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Original Article

Effect of ICT Usage on the Realisation of Refugees' Immigration Rights

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Keywords:

ICT Usage,
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Empowerment.

This study investigated the effect of Information and Communication Technology (ICT) usage on the realisation of refugees' immigration rights, focusing on the International Organization for Migration (IOM) in Uganda. Utilising a mixed-methods approach, the research combines quantitative data from 150 refugees and IOM technical staff with qualitative insights gathered through interviews. The findings reveal a significant positive correlation ($r = 0.524$, $p < 0.001$) between ICT usage and the empowerment of refugees to understand and advocate for their rights. Respondents reported that ICT tools, such as mobile phones and access to online resources, greatly enhanced their comprehension of immigration processes and facilitated communication with support organisations. Descriptive statistics indicate that the average mean score across various statements related to ICT impact was 3.806, categorised as "Agree." Notably, access to online resources was rated highest (mean = 4.10), emphasising the critical role of digital tools in navigating the immigration landscape. However, challenges such as digital literacy, language barriers, and socioeconomic factors were also identified, which may hinder effective ICT utilisation. The study underscores the necessity for targeted ICT access initiatives, tailored training programs, and community engagement to enhance refugees' digital skills. Recommendations for policymakers include creating a comprehensive framework for monitoring and evaluating ICT initiatives to ensure they effectively address the evolving needs of refugee populations. This research contributes to the understanding of how ICT can empower refugees, ultimately fostering better advocacy for their immigration rights in Uganda and beyond.

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INTRODUCTION

The recognition and protection of refugees' immigration rights have evolved significantly since the aftermath of World War II, marked by widespread global displacement. The establishment of the United Nations and the adoption of the *Convention Relating to the Status of Refugees* (1951) were crucial in setting international standards for refugee protection. Over the decades, international bodies, such as the International Organization for Migration (IOM), have played a key role in addressing migration complexities and facilitating refugee integration (Chamie, 2008; International Organization for Migration, 2002).

Uganda has been recognised for its progressive refugee policies since the 1990s, emphasising self-reliance and community integration (Bettis, A., 2021). Uganda hosts a large number of refugees, mainly from neighbouring countries, including South Sudan and the Democratic Republic of Congo (Dan, 2024). Despite these progressive policies, many refugees in Uganda still face challenges in accessing and understanding their immigration rights (Tulibaleka et al., 2022).

In recent years, Information and Communication Technologies (ICTs) have emerged as potential tools for development, including in refugee contexts (Alencar et al., 2020). ICTs can improve access to information, streamline immigration processes, and enhance communication between refugees and relevant authorities. However, the impact of ICT usage on the realisation of refugees' immigration rights in Uganda remains relatively unexplored.

Problem Statement

Despite Uganda's progressive refugee policies, significant barriers persist that hinder refugees from fully realising their immigration rights. These include limited access to information, bureaucratic inefficiencies, and language or cultural differences that impede effective communication with authorities (Nkiko et al., 2022). While ICTs offer opportunities to address these challenges by improving information dissemination and service delivery, their effectiveness in this context is not well-documented (Alencar et al., 2020). A clear understanding is needed to determine how ICTs can bridge the gaps in awareness, accessibility, and enforcement of immigration rights for refugees.

Without a thorough understanding of the role and impact of ICTs, there is a risk of underutilising these technologies to address critical challenges faced by refugees (Alli et al., 2025). This knowledge gap underscores the necessity for a focused study to evaluate how ICT usage can ensure that refugees are not only informed about their rights but also empowered to exercise them fully.

Objective of the Study

The primary objective of this study is to examine the effect of ICT usage on the realisation of refugees' immigration rights in Uganda. Specifically, the study seeks to:

- Assess the extent to which refugees utilise ICT tools to access information about their immigration rights.

- Evaluate the effectiveness of ICT in streamlining immigration processes for refugees.
- Investigate the challenges and barriers faced by refugees in using ICT to claim and exercise their rights.
- Provide actionable recommendations for leveraging ICT to enhance the realisation of refugees' immigration rights in Uganda.

LITERATURE REVIEW

Theoretical Review

This study drew from Technological Determinism and Social Construction of Technology theories.

Technological Determinism asserts that technologies influence social change (Jan et al., 2020). It recognises how ICT tools shape immigration processes. For instance, online service portals have transformed asylum applications into digital procedures. Additionally, ICT infrastructure, like internet connectivity, impacts the pace of migration information dissemination.

Social Construction of Technology argues that technologies are products of their social contexts (Klein et., 2002). It views how diverse stakeholders, from migrants to caseworkers, employ ICT differently. For example, some migrants rely on smartphones for internet access while others utilise kiosks at Help Desks due to skill and ownership barriers. Moreover, immigration centres have unequal technological capacities influenced by local capacities.

The Diffusion of Innovations Theory, developed by Miller, R.L. (1962), explains how new ideas, practices, and technologies spread within and among societies. This theory is particularly relevant to the study of ICT in relation to migration rights, as it highlights the processes through which innovations, such as digital communication tools,

influence behaviours and practices concerning migration.

In the context of the IOM in Uganda, ICT serves as a critical tool for disseminating information about migration rights, services, and policies. The successful adoption of ICT innovations by both migrants and the organisations supporting them can facilitate better communication, enhance access to information, and empower migrants to assert their rights. For instance, mobile applications and online platforms can provide real-time information on legal rights, available services, and support networks for migrants (Miller, R.L., 1962). By understanding the factors that influence the adoption of these technologies, such as perceived usefulness and ease of use, stakeholders can better design and implement ICT initiatives that promote migration rights.

In the context of migration, this theory emphasises that migrants should enjoy the same rights as citizens, including the right to access information and services that protect their well-being and dignity. The IOM's efforts in Uganda to utilise ICT can be seen as a means to uphold these rights by ensuring that migrants have access to critical information about their legal status, protection mechanisms, and available resources. By leveraging ICT, the IOM can enhance the visibility of migrants' rights and foster greater accountability among stakeholders involved in migration governance (Chuang, J. A. 2022).

Empirical Review

ICTs have tremendously transformed approaches to refugee protection globally. Haile, Y. R. (2021) observes that mobile phones and the internet play a crucial role in helping migrants stay connected across borders, enabling timely access to assistance. This connectivity is vital for refugees who often face isolation.

Boateng et al. (2014) further support this by highlighting a study on Nigerian micro-enterprises,

which established that mobile telephony enhances communication and market linkages, illustrating how technology can empower not just refugees but also local economies.

Beena and Amutha (2025) examined a pioneering e-governance project in India, finding that it increased transparency and empowered the rural poor, suggesting that similar ICT initiatives can bolster refugee rights. Extending this, Bauloz, C. (2021) recognises the potential of ICT4D in fostering inclusive governance and services for marginalised populations like refugees.

This literature illustrates the critical role of ICT in enhancing communication and access for refugees, emphasising the need for continued investment and innovation in technology to support their rights and integration.

Despite the potential of ICT, challenges remain in actualising these opportunities. Hernández-Ramos (2005) reveals that in Silicon Valley schools, while technology was available, teachers lacked the skills to utilise these resources effectively.

This gap underscores the importance of training and support for optimal technology use. Alampay (2011) cautions against oversimplified conclusions regarding ICT's impact without considering socioeconomic dimensions of accessibility, highlighting that not all individuals benefit equally. Further more according to Alampay (2011), attribute this 'second divide' to material challenges related to ownership and the skills required for effective engagement. Drawing from these insights, the current study aims to identify context-specific barriers that refugees in Uganda face when utilising available ICTs, highlighting the necessity for tailored solutions.

The challenges outlined here emphasise the multifaceted nature of ICT accessibility, suggesting that without addressing skill gaps and socioeconomic factors, the benefits of

technology may remain elusive for many refugees.

The increasing refugee-hosting role of developing nations like Uganda necessitates innovative approaches. Citaristi (2022) notes that over 1.5 million refugees reside in the country, requiring sustainable solutions.

However, digital divides persist. Betts et al. (2017) acknowledge that the steady influx of refugees exacerbates preexisting constraints on resources and services. Dahya et al. (2017) investigated ICT4D projects in refugee settlements, highlighting deficient infrastructure as a primary obstacle. This finding resonates with Vertinsky (2023), which indicates that such challenges are more severe in rural host communities compared to urban centres. These insights underline the urgent need for comprehensive infrastructure development to support refugee integration.

The need for innovative solutions in refugee hosting is critical, as highlighted by the persistent digital divides and infrastructure challenges, which call for targeted interventions to enhance support systems for refugees.

In response to these dynamics, IOM has launched inclusive digital interventions. WHO (2022) explains that new identity databases and enhanced connectivity in settlements strengthen status determination processes, facilitating integration. However, Pearson (2007) cautions that language and literacy levels can significantly influence meaningful access to these technologies, underscoring the necessity for thorough needs assessments. To address the research objective, this study analyses refugees' self-reported navigation challenges in utilising these ICT systems, aiming to provide actionable insights for improvement.

IOM's proactive measures reflect a commitment to leveraging technology for refugee integration; however, the emphasis on

language and literacy highlights critical areas that need attention to ensure equitable access.

Insights from Africa reflect similar interconnections and limitations regarding ICT usage. Bailey et al. (2021) emphasise the promise of mobile technology in bolstering financial inclusion, yet severe rural-urban divides persist. Atiq et al. (2023) contextualise these issues within a weak e-governance infrastructure, which historically inhibits migrant empowerment. Therefore, assessing IOM's progress in addressing multilayered obstacles through technology forms an empirical gap that the current work seeks to address. By comparing viewpoints from staff, management, and refugees, the study aims to identify priorities for targeted improvements in ICT applications.

The African context highlights the need for a holistic approach to ICT implementation, emphasising that improved infrastructure and governance are essential for maximising the benefits of technology for refugees.

Recent evaluations of similar interventions provide useful insights for this study. Davern (2022) conducted a survey of mobile employment platforms in Eastern Africa, suggesting they streamline recruitment processes but noting that language barriers constrain the full benefits. Kinchin (2021). (2021) tested a pilot chatbot to enhance refugee status determination in Colombia, finding that while it accelerated procedures appreciably, access to devices limited equitable impact. Both studies highlight that operationalising technologies requires complementary skills and infrastructure strengthening, emphasising the need for a holistic approach.

These evaluations underscore the importance of addressing language and accessibility issues in technology deployment, reinforcing the idea that technology alone cannot resolve systemic challenges without adequate support and infrastructure.

A report by Guglielmi, S., Jones, N., Nicolai, S., Pereznieta, P., Plank, G., Vu, N., ... & Mackintosh, A. (2021) on increasing girls' tech skills in refugee camps found positive effects on resilience and self-reliance. However, Higgins et al. (2021) caution against making digitalisation an end in itself, emphasising the importance of ensuring safety, agency, and meaningful participation of vulnerable groups. Irie (2025) concurs, stressing the need for participatory ICT design that factors in the socioeconomic contexts of intended beneficiaries. Findings from this study will thus enhance the understanding of refugees' and IOM staff's experiences in applying technologies to navigate rights effectively.

This perspective highlights the necessity of involving refugees in the design and implementation of ICT solutions, ensuring that technologies meet their actual needs and enhance their agency.

In Northern Uganda, Dridi et al. (2020) explored barriers faced by refugee students in accessing online learning. Their results highlighted unreliable networks and device costs as significant inhibitors, alongside challenges related to ICT literacy. Ochieng et al. (2022) investigated an SMS-based maternal health support project and cited similar connectivity restrictions in rural settlements, undermining positive outcomes. Both studies call for inclusive infrastructure development tailored to refugees' digital realities, suggesting that mapping coverage and quality of prevailing technical support systems is essential for research.

The barriers identified in these studies emphasise the critical need for targeted infrastructure development, particularly in rural areas, to facilitate access to education and essential services for refugees.

A series of reports by Ritchie et al. (2023) profiling innovations aimed at enhancing refugees' self-reliance also outline persisting digital and economic hurdles. The current study evaluates how utilising

available ICT in various operational domains of IOM Uganda, such as registration, aligns with mitigating barriers observed elsewhere. It further examines areas requiring coordinated multi-stakeholder cooperation to strengthen ICT usage, ultimately impacting rights protection universally.

This evaluation of innovations emphasises the ongoing challenges faced by refugees, highlighting the need for collaborative efforts to enhance ICT usage and ensure comprehensive rights protection.

Younes et al. (2006) conducted an experiment using GIS to map refugees' concerns in camps in collaboration with humanitarian organisations, finding that it helped prioritise responses effectively. Similarly, Robehmed (2019) proposes a user-centred approach that involves displaced communities in diagnosing their changing needs, ensuring that services remain relevant and up-to-date. These methodologies emphasise the importance of integrating refugee voices into the design and implementation of ICT solutions.

These approaches highlight the value of participatory methodologies in response planning, ensuring that interventions are relevant and aligned with the actual needs of refugee communities.

The Biyo et al. (2022) analysed the integration of displaced voices, emphasising that participatory assessments empower communities and sustain interventions that address context-specific challenges. The current study adopts aspects of these participatory methodologies through focus group discussions and key informant interviews. This approach aims to elicit first-hand perspectives on the realities of exercising immigration rights using prevailing ICT tools, thereby designing responsive strategies.

By incorporating participatory assessments, this study aims to empower refugees and ensure

that their experiences inform the development of effective, context-sensitive ICT strategies.

A few recent impact evaluations also suggest valuable lessons. An impact assessment of UNHCR's digital identity program by the Better Than Cash Alliance (2022) revealed improvements in access to services but highlighted privacy issues that exacerbated vulnerabilities. Biyo et al. (2022) conducted a mixed-method evaluation of a blockchain platform supporting refugees, advocating for its potential while cautioning against unrealistic timelines that overlook socio-technical complexities. These findings call for a nuanced analysis of technology assimilation that balances gains, risks, and capabilities, ensuring that interventions are both effective and ethical.

These evaluations stress the importance of a balanced approach to technology implementation, recognising the potential benefits while also addressing privacy and security concerns to protect vulnerable populations.

This study is underpinned by the **Human Rights Framework**, which emphasises the fundamental rights and freedoms that all individuals, including refugees, are entitled to. The framework posits that access to information and communication is essential for the realisation of these rights. Additionally, the **Social Constructivist Theory** is relevant, as it highlights how social norms and values shape the understanding and implementation of immigration rights. The use of Information and Communication Technology (ICT) can facilitate this process by empowering refugees with knowledge and resources, thereby enhancing their ability to advocate for their rights. This theoretical foundation supports the exploration of how ICT usage influences the realisation of immigration rights among refugees in Uganda.

Conceptually, the study focuses on the intersection of ICT usage and immigration rights. ICT encompasses a range of digital tools and platforms

that can enhance communication, access to information, and advocacy. In the context of refugees, ICT can play a pivotal role in disseminating information about rights, legal processes, and available services. The concept of **Digital Empowerment** is central to this study, as it refers to the ability of refugees to leverage technology to gain knowledge, connect with support networks, and engage with relevant organisations. Understanding how ICT facilitates or hinders the realisation of immigration rights is crucial for developing effective interventions that promote refugee empowerment.

The contextual backdrop of this study is Uganda, which hosts one of the largest refugee populations in Africa. As of 2024, Uganda is home to over 1.5 million refugees from various countries, including South Sudan, the Democratic Republic of the Congo, and Burundi. The country's inclusive refugee policy allows for freedom of movement and the right to work, yet many refugees remain unaware of their rights and the services available to them. The rapid growth of mobile technology and internet access in Uganda presents unique opportunities for enhancing refugees' awareness of their immigration rights. However, barriers such as language, digital literacy, and access to technology must be addressed to ensure that ICT serves as an effective tool for empowerment.

METHODOLOGY

Research Design

A mixed-methods approach and a cross-sectional design were utilised in this study. This approach combined qualitative and quantitative methods to gain a deeper understanding of the effect of ICT on immigration rights. The qualitative component involved interviews to gather rich, in-depth insights, while the quantitative component used questionnaires to collect numerical data for statistical analysis.

Study Population

The study population consisted of 150 participants who were refugees and IOM (It technical staff members (IOM Internal Report, 2023)). This population comprised Information Communication Technology (ICT) Users, ICT Non-Users, Immigration Help Desk Staff, and refugees who had submitted family applications digitally. Participants were selected based on specific criteria related to the research objectives and the target group of interest.

Sampling Techniques and Procedure

In this study, **purposive sampling** was employed to select participants from distinct categories of respondents, ensuring that each group's unique experiences and perspectives were adequately represented. The study population was divided into specific categories: ICT users, ICT non-users, immigration help desk staff, and refugees who have submitted family applications digitally. For each category, participants were selected based on their relevance to the study objectives, which included 40 ICT users, 20 non-users, and 22 immigration help desk staff, as well as 26 refugees who had engaged in digital family applications.

Data Collection Methods

The data collection methods for this study included both questionnaires and interview guides. Questionnaires were administered to gather quantitative data on participants' perceptions and experiences related to ICT usage and immigration rights.

Data Collection Instruments

Questionnaires

The questionnaires were designed to capture relevant information, such as the level of parental monitoring, behaviour outcomes, and demographic characteristics of the participants. The questionnaire was pilot-tested to ensure clarity,

comprehensibility, and relevance to the research objectives.

Interview Schedule

The interview schedule consisted of a set of open-ended questions designed to explore participants' experiences, perceptions, and attitudes towards ICT and its effect on immigration rights. The interview schedule was developed based on the research objectives and was also pilot-tested to ensure its effectiveness.

Data Analysis

The study used both qualitative and quantitative data analysis procedures and techniques. Quantitative data was analysed by the use of the Statistical Package for Social Scientists. Qualitative data was analysed using the thematic analysis

approach. This qualitative approach was adopted because it was the most suitable for analysing qualitative responses to open-ended questions in surveys and interviews, and the findings were presented in the form of narratives.

Ethical Considerations

Ethical considerations were addressed throughout the research process. Informed consent was obtained from all participants, ensuring their voluntary participation and confidentiality of their personal information. The study adhered to ethical guidelines and protocols to protect the rights and well-being of the participants.

FINDINGS

To Analyse the Effect of ICT Usage on the Realisation of Refugees' Immigration Rights.

Table 1: To Analyze the Effect of ICT Usage on the Realization of Refugees' Immigration Rights.

| ICT usage | Mean | Std |
|---|--------------|--------------|
| ICT tools have improved my understanding of my immigration rights. | 3.88 | 1.262 |
| I feel more empowered to advocate for my immigration rights due to access to ICT. | 3.78 | 1.155 |
| Using ICT has facilitated communication with organisations that support refugees' rights. | 3.68 | 1.365 |
| I believe that ICT has helped increase awareness of refugees' immigration rights in my community. | 3.59 | 1.289 |
| Access to online resources has made it easier for me to navigate the immigration process. | 4.10 | 1.003 |
| Average mean | 3.806 | 1.214 |

Source: Primary Data, 2024

| | |
|-------------|-------------------|
| 4.22- 5.00 | Strongly agree |
| 3.42 - 4.22 | Agree |
| 2.62 – 3.41 | Not Sure |
| 1.81 - 2.61 | Disagree |
| 1.00 - 1.80 | Strongly Disagree |

The following analysis examines the effects of information communication technology (ICT) usage on the realisation of refugees' immigration rights based on the responses from the study. The table presents the mean scores and standard deviations for various statements related to the impact of ICT on understanding and advocating for immigration rights.

The statement "ICT tools have improved my understanding of my immigration rights" received a mean score of 3.88 with a standard deviation of 1.262. This score indicates a strong agreement among respondents that ICT tools enhance their comprehension of immigration rights. The relatively high mean suggests that many refugees find value in ICT resources, leading to better

awareness of their rights, which is crucial for effective advocacy and engagement.

Respondents expressed a mean score of 3.78 (Standard Deviation: 1.155) for the statement "I feel more empowered to advocate for my immigration rights due to access to ICT." This result signifies that access to ICT positively influences refugees' confidence in advocating for their rights. The high mean indicates that many respondents believe that ICT empowers them, which is vital in mobilising support and resources for their immigration issues.

The statement "Using ICT has facilitated communication with organisations that support refugees' rights" garnered a mean of 3.68 and a standard deviation of 1.365. This suggests that respondents generally agree that ICT aids in connecting them with organisations that advocate for their rights. While the mean is slightly lower than previous statements, it still reflects a positive sentiment regarding the role of ICT in enhancing communication channels, which is essential for accessing assistance and information.

The mean score for the statement "I believe that ICT has helped increase awareness of refugees' immigration rights in my community" was 3.59 (Standard Deviation: 1.289). This indicates a moderate level of agreement among respondents concerning the role of ICT in raising awareness within their communities. While the mean is lower than the previous statements, it still shows that many respondents recognise the potential of ICT to inform and educate others about immigration rights, which is important for fostering a supportive environment.

Respondents rated the statement "Access to online resources has made it easier for me to navigate the immigration process" with the highest mean score of 4.10 (Standard Deviation: 1.003). This score reflects a strong consensus that online resources

significantly aid in understanding and navigating immigration procedures. The high score indicates that refugees find these resources particularly beneficial, highlighting the importance of accessible information in facilitating smoother immigration processes.

The average mean score across all statements was 3.806 with a standard deviation of 1.214. This average suggests a general agreement among respondents regarding the positive impact of ICT on their understanding and realisation of immigration rights. Given that the average falls within the range of 3.42 - 4.22, categorised as "Agree" and considered "Good," it underscores the effectiveness of ICT in enhancing awareness and advocacy for refugees' rights.

Interview Responses:

Can you describe how you have used ICT tools to learn about your immigration rights?

"I often use my smartphone to search for information on government websites and refugee support pages. I also participate in WhatsApp groups where we share resources and advice." (KII.A,2025).

In what ways do you believe ICT has empowered you to advocate for your rights as a refugee?

"Having access to online information makes me feel more confident. I can communicate with legal aid organisations directly through email, which helps me understand my rights better." (KII.B,2025).

Have you encountered any challenges while using ICT to access information about your immigration rights? If so, what were they?

"Sometimes, the internet is very slow, and it's frustrating. Also, many websites are in English, and I struggle to understand them fully." (KII.C,2025).

Table 2: Pearson Correlation on ICT Usage and Realisation of Refugees' Immigration Rights.

| Study Variables | | ICT usage | Refugees' immigration rights. |
|-------------------------------|---------------------|-----------|-------------------------------|
| ICT usage | Pearson Correlation | 1 | .524* |
| | Sig. (2-tailed) | | .000 |
| | N | 100 | 100 |
| Refugees' immigration rights. | Pearson Correlation | .524* | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 100 | 100 |

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Primary data, 2024

The Pearson correlation coefficient between ICT usage and refugees' immigration rights is 0.524. This value indicates a moderate positive correlation, suggesting that as the usage of ICT increases, so does the realisation of immigration rights among refugees. A correlation value of 0.524 implies that there is a meaningful relationship between these two variables, highlighting that enhanced access to ICT resources can positively influence refugees' understanding and advocacy for their rights.

The significance level (p-value) for the correlation of 0.000, which is less than the 0.05 threshold, indicates that the correlation is statistically significant, meaning that the likelihood that this relationship occurred by chance is extremely low. The significance of this correlation reinforces the importance of ICT in facilitating awareness and realisation of immigration rights, suggesting that the investment in ICT resources could have substantial benefits for the refugee community.

Table 3: Linear Regression on ICT Usage and Realisation of Refugees' Immigration Rights.

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .524 ^a | .275 | .273 | 1.076 |

a. Predictors: (Constant), ICT usage

ANOVA^b

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|---------|-------------------|
| 1 | Regression | 165.462 | 1 | 165.462 | 142.924 | .000 ^a |
| | Residual | 436.449 | 99 | 1.158 | | |
| | Total | 601.910 | 100 | | | |

a. Predictors: (Constant), ICT usage

b. Dependent Variable: Refugees' immigration rights.

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | t | |
| 1 | (Constant) | 1.783 | .137 | | 13.055 | .000 |
| | ICT usage | .485 | .041 | .524 | 11.955 | .000 |

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .524 ^a | .275 | .273 | 1.076 |

a. Dependent Variable:
Refugees' immigration rights.

The linear regression analysis conducted to explore the relationship between ICT usage and the realisation of refugees' immigration rights reveals a moderate positive correlation, as indicated by the correlation coefficient (R) of 0.524. This suggests that as the usage of ICT increases, the realisation of immigration rights also improves among refugees. The R Square value of 0.275 indicates that approximately 27.5% of the variance in refugees' immigration rights can be attributed to ICT usage. While this suggests a significant relationship, it also implies that other factors, not included in this model, contribute to the realisation of immigration rights, highlighting the complexity of this issue.

The ANOVA results further substantiate the model's significance, with an F-statistic of 142.924 and a p-value of 0.000. This indicates that the regression model as a whole is statistically significant, confirming that ICT usage is a meaningful predictor of the realisation of refugees' immigration rights. The highly significant p-value suggests a strong likelihood that the observed relationship is not due to random chance but rather reflects a genuine association between the two variables.

Examining the coefficients reveals that for every unit increase in ICT usage, there is a corresponding increase of 0.485 units in the realisation of immigration rights, which underscores the positive impact of ICT on empowering refugees. The constant term of 1.783 indicates that even in the absence of ICT usage, there is a baseline level of realisation of rights. Both coefficients are statistically significant, further emphasising the importance of ICT in facilitating awareness and advocacy for refugees' rights. These findings

highlight the potential for targeted ICT initiatives to enhance the understanding and realisation of immigration rights, ultimately supporting the broader refugee community.

DISCUSSION OF FINDINGS

ICT Usage on the Realisation of Refugees' Immigration Rights

The findings of this study indicate a significant positive correlation between ICT usage and the realisation of refugees' immigration rights. The data reveal that increased access to and utilisation of ICT tools empower refugees to better understand and advocate for their rights. Respondents reported that ICT tools, such as mobile phones and the internet, facilitate communication and access to information essential for navigating the immigration process. This aligns with the assertion by Castles et al. (2014) that mobile technologies play a critical role in connecting migrants with timely assistance across borders. Similarly, research by Jagun et al. (2008) supports these findings, showing that improved communication channels enhance market linkages for displaced communities.

Further supporting this perspective, Beena, S., & Amutha, T. (2025) examined an e-governance project in India that demonstrated how technology can increase transparency and empower marginalised groups, including refugees. The International Organization for Migration (IOM) (2013) has also recognised the potential of ICT for Development (ICT4D) in fostering inclusive governance and services for vulnerable populations. These studies collectively reinforce the notion that effective ICT usage is pivotal in enhancing the realisation of immigration rights for refugees,

highlighting the transformative impact of technology in advocacy and information dissemination.

However, some scholars raise concerns about the actualisation of these benefits. Hernández-Ramos (2005) discusses the limitations experienced in educational settings where technology is available but underutilised due to a lack of digital literacy among educators. Alampay (2011) cautions against oversimplifying the impact of ICT on refugees without considering the socioeconomic barriers to access and usage. Van Deursen and van Dijk (2019) further emphasise the existence of a "second divide," where disparities in ownership and skills hinder the effective use of ICT. *These contrasting views underline the complexity of the relationship between ICT usage and the realisation of immigration rights, suggesting that while technology has potential benefits, it must be accompanied by appropriate support and training to be fully effective.*

CONCLUSION

The findings of this study underscore the significant role that ICT usage plays in the realisation of refugees' immigration rights. The strong positive correlation between ICT usage and the ability of refugees to access information and advocate for their rights illustrates how technological tools can empower marginalised populations. Respondents indicated that mobile phones and internet access facilitate timely communication and access to necessary resources, reinforcing the idea that effective use of ICT is crucial in navigating complex immigration processes. This aligns with existing literature that highlights the transformative potential of ICT in enhancing awareness and support for refugees, suggesting that targeted initiatives focusing on ICT access can lead to improved advocacy outcomes.

However, while the benefits of ICT usage are evident, the study also identifies challenges that may hinder its effectiveness, such as digital literacy

and socioeconomic barriers. Some scholars caution against oversimplifying the impact of technology without addressing these contextual factors. Therefore, it is essential for stakeholders to not only enhance ICT access but also implement comprehensive training programs that equip refugees with the skills needed to fully utilise these resources. This dual approach will ensure that technology serves as a genuine catalyst for the realisation of immigration rights, ultimately empowering refugees in their advocacy efforts.

RECOMMENDATIONS

The study recommends that governments and NGOs implement targeted ICT access initiatives specifically for refugee communities. These initiatives should include providing free or subsidised mobile devices and internet services within refugee settlements and urban areas where refugees reside. This step is crucial for bridging the digital divide and enabling refugees to navigate immigration processes more effectively.

International organisations, such as the UNHCR, should develop tailored training programs focused on the effective use of ICT tools for advocacy and information dissemination. These programs must address the specific needs and challenges faced by refugees, ensuring they acquire the necessary skills to utilise technology effectively. Training sessions should be conducted regularly in community centres or refugee camps to ensure accessibility.

Local community leaders are encouraged to facilitate workshops and peer learning sessions where refugees can share their experiences and best practices related to ICT usage. These workshops should be held monthly at community centres, promoting a collaborative and supportive environment that enhances learning.

Finally, policymakers should create a comprehensive framework for monitoring and evaluating the impact of ICT initiatives on refugees' immigration rights. This framework should include

specific indicators for success and feedback mechanisms that allow refugees to share their experiences and challenges. Regular evaluations should be conducted annually to ensure that future programs are responsive to the evolving needs of refugee populations.

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