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Bonding and linking social capital are key determinants for successful pandemic policy

Carlos Irwin Oronce^{a,b}, Yusuke Tsugawa^{b,c,*}

^a VA Greater Los Angeles Healthcare System, Los Angeles, CA, USA

^b Division of General Internal Medicine and Health Services Research, David Geffen School of Medicine at UCLA, Los Angeles, CA, USA

^c Department of Health Policy and Management, UCLA Fielding School of Public Health, Los Angeles, CA, USA

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In the United States, the response to the COVID-19 pandemic has demonstrated the fracturing and divisiveness of public discourse. What were originally deemed uncontroversial non-pharmaceutical interventions (NPIs), such as mask-wearing, have become symbols of political and cultural identity. Many NPIs, including mask-wearing and social distancing, required communities to come together and act collaboratively. However, studies have demonstrated that the ability of communities to coordinate NPIs may vary substantially between regions. One of the potential determinants of whether communities could cooperate in the face of monumental challenges, such as the COVID-19 pandemic and its rippling economic and social effects, is social capital, defined as the resources to which individuals have access through their social networks and facilitated by shared values or norms (Moore and Kawachi, 2017). The idea of social capital in mitigating the social, emotional, and health effects of natural disasters has been well-documented (Castleden et al., 2011; Koh and Cadigan, 2008; Noel et al., 2018), and there is emerging evidence that this has been true for the COVID-19 pandemic as well. For example, prior work from Europe has shown that countries with greater social capital had lower excess deaths and decreased mobility which lends support to the idea that social capital facilitates collective action towards health behaviors that curb the spread of COVID-19 (Bartscher et al., 2020). Social capital, however, is a complex construct, and therefore, may have intricate interplays with how individuals respond to emergencies such as the COVID-19 pandemic.

In this issue of Social Science and Medicine, Fraser and colleagues

investigated the relationship between the three subtypes of social capital (bonding, linking, and bridging) and the impact of the COVID-19 pandemic, as measured by excess mortality using county-level data in the US. They found that regions with a high bonding social capital experienced lower excess mortality, while the relationship for linking capital and excess mortality was weaker. They found no evidence of the impact of bridging social capital (Fraser et al., 2021).

This study raises important questions of how bonding and linking social capital could be leveraged in the continued response to the pandemic. First, the finding that bonding social capital was associated with lower excess mortality, even after adjusting for other structural and social determinants, underscores the importance of interpersonal relationships and community members in promoting behaviors that curb the spread of COVID-19. As of early August 2021, hospitalizations for COVID-19 reached levels not seen since February 2021, during the last national surge in cases. This time, however, most hospitalizations are occurring among the unvaccinated, and the delta variant comprises a growing portion of cases. The finding by Fraser et al. regarding bonding social capital should encourage public health policymakers to focus efforts on trusted messengers and strategies that foster conversations among individuals in the same family or social circles regarding vaccination. For example, a recently published randomized trial of physician-delivered information found that racial concordance between participants and physicians increased information-seeking behavior among Black study participants (Alsan et al., 2021). Instead of spending resources on financial incentives or rewards, media messages featuring

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* Corresponding author. Division of General Internal Medicine and Health Services Research, David Geffen School of Medicine at UCLA, 1100 Glendon Ave Suite 850, Los Angeles, CA, 90024, USA.

E-mail address: ytsugawa@mednet.ucla.edu (Y. Tsugawa).

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everyday community members rather than celebrities or high-profile individuals may be more effective in communities with high bonding social capital that are also at risk of excess mortality during the current surge.

Second, the finding that linking social capital was temporarily associated with reduced excess mortality early in the pandemic suggests that the impact of linking social capital may be nuanced. Outside of the COVID-19 context, high social capital enhances the relationship between healthy behaviors and the collaborations of local health departments and health care systems (Cramer et al., 2021). At the outset of the COVID-19 pandemic, trust in governmental and public institutions was high, and public health officials, such as Dr. Anthony Fauci, were highly regarded. High trust in governmental institutions and linking social capital may have aided public health and health care messages on risk mitigation, thereby improving adherence to NPIs. During the current phase, which has focused on vaccine uptake, trust in government is crucial for public health as prior work has demonstrated its association with vaccine acceptance (Moucheraud et al., 2021).

Given the importance of linking social capital and public health, one explanation for the finding in the study by Fraser et al. is the role of misinformation. Since last year, there has been increasing antagonism towards public officials and proliferating misinformation regarding the effectiveness of masking, social distancing, and other NPIs, in addition to the effectiveness and safety of the COVID-19 vaccine. The spread of misinformation has been deemed a public health problem by the Surgeon General and has potentially undermined trust in non-partisan governmental leadership, which may explain why the relationship between linking social capital and excess mortality was not durable (Murthy, 2021). Specifically, even in communities where linking social capital is high, misinformation may have already sowed enough doubt to undermine population-level confidence in NPIs and generate hesitance towards vaccination. The potential impact cannot be understated and will contribute to tragically preventable excess mortality.

What can be done to counter this and potentially strengthen the inverse relationship between linking social capital and excess mortality? As the Surgeon General's report notes, addressing misinformation is a multilevel problem requiring action across individuals, communities, governments, educational institutions, and researchers. In particular, governments may need to experiment with improved messaging tools in partnership with local communities, thereby leveraging bonding social capital. Additionally, researchers can support such efforts by studying interventions to combat misinformation but also investigating the underlying mechanisms of how misinformation interacts with social capital subtypes and affects the response to the COVID-19 pandemic (Murthy, 2021).

Studying the relationship between social capital and population health is challenging because the concept of social capital is

multidimensional, and the implications may be less clear. This is even more difficult in a frequently changing public health problem as the COVID-19 pandemic. Fraser and colleagues commendably address the challenge by focusing on subtypes of social capital and provide researchers, policymakers, and public health practitioners with new insights on how social capital has shaped the course of the COVID-19 pandemic in the US. At the same time, they have highlighted important new questions that deserve further investigation. In the short term, we must enhance and support the efforts of campaigns leveraging bonding social capital in the form of trusted messengers, such as HHS's "We Can Do this Campaign" (US Department of Health and Human Services, 2021). Over the long term, researchers should investigate how misinformation has impacted the relationships between social capital subtypes and health, as well as how social capital subtypes may have even played a role in propagating misinformation. Advancing our knowledge in these areas will make us better prepared for future pandemics.

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