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Reducing the Digital Divide: Why Culturally Relevant eHealth Interventions Can Reduce Latino Health Disparities

Blanca Flor Garcia-Silva
bfgarciasilva@usfca.edu

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Blanca Garcia-Silva

Master of Public Health – Community and Public Health Practice

University of San Francisco

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Abstract

Objectives: This paper systematically reviews the recent literature on incorporating culturally relevant material in electronic health (eHealth) tools for Latinos. Latinos are a fast-growing ethnic population set to reach 119 million individuals by 2060 (Velasco-Mondragon et al., 2016). Latinos are also disproportionately affected by comorbidities and other poor health outcomes. Developing a culturally sensitive eHealth tool can lead to positive health outcomes among Latinos.

Methods: Peer-reviewed articles and analyses were extracted to identify whether eHealth was associated with positive health outcomes among Latino adults. Four literature databases were used to extract English-language articles published from 2001 to 2022. Furthermore, data from the CDC and WHO were extracted for statistical data regarding Latinos in the US.

Recommendations: Improvements in eHealth are needed to increase Latino engagement. Possible factors to consider when developing a culturally relevant eHealth intervention are peer support, technical training, and language done by community messengers like CHWs and trusted members of the community.

Conclusion: eHealth use is increasing throughout the country, but the service is not tailored to Latino communities. With necessary improvements, eHealth can increase engagement in healthcare services and improve health outcomes among the target population.

Keywords: *eHealth, Latino health, cultural relevance, cost-effective, and Social Cognitive Theory (SCT)*

Introduction

In recent years, the Latino population has grown in America. The Latino/Hispanic population is the largest ethnic minority and will increase from 17.4% to 28.6%, or 55.4 million to 119 million people, by 2060 (Velasco-Mondragon et al., 2016). Figueroa and authors (2021) found that compared to other diverse groups, Latinos have higher rates of experiencing chronic diseases. In 2020, it was found that Latinos have 4.6 times the rate of having COVID-19 and needing to be hospitalized than non-Hispanic whites (Figueroa et al., 2021). The Hispanic/Latino community has higher rates of comorbidities such as COVID-19, obesity, cancer, and heart disease (CDC, 2022; Velasco-Mondragon, 2016). About 16.1% of Hispanic adults living in the US have fair or poor health, 44.8% of adult men and 46.8% of women aged 20 and over are diagnosed as obese, and 46% of men and 35.4% of women who are 20 and older have hypertension (CDC, 2022).

Not only do Latinos have an increased risk for comorbidities, but they also have low income, which affects their decision to seek healthcare. The average median income for Latinos is less than $40,000 yearly compared to non-Hispanic whites who have an average of $60,000 annually (Velasco-Mondragon et al., 2016; Artiga et al., 2021). In addition to low income, about 31% of non-elderly Latino adults report being uninsured compared to 70% of potentially undocumented Latinos (Artiga et al., 2021). Of the insured individuals, 20% of adults receive insurance from their employer, 15% from Medicaid, and 7% for each of the following from their spouse's employer, self-purchased insurance, and Medicare (Artiga et al., 2021). About 20% of adults who have sought care have reported that it is difficult to access healthcare facilities due to location (Artiga et al., 2021). Low income and insurance are two main factors that determine whether a Latino adult would seek healthcare for preventative measures.

Evidence shows that electronic health (eHealth) is a form of communication used in healthcare to reach out to hard-to-reach populations (Tarver and Haggstrom, 2019; Whittaker, 2012; Bitar & Alismail, 2021). Telecommunication can be a call, an app, or a tool that helps manage a person's health (Khairat et al., 2019). Mobile health (mHealth) is defined as a technological service that provides public and medical services through the usage of mobile devices and media (Weichelt et al., 2019). Similarly, telehealth uses telecommunications to discuss clinical and preventative care and provide education on health care for those unable to make it to their doctor's appointments in person (Bitar & Alismail, 2021). These communication methods may also benefit those with little English literacy, those with disabilities, and those living in isolated and/or rural communities.

Methods

Research Strategy

The literature review was created through the analysis of peer-reviewed articles that focused on Latino adult populations utilizing eHealth tools to increase health outcomes in the United States (US). This review only includes articles on Latino populations related to eHealth intervention programs. In addition, this review aims to propose recommendations for future eHealth use amongst this population.

Target Population

Self-identified Latino adults living in the United States (aged ≥ 18 years)

Keywords

Search keywords included: eHealth, health outcomes, vulnerable populations, telemedicine outcomes, mHealth interventions, telehealth, Latino, Latinx, Hispanic, eHealth, and Social Cognitive Theory (SCT). The review utilizes data from peer-reviewed articles and the CDC and WHO data to ensure appropriate data extraction for the target population.

Databases

Various databases were used, including PubMed, Fusion, EBSCO, and CINAHL. Background population data was extracted and analyzed from WHO and the CDC. Articles used for analysis were of English language published in the years of 2001-2022.

Literature Review

The Latino/Hispanic population is the largest ethnic minority and will increase by 11.2%, or about 63.6 million people, by 2060 (Velasco-Mondragon et al., 2016). This population is disproportionately affected by various factors including low socioeconomic status (SES), education, occupation, and health services (Velasco-Mondragon et al., 2016). Latinos living in America are more likely to not have completed their high school education, to live in poverty, and less likely to speak English proficiently than non-Hispanic Whites (Velasco-Mondragon et al., 2016). Velasco-Mondragon concludes that a solution to increase accessibility and utilization of health services relies on enhancing cultural sensitivity and health literacy. This includes having health providers who speak Spanish successfully improve Latinos' medical conditions and actively engage in their medical treatment (Velasco-Mondragon et al., 2016).

Technological devices in the US are used in daily life as a means of communication. With these devices, one can look for airplane tickets, send loved ones messages, attend remote meetings, and use them as a tool for the medical world to communicate with their patients. Since health care is becoming more technology-driven, eHealth has become an effective tool for communicating with different populations, including hard-to-reach populations (Tarver and Haggstrom, 2019; Whittaker, 2012). eHealth is an umbrella term encompassing mHealth, telehealth, and telemedicine (Appendix A).

This review aims to address the barriers Latinos face when accessing eHealth and to describe how improved eHealth interventions can reduce these barriers and increase access to healthcare. This review will focus on and discuss the different types of eHealth interventions while highlighting how economic impact, cultural relevance, and readiness influence the usage of eHealth tools.

Current eHealth Interventions

A model of eHealth that is becoming more common to target low-income individuals without internet access is mHealth. mHealth interventions have shown that remote health services can result in positive outcomes (Weichelt et al., 2019). Burner and colleagues (2018) conducted a study using mHealth to target diabetic participants by sending educational automated messages to manage their diagnosis. The intervention included a physical activity regiment and motivational messages (Burner et al., 2018). This increased participants' positive behaviors, retention, and adherence even after the intervention had ended (Burner et al., 2018).

Chandler and authors (2019) designed a case-control study targeting patients with hypertension using a culturally tailored mobile application and motivational text messages. As a result, they found that patients in the intervention group had significantly decreased blood pressure and increased medication adherence. Similarly, Silverman-Lloyd and associates (2020) conducted a study focusing on culturally tailored interactive messages on primary pediatric care education for Latino parents with children in pediatric services. The authors conclude that positive engagement with mHealth was due to the culturally tailored and low English proficiency messages parents received.

Telehealth is another eHealth tool that can potentially increase hard-to-reach populations' health outcomes since an individual can contact their provider through technology (Bitar & Alismail, 2021). Perri and the authors (2020) studied the relationship between telehealth and weight loss using an intervention and comparison group. Their intervention group received extended care via email for weight loss. They concluded that the intervention group had a weight reduction of at least 10%, maintained long-term weight loss, and had greater adherence to caloric goals to maintain their diabetes diagnosis. Vaughan and colleagues (2021) designed a

randomized clinical trial (RCT) and partnered with community health workers (CHWs) to utilize telehealth and SMS messaging with their diabetic patients. Their study indicated that the Latino participants in the intervention group decreased their A1c levels and were more receptive to the intervention program than those in the control group.

Language and Cultural Relevance

Cristancho and authors (2008) concluded that utilizing the communities' cultural backgrounds will better support the development of population-centered programs. To better support vulnerable populations, Lee (2019) and Maglalang (2017) provided culturally tailored messaging to address the human papillomavirus vaccine and diabetes education. The authors realized that barriers were uplifted between health services and patients when interventions included culturally relevant material.

Steinberg and authors (2016) found that mothers in their study preferred bilingual providers because it was easier to communicate and strengthen rapport. They explain that participants would specifically travel long distances or endure long wait times at the clinic just to be seen by bilingual providers. Many participants said they felt like a burden for not understanding the medical terminology and not speaking English fluently (Steinberg et al., 2016). The patients further stated that it made them feel humiliated, discriminated against, and felt like they lost trust in the healthcare system and healthcare provider (Steinberg et al., 2016).

Patient Readiness

Healthcare and public readiness are essential in eHealth uptake (Anderson-Lewis et al., 2018). eHealth interventions may be unsuccessful if they are not appropriately implemented and

if the target population is not ready to adopt this service (Mauco et al., 2020). Public readiness is described as the state when patients are knowledgeable, can afford and have access to eHealth tools, and have determined that they can utilize this service based on personal experiences (Mauco et al., 2020). For instance, Talarico (2020) conducted a study to determine the influence telehealth had on mental health. The responses to the survey indicated that willingness to continue eHealth was high due to experience with the tool and because of positive attitudes.

Latinos have purchased more technological devices; however, the devices are not used to gather health information (Ginossar & Nelson, 2010). The digital divide among Latinos has increased compared to other ethnic groups because of their lack of technological skills and eHealth literacy (Ginossar & Nelson, 2010). Therefore, the target population has not been able to adopt this service (Ginossar & Nelson, 2010).

Individuals from all age groups may feel overwhelmed when using eHealth due to their lack of technological skills (Weichelt et al., 2019). The authors concluded that about one-fourth of medical visits in the US are from older adults; consequently, Weichelt and associates (2019) found that 13 million older adults lack the skills and knowledge to navigate technological devices. The authors stated that this population might not be ready to adopt eHealth interventions; therefore, program planners should find solutions to reduce the technological barrier.

Economic Impact

Studies have shown that those who lived in rural areas lived farther away from health clinics, hospitals, and most health service buildings (Figueroa, 2021). Physical location and clinic proximity, ranging from 10 to 25 miles away, have been proven to affect an individual's

decision to seek healthcare (Tulimiero et al., 2020). According to Butzner and Cuffee (2021), programs like telehealth and telemedicine reduce transportation costs and time spent traveling to clinical services. A study found that patients' work schedules prevented them from seeking health services since they feared losing their job for asking for time off. Losing wages can have a detrimental impact on the patient's financial well-being (Katalenich et al., 2015).

eHealth interventions can provide affordable care without compromising the individual's position (Katalenich et al., 2015). Mallow (2014) and Iribarren (2017) determined that not only did individualized, culturally relevant mHealth interventions improve health outcomes and increase life years gained, but they were also cost-effective in reaching hard-to-reach populations and those living in rural communities. eHealth interventions can increase patient education, thus, helping them control and manage their health (Kichloo et al., 2020).

Appropriate tools to manage a participant's diagnosis and overall health can help reduce emergency room (ER) visits and save on costs. Reducing ER visitations could save $19-$121 per visit (Kichloo et al., 2020). Additionally, telemedicine is more affordable than in-person visits. Kichloo and colleagues (2020) state that eHealth interventions like telemedicine may also reduce healthcare costs for health organizations. The authors found that ER visits were decreased by 1% through eHealth interventions, which could save health institutions over $100 million annually. In addition, Figueroa and colleagues found that without preventative measures, Latino and Black populations will increase the US healthcare system's economic burden by $50 billion due to health disparities. Implementation of telemedicine can improve health outcomes while decreasing costs for individuals and medical service buildings (Kichloo et al., 2020).

Social Cognitive Theory

Many behavioral theories have been incorporated into eHealth interventions, such as the Social Cognitive Theory (SCT) (Anderson-Lewis et al., 2018; Martin et al., 2020; Appendix B). Martin (2020) describes SCT as an influential behavioral theory widely used in behavioral interventions and, with its incorporation, has shown an increase in positive health outcomes. In addition, it challenges individuals to continuously self-reflect, self-regulate, and self-organize to gauge whether they can engage in a behavior (Martin et al., 2020). Martin and colleagues explain that SCT comprises six different constructs: observational learning, reciprocal determinism, self-efficacy, behavioral capability, reinforcements, and expectations. The goal of SCT is to achieve self-efficacy, which is influenced by the other constructs (Martin et al., 2020).

SCT is an advantageous theory to integrate into eHealth tools precisely because of the interaction of self-efficacy and capability, which has the potential to predict preventative behaviors (Joseph et al., 2020). Joseph and associates (2020) describe self-efficacy as a primary factor that drives an individual to engage in healthy behaviors. Therefore, with the integration of SCT, program developers can consider how to effectively tailor eHealth to the target population to decrease barriers to healthcare.

Conclusion

This study aimed to explore the connection between eHealth interventions and Latino adults living in the United States. Various eHealth models were identified that could reduce language barriers and increase engagement in positive health behaviors among Latinos. Studies have shown that culturally relevant eHealth interventions have improved health outcomes in Latino adults.

Recommendations

The Latino population is approximately 17.4% of the American population and are disproportionately affected by inadequate services and a lack of culturally appropriate medical care (Martinez & Perle, 2019). Barriers such as transportation, financial hardship, language, and lack of understanding of cultural needs and health literacy mediate and moderate the health of many Latinos (Martinez & Perle, 2019). For this reason, different solutions have been proposed to increase access to care for Latinos, including electronic health (eHealth). However, recent studies have shown that eHealth programs are not up to par with the needs of Latino populations and need improvement. The following recommendations are influenced by SCT to include more culturally relevant features in eHealth.

Reciprocal Determinism and Reinforcements

To influence Latinos' personal attitudes, researchers who develop eHealth interventions should consider (a) providing straightforward vocabulary in the Spanish language to reduce health literacy barriers, (b) including training on how to navigate eHealth tools, and (c) test the resource with trusted community members such as CHWs to build trust and increase positive attitudes. For example, the Latino community is more receptive to engaging in the uptake of eHealth interventions if they witness community messengers like CHWs and other community members. Along with peer support, potential participants of eHealth may increase service use by witnessing other participants receive medical information through their mobile phones without encountering barriers. Seeing telemedicine as a beneficial resource can potentially increase its use and receptiveness in Latinos.

Addressing barriers like lack of access to the internet and Wi-Fi via a tool that does not require reliance on these items can enhance the use of eHealth tools (Bailey et al., 2021). This will allow more Latino community members to register for eHealth since medical services will be more accessible (Anaya et al., 2021). Further, adding a financial incentive can influence Latinos' attitudes about eHealth tools and motivate them to engage in their health (Weinstein, 2014; Lara, 2005). Incentivizing services can allow Latinos that do not have health insurance to receive medical care without having to pay out of pocket. Second, positive attitudes are essential to increasing eHealth engagement (Lara et al., 2005). Lara and associates (2005) addressed two groups in their study: assimilated Latinos and those who were less assimilated. The authors recommended that eHealth should incorporate Latino cultural norms to increase positive attitudes, including having family and/or church members promote eHealth, use holistic practices to heal, and allow native Spanish speakers to create interventions, to name a few (Lara et al., 2005).

Although the literature shows that Latinos struggle with technology, Ghaddar and authors found that Latinos were receptive to eHealth due to their positive attitudes toward telehealth. Positive attitudes have been able to mediate the relationship between eHealth literacy and intention to utilize eHealth. This has resulted in telehealth acceptability within the community (Ghaddar et al., 2020). By incorporating culturally relevant practices like language and community messengers, positive reinforcement and attitudes can increase eHealth uptake in the target population.

Behavioral Capability and Self-Efficacy

Once personal attitudes are influenced and reinforced; the next step is to consider the role behavioral capability and self-efficacy play in keeping Latinos engaged with eHealth. According to Larkey and authors, behavioral capability influences self-efficacy and vice versa. To be able to engage Latinos in eHealth tools, they have to be able to understand how to navigate a health tool. To reduce the technological gap within the community, Anaya (2021) and Wu (2021) recommend that eHealth tools include how-to training for Latino populations to foster a smoother transition. Many Latinos own cell phones and use mobile messaging, Facebook, and WhatsApp apps to communicate with one another (Anaya et al., 2021). It would be helpful to include training on how to download the health applications, how to communicate with your health provider, and how-to request an e-consult visit. The how-to trainings can influence Latinos' ability to engage in the service. Seeing community messengers like CHWs provide the activities can boost their confidence and motivation to engage in eHealth (Vaughan et al., 2021; Wu et al., 2021).

Behavior influences self-efficacy, and for participants to achieve self-efficacy, they must have the skills and knowledge to navigate eHealth (Martin et al., 2020; Joseph et al., 2020). For example, through lived experiences, learned technical skills, and positive reinforcement, individuals will be encouraged to access health services through eHealth (Martin et al., 2020). Joseph and colleagues (2020) found that individuals who have achieved self-efficacy are more likely to engage in positive behaviors. Therefore, it can be assumed that adopting eHealth into a culturally appropriate service and providing the participants with the knowledge and skills to operate this service can increase the likelihood of its use by the target population.

Observational Learning and Expectations

Martin and colleagues (2021) show that observational learning influences expectations since individuals assign a value to an expectation through observation. Ruddock (2016) and Wu (2021) found that individuals will more likely engage in telehealth practices with peer support than with no peer support. Wu (2021) discovered that gender plays a considerable role in program uptake. The author found that women influenced their peers' decisions to use the application. For Latinos, observing community messengers and members use eHealth and effectively navigating it can help them engage in the application (Ruddock, 2016; Wu, 2021). According to Velasquez & Quenette (2018), the Latino population is more greatly influenced by their peers from the community when it concerns behavioral modeling. Therefore it would be beneficial for participants to see their peers from the same community use technological devices as a form of telecommunication.

Community Health Workers (CHWs) are essential in the conversation about uptake. CHWs' have the ability to describe the program in the language participants understand and encourage the use of the application in a culturally appropriate way. Research shows that when CHWs assist populations in navigating the eHealth tool, individuals report feeling more confident in using the service (Vaughan et al., 2021; Wu et al., 2021). Often, Latinos feel more comfortable communicating with a CHW about their needs than with a health care provider (Vaughan et al., 2021; Wu et al., 2021).

For Latinos, observational learning influences outcome expectations. Receiving information and education in a culturally relevant way from trustworthy sources can influence engagement in eHealth interventions (Shane-McWhorter et al., 2016). To build trust within the

Latino community, it will involve community messengers like CHWs in developing eHealth tools to make material culturally sensitive and maximize its potential use.

To reduce health disparities in the Latino populations, we should create patient-centered and culturally tailored eHealth solutions. It is suggested that these tools are improved through correspondence with the community because many individuals will be more receptive to this service delivery if there are positive connections with trusted intermediaries. With these recommendations, eHealth can be improved, and its success in Latino communities can increase health outcomes.

Discussion and Implications

As the leading ethnic minority, Latinos have been disproportionately affected by chronic and infectious diseases (Gonzalez et al., 2021). These diseases are preventable with the proper resources and services. An innovative method to reach Latinos who face barriers such as limited transportation and time availability, financial distress, and language barriers is through eHealth (Tulimerio et al., 2021). eHealth interventions can encourage Latino communities to seek care and take control of their health. However, culturally relevant material is needed for eHealth tools to be effective among Latinos. This will involve incorporating community messengers like CHW in the development and education of eHealth interventions.

Clinical outcomes, positive behaviors, and medication adherence have been improved through the implementation of eHealth services in Latino communities (Gonzalez et al., 2021). Affordability plays a significant role in whether patients will seek health services; therefore, eHealth must be cost-effective for Latinos (Bitar & Alismail, 2021). Culturally tailored

programs, affordability, and technological training are factors that will help Latino communities determine whether they will utilize eHealth services or not.

Research and eHealth Limitations

Martinez and Perle (2019) state that there are gaps in knowledge since there is a limited amount of research articles that have evaluated the Latino population concerning eHealth usage and whether improvements in health outcomes can be related to the service delivery. However, the authors state that there has been completed research to test for health literacy and engagement in general populations. The difficulty is a lack of evidence that these programs will work in the Latino population after an increase in education using this service delivery compared to traditional, in-person healthcare services. Most research that has been completed regarding eHealth services focuses on non-Latino populations; therefore, the need for more research that focuses on this target population to reduce health disparities across minority groups is critical.

The lack of health literacy, language barriers, and access to electronic devices has made it nearly impossible for specific populations to use the eHealth program (Steinberg et al., 2016; Anaya et al., 2021). Furthermore, Maglalang and associates (2017) studied a Filipino cultural eHealth intervention and found that it was not entirely culturally relevant based on the feedback they received from the participants. Research shows that technological services are not culturally adaptable to meet diverse populations' needs, underscoring the need to improve eHealth services (Anaya et al., 2021). Therefore, not only should program developers create Latino-centered eHealth interventions, but they should consider various diverse populations.

Another limitation is that not many metrics can accurately measure readiness in eHealth tool uptake. Weichelt and authors (2019) used a framework for readiness from Bangladeshi

researchers but discovered the instrument was designed for clinicians' readiness versus patients' readiness. Additional research is needed that determines how ready participants are to participate in eHealth that is able to measure readiness accurately (Weichelt et al., 2019). Therefore, a research gap still exists in how to determine eHealth adaptability, acceptability, and feasibility (Maglalang et al., 2017; Mauco et al., 2020). Serafica and colleagues (2019) found that with pre- and post-assessments, they were able to determine if participants' knowledge about their medical diagnosis and acceptability increased after the intervention.

Lastly, additional research is needed to address eHealth's cost-effectiveness for low-income individuals. Currently, a significant failure of cost-effective services is that they are advertised as cost-effective, but they are not. Iribarren and associates (2017) found that most studies that focused on cost-effectiveness did not target low-income populations, which negatively impacted Latinos because their average income is equal to or less than $39,600 (Velasco-Mondragon et al., 2016). Although this study provides evidence to show the importance of cost-effective and culturally relevant information in eHealth services, it has various limitations.

Future Directions

Research suggests that mHealth is the best eHealth service for Latinos. Therefore, creating a culturally relevant mHealth intervention that incorporates culturally appropriate practices is needed to continue engaging Latinos in care. The service should be continuously updated to fit other cultures and diverse populations' needs through the adaptation of eHealth programs.

Further research is needed to address how current eHealth services should not be a "one size fits all" approach and must be culturally relevant and cost-effective to decrease barriers to care and improve health outcomes in diverse populations. Other future directions include the creation of metrics to appropriately measure the true cost-effectiveness of an eHealth tool and how it benefits the population. A metric that can measure cost-effectiveness is needed, primarily because the average Latino income may create a financial barrier to accessing care. Other metrics needed are assessments that can measure eHealth's accessibility, feasibility, and adoption to assess how effective this service delivery is with the target population.

Conclusion

Latino populations face more significant barriers when seeking health care services. eHealth can mitigate barriers to health to improve the health of Latino communities. Studies have shown that culturally relevant and cost-effective eHealth programs were not only positively viewed by the Latino community but have the potential to increase health outcomes. eHealth services can be further improved by including technical training from trusted community members to increase engagement and reduce technological barriers. Moreover, CHWs should mentor community members on how to utilize eHealth to encourage its use. Future research should focus on which eHealth service delivery works best for Latinos and how program planners can further develop culturally sensitive eHealth services for diverse populations.

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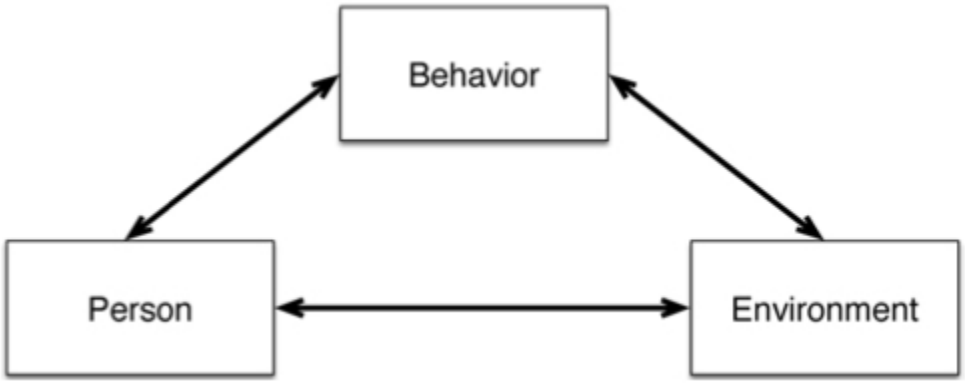
Appendices

Appendix A: Definitions of eHealth, mHealth, telehealth, telemedicine

Source	Term	Definition
Bitar and Alismail, 2021	Electronic Health (eHealth)	A form of communication using technology for the healthcare field that is cost-effective and secure of confidential and medical information to support patients and health services.
Weichelt et al., 2019	Mobile Health (mHealth)	A service that provides public and medical services through mobile devices and media.
Bitar and Alismail, 2021	Telehealth	The use of telecommunications to discuss clinical and non-clinical services like administrative and public health education. In some cases, telehealth includes visiting health providers in person.
Bitar and Alismail, 2021 WHO, 2010	Telemedicine	Telemedicine focuses on clinical services using telecommunication only. "Healing from a distance."

Appendix B: Social Cognitive Theory



(Martin et al., 2020)

Appendix C: Authors' Recommendations

Authors	Themes	Subthemes
Anaya et al., 2021 Bailey et al., 2021 Lara et al., 2021	**Latino Culture Inclusion**	Strategies specific to Latino community, language, and culture norms
Anaya et al., 2021 Wu et al., 2021 Larkey et al., 2021	**Technical Barriers**	Training on how to use eHealth tools, do not limit eHealth sign up to just email
Lara et al., 2021 Weinstein et al., 2014	**Cost-effective and Incentivization**	Offer monetary gifts or partial reimbursement of eHealth fees
Ruddock et al., 2016 Wu et al., 2021	**Community Support**	CHW intervention, peers

Appendix D: University of San Francisco MPH Competencies

Competency Theme	Competency
Planning & Management to Promote Health	Assess population needs, assets and capacities that affect communities' health Select methods to evaluate public health programs Apply awareness of cultural values and practices to the design or implementation of Public Health policies or programs
Communication	Select communication strategies for different audiences and sectors
CPHP Competency	Apply project management strategies to improve the quality of programs and services and public health settings