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PERSPECTIVE

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The need for scientific leadership and collaboration to enhance social connection: A call to action

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Abstract

The United States faces a growing crisis of social disconnection, marked by increasing rates of loneliness, social isolation, and declining social capital. This has profound implications for public health, as social connection is critical to individual well-being and societal functioning. The "loneliness epidemic," as described by the US Surgeon General, is intertwined with broader challenges such as mental health crises, substance abuse, and sociopolitical issues. Although evidence highlights the importance of social connection for health outcomes, efforts to address social disconnection remain fragmented. This article provides context about the status of social disconnection in America and justifies the need for science to promote social connection from the perspectives of a scientific leadership council (SLC). This call to action proposes coordinated efforts to: (1) galvanize efforts to employ scientific evidence to design solutions and policies to address social disconnection; (2) establish the role of a US-based SLC, an interdisciplinary collaborative for evidence-based leadership; and (3) advocate for unified efforts and harmonization to close the gap between evidence and implementation. Additionally, this article proposes setting measurable national goals aligned with the Healthy People 2030 framework to monitor progress and drive systemic change, transforming the current landscape and building a more connected future.

KEYWORDS
loneliness, policy, social connection, social isolation

INTRODUCTION

There are growing concerns that Americans are more socially disconnected than ever, with serious and widespread consequences. The US Surgeon General has described this as a "loneliness epidemic," with others framing it as a public health crisis. With rising rates of isolation and declines in social capital,[1–3] it is perhaps not surprising that an appreciable portion of the population report feeling lonely.[2,4–6] Correspondingly, we are simultaneously witnessing youth mental health, substance abuse, violence, and economic, environmental, social, and political crises that may be interconnected. Social connection is critical to the health, well-being, and functioning of individuals, communities, and society, and thus may be a root cause of our most pressing societal issues. Together, the prevalence of social isolation and loneliness and

rising conflict between groups, and their pronounced societal impacts, highlight the urgent need for coordinated and comprehensive efforts to address and reverse these trends to improve the lives of all Americans. To do so, we cannot take a fractured or haphazard approach. Science and leadership will need to underpin these crucial efforts.

Social connection is fundamental to individual and community functioning and thriving.[7] We use *social connection* as an umbrella term to refer to the multitude of concepts and measures, all of which have been extensively documented as associated with physical and mental functioning. Social connection can take many forms, including structure (e.g., network size and diversity, social interaction frequency), function (e.g., social support), quality of social interactions (e.g., social conflict, relationship satisfaction), relationships, and networks.[8,9] Thus, social connection is a multifactorial construct, and social disconnection can also take many forms. Therefore, loneliness and isolation are common indicators but do not comprehensively capture all forms of lacking or low social connection (social disconnection). Indeed, social disconnection is not just the absence of connection but can be characterized by the presence of social negativity (e.g., conflict, insensitivity, and interference).[10] Social connection can vitally influence our quality of life, and physical, cognitive, and mental health, as well as longevity, safety, and prosperity.[9] When any component of social connection is lacking, there is evidence of detrimental effects across each of these dimensions. Thus, there are significant individual and societal costs to not addressing the loss of social connection.

Over the past several decades, there have been several shifts pointing to trends of declining social connection among Americans. For example, the 2022 Behavioral Risk Factor Surveillance System (BRFSS) data of over 300,000 Americans found that social connection was the most commonly reported unmet need.[11] Furthermore, 32% reported feeling socially isolated or lonely, and 25% reported lacking social/emotional support.[12] Data from the American Time Use Survey demonstrate that the past two decades have seen an ever-increasing proportion of Americans spending significantly more time in isolation, less time in companionship, and less time with family, friends, and others.[13] One of the most dramatic drops in social connection was time spent with friends reported by youth. A decline in social capital, including participation in clubs, organizations, and groups, has been evidenced as far back as the mid-1900s. For example, the United States has seen declining participation in religion, volunteering, and civic engagement.[14–16] These shifts correspond with declines in trust in institutions and in others.[a] Trust underpins social interactions, and thus the absence or breakdown of trust makes connections more difficult.[17] Sociodemographic shifts may also continue to contribute to the decline in social connection. For example, an increase in single occupancy households, declining marriage and birth rates, and an increasing aging population may result in fewer sources of informal support from kin as people age.[18] Thus, as a society, if there is less informal support available, the need for more formal support will increase.

[a] https://www.pewtrusts.org/en/trend/archive/fall-2024/americans-deepening-mistrust-of-institutions

While the current trends are indeed concerning, there is also reason to be hopeful. For instance, the Meta/Gallup Global State of Social Connection Survey of 142 countries found that while nearly a quarter of the global population reported feeling very or fairly lonely, the majority reported feeling socially connected.[19] This higher frequency of connection suggests that we can systematically leverage social strengths to address vulnerabilities on a large scale. The question then becomes, how? The answer lies in the wealth of evidence across multiple fields that we can leverage for this purpose.

Identifying a problem is one thing, but effecting change in public perceptions, norms, and practices is another. Shaping effective movements for change has proven challenging, as we have seen both public health successes and failures. For instance, after coordinated public health efforts such as public awareness, education, black box warnings, and taxes, smoking rates have declined from 40% in 1964 to 11.5% as of 2021,[20,21] yet obesity persists without improvement.[22] It is imperative that we learn from other public health successes and failures to prioritize resources wisely and direct efforts toward approaches that are both impactful and devoid of potential harm. Scientific underpinning is crucial not only for meaningfully improving health outcomes but also from an economic perspective, ensuring we invest our time and resources in actions that yield tangible benefits to society.

We offer a call to action that builds upon the National Academy of Sciences and Medicine's groundbreaking report,[23] the US Surgeon General's Advisory,[9] and the World Health Organization's establishment of the Social Connection Commission.[24] Our call to action underscores the need for evidence to influence individual and community health effectively and calls upon the scientific community and all relevant stakeholders to come together to further the body of research and successfully implement it. In essence, science is foundational and must be integrated into any formalized actions taken to advance social connection and address the harms of disconnection—this may even include continuing research on *all people*, including minoritized groups. Leadership and champions are also vital to coordinate and convene various stakeholders to foster collaboration and support positive societal-wide social connection. Thus, this call to action has three primary aims: (1) galvanize efforts to employ scientific evidence to design solutions and policies to address social connection; (2) establish the role of a US-based scientific leadership council (SLC), an interdisciplinary collaborative for evidence-based leadership; and (3) advocate for unified efforts and harmonization to close the gap between evidence and implementation.

NEED FOR SCIENCE

Over the past few decades, we have seen a significant increase in scientific attention to the systematic study of social connections. In particular, many studies have focused on the low end of the social connection continuum—with a surge in studies measuring social isolation and loneliness. The number of studies, sample sizes, and the rigor of the methodology have increased over time. For example, the number of studies published on loneliness in the last 4 years has

risen exponentially.[25] The rigorous systematic study of social isolation and loneliness and their relationships with health outcomes continues to advance the field of social connection across multiple sectors. For example, several meta-analyses on key outcomes now aggregate hundreds of peer-reviewed studies analyzing data from millions of participants that demonstrate how strongly social connection variables are related to health outcomes like heart disease, stroke, and mortality.[25–30] While the literature base is diverse, there is remarkable converging evidence pointing to the protective effects of being socially connected and the risk associated with various deficits in social connection (i.e., social disconnection) that rivals the risk of traditional chronic conditions and risk factors.[31,32] The evidence supporting the risks of social isolation and loneliness has been collected over many years and replicated in various populations.

While the protective effects of social connection are well documented, it is essential to remember that some evidence is stronger than others. This is particularly relevant to the next frontier of social connection research, including building the evidence base for determining which interventions improve social connection and, subsequently, other outcomes of interest. Given the gravity of the problems of social disconnection (e.g., isolation and loneliness), it is attractive to seek out quick fixes to address them. However, due to its dynamic and complex nature, solutions to the problem will likely be multifactorial and complex, with different solutions working for different populations. Equally important to identifying effective solutions is identifying those that do not work or cause harm. Sometimes, a solution for one population may not work for another or may even have unintentional negative consequences for another population, such as intensifying feelings of loneliness or reinforcing social isolation by masking loneliness. Investing in ineffective solutions that are based on a sufficient-component approach may lead to a false sense of security or the assumption that we are addressing a problem when we are not, and scaling up or making significant investments in ineffective approaches may fuel distrust. The nuance of which interventions work (or do not work), for whom, and in what situations emphasizes the need for science and a systematic approach to help support the development of the evidence base.

While science will be a necessary part of the advancement of the field of social connection, this is not to say that scientists should be gatekeepers of information. The media has been an important partner in spreading and raising awareness about the risks of social isolation and loneliness to broad audiences. However, there has been a proliferation of self-proclaimed experts and "magic bullet" solutions for social disconnection that are being invested in, and sometimes perpetuated through, popular media coverage without being backed by evidence or a systematic approach. Many of these may amplify misinformation, creating confusion at best and even causing harm in the worst case. In this age where media platforms have the potential to reach massive audiences without scrutiny, the scientific community should be employed as a coordinated resource to help everyone understand the evidence, or lack thereof, driving the field of social connection. In a recent review of interventions targeting social isolation and/or loneliness among older adults conducted by the Agency for Healthcare Research and Quality, of the 16 studies meeting search criteria, half of them were considered poor quality,[33] despite all being peer-reviewed. Many tools have been developed for scientists to evaluate the strength of studies (e.g., risk of bias) included in meta-analyses, and this serves as a reminder that the strength of evidence needs careful examination and interpretation, both within the scientific community and especially before being disseminated widely through broadly accessible media outlets.

With enthusiasm for addressing social isolation and loneliness increasingly expanding within many sectors, it is important to extend the standard of evidence to these sectors. This is especially important when evaluating the effectiveness of social connection interventions developed by for-profit companies. The innovation and scaling opportunities that for-profit companies bring to the field can offer exciting tools to address social isolation and loneliness. Moreover, for-profit companies typically have the capacity to quickly and efficiently develop novel solutions and disseminate them widely. However, for-profit companies answer to investors and stakeholders, and thus, even well-intentioned companies are vulnerable to bias in evaluating the effectiveness of their solutions. As scientists, we must be cautious about for-profit ventures and ensure that we invest in and support those who conduct high-quality research to ensure their products are effective in creating or supporting social connection, not simply effective at building a user base that generates profit for the company. For example, a company may solicit an independent evaluation by researchers or maintain a scientific advisory board with researchers who do not have a financial stake in the company. Similar partnerships between researchers and industry have been successful, such as the NIH partnering with Pfizer to expedite drug development and dissemination of screening modules such as the one used for depression (e.g., PHQ-9).[34–36] Scientific evidence is paramount, given the risks posed by for-profit companies with inherent financial competing interests, no matter how well-intentioned they may be.

CURRENT CHALLENGES

While scientific evidence is crucial to advancing the field of social connection and identifying solutions to address social isolation and loneliness, there are many barriers to conducting this work. Interest in promoting social connection continues to grow across sectors of society (e.g., education,[b] employment/labor,[c] government, and healthcare[d]), but this enthusiasm has outpaced its coordination. Consequently, many sectors and community-based organizations are conducting relevant work in silos, preventing opportunities to capitalize on shared learning and combine resources and potentially have a greater impact on addressing social isolation and loneliness and promoting social connection. As this work progresses, facilitating cross-sector knowledge

[b] https://www.social-connection.org/social-framework/education/#:~:text=Our%20Report%3A%20The%20SOCIAL%20Framework,and%20students%20of%20all%20ages.&text=At%20our%202022%20Annual%20Action%20Forum%2C%20Drs.
[c] https://www.social-connection.org/social-framework/work-employment-labor/
[d] https://www.social-connection.org/social-framework/health/

TABLE 1 Strategies and activities for the seven goals that the scientific community can drive in multisectoral efforts to address social connection.

Goal	Strategies and activities
1. Provide scientific leadership	Advocate for a leadership position or "national champion" to oversee and create accountability for the vision, movement, and work related to social connection (similar to the UK and Japan Ministers of Loneliness). Serve as subject matter experts to consult, advise, or directly lead national measurement, initiatives, strategy, and other efforts related to social connection.
2. Promote interdisciplinary scientific collaboration	Serve as a platform for interdisciplinary dialogue and collaboration. Utilize diverse perspectives across scientific disciplines (e.g., psychology, sociology, public health, medicine, political science) and life stages to develop comprehensive and inclusive research agendas. Collaboration through strategy sessions, position statements, publications, presentations, convenings, and public-facing materials. Reassess SLC composition periodically to expand representation.
3. Identify gaps in the evidence to set a national research agenda	Establish a convening to create a national scientific strategy to close the gap between evidence and application. Utilize the SOCIAL Framework to identify gaps and opportunities and track progress.[39] Create and contribute to a centralized resource or national data repository to monitor and synthesize peer-reviewed and gray literature. Establish a Cochrane Collaboration group for systematic reviews. Engage community and industry partners to understand and address practice barriers.
4. Drive consensus and harmonization of measurement for national core objectives and guidelines for social connection	Promote harmonization and uniformity in terminology across disciplines for social connection and associated research (taxonomy). Create national repositories of key measures and datasets. Convene interdisciplinary experts to develop standardized multifaceted measurement tools for assessing social connection. Maintain an inventory[a] of relevant measures and metrics for the assessments of social connection. Ensure metrics are scientifically sound and enable comparison to other nationwide and international data sources and efforts (e.g., BRFSS, NHANES, OECD). Develop publicly available consensus guidelines about strategies to address social disconnection and advance social connection to inform cross-sectoral, evidence-informed action. Update guidelines periodically to reflect the latest evidence, including lessons learned from the field.
5. Develop frameworks to address social connection	Contextualize gaps and opportunities within common theoretical frameworks and models (e.g., SOCIAL Framework[42]). Promote accessible frameworks that recognize variation in how people experience disconnection and the risks across the life course. Create and contribute to a centralized resource or repository organized by theoretical frameworks and models related to social connection. Encourage research conducted with theoretical underpinnings to guide recommendations for replicability.
6. Evidence-based decision-making	Engage relevant social connection subject matter experts in relevant decision-making. Advocate for an evidence-based approach to policymaking that ensures the implementation of effective policies and strategies that are informed by the latest scientific evidence. Synthesize research findings to inform actionable policy recommendations. Systematically evaluate the implementation and effectiveness of policies on an ongoing basis to guide modified and/or additional legislation and funding priorities. Caution against claims, initiatives, policy, and other implementation that are not grounded in evidence and theory.

(Continues)

TABLE 1 (Continued)

Goal	Strategies and activities
7. Raise public awareness	Review the current evidence and keep the public apprised of new innovations and effective solutions to address social connection. Ensure that high-quality peer-reviewed evidence is also communicated to the public through plain language. Regularly communicate science to the public through various media channels. Use evidence to guide more effective awareness campaigns to ensure accurate information, and to guide communication strategies that have the greatest effect on behavior change. Promote opportunities to improve social connection through public and professional convenings, conferences, and networks. Support and guide locally driven coalitions and initiatives to implement and assess the effectiveness of solutions to improve social connection. Caution against self-proclaimed claims to "end" loneliness and "whatever feels good" approaches and solutions that are not grounded in evidence or theory.
8. Ensure sustainability and prioritization	Advocate for leadership positions that are not politically appointed. Advocate for funding prioritization to adequately resource efforts, particularly long-term efforts. Provide mentorship to build the next generation of researchers and champions from diverse backgrounds and sectors.

Abbreviations: BRFSS, Behavior Risk Factor Surveillance System; NHANES, National Health and Nutrition Examination Survey; OECD, Organization for Economic Co-operation and Development.

[a]https://www.social-connection.org/social-connection-measurement-tools-inventory/.

sharing and promoting cross-sector collaborations will be crucial for success.

Even within sectors, challenges exist in coordinating efforts to address social connection. As outlined in the 2020 NASEM and 2023 OSG reports, which focus mainly on the health sector, there is a lack of consensus on how to measure social connection, social isolation, and loneliness.[37,38] Additionally, guidelines for national data on social connection using health population surveys and other modes are lacking. Taking action may be mired by a complicated landscape of interventions. Without developing national standards to identify, measure, and track these phenomena, we risk wasting resources by reinventing the wheel and stymying the advancement of this work by using inconsistent definitions and practices.[39,40]

Overcoming these barriers is not out of reach. As outlined in a 2023 report by the US Government Accountability Office (GAO), there is a precedent for cross-sector collaboration in government agencies to address large challenges.[41] In this report, they identify best practices for interagency collaboration, including defining common outcomes, bridging organizational cultures, and including relevant participants.[41] These practices could promote a more impactful effort across sectors to address social connection. However, there needs to be a coordinating body, a champion(s) in place, and an infrastructure to support these practices.

NEED FOR EVIDENCE-BASED COLLABORATION AND LEADERSHIP

Effective, collaborative, and interdisciplinary leadership is essential to build and communicate a vision that advances the evidence needed to address social connection. Given the pressing need to overcome challenges and barriers, and provide scientific guidance to establish and advance evidence, the Foundation for Social Connection established a scientific leadership council (SLC) in 2020 to address this gap. The SLC is a small group of scholars that serves as a coordinating body to convene diverse perspectives, synchronize research and action, and deliberate and provide recommendations about matters of scientific research and evidence that affect national and local policy, research development, and program implementation and development. The SLC members are scientists who were selected to represent an array of disciplines (e.g., public health, medicine, psychology, communication studies, education, and industry), research methodologies (e.g., clinical and community trials, translational research, and community-based participatory research), and professional insights about the causes and consequences of social connection and disconnection.

Establishing this group was an important first step in building this scientific collaboration and leadership. The primary role of the SLC is to ensure that work focused on social connection is driven by evidence, requiring strategic flexibility amidst the evolving state of research and practice aimed at addressing social disconnection. Given the difficulty of remaining abreast of the current published literature, emerging policies, and innovative solutions, the SLC has developed a weekly research report to disseminate the most recent peer-reviewed research on social connection. Knowledge sharing through this mechanism is intended to foster opportunities for research and collaborations and, as a national and international portal, is well-positioned to strategically expand its expertise base, build a larger national scientific network, and form strategic collaborations with community partners and stakeholders. This expanding infrastructure advances the SLC's aim to disseminate evidence to different audiences through various

networks of practitioners, researchers, nongovernment organizations, government agencies, policymakers, and more.

While the SLC is the first step, our future efforts will focus on expanding the reach and representativeness of the group. This includes working with community partners and stakeholders across sectors of society. We must not only build a larger scientific network, but a larger network outside of academia and other research institutions. At the Foundation for Social Connection (F4SC), we work with a network of community partners, including supporting communities through our action guide for building socially connected communities. This group of scientists engages and collaborates with many different types of stakeholders at F4SC and through the network at our sister organization, the F4SC Action Network (formally known as the Coalition to End Social Isolation and Loneliness). Furthermore, to complement the formal efforts of the expanding SLC, another group of social connection experts is forming, comprised of scholars, community organization representatives, and industry partners. This additional group will be called upon to review materials generated by the SLC, participate in targeted initiatives, and propose a vision for bridging the gap between research and practice.

CALL TO ACTION

Our call to action is to invite the larger scientific community to join us in our efforts by establishing an interdisciplinary collaboration to unify and sustain efforts. This call to action is to unite the scientific community across scientific disciplines and relevant stakeholders across sectors of society to work together to close the gap between evidence and implementation. Such a call has the potential to build social trust and frame social norms within and between communities (e.g., scientific, practitioner, and general public) to facilitate action to promote social connection.

This call to action is essential to making progress toward the recommendations already set forth in the NASEM reports and the US Surgeon General's Advisory. While not all recommendations are directed at the scientific community, there is nonetheless a role for the scientific community in each of them. Among these recommendations, we have identified seven goals that the scientific community can drive in multisectoral efforts to address social connection. These goals are to: (1) provide scientific leadership; (2) promote interdisciplinary collaboration; (3) identify gaps in the research base to set a national research agenda; (4) drive consensus and seek harmonization of multifaceted measurement and national guidelines for social connection; (5) develop frameworks to address the complex and multifaceted nature of social connection; (6) support evidence-based decision-making; and (7) raise public awareness. See Table 1 for strategies and activities for each goal.

A second call to action is to set clear, measurable national goals to monitor our success. In an effort to align our efforts with a larger visionary framework, we adapted the Healthy People 2030 plan of action,[43] focusing more broadly on health and well-being to focus on promoting health and well-being through the lens of social connection. These include:

1. Set national goals and measurable objectives to guide evidence-based policies, programs, and other actions to improve social connection.
2. Provide accurate, timely, and accessible data that can drive targeted actions to address regions and populations that have poor connections or are at high risk for social disconnection, including isolation and loneliness.
3. Foster impact through public and private efforts to improve social connection for people of all ages and the communities in which they live.
4. Provide tools for the public, programs, policymakers, and others to evaluate progress toward improving social connection.
5. Share and support the implementation of evidence-based programs and policies for social connection that are replicable, scalable, and sustainable.
6. Report biennially on progress throughout the decade.
7. Stimulate research and innovation toward meeting social connection goals and highlight critical research, data, and evaluation needs.
8. Facilitate the development and availability of affordable means of programs, services, and resources for social connection.
9. Advocate to have topics and objectives specific to social connection embedded into Healthy People 2030 and future Healthy People frameworks.

CONCLUSION

The scientific community must unite in a coordinated and collective effort to achieve national social connection and health goals. The persistent delays in translating scientific evidence into implementation highlight a clear and urgent need for immediate, concerted actions to accelerate progress in addressing social connection. Accelerating progress in addressing social connection requires that all efforts be rooted in robust science and evidence. In a landscape filled with competing voices and interests, there is a high risk of confusion, resource competition, and duplication of efforts. We cannot afford to let these barriers slow our progress.

To accelerate progress, we must go beyond working in isolation and forge partnerships within the scientific community and with other key stakeholders across sectors of society. Scientists in academia, industry, government, and philanthropy are uniquely positioned to take on leadership roles and champion collaborative, cross-sector solutions. This is not just a call to collaborate with us but will be necessary for sustained commitment from all parties to drive innovation and systemic change.

Breaking down silos and fostering an inclusive, transdisciplinary multiperspective approach is essential to addressing complex societal issues. By codesigning and collaborating with others, we can ensure broader commitment, ownership, and appropriate application of scientific evidence infused across all initiatives.

In keeping with our mission, we urge the scientific community to avoid working in isolation and embrace connection. Only through ongoing collaboration can we achieve meaningful, long-term impact to strengthen social connection and improve health and well-being

outcomes. The power of connection is not just a research goal but the key to lasting societal change.

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COMPETING INTERESTS

TKMC reports personal consulting fees from Edenbridge Healthcare and Papa Inc. All other authors declare no competing interests.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no datasets were generated or analyzed for the current paper.

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