Living Longer Online: Seniors, Online Communities and Web 2.0

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## **Abstract**

This paper explores published articles that have researched the effects of senior citizens participating on Web 2.0 and joining online communities. The paper refers to public participation on Web 2.0 platforms, namely the obstacles and the health benefits associated with senior citizens joining online communities. The articles referenced in this paper show evidence of extended mortality rates among those who utilise online platforms for communication later in life, helping to combat loneliness and social ailments (Holt-Lunstad, Smith, & Layton, 2010). Monbiot (2018) discusses a town in the UK, which claims that participation in communities is curing its senior town residence from ailments, subsequently lowering the town's hospital admissions. Others back the findings in this article with numerous case studies recording positive results from seniors aged 55 and over participating in online communities. Medical case studies show a connection between social behaviour and feelings with inflammation and illnesses, thus linking social communication to physical wellbeing (Eisenberger, Moieni, Inagaki, Muscatell, & Irwin, 2017). This paper investigates the importance of community connection in adult life, highlighting that the usability and diversity associated with Web 2.0 platforms and social network sites 'SNS' (boyd & Ellison, 2007) encourage online

participation. This paper acknowledges "The Digital divide" (Peacock & Künemund, 2007) and "Technophobia" (Hogan, 2009) as barriers which senior citizens come up against when attempting to utilise the internet and Web 2.0 platforms. This paper argues that senior citizens can overcome Technophobia and actively participate in online communities to encourage greater mental health and wellbeing, therefore influencing positive social connections regardless of physical ability, age or locations.

Living Longer Online: The Benefits of Joining Online Communities.

Traditional communities can be defined as groups of participants, from a similar demographic or geographic location physically meeting to contribute to a common interest or goal, also known as a Common good (Katz James E, Rice Ronald e, Acord Sophia, Dasgupta Kiki, & David, 2004). Online communities have developed with the same principles as traditional communities that relied on a common geographical location and a physical presence for connection (Katz James E et al., 2004). However, thanks to advances in digitization and convergence (Jenkins, 2004), community connection is now accessible via the internet and Web 2.0 platforms, which broaden community reach by diminishing the need for co-location of members.

Web 2.0 is a term used to describe an evolved version of the World Wide Web for companies that had survived the dot com crash, the term originated by Tim O'Reilly in a 2005 conference (Allen, 2009). Web 2.0 is an efficient and collaborative platform made for "human connection" (Fuchs, 2010, p. 764), allowing participants to contribute and participate from multiple geographical locations. The term Web 2.0 relates to the World Wide Web becoming a faster, more efficient, and adaptable version of itself (Allen, 2009). Web 2.0 is a platform that enables us the capability to present one's self through online connections, participation and collaboration.

Social Network Sites or SNS's are platforms with multiple technological affordances used for connection and participation on Web 2.0 (boyd & Ellison, 2007). Social network sites attract people to interact through shared interests, common friends or to follow blog posts on particular topics (Blood, 2000). Utilising SNS's such as Facebook has been seen to strengthen existing family ties and friendships, combat loneliness and complement existing arrangements such as phone calls, particularly valid in the case of senior citizens

(Cornejo, Tentori, & Favela, 2013). Lai and Turban (2008) explain that one of the largest differences between the traditional World Wide Web and Web 2.0 is that its content is user generated with a large emphasis on social network sites, encouraging greater collaboration and participation from internet users.

Social media platforms can be utilised for communication as a Web 2.0 tool, and accessed at little cost with almost full user control for sharing posts, pictures, videos and experiences. Social Network Sites may comprise of thousands sometimes millions of members, or in the case of Facebook have over 2 billion active users (Statista, 2018). Within these social network sites online communities and groups can form. These groups are niece to a specific topic, interest or common attribute, and links users such as senior citizens (Facebook, 2018) together in a sub-topic on a large social networking site (Lai & Turban, 2008). The expanding reach available for online communities increases their member numbers and further solidifies their common purpose. When a traditional community becomes disconnected, contact between individuals and the community is lost due to physical dispersal (Katz James E et al., 2004). Utilizing the advances of the internet and the participatory nature of Web 2.0 (Jenkins, 2004), online community members can reconnect, expand and retain their connections regardless of the members geographical locations or physical abilities. Virtual communities are "communities without the physical limitations" (Katz James E et al., 2004, p. 326), broadening the sense of belonging and connection individuals feel within an online community. Utilising these Web 2.0 elements allows a sense of community to flourish for online participants.

## Discussion

Communities and Web 2.0 have evolved in our everyday lives, providing numerous modes of communication and community participation available for all age groups. An article published by *The Guardian* (Monbiot, 2018), has associated community groups with a cure for illness and isolation. The article states that when senior citizens become active members in communities emergency hospital admissions fall dramatically. The article reports that social contact for senior citizens should be "on prescription" (Monbiot, 2018). The link between body inflammation and social connections has been described in a case study by Eisenberger et al. (2017), which found that the human immune system is in fact a regulator of social behaviour, and that social environments influence the human immune system. When we are sick, we are sensitive to social situations and communication, knowing when social engagement is required from certain individuals to help us feel better. This study explains that for humans as social animals, having online connections and relationships may help influence our recovery in times of sickness and help to improve mortality rates, "Social disconnection severely compromises survival" (Eisenberger et al., 2017, p. 243). This links the importance of participation in online communities with mental and physical wellbeing (Holt-Lunstad et al., 2010).

Online communities along with SNS's allow participation and communication online, influencing characteristics of community through participation. A "sense of community" (Gruzd, Wellman, & Takheteyev, 2011, p. 1313) can be obtained through participants using Web 2.0 platforms for organizing to meet others, hold discussions in

online forums and create events thus, retaining the traditional sense of community while expanding social circles, relationships and sharing a common cause. Creating "Civic communities" online encourages members to address public issues collectively, as opposed to individually which utilises the power in numbers (Borgida et al., 2002).

National seniors Australia Facebook page claims a "Collective voice of over 200,000 members, National Seniors is the largest, independent organisation lobbying government and business at all levels to get a better deal for the over 50s" (Facebook, 2018). Online communities such as this are proving to be valuable community platforms with its members lobbying for a "Common good" (Katz James E et al., 2004), which in this case is for positive change for a demographic of Australians aged 50 and over.

Multiple contributions to a shared goal or topic have been recognized to produce a richer quality of work as opposed to the quality of work produced by individual contribution, heightening the need for numerous members and contributors within online communities (Arazay Ofer, Morgan Wayne, & Raymond, 2006). The further the reach gained by online communities increases their quality of work and further advertises their common goal along with increasing the number of community members.

Concerns have been raised in relation to the use of online communication platforms for developing youths, with research showing its growing use is a cause for social issues such as aggression, substance abuse, academic difficulties and disordered eating (Strasburger, Jordan, & Donnerstein, 2010). Effects from the use of online communication are not always positive, with the internet and Web 2.0 affordances often used as platforms for cyber bullying and aggression (Melissa & Park, 2010). This raises concerns for professionals regarding the impact technology is having on the developing

brain. However, the impact that the same communication and social engagement is having for those aged 55 and over, or those who have fully developed as adults finds that communicating online has beneficial effects on their health and wellbeing, contributing to "successful ageing" (Nimrod, 2011, p. 227). People are increasingly using SNS's to stay in contact and share important aspects of their life with family and friends, older adults will miss opportunities to keep updated with friends and family members who now spend a large amount of time using these platforms (Cornejo et al., 2013). The ability to utilise Web 2.0 tools such a blogs, wikis, messaging, video calling and online forums are moreover, encouraging senior citizens to overcome "technophobia", a fear of technology (Hogan, 2009) and to retain high levels of social engagement and relationships with family members and friends online. Data from over 308,849 individuals was gathered and measured over seven and a half years, the results found that people who maintain strong social relationships had a 50% greater likelihood of survival compared to those lacking sufficient social relationships (Holt-Lunstad et al., 2010). This indicates that online community ties and relationship creation and retention can influence the health outcomes of adults (Holt-Lunstad et al., 2010, p. 14).

The Digital age gap or "Digital divide" (Nimrod, 2010) is caused by younger generations adopting digital and technological developments quicker than older generations, this can occur for a number of cultural and technological reasons. Studies done on decisions for older people to remain offline found results to be based on private access possibilities, motivational indifference and deficient knowledge (Peacock & Künemund, 2007). Remaining offline at a time when digital technology and online participation is advancing (Jenkins, 2004), and billions of users are choosing to

participate through online platforms means that senior citizens who remain offline will be "disadvantaged from a socio-ecological point of view" (Peacock & Künemund, 2007).

Nimrod (2010) discusses how online communities for senior citizens offer emotional support, increasing communication, companionship and an opportunity for growth and retaining friendships, these online communities also offer an opportunity to have fun and create new friendships (Nimrod, 2011). It is important that that senior citizens still feel like active members of society, this may be threatened by retirement or ill health, however contributing to online forums and SNS's leads to companionship and discussions on a broad number of subjects from death to politics, serving a sense of connectedness for those who participate (Nimrod, 2010).

A study on technophobia conducted on senior citizens and undergraduate students in Ireland found significant levels of technophobia and computer anxiety in older citizens namely women, as opposed to younger undergraduate students, the case study was measured on computer anxiety and attitudes towards technology (Hogan, 2009).

Computer anxiety results in computer avoidance, and has been linked with the ageing population, as older adults become less mobile, and continual aspects of daily life become increasingly reliant on information technology it is becoming more important for senior citizens to learn how to utilise online technologies (Hogan, 2009). Social isolation and decreased face-to-face interaction are worrying trends among the ageing population (Borgida et al., 2002) and using the internet and Web 2.0 platforms may be considered a strategy for combating this. According to studies (Borgida et al., 2002; Cornejo et al., 2013; Hogan, 2009; Nimrod, 2010; Peacock & Künemund, 2007) for senior citizens to advance from technophobia and to eliminate a Digital divide new methods of internet

communication participation must be introduced to encourage this demographic to participate and communicate online.

## **Conclusions and Future studies**

In conclusion, technological advances and developments in the Internet and Web 2.0 have made for a relatively seamless, useful and efficient World Wide Web, its platforms etched in our everyday lives to enable online communication, productivity and usability of numerous platforms (Allen, 2009). For younger generations growing up using digital technology these platforms have a sense of ease of use, with many people now choosing to retain social connections and share important elements of their lives on SNS's (boyd & Ellison, 2007). Senior citizens aged 55 plus are a generation who did not grow up proficiently educated in using these technologies (Hogan, 2009). This among other cultural factors has resulted in a Digital divide between younger and older generations (Peacock & Künemund, 2007). The case studies used in this paper strongly suggest that utilizing online communities is increasing mortality rates, combatting ailments and tackling loneliness in senior citizens (Eisenberger et al., 2017; Holt-Lunstad et al., 2010; Monbiot, 2018). The mentioned health benefits for senior citizens joining online communities such as companionship, social engagement, increased mortality and positive mental wellbeing outweigh the difficulties and obstacles initiated by the Digital divide, such as computer anxiety and technophobia. Much of the research findings suggest that highlighting and advertising these benefits while putting sufficient programs in place to promote internet communication and participation will educate the ageing population on

how to better utilise the internet and Web 2.0 (Borgida et al., 2002; Hogan, 2009; Peacock & Künemund, 2007). This will ensure that senior citizens do not become socially disadvantaged, thus increasing connectivity and participation rates of this demographic therefore influencing a better quality of life for senior citizens through community participation and the use of Web 2.0 and influencing topics for future study in this area.

## References

- Allen, M. (2009). Tim O'Reilly and Web 2.0: The Economics of Memetic Liberty and control *Communication*, *Politics & Culture*, 42(2), 6-23.
- Arazay Ofer, Morgan Wayne, & Raymond, P. (2006). Wisdom of the Crowds:

  Decentralized Knowledge Construction in Wikipedia. 16th Annual Workshop on

  Information Technologies & Systems (WITS) Paper.
- Blood, R. (2000). Weblogs: a History and a perspective. *Rebecca's pocket*. Retrieved from http://www.rebeccablood.net/essays/weblog\_history.html
- Borgida, E., Sullivan, J. L., Oxendine, A., Jackson, M. S., Riedel, E., & Gangl, A. (2002).
  Civic Culture Meets the Digital Divide: The Role of Community Electronic
  Networks. *Journal of Social Issues*, 58(1), 125-141. doi:doi:10.1111/1540-4560.00252
- boyd, d. m., & Ellison, N. B. (2007). Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210-230. doi:10.1111/j.1083-6101.2007.00393.x
- Cornejo, R., Tentori, M., & Favela, J. (2013). Enriching in-person encounters through social media: A study on family connectedness for the elderly. *International Journal of Human-Computer Studies*, 71(9), 889-899.

  doi:https://doi.org/10.1016/j.ijhcs.2013.04.001
- Eisenberger, N. I., Moieni, M., Inagaki, T. K., Muscatell, K. A., & Irwin, M. R. (2017).

  In Sickness and in Health: The Co-Regulation of Inflammation and Social

  Behavior. *Neuropsychopharmacology*, 42(1), 242-253. doi:10.1038/npp.2016.141

- Facebook. (2018). National Seniors Australia Retrieved from <a href="https://www.facebook.com/nationalseniors/">https://www.facebook.com/nationalseniors/</a>
- Fuchs, C. (2010). Social software and web 2.0: their sociological foundations and implications. . *Handbook of research on web 2.0, 3.0, and X.0: technologies, business, and social applications, II*, 764-789.
- Gruzd, A., Wellman, B., & Takheteyev, Y. (2011). Imagining Twitter as an Imagined Community. *American Behavioral Scientist*, 55(10), 1294-1318. doi:10.1177/0002764211409378
- Hogan, M. (2009). Age Differences in Technophobia: An Irish Study. In W. Wojtkowski,
  G. Wojtkowski, M. Lang, K. Conboy, & C. Barry (Eds.), *Information Systems*Development: Challenges in Practice, Theory, and Education Volume 1 (pp. 117-130). Boston, MA: Springer US.
- Holt-Lunstad, J., Smith, T. B., & Layton, J. B. (2010). Social Relationships and Mortality Risk: A Meta-analytic Review. *PLOS Medicine*, 7(7), e1000316. doi:10.1371/journal.pmed.1000316
- Jenkins, H. (2004). The Cultural Logic of media convergence. *Of Cultural studies*, 7(1), 33-43. doi:10.1177/1367877904040603
- Katz James E, Rice Ronald e, Acord Sophia, Dasgupta Kiki, & David, K. (2004).
   Personal Mediated Communication and the Concept of Community in Theory and
   Practice. Communication and Community: Communication Yearbook 28, 28, 315-371.

- Lai, L. S. L., & Turban, E. (2008). Groups Formation and Operations in the Web 2.0 Environment and Social Networks. *Group Decision and Negotiation*, 17(5), 387-402. doi:10.1007/s10726-008-9113-2
- Melissa, P.-Z., & Park, M. J. (2010). To Tweet, or Not to Tweet: Gender Differences and Potential Positive and Negative Health Outcomes of Adolescents' Social Internet Use. *American Journal of Men's Health*, 4(1), 77-85. doi:10.1177/1557988309360819
- Monbiot, G. (2018). The town that's found a potent cure for illness community

  Retrieved from The Guardian website:

  <a href="https://www.theguardian.com/commentisfree/2018/feb/21/town-cure-illness-community-frome-somerset-community-frome-somerset-isolation?utm\_source=nextdraft&utm\_medium=email</a>
- Nimrod, G. (2010). Seniors' Online Communities: A Quantitative Content Analysis. *The Gerontologist*, 50(3), 382-392. doi:10.1093/geront/gnp141
- Nimrod, G. (2011). The Fun Culture in Seniors' Online Communities. *The Gerontologist*, 51(2), 226-237. doi:10.1093/geront/gnq084
- Peacock, S. E., & Künemund, H. (2007). Senior citizens and Internet technology.

  European Journal of Ageing, 4(4), 191-200. doi:10.1007/s10433-007-0067-z
- Statista. (2018). Retrieved from <a href="https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/">https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/</a>
- Strasburger, V. C., Jordan, A. B., & Donnerstein, E. (2010). Health Effects of Media on Children and Adolescents. *Pediatrics*, 125(4), 756.

