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Using a Modified Technology Acceptance Model and Communication Inequality Theory to Evaluate Telehealth Acceptance Among Resettled Refugees

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This study aimed to understand the willingness of resettled refugees to use telehealth services and to explore the influencing factors on resettled refugees' use of telehealth services in New York's capital district through a modified version of the technology acceptance model and *communication inequality theory*. The data analyzed in this study were drawn from the Telehealth and COVID-19 Knowledge, Attitudes, and Practices in New York Refugee Communities Survey (N = 353), conducted March–May 2022. In the multivariate analysis, willingness to use telehealth services in the future was significantly associated with perceived usefulness (OR = 14.61, $p < .001$), perceived ease of use (OR = 8.05, $p < .001$), age, and level of education. Thus, organizations providing telehealth services should emphasize the benefits of telehealth and provide adequate assistance and guidelines for population groups unfamiliar with new technologies. This study may assist telehealth providers in developing and implementing an equitable telehealth system.

Keywords: communication inequality, refugee health disparities, resettled refugees, technology acceptance model, telehealth

Since 1980, more than three million refugees have fled their country of origin and resettled in the United States to escape persecution and flee from war, torture, and famine (Connor, 2017). Refugee populations have high rates of healthcare disparities compared with native-born populations and other foreign-born populations (Edberg, Cleary, & Vyas, 2011; Javanbakht et al., 2019). The COVID-19 pandemic exacerbated existing health disparities among refugee populations (Feinberg, O'Connor, Owen-Smith, & Dube, 2021). Many people could not attend their routine doctor's visits and checkups, exacerbating pre-existing conditions and fostering the development of previously inexperienced health problems (Gertz, Pollack, Schultheiss, & Brownstein, 2022). Marginalized populations with a lack of access to healthcare, such as refugee populations, were more vulnerable to increased COVID-19 symptomology and risk of death than the general public (Singer, Molyneux, Gogerly-Moragoda, Kee, &

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Baranowski, 2023). Mental health outcomes were also predicted to be worse for refugee populations compared with U.S.-born populations and other foreign-born populations during the pandemic (Weith, Fondacaro, & Khin, 2022). Refugees had disproportionately high rates of posttraumatic stress disorder (PTSD) and major depressive disorder (MDD), and these mental health challenges were likely exacerbated by postmigration resettlement challenges during the pandemic, such as isolation from mandatory lockdowns or high rates of unemployment in the service industry.

For vulnerable populations and communities, such as resettled refugee populations, who have experienced persistent barriers to healthcare and related health disparities, telehealth services may offer an efficacious alternative to in-person healthcare services (Disney, 2023; Sandre & Newbold, 2016). Telehealth services can potentially help address refugee health disparities. They can provide refugee populations direct access to healthcare professionals, facilitating opportunities to connect with doctors from similar cultural or linguistic backgrounds and removing the burden or barrier of available interpretation (Truong et al., 2022). Given the potential for technology to offer greater access to linguistically compatible providers and interpreters, telehealth could effectively tackle the language and cultural obstacles faced by non-English speakers in healthcare settings.

Telehealth services can also help refugee communities overcome common structural barriers—such as lack of transportation, childcare, or time off work—and ensure continuity during times of disruption, such as the COVID-19 pandemic (Salameh et al., 2023). For refugee-serving organizations, telehealth can reduce cancellations and no-shows (Weith et al., 2022). Although not without challenges and limitations, telehealth may create opportunities for accessible, linguistically compatible, and cost-effective care for refugees and other immigrant populations (Schulz, Leder, Akinci, & Biggs, 2015; Weith et al., 2022).

Although the availability of telehealth services provides an exciting opportunity to remove healthcare barriers for refugee populations, existing research suggests that telehealth utilization rates are low (Disney, 2023). Importantly, there is limited telehealth research that is refugee-specific (rather than the general population or inclusive of all immigrant populations); however, refugees often fit into sociodemographic groups that have been documented as experiencing telehealth disparities, such as low socioeconomic status and low English proficiency (Salameh et al., 2023) or limited technology literacy (Truong et al., 2022). In a review of studies from 2020–2021 using telehealth data from a range of U.S. populations, Harju and Neufeld (2022) found that although telehealth utilization varied across geographic regions and medical specialties, there were disparities in telehealth use by race, age, and income. Similarly, a systemic review of telehealth studies found that one of the biggest barriers to utilizing telehealth among minority racial/ethnic communities with limited English-speaking abilities was low digital literacy and a lack of understanding of telehealth services (Truong et al., 2022).

In the refugee-specific telehealth literature, evidence suggests that client distrust, technological barriers, and communication issues are obstacles to effective telehealth services (Disney, Mowbray, & Evans, 2021). Technological barriers include low-tech literacy and lack of access to video-capable devices or reliable Wi-Fi (Disney et al., 2021; Weith et al., 2022). There is also the compounding effect that refugee patients who have the least access to in-person healthcare or rely on telehealth the most tend to have the most barriers to telehealth (older age, less technologically literate, and more likely to

be limited to English proficiency patients), thus limiting their ability to engage with telehealth care (Salameh et al., 2023). Other research suggests that patients from refugee backgrounds may experience anxiety using telehealth because of a perceived risk of telecommunications fraud or other privacy concerns (Disney et al., 2021; Truong et al., 2022), or perceive telehealth as less legitimate than in-person healthcare (Salameh et al., 2023).

Additionally, little research exists describing the telehealth preferences or experiences of refugee populations. Most research aim to understand telehealth preferences or experiences of refugee populations within the context of refugee camps, not as permanent countries of resettlement (Hady, Mahmoud, & Whaibeh, 2021; Jefee-Bahloul, 2014). There is some evidence (Schulz et al., 2015) that resettled refugee patients who need an interpreter for a healthcare visit may find videoconferencing interpretation satisfactory and much preferred to phone interpretation. Other research has noted that refugees may find it difficult to understand new or unfamiliar tech platforms to access telehealth (O'Mara, Monani, & Carey, 2022).

To better evaluate and understand the potential utility of telehealth in resettled refugee communities, a modified version of the technology acceptance model (TAM) was applied in the current study. Rooted in social psychology, TAM was developed as an information technology framework to explore individual beliefs, attitudes, and intentions related to the use of technology in the workplace setting (Davis, 1989). This model delineates how perceived usefulness and ease of use determine the degree to which individuals use the technological tool or service in question (Su & Li, 2021)—i.e., how useful is telehealth and how much effort is needed to learn telehealth?

TAM has been used to explore technology adoption in settings like medicine, nursing, mental health, online learning, and social media. Additionally, TAM has been applied to understand the technological decisions of refugees, immigrants, and international populations (Alshurafat, Al Shbail, Masadeh, Dahmash, & Al-Msiedeen, 2021; Dutot, 2014; Hsieh, Lai, Chuang, & Tsai, 2022). As such, TAM is an appropriate model for exploring willingness to use telehealth among resettled refugee populations in the United States.

Communication inequality theory is also helpful for understanding telehealth acceptance among resettled refugee populations (McKinnon, 2023; Viswanath & Emmons, 2006). Communication inequality is the "differences in the generation, manipulation, and distribution of information among social groups; and differences in (a) access and use, (b) attention, (c) retention, and (d) capacity to act on relevant information among individuals" (Viswanath & Emmons, 2006, p. S242). Communication inequality theory states that health disparities occur when inequalities transpire across the health communication continuum, causing inequitable access to learning within specific individuals or groups. Communication inequality theory offers a lens through which to assess whether refugee communities receive an equitable amount of government funding for culturally and linguistically tailored health communication during the COVID-19 pandemic—and, if not, how this inequity further exacerbates COVID-19 health disparities. It also prompts questioning why there was a deficiency in addressing COVID-19 misinformation on social media platforms in languages beyond English (Knudsen, Perlman-Gabel, Uccelli,

Jeavons, & Chokshi, 2023) when resettled refugees rely heavily on social media for their health-related information (Ahmed, 2022).

Communication inequality theory postulates that individuals with limited access to digital technology, such as immigrants and refugees, are typically the same individuals who are historically underserved by the healthcare system and who suffer the greatest health disparities (Bao & Lee, 2023; Viswanath & Kreuter, 2007). While TAM explains some aspects of telehealth adoption, it fails to account for the systemic inequalities that also impact telehealth adoption. Together, TAM and communication inequality theory explain both individual and systemic reasons for accepting or rejecting telehealth. Together, these two frameworks—TAM and communication inequality theory—help to understand technology acceptance in an often marginalized resettled refugee population (Bao & Lee, 2023).

This study was interested in the following research questions.

RQ1. Among resettled refugees living in New York State, what are their telehealth experiences and preferences?

RQ2. Is there a relationship between perceived usefulness and perceived ease of use, and telehealth acceptance among resettled refugees living in New York State?

Based on the TAM framework, we hypothesized that increased perceived usefulness and perceived ease of use would have higher odds of telehealth acceptance. Based on communication inequality theory, we hypothesized that there would be differences between telehealth experiences and preferences—that is, there would be a difference between the commonly used platform and the preferred platform.

Methodology

Study Procedures

This study is part of a larger project, the *Telehealth and COVID-19 Knowledge, Attitudes, and Practices (KAPs) in New York Refugee Communities Survey* (*N* = 353), conducted March–May, 2022. The cross-sectional, structured survey contained KAPs questions related to telehealth, COVID-19, and COVID-19 vaccination. Survey questions related to participants' perceptions of and experiences with telehealth services were examined in this study. The survey was administered by Community Data Collectors (Disney, Ahmed, & Carnes, 2023) through their personal networks to local refugee communities. Community Data Collectors were from Afghanistan, Sudan, and Syria and collectively spoke Arabic, Dari, Pashtu, and English. Community Data Collectors received survey and ethics training before data collection, and they assisted participants with language or technology as needed. All participants were provided with a gift card (USD $20) in appreciation of the time taken to participate, and Community Data Collectors were compensated. All procedures were reviewed and approved by the University at Albany, State University of New York Institutional Review Board.

Telehealth Use Among Resettled Refugees Before and During COVID

Participants were asked four questions to gauge their personal experiences with telehealth. Participants were asked, "Have you ever had a telehealth (video/phone) appointment?" and "Did you ever have a telehealth (video/phone) appointment before the COVID-19 pandemic?" Response options for these two questions included "Yes, once," "Yes, more than once," and "No." The participants who answered "Yes" to having had a telehealth visit were asked to respond to the following statement, "The telehealth appointment was able to address my concerns or what was bothering me," using a 4-point Likert scale as follows: 1 = "Strongly disagree," 2 = "Disagree," 3 = "Agree," and 4 = "Strongly agree." Participants were also asked about their willingness to have a telehealth appointment in the future, with response options of "Yes" and "No."

Telehealth Preferences Among Resettled Refugees Variables

The telehealth preferences captured in this study included the type of healthcare visit and the type of platform for telehealth visits. All participants were asked to indicate their preference for a healthcare visit—both "in general" and "during the COVID-19 pandemic." Response options included "Video visit," "Phone visit," and "In-person office visit." Participants were also asked to indicate their history of use and preference for telehealth platforms. Response options included "Zoom," "Facetime," "WebEx," and "WhatsApp."

Refugee Telehealth Acceptance Logistic Regression Model Measures

This study uses a modified TAM framework that incorporates the theoretical constructs of the original 12-question TAM.

Perceived Usefulness

Perceived usefulness was captured with a "yes" response to "Telehealth visit allows more time with my healthcare provider" when asked the question "What do you like about telehealth appointments?"

Perceived Ease of Use

Four survey items were used to measure perceived ease of use, and a scale was created (Cronbach α = .73, potential range: 0–4). Specifically, perceived ease of use was captured with a "yes" response to the items "Cell phone or Wi-Fi service is unreliable," "Need a language interpreter," "Do not know how to use a phone for a telehealth appointment," and "Do not know how to use a video for a telehealth appointment" when asked, "What do you NOT like about telehealth appointments? Please choose all the reasons that apply."

Telehealth Acceptance

The main independent variable of interest was telehealth acceptance. Those who answered "yes" to the question "Would you be willing to have a telehealth appointment in the future?" were categorized as accepting telehealth, and those who answered "no" were categorized as not accepting telehealth.

Sociodemographic Variables

Participants reported their gender (male/female), age (by decade), and highest completed education level (less than primary school, primary school, secondary school, 1 year or more of college, college, graduate school). Age was collapsed into three categories: 18–30, 31–50, and 51–80 years. Participants reported self-perceived health status (excellent, very good, good, fair, and poor), which was collapsed into two categories: "good" (excellent, very good, and good) and "not good" (fair and poor). Participants also reported several years of living in the United States. Length of residence in the United States was collapsed into four categories: less than 1 year, 1–5 years, 6–10 years, and more than 10 years. Education level was also collapsed into three categories: less than primary and primary school, secondary school, and some college and graduate school.

Statistical Analysis

All statistical analyses were conducted using IBM SPSS Statistics (Version 27) (IBM Corps., 2020). Descriptive statistics were first computed, followed by bivariate analysis, to examine the correlation between telehealth acceptance and nontelehealth acceptance. Reliability for the survey questions was reported using Cronbach's alpha. Next, a binary logistic regression analysis was performed to predict resettled refugees' willingness to use telehealth services from key independent variables (perceived usefulness and perceived ease of use). The control variables were sociodemographic characteristics, including age, gender, and education. The results of the logistic regression analysis were presented by odds ratio (OR) with 95% confidence intervals (CIs) and p-values < .05. Furthermore, frequency distribution statistics were conducted to delineate preferences about the type of healthcare visit, both generally and during the pandemic, as well as the utilized platform and preferred platform.

Results

Based on the TAM framework, we hypothesized that increased perceived usefulness and perceived ease of use would have higher odds of telehealth acceptance. Based on communication inequality theory, we hypothesized that there would be differences between telehealth experiences and preferences—for example, we hypothesized that there would be a difference between the commonly used platform and the preferred platform. Both hypotheses are supported by the results of this study.

Descriptive and Bivariate Analysis of Telehealth Use Among Resettled Refugees Before and During COVID

The participants' experience with telehealth increased nearly threefold after the COVID-19 pandemic (29.3%) compared with before the COVID-19 pandemic (11.6%). Among those who reported that they had had a telehealth visit in the past, nearly three-quarters agreed (71.6%) or strongly agreed (9.0%) that the telehealth appointment was able to address their concerns or what was bothering them. Among all participants, half (52.3%) reported that they were willing to have a telehealth appointment in the future. Among those who had used telehealth once in the past, 27.6% were willing to use telehealth again in the future. Among those who had used telehealth multiple times in the past, 61.4%

were willing to use telehealth again in the future. Among the participants who had no telehealth experience, 45.3% were willing to have a telehealth visit in the future. Telehealth experience was significantly associated with willingness to use telehealth in the future, such that those who used telehealth in the past were more likely to use telehealth in the future ($p < .001$). Please see Table 1 for a summary of the bivariate associations between the study variables.

Table 1. Bivariate Associations between Refugee Health Status, Length of Residence in the United States, Telehealth Experience, and Telehealth Acceptance.

	Telehealth Acceptance			
	Total (*N* = 353)	Yes (*N* =182)	No (*N* = 166)	
	N (%)	*N* (%)	*N* (%)	*p* value
Health Status				.658
Not good	34 (9.7)	16 (48.5)	17 (51.5)	
Good	318 (90.3)	165 (52.5)	149 (47.5)	
Time in the U.S.				.263
Less than 1 year	43 (12.6)	36 (83.7)	7 (16.3)	
1–5 years	104 (30.6)	41 (40.2)	61 (59.8)	
6–10 years	126 (37.1)	58 (46)	68 (54)	
More than 10 years	67 (19.7)	39 (60.9)	25 (39.1)	
Telehealth Experience**				<.001
No	249 (70.7)	111 (45.3)	134 (54.7)	
Yes	103 (29.3)	71 (69.6)	31 (30.4)	

Note. $*p < .05$, $**p < .01$

Descriptive Analysis Results of Telehealth Preferences Among Resettled Refugees

Participants reported that their most preferred type of healthcare visit in general was in-person office visits (76.6%), followed by video visits (14%) and phone visits (9.4%). The most preferred type of healthcare visit during the COVID-19 pandemic was also in-person office visits (57.1%), followed by video visits (27.1%) and phone visits (15.1%). When asked what type(s) of appointment they would be willing to use telehealth, the most common type was routine visits (61.7%), followed by mental health care (42.4%), sick visits (40.5%), urgent care (25.3%), and emergencies (15.3%).

Zoom (49.5%) was the most often used platform for telehealth appointments, followed by Facetime (20.6%), WebEx (20.6%), and WhatsApp (9.3%). Zoom (35.6%) was also the most preferred platform among all participants, followed by WhatsApp (27.9%), Facetime (25.5%), and WebEx (10.9%).

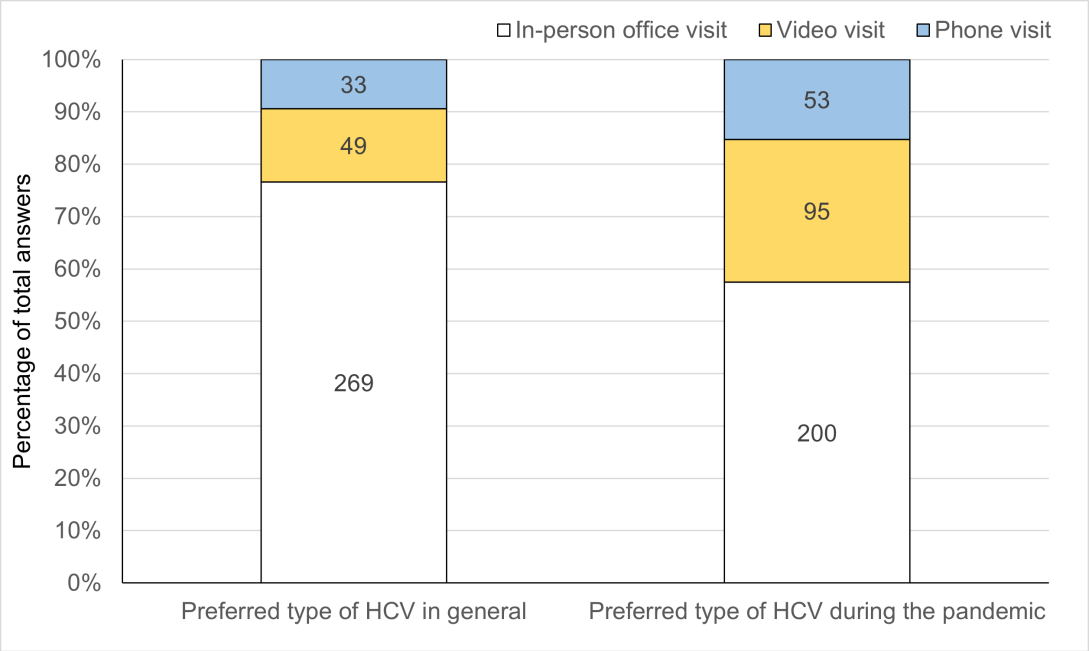

Figure 1. Preferred type of HCV in general and during the pandemic.

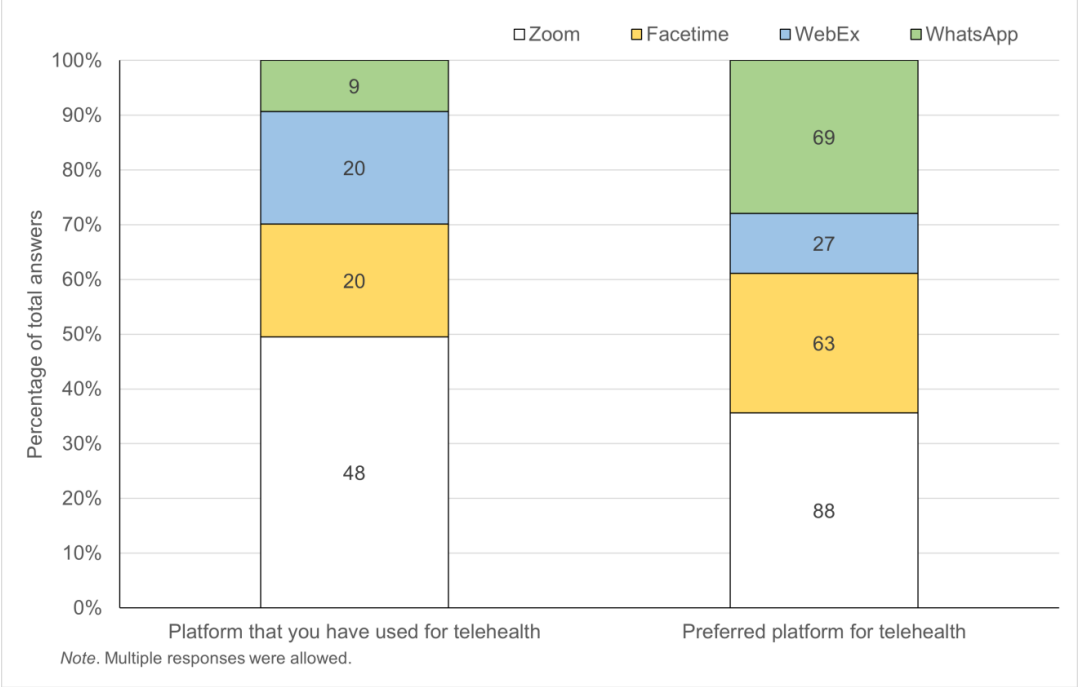

Figure 2. Difference between common platform and preferred platform.

Refugee Telehealth Acceptance Regression Model Results

Among the participants, the distribution of gender was balanced, with 47.9% male and 52.1% female. The majority of the participants were split between the age groups of 31–50 years old (46.9%), followed by 18–30 years old (42.6%), and 10.5% of participants were between 51–80 years old. The educational background of the participants was diverse: 57% had attended some college and graduate school, while 27.6% had attended less than primary school. Univariate descriptives of perceived usefulness and perceived ease of use variables and sample characteristics are reported in Tables 1 and 2.

Bivariate comparisons among participants showed a significant difference in perceived usefulness, perceived ease of use, gender, and education level between those who were willing to use telehealth and those who were not willing to use telehealth. Self-perceived health status (p = .658) and length of residence in the United States (p = .263) were not significant in bivariate analysis and dropped of the multivariate model.

Table 2. Univariate Descriptives of Refugee Telehealth Acceptance Regression Model Variables

	Yes	
What do you like or not like about telehealth appointments?	*N*	%
Perceived Usefulness		
Telehealth visit allows more time with my healthcare provider	46	15.9
Perceived Ease of Use		
Cell phone or Wi-Fi service is unreliable	61	21
Need a language interpreter	71	24.5
Do not know how to use a phone for a telehealth appointment	58	20
Do not know how to use a video for a telehealth appointment	54	18.6

Note. Total sample: *N* = 353.

Table 3. Sample Characteristics and Bivariate Associations of Refugee Telehealth Acceptance Regression Model Variables

	Total (*N* = 353)	Positive (*N* =182)	Negative (*N* = 166)	
	N (%)	*N* (%)	*N* (%)	*p* value
Gender*				.028
Male	167 (47.9)	96 (53.6)	69 (41.8)	
Female	182 (52.1)	83 (46.4)	96 (58.2)	
Age				.244
18–30	150 (42.6)	75 (41.4)	73 (44)	
31–50	165 (46.9)	97 (53.6)	67 (40.4)	
51–80	37 (10.5)	9 (5.0)	26 (15.6)	
Education**				<.001
Less than primary and elementary school	97 (27.6)	35 (19.4)	60 (36.1)	

Secondary school	54 (15.4)	23 (12.8)	30 (18.1)	
Some college and graduate school	200 (57.0)	122 (67.8)	76 (45.8)	
Perceived Usefulness**				<.001
Perceived Ease of Use**				<.001

Note. *p < .05, **p < .01

The logistic regression model was statistically significant, $\chi2(7) = 89.815$, $p < .001$. The model explained 30.7% (Nagelkerke R2) of the variance in telehealth acceptance and correctly classified 68.5% of the cases. In the multivariate analysis, willingness to use telehealth services in the future was significantly associated with perceived usefulness, perceived ease of use, age, and education. Participants who had a positive perception of the usefulness of telehealth were 14 times more likely to be willing to use telehealth services in the future (OR = 14.61, $p < .001$). Participants who had a positive perception toward the ease of use of telehealth were eight times more likely per each unit increase on the scale to be willing to use telehealth services in the future (OR = 8.05, $p < .001$). Younger participants were more likely to be willing to use telehealth services in the future than those who were aged between 51–80 (aged 18 to 30: OR = 2.57, $p < .05$; aged 31 to 50: OR = 3.10, $p < .05$). Participants who completed some college and graduate school were three times more likely to be willing to use telehealth services in the future than those who had primary education or less than primary education (OR = 3.06, $p < .001$). Gender was not significantly associated with willingness to use telehealth services ($p = .16$).

Table 4. Logistic Regression Model Predicting Telehealth Acceptance Among Refugee Adults

	Willingness to Use Telehealth in the Future				
			95% CI		
	OR	SE	*LL*	*UL*	*p* value
Gender					
Male	1.42	.25	.87	2.31	.16
Female	-	-	-	-	-
Age*					
18-30	2.57	.48	.99	6.60	.05
31-50	3.10	.48	1.22	7.89	.02
51-80	-	-	-	-	-
Education					
Less than primary school and primary school	-	-	-	-	-
Secondary school	1.17	.41	.52	2.64	.70
Some college and graduate school**	3.06	.30	1.70	5.51	<.001
Perceived Usefulness**	14.61	.63	4.29	49.68	<.001
Perceived Ease of Use**	8.05	.55	2.76	23.45	<.001

Note. Abbreviations: OR, odds ratio; CI, confidence interval; SE, standard errors
*p < .05, **p < .01

Discussion and Implications

The results from this study indicate that resettled refugees' willingness to use telehealth services is directly and significantly influenced by perceived usefulness and ease of use. Resettled refugees in this study who reported higher levels of perceived usefulness and perceived ease of use, younger age, higher levels of education, and male gender were more likely to use telehealth services in the future than those with lower levels of perceived usefulness and perceived ease of use, older age, lower levels of education, and female gender. Interestingly, perceived health status and length of residence in the United States were not significantly correlated with telehealth acceptance, suggesting that resources to improve telehealth acceptance may be better directed at factors other than the health status of patients or acculturation-related factors.

Telehealth experience, when categorized according to "Yes" and "No," was significantly associated with willingness to use telehealth in the future ($p < .001$). Interestingly, when the "yes" responses are broken down further by those who have had one telehealth visit and those who have had multiple telehealth visits, the results indicate a sharp difference in willingness to use telehealth in the future—27.6% versus 61.6%. In fact, those who had only one telehealth visit in the past were far less likely to accept telehealth than those who had never used telehealth (44.6%). One possible reason for this difference is that participants who had a negative experience the first time they used telehealth were unwilling to use it again. Preparing patients before utilizing telehealth can prevent a negative initial experience that leads to premature telehealth rejection.

This study also found that social media platforms were preferred platforms for telehealth—collectively more preferred than Zoom or WebEx. While utilizing social media platforms for telehealth may not be permitted for some agencies or organizations, there are other ways that this preferred platform can be incorporated into effective telehealth expansion. The use of social media platforms for health communication campaigns may increase the perceived usefulness and ease of use of telehealth among refugee and immigrant populations. A study on the use of digital platforms and the increased resilience of Syrian refugees in the Netherlands found that social media platforms became critical spaces for refugees to share their personal experiences and feedback about healthcare in their host country (Udwan, Leurs, & Alencar, 2020). There are multiple points of communication inequality intervention.

There is a mismatch between the most used platform and the most preferred platform for telehealth visits. Notably, the more formal platforms, Zoom and WebEx, together account for approximately 70% of the platforms used, yet participants prefer the less formal platforms or platforms that are embedded into social media, such as WhatsApp and Facetime. Nearly half of the participants reported using Zoom for telehealth visits, and just over one-third considered Zoom a preferred platform. This suggests, on one hand, that Zoom is a familiar platform for many participants, but also that Zoom still may not be the most preferred route of telehealth appointments for refugee clients. Communication inequality theory might suggest that the mismatch between commonly used telehealth platforms and preferred telehealth platforms is a systemic variable that further exacerbates health disparities.

One possible explanation for the reported social media preferences among refugee participants is that the social media platforms WhatsApp and Facebook are widely used across the globe (Cook & Zschomler, 2020), and many refugees may have greater digital literacy, trust, and/or comfortability with these apps than Zoom and WebEx, which are primarily used in the United States and other Western countries. Although the application of a modified TAM allowed us to explore the willingness of resettled refugees to use telehealth services in their host country, more research is needed to understand what impacts preferences of telehealth platforms and how platform literacy can be improved, or how the platform itself can be improved, to better meet the unique needs of refugee patients.

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There are several actionable implications for organizations that utilize, or plan to utilize, telehealth services with refugee populations. To improve perceived usefulness, organizations providing telehealth services should emphasize the benefits of telehealth. To improve perceived ease of use, organizations should provide adequate assistance and guidelines for population groups unfamiliar with new technologies. For example, this study found that nearly a quarter of the participants were concerned about how they would access an interpreter during a telehealth visit. However, telehealth can overcome language barriers by including interpreters in the telehealth service or by connecting linguistically compatible providers despite geographical distance. Given that one of four participants saw interpretation as a barrier to ease of use, this study suggests that health communication is needed to explain how language needs can or will be met via telehealth services. In short, if patients do not know that interpretation is available via telehealth or how to access interpretation via telehealth, then they may avoid telehealth services.

Strategies that may aid in bridging the gap between refugee populations and telehealth utilization involve support, connection, and empowerment through interventions at the introduction of telehealth services. For example, before establishing telehealth appointments with new clients, organizations may want to consider the utility of face-to-face meetings in building relationships (Truong et al., 2022). The introduction of these services to the patient is important, as technological and language barriers may prevent patients from attempting to initiate telehealth appointments. Interventions such as face-to-face meetings before telehealth engagement may benefit these patients, as support from trained telehealth ambassadors and language interpreters may increase perceived ease of use, particularly for individuals who lack technological experience or have limited English-speaking abilities. Additionally, organizations should consider including telehealth programming with text and audio options to help patients understand the instructions and make telehealth services more inclusive. Following initial telehealth appointments with new clients, organizations should consider access to user-friendly patient portals that incorporate pictures or

symbols for non-English speakers. Developing effective interventions would likely be aided by engaging culturally and linguistically diverse populations in the development process (Udwan et al., 2020).

As the postpandemic world progresses, digital platforms should be considered and utilized appropriately. With the advent of digital technologies, such as social media, Dutot (2014) called attention to improving the current TAM, modified TAM, or expanded TAM models with new variables, which has become even more important considering the ubiquity of social media (Dwivedi et al., 2018; Mano & Morgan, 2022).

Although telehealth for mental health services was not specifically explored in this study, this study did identify that 42.4% of participants were open to receiving mental health services via telehealth, a prevalence rate that is similar to that of some U.S.-born populations (Appleton et al., 2021; Hadler, Bu, Winkler, & Alexander, 2021). This finding is surprising because despite having higher rates of mental health disorders than the general U.S. population, refugees have a lower service utilization rate—suggesting that telemental health services have the potential to increase service utilization for some refugee patients. More research is needed to understand the nuances of refugees' willingness to adopt telehealth for mental healthcare.

Telehealth is a rare positive outcome of the COVID-19 pandemic and a healthcare delivery system that will continue to be utilized by patients in the United States in the postpandemic world. Studies of how we can improve perceived usefulness and ease of use are important for increasing the utilization of telehealth services for resettled refugees. As such, more exploratory studies are needed to understand areas where telehealth may meet the unique needs of refugee populations.

Limitations

The current study was not without limitations. One limitation was that the variables used to measure perceived usefulness and perceived ease of use could not capture the constructs in their entirety. For example, more time with a doctor is an applicable but limited definer of "usefulness." Perceived usefulness was measured on a categorical scale rather than a continuous scale. Although data-based, this study cannot be more exploratory. Additionally, this study was a cross-sectional design; therefore, it was not possible to deeply measure and understand the participants' cognition or emotional changes toward telehealth services. Therefore, future research could also be conducted using a longitudinal approach to investigate the context of changes in attitudes toward telehealth services at different time periods.

Conclusion

This study aimed to understand the willingness of resettled refugees to use telehealth services and to explore the influencing factors on resettled refugees' use of telehealth services in New York's capital district through the TAM and the communication inequality framework. The findings support previous research that highlights the crucial role of perceived usefulness and perceived ease of use in increasing willingness to use telehealth services in the future. Telehealth services may offer an efficacious alternative to in-person healthcare, including for vulnerable populations and communities that have experienced persistent barriers to healthcare and related health disparities. The recent influx of telehealth services

following the COVID-19 pandemic has provided great opportunities for populations who historically experience barriers to healthcare to engage with doctors or specialists previously unavailable in their range of access. Although not without challenges and limitations, telehealth may create opportunities for accessible, culturally responsive, and cost-effective care for historically minoritized populations, including refugees. However, there is currently a lack of cultural adaptation to telehealth innovation. Telehealth providers and policymakers can use the study's findings to develop culturally appropriate telehealth services. Together, a modified TAM framework and communication inequality theory can explore how individual- and contextual-level dynamics influence technology use and the degree to which telehealth is a culturally accepted and appropriate medium for healthcare delivery in this historically underserved population.

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