

Harnessing Digital Media to Promote Mental Health in College Populations

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1. Current Vision

My career goal is to determine the best investments in the mental health and general wellbeing of college populations and adolescents and young adults more generally. In recent years I have become convinced that achieving this goal requires the components emphasized by this exciting workshop, including multidisciplinary team science and collaboration, cutting-edge health and behavioral science, and innovative computing and sensing technology.

Mental health is at the core of college student wellbeing in many respects. Psychiatric disorders, including substance abuse disorders, account for nearly 50% of the total burden of disease for people ages 15-24 in the U.S. (Michaud et al., 2006 *Pop Health Metrics*). Common mental health problems such as depression and anxiety appear to be increasing in prevalence in college populations (Twenge et al., 2010 *Clin Psych Rev*). These conditions are highly correlated with a wide range of important health behaviors (e.g., sleep, diet, physical activity, substance use), and are highly predictive of academic success in college (Eisenberg et al., 2009 *BE J Econ Anal & Policy*).

Digital media such as videos, social media, apps, games have become a pervasive influence in young people's lives. Some observers worry that the ubiquity of digital media is contributing to the decline in resilience and mental health among young people, as extrinsic motivations (e.g., popularity, status, money) become more prominent. Rather than bemoan these apparent trends, we need to ask, how can we harness digital media as a positive influence on mental health?

The strategy developed by our team at the University of Michigan emphasizes the concept of the "Tinyshift" (irreverently mashed into a single word): small doses of digital media can increase coping skills and motivate help-seeking and healthy and supportive behaviors. We believe this concept holds great potential, if we can bring together the following four complementary assets into a large-scale, collaborative enterprise:

i) Multi-component, coordinated production and synthesis of digital media. A vast array of digital media related to mental health is already available, and this stock of content and tools will continue to grow organically. While young people (and their schools) can find good content and programs themselves, there also needs to be some group(s) who are curating the best media available and presenting them to youth populations in a coordinated manner. Also, digital media has a better chance of truly engaging young people when delivered in coordination with in-person relationships and organizations; in this respect, colleges are ideally positioned.

ii) Scientific grounding. Academic researchers have a role to play in the curation of media, by imposing high standards of science: theory, data, and empirical evidence help distinguish the digital media that is most likely to improve mental health and health behaviors. Ideally, digital media-based interventions are evaluated and optimized using rigorous trials that take

advantages of the latest advances in research methodology (e.g., the MOST framework, SMART trials, and factorial designs, as appropriate).

iii) Multidisciplinary collaboration and partnerships. A small group of academic researchers cannot do this by themselves. Partnerships are needed across academic disciplines (e.g., public health, psychology, survey research, economics, business, computer science, electrical engineering, performance arts, screen arts and video production), and between universities and other communities and organizations. For example, our team has begun to build partnerships with a variety of health technology companies and national professional and advocacy organizations focused on student mental health.

iv) Involvement of students themselves. The bedrock of our proposed strategy is the intensive involvement of students themselves. The current generation of students has enormous enthusiasm to help develop, test, and disseminate digital interventions for mental health. They know what will stimulate and engage their own community better than we as researchers can possibly know. Specific mechanisms for engaging students in this work include student organizations (e.g., we began the Healthy Minds Student Leader Coalition in 2014, as a way to engage student leaders in our work related to digital media and mental health) and multidisciplinary courses (e.g., interlocking courses on screenwriting/video production, app/game development, research/evaluation, and social entrepreneurship).

2. Opportunity to Enhance Vision through this Workshop

My sense is that the strengths of our current vision, and our team behind it, are complementary to the exceptional assets that this workshop will bring together. Thus, our participation in this workshop would help us enhance our vision significantly, and perhaps merge it in some ways into collective visions with other participants. To date our team's most significant progress has been in the areas of: establishing large-scale networks and collaborations; collecting social, behavioral, and health data; and developing engaging brief videos to address mental health. We would benefit substantially from discussions and new collaborations with researchers who are more experienced in the development of technology-based health interventions.

3. Background and Credentials of Proposer

My graduate training is in economics, which reflects my overall focus on determining the best investments (the most cost-effective interventions and strategies). At the University of Michigan I am an Associate Professor of Health Management and Policy in the School of Public Health and a Faculty Associate in the Institute for Social Research. My research to date centers on college student mental health. I developed the Healthy Minds Study, in which we have collected web-based survey data from college and university populations at over 115 institutions since 2005. This study has provided data to inform the development and evaluation of intervention strategies, and has evolved into a national (and to some degree international) research-practice network (www.healthymindsnetwork.org). In recent years I have worked with Inbal (Billie) Nahum-Shani and other colleagues to test the effectiveness of brief videos (and associated apps) as a strategy for promoting help-seeking behavior and other coping skills in college populations (e.g., the [Tinyshifts channel](https://www.youtube.com/channel/UC...) on YouTube and www.athletesconnected.umich.edu).