

## Combining personal data with social accountability for health-related goal attainment

Brooke Auxier  
Philip Merrill College of Journalism  
University of Maryland, College Park  
bauxier@umd.edu

*Abstract -- Personal informatics tools, like mobile apps, are popular in the health and fitness space. Though these health and fitness-related applications are meant for personal and private use, these data points and insights are often shared by users in social settings in order to build community and provide accountability. This model, which involves the social sharing of personal informatics, is worthy of study, and perhaps, replication.*

A recent report from the Centers for Disease Control and Prevention's National Center for Health Statistics (NCHS) found that nearly half of American adults reported trying to lose weight at some point in the 12 months preceding the survey, which was administered from 2013-2016 (Center for Disease Control, 2018). Another study found that although 76 percent of U.S. adults say eating a healthy diet and getting enough sleep is part of a healthy lifestyle, only 52 percent of the sample did either regularly (Intel, 2018).

It seems that many people are striving towards health and fitness goals, so it's no surprise that personal informatics tools and technologies focused on health and fitness, especially mobile applications, are popular. A study from 2015 found that more than half (58 percent) of mobile phone users in the United States had downloaded a health-related app (Krebs & Duncan, 2015). And there is empirical evidence to suggest that the use of smartphone apps can help people reach health and fitness goals (Higgins, 2016).

Health-related apps range in focus and purpose, from fitness, to nutrition, weight loss, sleep and stress. Applications like MyFitnessPal and MyPlate allow users to track their food and caloric intake, while other applications like Aaptiv, Sweat and Studio Tone It Up provide step-by-step workout and fitness plans for users. Apps like Sleep Cycle and Sleep Better track user sleep habits and patterns and the Headspace and Breathe2Relax apps help users manage stress. As of 2017, the two most popular cross-platform health-related applications by monthly active users were FitBit and MyFitnessPal (Verto Analytics, 2017).

Though these apps are largely intended for individual use, there are several social components to these personal tools that aid users in goal attainment. Social sharing is inherent to many of these apps and users are encouraged to share their progress, setbacks, milestones and experiences with

others right in the app's environment. However, many social activities also take place outside of the interface—both online and off.

Communities often form on other online platforms around health-related goals. For example, Studio Tone It Up, a fitness app created by influencers Karina Dawn and Katrina Scott, has an active and engaged community on both Instagram and Twitter. Users of the app unite by using the hashtag #tiu. They share progress photos, personal challenges and setbacks, and their overall experience with the Tone It Up programs on these social platforms. These social presentations of personal experience (and personal information and data sharing) allow for group accountability, which may lead to greater success with the program.

Other interactions take place offline. Communities and individuals, like the one built around Tone It Up, often host offline meetings through the use of geo-specific hashtags or meetup groups. Members of the Tone It Up community use geo-specific hashtags on Instagram and Twitter, like #tiudc and #tiunyc, to connect with other local members. The creators of the Tone It Up app also host live events (e.g. workouts, meet-and-greets) that attract hundreds of attendees.

The off-app and offline events and interactions may contribute to individual goal attainment, but they also inadvertently work to strengthen the communities and increase brand awareness. The combination—the use of personal data in social and community settings—seems to be a successful model and this phenomenon lends itself to further study.

Further inquiry into these practices could examine how social interactions support personal attainment of fitness and health-related goals. Other technologies, like websites and wearable fitness trackers, could be analyzed for their role in this space, along with offline settings like gyms and fitness clubs. Understanding how personal data and community come together to assist goal achievement could impact how these traditional businesses operate and serve their clientele.

Since this model of mixing personal accountability with social community is seemingly successful, a model of personal achievement (based off of a goal-setting system) could be developed. This model could be based on existing successful fitness applications and applied to other domains and areas of achievement (e.g. attaining educational degrees, job promotions, etc.). The model could be established and refined through surveying and interviewing successful users of these health-related applications to better understand the model for success. Once this model was established and tested, it could be applied to other life goals.

The interaction of personal data and socialization for the purposes of goal attainment is a combination worthy of future study.

## References

- Centers for Disease Control and Prevention. (2018). Attempts to Lose Weight Among Adults in the United States, 2013–2016. Retrieved from <https://www.cdc.gov/nchs/data/databriefs/db313.pdf>
- Higgins, J. (2016). Smartphone applications for patients' health and fitness. *The American Journal of Medicine*, 129(1), 11-9. doi:10.1016/j.amjmed.2015.05.038
- Krebs, P., & Duncan, D. (2015). Health app use among US mobile phone owners: A national survey. *JMIR MHealth and UHealth*, 3(4), 101. doi:10.2196/mhealth.4924
- Mintel. (2018, Jan). Resolution resolve: More than half of Americans report living healthier in 2017. Retrieved from <http://www.mintel.com/press-centre/social-and-lifestyle/resolution-resolve-more-than-half-of-americans-report-living-healthier-in-2017>
- Verto Analytics. (2017, July). Most popular health and fitness apps in the United States as of July 2017, by monthly active users (in millions). Retrieved from <https://www.statista.com/statistics/650748/health-fitness-app-usage-usa/>