Marginalized Young People Health-care Access and Affordability

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Background

Marginalized Young People (MYP) have a range of challenges both domestically and internationally regarding access and navigation of health-care systems. Use of digital mental health (DMH) combined with an information communication technology system (ICT) is a solution to help underserved populations gain information channels and improve access to correct health service information (Schuller, Hunter, Figueroa, and Aguilera, 2019). MYP have differing cohorts including homeless, rural, race, and LGBTQ. Robards, Kang, Usherwood, and Sanci (2017) performed a systematic review of MYP across 1,796 articles and developed themes relating to an "…ability to recognize and understand health issues" including a professionals' knowledge, service environments, and ability to assess one's health. The following reviews government implementation of MYP digital only health operations, how MYP could be impacted, and what policy decisions and resources support this approach.

Type of Access

Utilitarian's would certainly agree a government's distribution of health public service information can help create the greatest good for the greatest number of people by fostering **enabling values** so citizens can pursue and develop societal interest (Schultz, 2006, pg. 7). Globally, MYP's internet connect varies so the *type of access* to most broadly service and distribute health information to MYPs is *broadband and 5G Internet* technologies. According to Warschauer (2002), while "those who are already marginalized will have fewer opportunities to access and use computers and the Internet" the expansion of broadband may permanently reverse this viewpoint (p. 4). Broadband's expansion via Tesla's *Starlink* satellite system, the U.S. 2016 FCC addition of broadband to its Lifeline phone program, and the world's installation of 5G speak to the technology's mushrooming significance to connect individuals (FCC, 2020; Qualcomm, 2020). **Deontologicism** encapsulates broadband's expansion as morally right as making information access widely available is an obligation enabling values, such as education and health, while simultaneously respecting individual rights.

Internet access is key to understanding the structure surrounding individuals, communities, and governments ability to symbiotically share information. Device ownership,

such as smartphones and computers, help establish communication networks enabling **socio-technical inclusion or exclusion** (Warschauer, 2002). A casual notion of the **digital divide** is lacking access to the Internet "harms life chances" (ibid, p. 4) but 5G's expansion will explode the *internet of things* (IOT) and marginalized groups will have greater access potential and realized interconnections. Broadband's expansion promotes **social inclusion** by enabling individuals with decreased economic resources to access such information leading to employment, education, and other civil activities. Warschauer (2002), also argues a key to social inclusion is reducing **access** barriers, i.e. service or device, and promoting **literacy**. Fostering social inclusion with broadband is a **network externality** that can help MYP connect to health information and peers. Broadband also enables MYP **digital inclusion** via active participation and exercise of one's **agency** and self-expression (Bach, Shaffer, and Wolfson, 2013).

Schuller's, et al. (2019) assessment of MYP populations in the U.S. found both whites and Latinx individuals own smartphones at the same rate of 77% while homeless own smartphones at 58% and cellphones at 93%. LGBTQ cellphone ownership is comparable with heterosexual peers. Rural populations, which account for about 20% U.S. population, are challenged with broadband access at 61%, versus urban peers at 96%, and smartphone ownership at 65%. This high ownership supports government operations development of MYP mobile applications and websites targeting MYP health-care tools. However, a government's type of access to citizens cannot be limited to software. Bach, et al. (2013) discuss how **digital equality** is a complex function of technology access, computer literacy and government fostering a knowledge economy. The authors develop a **Digital Human Capital** framework binding these elements together stressing the expansion of **digital literacy** will result in meaningful content for marginalized groups through their active digital participation learning personal healthcare. Government's use of digital only would benefit from Schueller, et al. (2019) finding encouraging making health information available in different languages, tailoring cultural message and adopting digital development principals found successful with mental health applications, including: (1) design for public health impact, (2) add value for all users, (3) test products, (4) acknowledge disruption, and (5) anticipate variability (p. 247). However, customization requires a cost analysis to help manage **variable costs** versus **tangible and intangible** benefits.

While **deontologists** would applaud a software **public good** application based on "adding value for all users," a **utilitarianist** would struggle with language customization for LGBTQs.

Would not an application's vernacular best serve MYPs when easily translated across languages? Regardless of the ethical framework an **element to consider when making a decision is** to foster health **enabling values** on how increased information may reduce MYP social grievances and increase **health equality**.

How New Digital Access Might Disrupt Current Practices

There are various sociocultural and sociodemographic factors to consider with government supporting a digital only MYP health information network. Fortunately there are studies available to assess disruption as MYP "experience barriers in addition to those common to all young people" (Robards, et al., 2017, p. 365). MYP are intersectional cohorts and blend like ordinary citizens but homeless MYP don't usually intersect with rural MYP. Current practices to reach and support contrasting cohorts could decrease health equity if government emphasizes developing a digital only footprint neglecting brick and mortar successes.

Robards, et al, (2017) condensed 1,796 studies to 68 and one of the earliest MYP longitudinal studies was by Solorio, et al. (2006) who found the most common barrier for health information for homeless MYP was knowing *where to go*. From 2006 to 2015 it is interesting to see barriers change to: lack of health awareness, social proximity to centers, disrespect, and mistrust. These factors suggest "deciding to access health services is affected by service knowledge and attitudes towards help-seeking" (Robards, et al, 2017, p. 376). MYP can be empowered by digital technology in their community but if increased **digital inclusion** leads youth to discover negative, or false negative, reviews youth may never approach a doorstep. Bach, et al. (2013) proposed **Digital Human Capital** fails to address misleading information and its adverse influence on reduced literacy populations. Disruption may also result from digital institution mistrust versus positive outcomes achieved by local shelter in-person connections.

Another disruption to current practices focuses on marginalized rural populations. According to Schueller et al. (2019), rural MYP have a variety of text and data applications to inform on depression and other mental illnesses. There work found intensive data demands dramatically reduces interest suggesting **literacy** factor issues. This also contrasts to Robards et al. (2017) identification 'face-to-face' value in rural communities across the U.S and Australia.

Finally, disruption can be viewed in terms of negative outcomes resulting from artificial intelligence (AI) applications. MYP have a larger likelihood for **literacy** deficiencies affecting critical thinking and social practices associated with ICT. When AI is standardized as a primary assessment tool to diagnosis illnesses, such as depression, outcomes could be mis-leading without a qualified professional's interpretation. Governments, like business, seek automation to help with cost containment and MYP health diagnosis could be disrupted by automation because "for marginalized populations these biases may result in incorrect predictions or withholding of resources" (Schueller, et al., 2019, p. 252).

Policy Decisions and Resources

Prior to a policy decision a policy analysis of the abundant MYP research and theory would help with a prediction of consequences associated with a digital only operation connecting MYP with health information (Garcia-Murillo, 2020, [ii]). The U.S. government already has programs expanding broadband enabling all citizens greater internet access. A key starting point for policy decision supporting MYP digital health access involves performing a **cost-benefit analysis** to determine **development, operational, recurring, nonrecurring, and tangible and intangible** benefits. Once the scope of technology, hardware, and personnel are understood government policy funding and approval can be sought. Literacy is significant factor in framing MYP policy and Warschauer (2002) encourages policy addressing it. While there are known structural deficiencies with rural populations having 61% broadband, this policy does not seek **universal service**, rather it piggybacks **elements of a universal scope** on other program's broadband expansion whereby improving **access of information** to MYPs (Garcia-Murillo, 2020, [iii]).

Other policy resources would be helpful in targeting MYPs who are not able to afford smartphones. Computers tend to cost two to three times more than smartphones and are valued less as **substitutes** by those not employed as information workers. Smartphones have more financing options and such **affordability** is critical to this policy's success. If policy structure can validate MYP status perhaps funding smartphones for rural and homeless MYP would improve health equity for these heavily burdened cohorts.

MYP digital health's **infrastructure ecology** will become more efficient and interconnected due to the broadband and 5G internet access. Infrastructure sustainability is a measurement result of the policy abilities to increase health equity while reducing avoidable costs. This **price versus value** argument has an intangible price tag of greater social equality for the MYP population.

Conclusion

According to the United Nations (2019) there is approximately 1.2 billion youth worldwide increasing to 1.4 billion by 2065. This dramatic increase supports the necessity of expanding MYP's access to health-care systems.

Word Count: 1500

References

Bach, A., Shaffer, G. & Wolfson, T. (2013). Digital human capital: Developing a framework for understanding the economic impact of digital exclusion in low-income communities. Journal of Information Policy, 3, 247-266.

FFC (2020). Lifeline program for low-income consumers. URL: https://www.fcc.gov/general/lifeline-program-low-income-consumers

Garcia-Murillo, M., 2020 [i]. IST 618-Information Policy: Ethics lecture.

Garcia-Murillo, M., 2020 [ii]. IST 618-Information Policy: Policy Analysis lecture.

Garcia-Murillo, M., 2020 [iii]. IST 618-Information Policy: Economics of Information lecture.

Hargittai, E. & Walejko, G. (2008). The participation divide: Content creation and sharing in the digital age. (2), 239 - 256. DOI: 10.1080/13691180801946150 URL: http://dx.doi.org/10.1080/13691180801946150

Robards, F., Kang, M. Usherwood, T., Sanci, L (2017). How Marginalized Young People Access, Engage With, and Navigate Health-Care Systems in the Digital Age: Systematic Review. Journal of Adolescent Health. URL: http://www.sciencedirect.com/science/article/pii/S1054139X17308613

Schultz, R. A. (2005). Contemporary issues in ethics and information technology: IGI Global (Chapter 2)

Schueller, S.M., Hunter, J.F., Figueroa, C. *et al.* Use of Digital Mental Health for Marginalized and Underserved Populations. *Current Treatment Options Psychology* **6,** 243–255 (2019). https://doi-org.libezproxy2.syr.edu/10.1007/s40501-019-00181-z

Solorio, M.R., Milburn, N.G., Andersen, R.M. *et al.* Emotional Distress and Mental Health Service Use Among Urban Homeless Adolescents. *J Behavior Health Serv Res* **33,** 381–393 (2006). https://doi-org.libezproxy2.syr.edu/10.1007/s11414-006-9037-z

Qualcomm. We introduced the world to 5G – now its going mainstream. Retrieved on February 20th, 2020. URL: https://www.qualcomm.com/news/onq/2020/02/18/we-introduced-world-5g-now-its-going-mainstream

Warschauer, M. (2002). Reconceptualizing the digital divide. First Monday, 7(1). http://firstmonday.org/ojs/index.php/fm/article/view/967/888/

United Nations Department of Economic and Social Affairs. (2019). International Youth Day, 12 August 2019. Retrieved:https://www.un.org/development/desa/youth/wp-content/uploads/sites/21/2019/08/WYP019_10-Key-Messages_GZ_8AUG19.pdf