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CSE 300

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Literature Review

Technology's Influence on Social Networks

Ingrained into the foundations of modern society, technology affects humans' daily lifestyle and the ability to survive and evolve. Among its influence, technology can be further examined regarding the adaptations made in response to the ways it has changed communication between people. It may be claimed from different perspectives that technology leads our consciousness to drift and detach from the present or creates community and ties people closer together by simplifying communication. This becomes a greater area of concern when technology has proven to make positive social impact, while also demonstrating signs of deterioration in social behavior. Many studies of computers in regards to human behavior demonstrate these patterns and the various articles in this area research will be reviewed to build a clearer perspective on this topic.

From one end of the spectrum, Morahan-Martin observed that loneliness and social isolation is indeed associated with increased Internet use. Online social interactions give individuals the ability to observe others' interactions, while maintaining greater control over presence, intimacy, and timing without the pressure of face-to-face communication. These attributes of online social interactions further supported by anonymity on certain platforms promote positive social interactions that enhance friendship and the ability to modulate negative moods, while reducing self-consciousness and social anxiety. Despite these benefits, people who fall into the habit of preferred online interactions, show behaviors indicating social withdrawal and other interferences with daily function in real life

interactions. Although, similar trends recur in later research one weakness lies in the fact that it may no longer be as up to date because it was made over ten years ago (Morahan-Martin).

The disturbance to daily real life interactions is emphasized in Arnd-Caddigan's review of research done by Sherry Turkle. As a clinical psychologist, Turkle takes an interview approach to her research and warns that even positive interaction via technology only "offers the illusion of companionship without the demands of friendship". Further she states, "networked life allows us to hide from each other, even as we are tethered to each other". To explain her reasoning, she argues that electronic communication feeds narcissism allowing people to feed the human desire to relate to others, while remaining devoid of tone, facial expression, and body language. However, Turkle's more qualitative approach to her research, rather than a quantitative approach with empirical data presents one fault to her study. Arnd-Caddigan even states in her review that Turkle provides data as narratives of her participants' experiences and does not clearly address the question of whether or not the impact of technology is an evolutionary trend that will forever redefine human interactions (Arnd-Caddigan).

In another study, Hampton expands upon internet use in terms of mobile phone use which also plays a particular role in the social networks of Americans. Contrary to previous reports and popular concern, social isolation has barely changed between the 1980's and the past decade. Although networks have become smaller and less diverse within this period, larger networks and diversity trend towards mobile phone users who also actively participate in a variety of online activities.

In relation to the Morahan-Martin's study, the product of greater diversity within personal networks was discovered to be another advantage of internet use and social networking. This opposes the idea that technology detaches people from active social engagement. Rather, it is more likely to progress participation in the local community and charitable organizations. Internet use even draws people to public spaces such as parks, cafes, restaurants, and libraries rather than away. This research concluded for one month, that the need for internet access in public spaces was represented by about 38% logged

on to the internet in the library and 18% at a coffee shop. Most interestingly, it was discovered that in-person contact, phone contact, text messaging contact, email contact, instant messaging and social media contact, followed by contact via letters or cards were the preferred methods of communication in that order. As an alternative perspective, the discoveries in this research lead to a more positive conclusion. As a whole, Hampton's research is the most careful and extensive in accounting for potential faults. This is because regression analysis was used to account for factors including people studied that are not heavy users of technology or come from a particular background such as one with more years of education where larger, more diverse social networks are expected (Hampton).

Among the senior population, it is shown that technology provides interventions to reduce the negative impact of social isolation according to Khosravi's study. The applied technological interventions include general internet use, robotics, social networking sites, videogames, peer support chatrooms, and 3D virtual environments. From these interventions, general internet use, robotics, and social networking sites were found to be the most effective. Interventions served to alleviate social isolation and loneliness common among seniors by allowing them to communicate with family and friends. Social networking sites in particular assist building and continuing relationships to the extent that they were concluded to be "essential in contributing to the wellbeing of seniors". Somewhat surprisingly, robotics interventions were applied in collected research more often than analysis of social networking site use. This is upon the basis that robots provide a "sense of social presence" in order to improve emotional wellbeing and assist seniors to live independently. However, video games such as those on Nintendo's Wii console were rated the highest in effectiveness towards alleviating loneliness. In comparison to traditional video games, those that emulated natural physical activities provided more physical and cognitive stimulation. In the overall approach to this study, data was collected by analyzing nearly 7000 studies throughout a database. Here, this study does well in its research with regards to variety and scope (Khosravi).

In one last study, Standlee explored the techno-social phenomenon of “hyper-connectivity” among college students. Interpersonal relationships among young adults are Standlee’s specific focus as a professor and sociologist at Concord University. She describes hyper-connectivity as a shared norm or experience identified as the “availability of people for communication anywhere and anytime”. Standlee concludes that for “an increasing number of young people interaction via technology is not merely an option, but a requirement for the establishment and maintenance of social network connections”. Although individuals may choose to submit or reject to the pressures of conformity, both decisions hold social consequences. According to participants, rejection and disconnection from technology means limited access to social events and a smaller intimate social circle with greater ease for activities like reading a book. However, this was often not the preferred option. Standlee’s interview approach to research is similar to that done by Sherry Turkle; however, she covers for Turkle’s faults in methodology by collecting data, while continuing to monitor participants over social media (Standlee).

Establishing a consensus from these studies, it can be stated that technology is a “double-edged sword”. One further limitation presented in all studies is the constraints to region which could be developed in future research. The majority of research analyzed American populations when more research could be conducted in other populations of first world countries. Places where technology is highly integrated could lead to other interesting results. For example, as the current most populated country in the world, China has access to Baidu, as a powerful search engine nearly equivalent to Google, and the more relevant WeChat which is an application that integrates features beyond comparison to Facebook. Even countries like Japan, technology has similar influence where it is used to pay for public transportation especially in population dense areas such as Tokyo. Ultimately, there is research to argue that technology is capable of being a negative influence through isolation and withdrawal, while also being positively essential to establishing, expanding, and maintaining a social network.

Works Cited

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