ScholarOne - The Impact of Social Support on Anxiety and Depression under the Context of COVID-19 Pandemic: A Scoping Review and Meta-analysis

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Abstract

COVID-19 has not only triggered a high risk of mental health problems but brought tremendous changes in the structure of social support. To synthesize the existing literature and examine the impact of social support on anxiety and depression during COVID-19, scoping review and meta-analytic approaches were adopted. Six databases were searched from 2020 to 2022. Random effects models were used and the pooled correlations (mean r and mean ρ) were estimated. Homogeneity was assessed using Q and I² tests. Subgroup analyses were conducted. Meta-analysis of both cross-sectional and longitudinal studies showed significant estimated correlations among social support, anxiety and depression (mean ρ = -0.30, 95% CI = [-0.333, -0.255]; mean ρ = -0.27, 95% CI = [-0.370, -0.281]). Validating these results across ages, occupations, and regions is necessary. Moreover, only 31.67% of studies identified social support as a single independent variable while the remaining explored a mediating or moderating role or as one of the multiple independent variables. Besides, the results regarding the mediating/moderating effect of social support were inconsistent. Our findings suggest that more studies are expected to further clarify the role played by social support in its associations with depression and anxiety.

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Abstract

COVID-19 has not only triggered a high risk of mental health problems but brought tremendous changes in the structure of social support. To synthesize the existing literature and examine the impact of social support on anxiety and depression during COVID-19, scoping review and meta-analytic approaches were adopted. Six databases were searched from 2020 to 2022. Random effects models were used and the pooled correlations (\(r\) and \(\rho\)) were estimated. Homogeneity was assessed using Q and I\(^2\) tests. Subgroup analyses were conducted. Meta-analysis of both cross-sectional and longitudinal studies showed significant estimated correlations among social support, anxiety and depression (\(\rho = -0.30, 95\% \text{ CI} = [-0.333, -0.255]\); \(\rho = -0.27, 95\% \text{ CI} = [-0.370, -0.281]\)). Validating these results across ages, occupations, and regions is necessary. Moreover, only 31.67\% studies identified social support as a single independent variable while the remaining explored mediating or moderating role or as one of the multiple independent variables. Besides, the results regarding the mediating/moderating effect of social support were inconsistent. Our findings suggest that more studies are expected to further clarify the role played by social support in its associations with depression and anxiety.

Keywords: Social support; anxiety; depression; COVID-19; meta-analysis

Data available statement

All data generated or analyzed during this study are included in this published article (and its supplementary information files).

Disclosure Statement

The authors have no relevant financial or non-financial interests to disclose.

Ethics Statement:

This research study was conducted retrospectively from data obtained from publicly available sources or with the permission of the original study authors. We consulted extensively with the University Ethics Committee of Jiaotong-Liverpool University who determined that our study did not need ethical approval. An official waiver of ethical approval was granted from the Ethics Committee of Jiaotong-Liverpool University.

PRISMA/PROSPERO

The researchers confirm that the meta-analysis has followed PRISMA guidance. The review protocol has not been published on Prospero because the record is not eligible as PROSPERO does not accept scoping reviews.

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