the MERS outbreak of 2015 found that people forced to quarantine experienced increased feelings of anxiety and anger (Jeong, 2016). Another study conducted during the SARS outbreak of 2003 discovered an additional source of stress was the lack of clear guidelines provided by the government (Robertson, 2004). Further studies to identify groups in need of mental health services is necessary to effectively provide relief during this difficult time.

Methodology

A survey was developed using the Patient Health Questionnaire (PHQ-9), the Generalized Anxiety Disorder Assessment (GAD-7), demographic information, and other variables. The anonymous, cross-sectional questionnaire was delivered to adults 18 years and older across the United States via social media and email.

Results

Of 274 survey respondents, 92% (n=252) reported practicing social distancing for the past two weeks, and 57% (n=144) completed the questionnaire. **The average PHQ-9 score was 9.14, and the average GAD-7 score was 8.22, indicating feelings of mild depression and mild anxiety among the overall sample.** Figures 1 and 2 show the sample's distribution of PHQ-9 and GAD-7 score classifications.

Results

	n	%
Male	25	17%
Female	116	81%
Caucasian	50	35%
Asian	65	45%
Black/African-American	8	6%
Hispanic or Latino	16	11%
Urban	43	30%
Suburban	91	63%
Rural	10	7%
Age range (average)	18-78 (29.24±10.48)	

FIGURE 1. PHQ-9 SEVERITY (N=144)

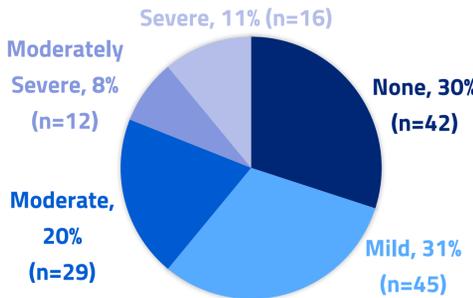


FIGURE 2. GAD-7 SEVERITY (N=144)

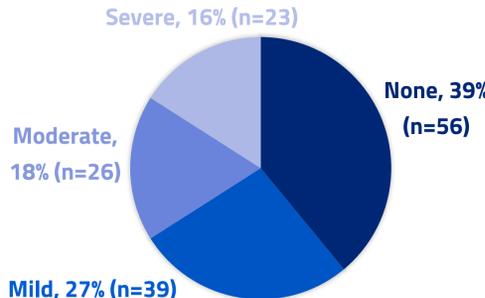
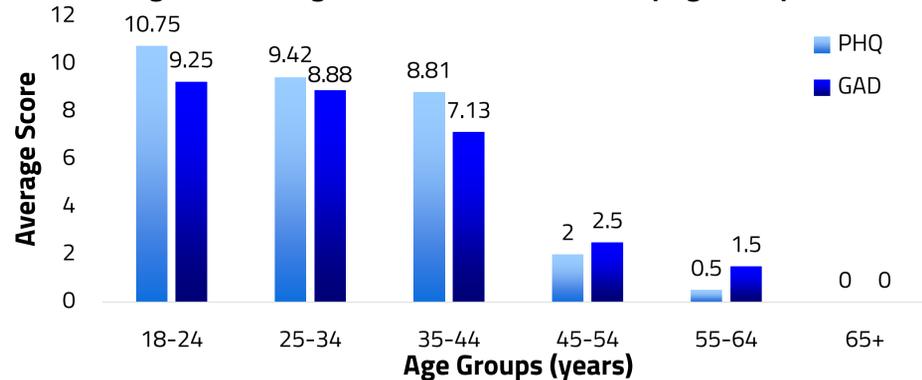


Figure 3 shows that the average PHQ-9 and GAD-7 scores decrease across increasing age groups. Table 2 shows that men had the lowest average PHQ-9 and GAD-7 scores compared to females and nonbinary individuals.

Figure 3. Average PHQ-9 & GAD-7 Scores by Age Group (n=144)



Gender	PHQ-9 average	GAD-7 average
Female (n=116)	9.10	8.59
Male (n=25)	8.68	5.67
Nonbinary (n=3)	15.00	13.67

Results

Results found 70% (n=102) of respondents screened positive for depressive symptoms, 61% (n=88) screened positive for anxiety symptoms, and **58% (n=83) screened positive for symptoms of depression and anxiety. However, only 33% (n=48) of respondents reported a prior history of at least one mental health condition.** Furthermore, 17% (n=25) noted taking medication for mental health purposes, and 23% (n=33) stated they are in counseling or therapy.

Women were more likely to have higher GAD-7 scores than men (p<0.05). Additionally, essential workers were more likely to report anxiety symptoms than non-essential workers (p<0.05). There was also a statistically significant difference in PHQ-9 scores between the 18-24 and 45-54 age groups (p<0.05) and between the 25-34 and 45-54 age groups (p<0.05).

Conclusion

Individuals who reported recent social distancing appear to be experiencing new or worsening symptoms of anxiety and depression, even if the individual has no previous history of a mental health diagnosis. Healthcare and essential workers are particularly susceptible to increased feelings of anxiety and depression, as well as people identifying as female and nonbinary. As COVID-19 restrictions continue to vary in response to the fluctuating COVID-19 cases, increasing efforts to provide mental health relief to people who are social distancing or in quarantine is needed.

One limitation is that the PHQ-9 and GAD-7 are not diagnostic tests. A definitive diagnosis of depression or anxiety is made with a comprehensive mental health assessment by a physician after a positive screening. Additionally, distributing the survey via social media has limited data collection among people 55 years and older.

The next steps of this project involve distributing a follow up survey after social distancing policies have ended to assess if depressive and anxiety symptoms resolve after the mandates have ended.

References

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The Psychological Impact of Quarantine and How to Reduce It: Rapid Review of the Evidence. *SSRN Electronic Journal*. doi: 10.2139/ssrn.3532534

Jeong, H., Yim, H. W., Song, Y.-J., Ki, M., Min, J.-A., Cho, J., & Chae, J.-H. (2016). Mental health status of people isolated due to Middle East Respiratory Syndrome. *Epidemiology and Health*, 38. doi: 10.4178/epih.e2016048

Robertson, E., Hershenfield, K., Grace, S. L., & Stewart, D. E. (2004). The Psychosocial Effects of Being Quarantined following Exposure to SARS: A Qualitative Study of Toronto Health Care Workers. *The Canadian Journal of Psychiatry*, 49(6), 403-407. doi: 10.1177/070674370404900612