Promoting Healthy Lifestyles Through Technology

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The use of technology as a tool for health promotion has become a popular trend in the healthy living community. Technology in this sense can be defined as phone applications, social media promoting fitness and nutrition, pedometers, accelerometers, video games, and multimedia (Internet and television). These resources allow people to learn about the positive effects of making healthy decisions, the skills a person needs to make these decisions, personal tracking and logging methods, how to become health literate, and fun facts and tips about healthy living.

Health promotion through technology has skyrocketed in recent years because the use of technology in general has become the new norm. According to articles published by ABC News, only 15 percent of Americans currently do not use technology. This means that 85 percent, or 268,600,000 million Americans use technology to some degree (Stern, 2013). Therefore, promoting strategies for healthy living through technological resources poses as one of the best ways to reach as many people as possible. People are much more likely to check online articles, social media, or phone applications rather than read the health section of a magazine or local paper, and due to this trend newspapers and magazines have even created online web versions of their papers to ensure they maintain the number of readers they have.

Technological devices such as phone applications provide an endless amount of information that allow people to learn about the beneficial effects of living a healthy lifestyle, and the skills that it takes to maintain this lifestyle. Many of these devices, especially phone applications, provide educational information, as well as

tracking methods for users to log their efforts. These devices generally define healthy lifestyles for users as a balance between diet and physical activity. An article written in Men's Fitness highlighted the best fitness and nutrition applications for iPhone users, and gave a brief description of each application. Under nutrition Men's Fitness provided three apps called Lost It, GoodFoodNearYou, and NutrionTips. Lose It is a free application that combines a workout journal and a food diary into one tracker in itself. The app provides accurate calorie, carb, fiber, fat, sodium, and protein values for any of the foods included in the food library. GoodFoodNeatYou is also a free application that allows users to locate healthier food options, including restaurants and grocery stores, which are based on the users location. Once the user has decided on a suggested place, they will then be provided with a list of healthy menu items that include calorie, fat, and carb values. NutritionTips provides users with various health related tips and facts that many people are unaware of (Freedman, 2014). The article then provides readers with "cardio" and "weights" applications. These apps include RunKeeper Pro, C25K, iTreadmill, GymGoal ABC, FitnessBuilder, and iFitness. The cardio apps act as logs for users to track the fitness efforts that they make each day. In addition to acting as tracking devices, the cardio app C25k is designed to improve the users endurance by slowly increasing their running time along with using an audio prompter to guide the user through each workout session. The weight applications allow users to learn the basics of weightlifting by providing an abundant amount of exercises, written instructions, various workout routines, BMI, BMR, and body fat percentage calculators. The weight apps also include custom exercises tailored to each users

specific body type, along with exercises for each body region and muscle group (Freedman, 2014).

Social networks are some of the most frequently visited websites on the Internet. According to eBizMBA Rank, a continually updated average of various social networks traffic rankings, social medias Facebook, Twitter, Pinterest, and Instagram combined have an estimated 1,560,000,000 monthly visitors (eBizMBA, 2014). The amount of information, even if provided in small doses at a time, by social networks is substantial. These numbers make it evident as to why so many health coaches and health-related businesses have turned to technology as a resource for promotion. Social networks allow people to connect to one another, and act as major sources for information sharing, people are more likely to engage in a healthy behavior if they believe that it will be praised by others, or if they have seen success stories from other people. Andrea Parker, an assistant professor of personal health informatics and human-computer interaction at Northeastern has conducted numerous studies on the effectiveness of mobile and web social networking applications in promoting and sustaining healthy living. Based on community interviews, Parker is in the midst of developing a mobile application that will encourage users to engage in healthy habits and encourage their neighbors to do the same as well. Parker has suggested that the application may also include a goal and rewards system for users, or even a tool that allows users to share media and success stories. She explains that by continuing to investigate technology's role in fostering healthy outcomes, "we can impact change on an even larger level." (Martin, 2013).

Phones and computers typically come to mind when referring to technology, however, tools such as pedometers, accelerometers, and even interactive video games are also technologies that are widely utilized in health promotion. Pedometers, or step counters, count and monitor the number of steps that a person takes throughout the day. Studies have shown that using a pedometer while engaging in physical activity increases levels of physical activity as a whole (Heyward, 2014). Accelerometers provide in depth information about the frequency, duration, intensity, and patterns of movement of users engaging in any kind of physical activity. These tools provide direct feedback to users, and allow them to visualize the efforts that they are making throughout the day. Viewing this information can increase a users self-efficacy to continue to participate in physically active programs because they feel as though they are making progress. In addition to pedometers and accelerometers, interactive video games have become widely utilized by health coaches. Video consoles such as Wii and Xbox have created games that are designed to increase physical activity, as opposed to video games that cause users to be sedentary. These interactive games include Dance Dance Revolution, Wii Sports, Wii Fit, and Kinect Sports. According to Advanced Fitness Assessment and Exercise Prescription, these games have been found to increase the amount of energy expended by users and an even produce beneficial health outcomes (Heyward, 2014). Interactive video games provide people with an exciting alternative to traditional workouts. These games offer a wide array of training activities including aerobic exercises, strength training, yoga, and balance training (Heyward, 2014). It is believed that the use of interactive video game technology

will prove very useful in the promotion of healthy behaviors and physical activity in people of all ages, and places such as rehabilitation centers, fitness centers, hospitals, and physical therapy centers have begun incorporating them into their practices.

In addition to using technology as a means of promoting healthy lifestyles, multimedia can also be utilized by health coaches to promote health literacy, which is an important step in the process of become healthy. Health literacy defined by Title V of the Patient Protection and Affordable Care Act of 2010, is the degree to which an individual has the ability to obtain, communicate, process, and understand basic health information and services to make appropriate health decisions (Center for Disease Control and Prevention, 2013). Based on this definition, it is evident as to why promoting health literacy is vital in the process of promoting and then ensuring a healthy lifestyle is maintained. Technology is an effective tool for educating people; therefore websites and television that promote health literacy are helpful for people wanting to learn about their health. According to the article, Using Technology to Promote Health Literacy, the Internet and television are much more effective in communicating messages than plain text, this is because people remember 10% of what they read, 20% of what they hear, 30% of what they see, and 70% of what they see AND hear (Malpani, 2012). The Internet offers many tools that allow people to learn more about healthy living, but in terms that are easier to understand as opposed to if a doctor told them. Websites such as www.healthphone.org, www.drawMD.com, and www.medibabble.com allow people to access libraries of health videos on topics ranging from breastfeeding to proper

hand washing techniques, learn the names of parts of the body and visualize detailed images with explanations of complex issues in simple terms, translate medical terminology to basic terminology for anyone, including non-English speaking users, and provide audio tools for illiterate users (Malpani, 2012). The use of television as a tool for promotion is also an effective way to aid in health literacy as well. Patient education videos are utilized and encouraged by health coaches. These videos can be created by health professionals, but are usually created by other patients, or everyday people. Peer to peer learning, or information sharing, is one of the most effective ways for others to learn because it is more relatable.

Living healthily is an important goal that everyone should try to incorporate into his or her lifestyle. Before a person can make this change, they must first be aware of the different tools that are out there that can help to make this change. This is why the use of technology to promote healthy lifestyles, such as fitness and nutrition, is such an important aspect of health. The growing world of technology is only going to continue prospering with advances in years to come, and the beneficial role it plays in health promotion will only continue to grow with these advances as well.

References

Centers for Disease Control and Prevention. (2013, June 9). Learn about health literacy. Retrieved from http://www.cdc.gov/healthliteracy/Learn/

eBizMBA (2014, November) Top 15 most popular social networking site. Retrieved from http://www.ebizmba.com/articles/social-networking-websites

Freedman, L. (2014). Best fitness and nutrition apps for iPhone. Retrieved from http://www.mensfitness.com/training/best-fitness-and-nutrition-apps-for-iphone

Heyward, V. (2014). Using technology to promote physical activity. Retrieved from http://www.humankinetics.com/excerpts/excerpts/using-technology-to-promote-physical-activity

Malpani, A. (2012, November 7) Using technology to promote health literacy. Retrieved from http://healthworkscollective.com/malpani/61901/using-technology-promote-health-literacy

Martin, G. (2013, August 27). A social network to improve community health. Retrieved from http://www.northeastern.edu/news/2013/08/a-social-network-to-improve-community-health/

Stern, J. (2013, September 26). Couldn't live without the Internet? 15 percent of American adults do. Retrieved from http://abcnews.go.com/Technology/offline-americans-15-percent-americans-live-email-internet/story?id=20386849