# Equity in the Broader Settlement Sector: Addressing Systemic Racism and Digital Equity across the Settlement Journey

(Final Report)

March 2024

A study conducted by the Centre for Community Based Research (CCBR) in partnership with the Peel Newcomer Strategy Group (PNSG) and the Waterloo Region Immigration Partnership (WRIP)

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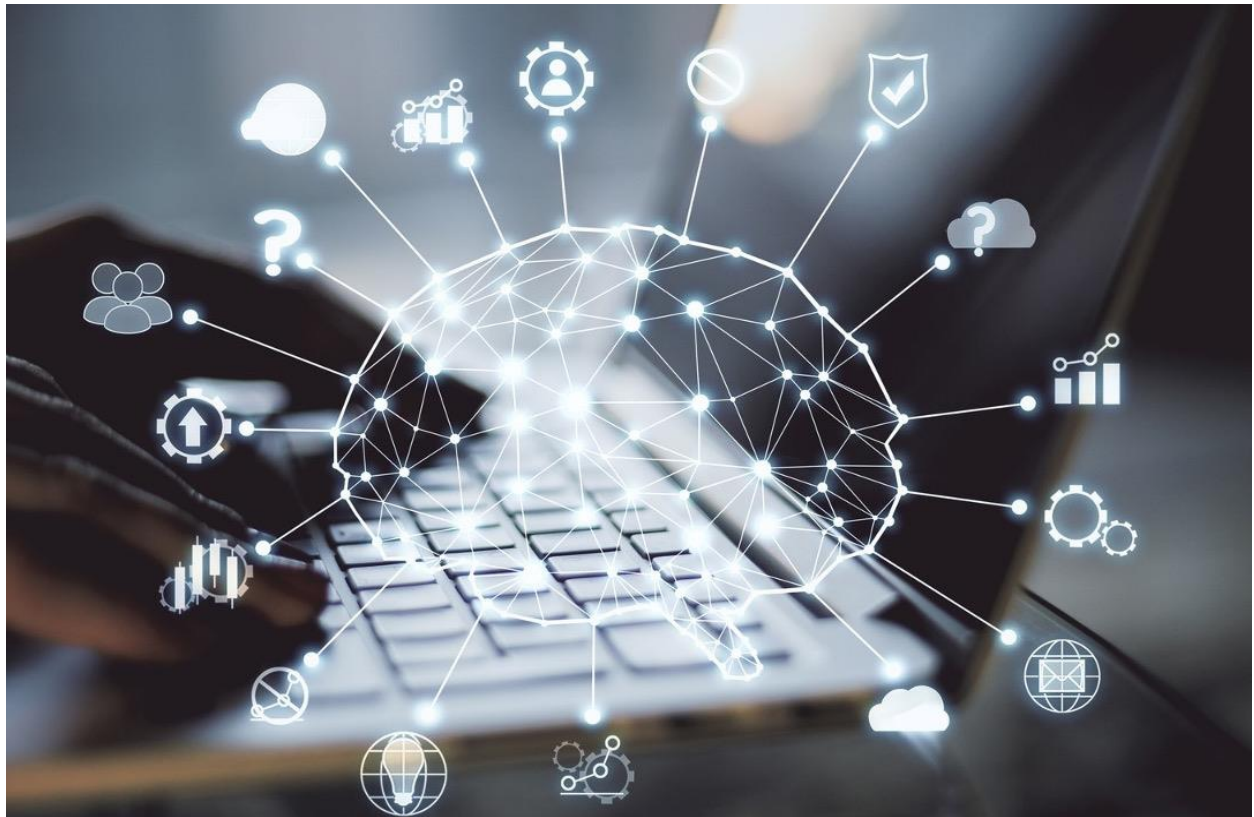
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Research Funder

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Acknowledgments

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Research Team

Summary

The research project titled *Equity in the Broader Settlement Sector: Addressing Systemic Racism and Digital Equity across the Settlement Journey* was a collaborative effort led by the Centre for Community Based Research (CCBR) in partnership with the Waterloo Region Immigration Partnership and Peel Newcomer Strategy Group. This project's purpose was to collaboratively understand the settlement experience of racialized newcomers, with a focus on how information and communication technologies (ICTs) facilitate and impact along the settlement journey.

The project goals were for the settlement sector and wider community in Waterloo and Peel to gain a deeper understanding of 1) how racism and digital inequity intersect and impact on racialized newcomers, and 2) how policies and practices for using ICTs can mitigate harm and support racialized newcomers' settlement and integration processes.

The project unfolded in three phases over 10 months. In phase 1, an advisory committee – formed with guidance from the local immigration partnerships in the Waterloo and Peel regions – co-designed the study protocols with the research team. During phase 2, relevant stakeholders in the settlement sector were engaged through a literature review, key informant interviews, focus groups, and case study stories. In phase 3, the project moved from research to dissemination. We produced a report, an infographic and facilitated feedback sessions in each community (Peel and Waterloo).

The findings revealed that racialized newcomers encounter both empowerment and obstacles in using ICTs. Settlement service providers demonstrate a commitment to addressing digital inequities through various, and in some cases tailored, programs and improved access to ICT resources. Despite this commitment, challenges such as limited resources, diversity in digital literacy levels, and privacy concerns persist. Additionally, the ad hoc nature of current support systems highlights a policy gap. This gap can be addressed by adopting a sector-wide systemic approach to addressing newcomer's ICT related needs. Also, findings show that the effectiveness of initiatives in combating structural racism remains uncertain due to a lack of comprehensive evaluation strategy. The findings section concludes with some organizational stories showcasing exemplary approaches to supporting racialized newcomers, particularly in promoting digital equity.

Moving forward, recommendations revolve around two main concepts: "flexibility in service provision" and "capacity building for the sector." The recommendations encompass adopting a client-centered approach by involving newcomers in program development and delivery, ensuring flexibility in service delivery methods, and expanding hybrid models of service delivery. Systemic integration of digital equity is crucial, along with developing tailored digital literacy programs and enhancing language and translation support. Organizations should adopt a trauma-informed approach, strengthen trust and safety measures, and foster collaborative partnerships. Leveraging community and family networks, addressing mobility and accessibility issues, increasing funding, committing to ongoing research and evaluation, and improving knowledge mobilization are also essential steps in enhancing equitable support for racialized newcomers in the settlement sector.

Research Partners

Centre for Community Based Research (CCBR)

CCBR is a non-profit organization located at the University of Waterloo, on the traditional and unceded territory of the Neutral, Anishinaabe and the Haudenosaunee Indigenous peoples. Established in 1982, CCBR's mission is to build more responsive and supportive communities, especially for those with limited power and opportunity. CCBR conducts and promotes research that is community-driven, participatory, and action-oriented. Its work builds on community strengths to create awareness, policies, and practices that advance equitable participation and inclusion of all community members.

Peel Newcomer Strategy Group (PNSG)

PNSG is a local immigration partnership for Peel region and a community collaborative that engages service providers and stakeholders to coordinate supports for newcomers as they settle and integrate in Peel. PNSG is a project of United Way Greater Toronto (funded by Immigration, Refugees and Citizenship Canada) and the Region of Peel; and it is guided by the collective voices of community stakeholders representing multiple sectors work, bridging newcomer-serving organizations with adjacent supports and services for settlement.

As one of over 80 local immigration partnerships across Canada, PNSG conducts community-level strategic planning, stakeholder engagement, communications, research, policy formulation and project management – to improve social and economic outcomes for Peel newcomers, immigrants and refugees.

Waterloo Region Immigration Partnership (WRIP)

WRIP is a multi-faceted partnership initiative bringing together community service, business, municipal, post-secondary and ethno-cultural organizations and Waterloo Region residents to create the conditions for immigrants to succeed and help build a welcoming, dynamic community for all. WRIP achieves this through leadership, convening, collaboration, research, engagement, education and advocacy.

Research Overview

Introduction

Due to the COVID-19 pandemic, Immigration, Refugees and Citizenship Canada (IRCC) funded service providers increasingly relied on information and communication technologies (ICTs) to support newcomers throughout their settlement journey. However, despite the benefits of ICTs, there were persistent challenges such as users' lack of technological competency, limited internet access, inadequate IT infrastructure, digital exclusion, and language and communication barriers. These challenges hindered access to and utilization of ICTs, resulting in a digital divide.

Racialized newcomers, particularly those from low-income and marginalized groups, were among the most vulnerable, facing potential isolation in the digital, social, and economic realms. While some communities, including Peel and Waterloo regions, had started addressing racism and discrimination within their local settlement sector, it was essential to address the intersection of structural racism and digital inequity across the broader settlement sector, including non-IRCC funded service provider organizations (SPOs) serving newcomers. The concern was that racialized newcomers might not receive equitable services during their settlement journey. This research project was a response to this concern to explore the current experience of racialized newcomers in the context of ICTs, delve into the current implemented policies and practices by settlement service providers around promoting digital equity, and ways of improving the newcomers' experience in their settlement journey. To meet the research objectives (following), PNSG and WRIP invited CCBR as a research partner on the project. As a community-based organization, CCBR brought its expertise in community-based research to the collaboration. CCBR partnered with PNSG and WRIP to form a steering committee, which guided the research process including the project design, data collection, and final reporting. The final reporting included this report, an infographic, and two community feedback session, one in Peel region, and one in Waterloo region.

Research Objectives

This project tries to build knowledge and identify measures to improve capacities in the settlement sector for culturally and racially responsive service to racialized newcomers. Specifically, it aims to collect evidence-based data on systemic racism and digital inequities faced by racialized newcomers in the settlement sector.

The main objectives are to:

- Collaboratively understand the settlement experience of racialized newcomers, with a specific focus on how ICTs facilitate and impact their settlement journey.
- Generate knowledge and insights into the extent of racism and discrimination related to digital equity.

- Identify measures to enhance capacities within the settlement sector, enabling better culturally and racially responsive services for racialized newcomers.

The ultimate goal is to contribute to improving the settlement sector's ability to recognize, analyze, and address digital barriers and obstacles faced by racialized newcomers as they integrate into Canadian society, leading to recommendations for more equitable policies and programming.

Research Questions

There are three main research questions guiding the project:

1. How do racialized newcomers currently experience ICTs during their settlement journey, and to what extent is this experience equitable? (Lived experiences)
2. What policies and practices are currently implemented by settlement service providers, both IRCC-funded and non-IRCC-funded, to address digital (in)equities? and how effective are these efforts to tackle structural racism? (Current practices)
3. What strategies should be taken to improve policies and practices concerning ICTs, ensuring that racialized newcomers receive equitable support throughout their settlement journey? (Future directions)

Research Approach

In this section, we will begin by outlining the primary approach utilized in the research, namely the community-based research approach. Following this, we will detail our strategies for implementing this approach and then we will explain our conceptual perspective on systemic racism, which underpins our research.

Community-based Research

We want to take the time to explore the community-based research approach to this project. Community-based research (CBR) is an approach that involves the active participation of stakeholders, those whose lives are affected by the issue being studied, in all phases of research for the purpose of producing useful results to make positive changes (Nelson et al., 1998). Within a community-based approach, a community means people who have a shared sense of belonging due to a mutual experience, identity, interest, and/or geography. In other words, a community is a group of people who are brought together for a common cause.

Three hallmarks of community-based research shape the research approach (Janzen & Ochocka, 2020). The first is that it is *community-driven*, where the research project is practically relevant to those most affected by the issues under study and leads to their self-determination. The second hallmark is that the project is *participatory*, in which community members and researchers equitably share control over the research project through active and reciprocal

involvement in the project design, implementation, and dissemination. The third hallmark is research that is *action-oriented*, where the process and results are useful to community members in making positive social change and promoting social equity.

The hallmarks help us see when CBR is taking place. The purpose is described by the three goals of community-based research. First, the project must gain new insights through systematic and quality research, leading to knowledge production. Second, the knowledge gained must be shared and communicated to enable people to use the research results through a knowledge mobilization process. Third, the project findings must foster community mobilization and stronger relationship building among people so that they are better equipped to use research learnings and together address societal issues.

Strategies

The first strategy we wanted to highlight was the use of an advisory committee. The Advisory Committee guiding this project consisted of partners from settlement and related organizations in the Peel and Waterloo regions. The Committee recruitment process was facilitated by PNSG and WRIP with the support of CCBR (detailed information on the advisory committee members can be found on the second page of the report).

The role of the advisory committee members on the project was to guide the research team throughout the design and implementation of the activities. In the 10-month duration of the project, the research team met with the advisory committee a total of four times. These meetings were instrumental in ensuring the milestones and objectives were met, in updating the committee on the progress of the research activities, in discussing challenges the team faced on the project, and in getting feedback to inform the next steps. These meetings enabled the committee members to be more actively engaged in the process of shaping the project journey and outcomes as community stakeholders and served as guidance checkpoints for the research team, ensuring the project remained on track and clarifying the considerations and directions for moving forward. This will be discussed further below (Appendix 2 includes a table summarizing the key topics discussed in each of the advisory committee meetings held).

The second strategy we wanted to highlight was stakeholder engagement. A stakeholder is someone who is affected by and/or has the power to impact the topic under study. As part of the community-based approach, the project involved the participation of stakeholders as collaborators within the project. Stakeholders from both the Peel and Waterloo regions' settlement sectors participated through several methods (see Table 1).

Conceptual Lens

A conceptual lens is the perspective that informs the approach. By its nature, CBR provides the opportunity to work from an anti-oppressive theoretical lens. For this project, we focused on systemic racism in particular.

Systemic racism (also called institutional racism) refers to the social, economic, and political structures that produce inequalities based on racial differences. There are different definitions, but the Canadian Human Rights Commission (2023) describes systemic racism as "an interlocking and reciprocal relationship between the individual, institutional, and structural levels which function as a system of racism. These various levels of racism operate together in a lock-step model and function together as a whole system" (p. 6). Racialized people (non-white people) experience racism from both individuals and institutions, such as health care, education, and immigration, among others. The impacts of such racism include barriers and obstacles that racialized people face when seeking to access important resources like employment, healthcare, housing, etc.

There is a lack of research that explores the relationship between systemic racism and digital inequity. Existing studies show that newcomers (Chen et al., 2022) and refugees (Potocky, 2021) experience low socioeconomic status (SES) when compared with Canadians. Other studies have shown that racialized people experience low SES more often than their white peers. The digital divide further reinforces inequity (Liu et al., 2021) and contributes to the social exclusion of newcomers (Hadziristic, 2017).

While there is a fair understanding of the relationship between low SES and racism and the relationships between low SES and the digital divide in existing literature, there is an existing gap in understanding the relationship between systemic racism and ICTs for newcomers. This project aims to contribute to addressing this gap in the relationship between racism and ICTs from the perspective of the settlement sector and offer recommendations to bridge the gap, especially for racialized newcomers in the Peel and Waterloo Regions.

Research Methods

To collect data, the research team used both primary and secondary methods. Primary data is collected firsthand by the researcher, while secondary data is information collected by others previously. For this project, secondary data came from a literature review, while primary data was obtained through focus groups, key informant interviews, and case studies. We conducted the literature review initially to understand existing knowledge about digital equity and racism, which then guided our interviews and focus group discussions. Therefore, we will begin by sharing the literature review process.

Literature Review

During the early phases of the project, the research team conducted a review of academic and grey literature to identify key themes in the existing literature on the uses of ICTs in the settlement sector, and the challenges for newcomers and settlement organizations with relying on ICTs, such as structural racism. The review was framed by project's three research questions (see Research Questions section).

The main objectives of the literature review were to:

- Collaboratively understand the settlement experience of racialized newcomers, with a specific focus on how ICTs facilitate and impact their settlement journey,
- Generate knowledge and insights into the extent of racism and discrimination related to digital equity, and
- Identify measures to enhance capacities within the settlement sector, enabling better culturally and racially responsive services for racialized newcomers.

For the academic literature review part, the team searched for peer-reviewed sources using Google Scholar, Wilfrid Laurier University Omni Search, Scopus, Web of Science, and JSTOR. Keywords that were used in the search process include:

- Information and Communication Technologies (ICTs) in resettlement
- Digital inequities/equity
- Digital engagement
- Digital literacy
- Immigration/resettlement/integration
- Digital divide
- Accessible technology OR equity in technology

In the review of grey literature, the project team used the Immigration, Refugees, and Citizenship Canada (IRCC) website and Settlement.org to identify organizations. From there the team reviewed organizational research reports, annual reports and policy documents to evaluate the preparedness of IRCC and non-IRCC funded service providers in Peel and Waterloo regions in addressing digital inequities faced by racialized newcomers.

Primary Data

For the primary data collection phase, the project team used three methods: 1) focus groups, 2) key informant interviews, and 3) case studies. These methods provided critical qualitative data to address the research questions guiding the project. The project team interviewed various stakeholders from the settlement sector in both Peel and Waterloo regions. The team created protocols for each method that were informed by the research questions and objectives of the project. Further, the protocols incorporated some of the key themes found in the literature review. This allowed the team to validate some of the findings and relate the project to the broader literature. It also helped to simplify the interview questions by incorporating some of the common language identified in the literature for research on ICTs. Finally, the team relied on a snowball strategy through the advisory committee networks for the recruitment of participants for each method. Recommendations were given by committee members for IRCC-funded settlement organizations to interview. Through these organizations, newcomers were invited to voluntarily participate in the focus groups and case studies. Following paragraphs provide more details on each of these three data collection techniques.

Focus Groups

The focus groups took place between July 2023 and September 2023. A total of seven focus groups were conducted with service providers and newcomers. Six of them were held over Zoom, with one focus group held in person with senior newcomers based in Waterloo, Ontario. Two of the focus groups were hybrid, involving participants from both regions.
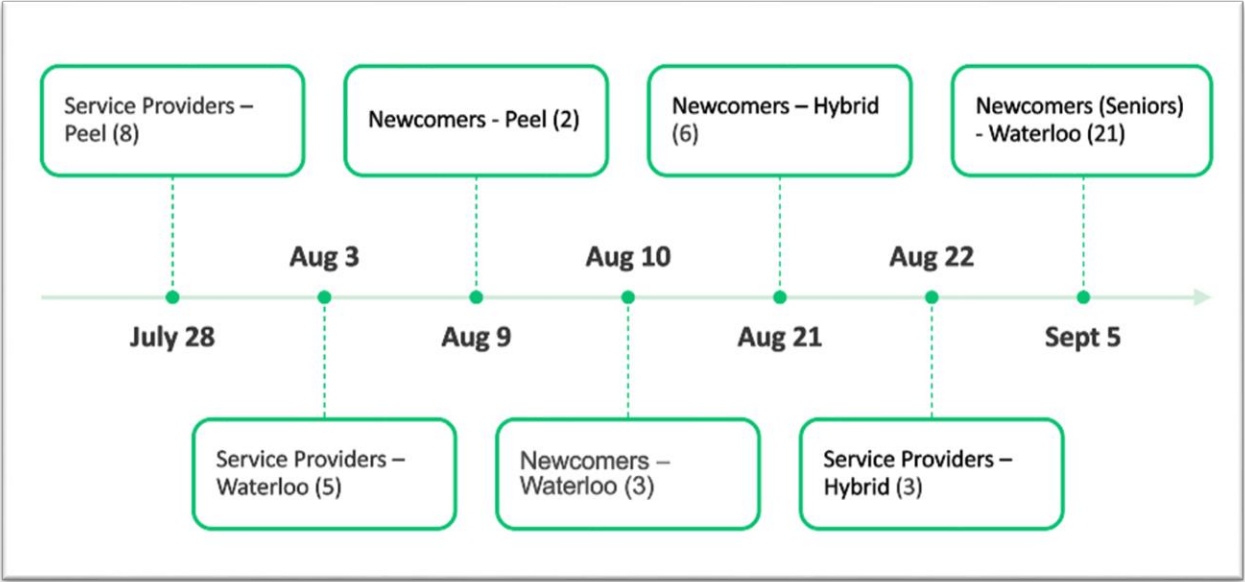

Figure 1. Timeline of Focus Groups, Participant Count, and Participant Types

Newcomer focus groups answered all three research questions, with an emphasis on research question #1. Service provider focus groups answered all three research questions, with an

emphasis on research question #2. Purposive sampling criteria for the focus groups with newcomers (e.g., race/ethnicity, length of stay in Canada, government-assisted refugees versus private sponsorship, work region of origin, etc.) and service providers (e.g., IRCC-funded/non-IRCC-funded, level within organization, etc.) were finalized with feedback from the advisory committee. With help from the advisory committee, focus group participants were recruited by identifying service providers who match the sampling criteria. Local immigration partnership councils in Peel and Waterloo region also promoted participation in the research. The service provider focus group preceded the newcomer focus group, as service providers could help to recruit newcomers according to the sampling criteria. The service provider focus group was facilitated by a member of the research team, and the newcomer focus group was facilitated by a racialized member of the research team. Honouria for participation was provided to both newcomers and service providers.

Key Informant Interviews

In the second part of the primary data collection, the project team held four key informant interviews with experts in the settlement sector in both Waterloo and Peel regions. The interviews took place over Zoom between September 20 and October 3, 2023. The purpose of these interviews was to capture an in-depth understanding of how IRCC-funded service providers address racism, discrimination, and digital inequity using ICTs.

Figure 2. Timeline of Key Informant Interviews: Participant Count, and Participant Types

The focus in these interviews was on answering all three main research questions, with an emphasis on question #3. These interviews helped us gain an in-depth understanding of how IRCC-funded service providers ad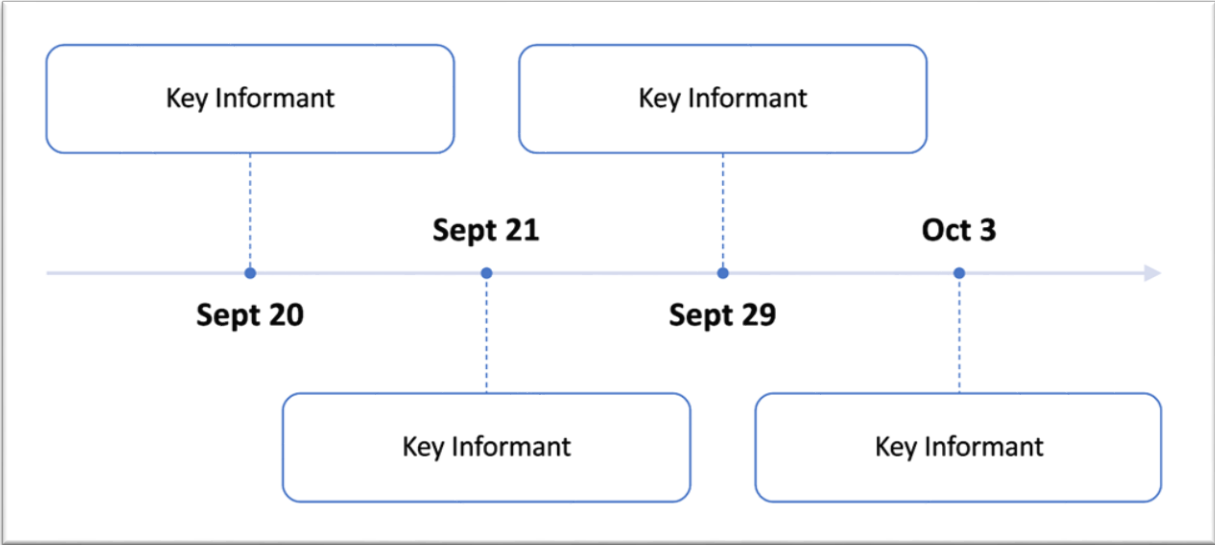dressed racism, discrimination, and digital inequity using information and communication technologies. Under the guidance of the advisory committee, sampling criteria were developed to ensure diverse perspectives (e.g., front-line staff, managers,

executive directors, consultants, etc). The recruitment plan was determined by the advisory committee with support from the local immigration partnership councils. Honoraria was provided after the interviews.

Case Studies

The final part of the data collection phase was the case studies. Using data from the focus groups and the key informant interviews, and recommendations from the advisory committee, the project team identified three exemplars of how ICTs are applied in the settlement sector in the Waterloo and Peel regions. Through a case study analysis of three settlement organizations – Achev, COSTI, COMPASS – the project drew a story of best practices by triangulating interviews with newcomers and service providers of each organization on how they used ICTs and addressed challenges and barriers to using ICTs. The research team conducted two focus groups (and three interviews substituting a focus group for newcomers) per case study. Each case study story illustrates the best practices around anti-racism and digital equity. The case studies stories were also be presented in two community feedback sessions held in Peel and Waterloo regions in March 2024 to inspire others to emulate. The following section provides a detailed analysis and presentation of these stories, followed by recommendations for the settlement sector from the overall project.
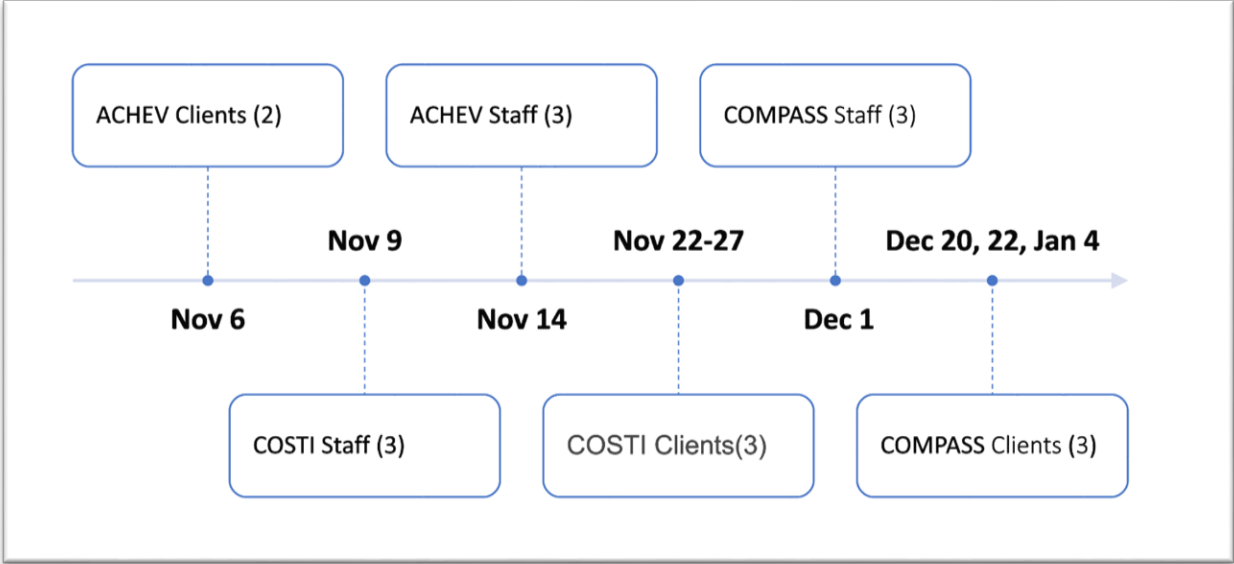
Figure 3. Timeline of Case Studies Interviews: Participant Count, and Participant Organization

We conducted 2-4 interviews per case study. The focus was on answering all three main research questions, with an emphasis on question #2. Sampling criteria and recruitment plans were determined by the advisory committee, with guidance from the local immigration partnership councils. Each case study featured multiple stories from interviews and focus groups, highlighting the best practices around anti-racism. Clients of the organizations were provided with an honoraria.

Research Findings

This section presents the integrated and summarized findings from the focus groups, key informant interviews, case studies and literature review. The findings are organized by the three main research questions guiding this project. Data has been analyzed and synthesized across methods and presented by thematic relevance under each question.

1. How Racialized Newcomers Experience ICTs

> Research Question 1. How do racialized newcomers currently experience ICTs during their settlement journey, and b) to what extent is this experience equitable? (Lived experience)

Interaction with ICTs is unavoidable: it is a necessary factor in the settlement experience, whether those newcomers arrive in Canada as immigrants, sponsored refugees, refugee claimants or through other pathways. Scholarly literature shows that newcomers use ICTs for various reasons. This includes the desire to reconnect and maintain sociocultural networks back home; to familiarize themselves with and adjust to the new environment in which they have settled; to access information and support services; to retrieve health information; to enhance children's education; and to entertain elderly people in their leisure time (Acharya, 2016; Caidi et al., 2010; Mikal & Woodfield, 2015).

At the same time, findings from both the literature review and our research demonstrate that racialized newcomers experience both successes and challenges with ICTs throughout their settlement journeys. Challenges could be based on factors such as educational level, language, and age, and play important role for many people when using ICTs (see Andrey & Abdelaal, 2022; Chen et al., 2020; Chen et al., 2022; Hargittai & Dobransky, 2017; Liu et al., 2021; Mikal & Woodfield, 2015; Reichel et al., 2015; Sexsmith, 2010). Although the newcomer experience varies, there were some common themes noted through the conversations with newcomers, settlement service providers, and key informants.

Facing language barriers: Some newcomer and service provider participants spoke about documentation to IRCC needing to be in one of Canada's two official languages (English and French). This barrier, coupled with the complexity of ICTs is a significant hurdle for many newcomers. Although some newcomers may be able to speak one of Canada's languages, the context of language here can still prove to be a barrier for some. To paraphrase a participant from a case study focus group, there are terms and expressions unique to Canada and the immigration experience that even fluent newcomers may not be familiar with (Case Study, Dec 1). The use of free digital translation services is commonly used among service providers, but there are privacy concerns related to this. Additionally, not all languages are available for

translation, and for languages that are available, mistakes are common and can cause miscommunications. A newcomer participant expressed, "Language is a challenge in the sense that vocabulary may be limited in researching and googling about topics that you're not familiar with" (Newcomers, Aug 9). One participant noted that their language was not documented, but only oral. This highlights how some languages cannot be reflected in ICTs because they are not written (Service Provider, Aug 3).

Facing barriers in digital inclusion: The existing literature illustrates that while some newcomers are tech-savvy, others have low levels of digital literacy, creating barriers to their effective use of ICTs (Andrey & Abdelaal, 2022; Hadziristic, 2017; Potocky, 2021). This barrier intersects with their socio-economic backgrounds (Turin et al., 2022). For instance, being a low-income family can create financial barriers to accessing technology, as the costs of tools and internet can be burdensome. Falling into a lower socio-economic bracket than their Canadian counterparts, coupled with the stresses of migration creates significant barriers. As existing studies show, affordability of devices, applications, and reliable internet access are significant factors in digital accessibility (Chen et al, 2022). Furthermore, other scholars data shows that accessing the internet in some areas can be more difficult than other areas, such as rural towns. This makes geography a factor in digital equity. While research shows that access to digital technology is one key barrier, it is not sufficient to develop digital skills (Premji, 2020). It is important to be mindful of where the barriers are. A service provider participant resonated with this idea saying, "Poverty, lack of access to housing, unemployment… essentially social determinants of health also contribute to the digital inequity" (Service Providers, July 28). An interviewee spoke to the nuances in digital equity in relation racialized newcomers,

> "… A lot of settlement agencies are mistaken in thinking that newcomers are not digitally literate, when it is actually accessibility rather than a lack of literacy… In the same ways that racialized groups face barriers in other realms, they face barriers in digital inclusion (tech, mechanics, digital literacy, etc.). There are some ad hoc attempts to improve these, but there is a need to continue, but also a need for a baseline approach/prioritization across the sector." (Key Informant, Sept 20)

Another factor in digital inclusion is age. The literature shows that those who are older find it much more difficult to access and use ICTs (see Chen et al., 2022). Much of the literature discusses age with respect to healthcare as a main issue of digital inequity, as many elderly people find themselves having to depend on ICTs to access health services. In this case, most technology can be difficult to use and require a learning curve and personal assistance. Age related issues were raised in our conversations with participants as well. For example, in our seniors focus group, participants expressed that they often needed support from youth in their families to navigate tech. In addition, not all the seniors were using smart phones, causing them to be excluded from accessing services digitally, unless they had support from family members (Newcomers, Sept 5).

Flexibility in accessing services online: Having access to settlement organizations virtually was also a method that was appreciated by many newcomers. Several messaging and video conferencing technologies were named, such as Zoom, WhatsApp, etc., with a note that flexibility on the part of the service organization to use the applications most familiar to the newcomer's improved communication. A recent study conducted by AMSSA identified that service providers should incorporate newcomer choice, meaning that clients should be free to choose how they receive services (Liu et al. 2021). For instance, digital English language classes may allow a newcomer mother with no childcare to attend when she would not have been able to meet in person. Having another class in person better suits an elderly newcomer who may find it too overwhelming to navigate a digital platform while learning a new language.

ICTs contributed to improving access to services as well as increased communication with settlement service organizations. This effect was strongest when newcomers were given the choice of what form of communication suited them best, whether that was email, WhatsApp, or another method of communication. A service provider participant shared their experience using Zoom to teach, "Zoom has been working great and so has WhatsApp – useful for checking in and sending homework, it's not as intimidating as an email" (Service Provider, Aug 3).

Digital messaging is also encouraged by settlement organizations to sustain newcomers' connections beyond the duration of a service. This allows for connections based on commonalities, not only geography. During a newcomer seniors focus group, some spoke about the community they have built to support each other in their online learning, creating group chats to check in and share resources (Newcomers, Sept 5).

Improved accessibility to information online: Although sometimes overwhelming, the amount of data available to newcomers is beneficial to their settlement journey. Access to information is improved with data being available online. However, the volume of information and difficulty with navigating it was identified as a challenge for newcomers and has increased newcomers' reliance on settlement service. A newcomer participant shared their perspective saying, "Everything is available on the internet from the government's point of view" (Newcomers, Aug 10). It was understood that although Government of Canada websites may contain a variety of information, newcomers find the current design inefficient and overwhelming. Another participant said, "Everything has been digitized – people will feel left out if service providers do not catch them up to speed" (Service Providers, July 28).

The need to improve access to information is critical for supporting senior newcomers. Literature suggests that senior newcomers rely on close connections like friends and family members to find information. They often prefer being in environments with people who share the same culture, languages and experiences, however, this decreases their opportunity to find public information (Chen et al. 2022). When asked about their experiences with ICTs, multiple senior newcomers shared that their family members helped navigate technology for them (Newcomers, Sept 5).

Needing mobile-friendly resources: There needs to be a balance in meeting translation needs and having mobile phone-friendly approaches. More newcomers are comfortable using mobile phones, so tailoring new applications to interface with this technology is necessary. An interviewee explained this challenge saying, "Language barrier is a concern, especially because some things that are more mobile friendly are less easily adapted for different languages, such as translation capabilities built into a web browser" (Key Informant, Sept 21). Accessing IRCC and settlement organizations heavily relies on ICTs. Although many newcomers come with a wealth of digital literacy, it is primarily while using mobile phones. This is not compatible with many forms and processes needed to communicate with, and receive communication from, IRCC. Another interviewee mentioned, "Many virtual services are tailored to computer use rather than mobile, which is what a lot of newcomers are most literate with" (Key Informant, Oct 3).

Increasing risk related to privacy and security: Privacy must be balanced with affordability, as the two priorities often conflict. For instance, the library has free internet access, but very little privacy. Some families own a common device (computer, telephone, etc.), which means only one family member can be utilizing the technology at any one time. Others may be unable to speak freely around their housemates, so a virtual appointment is unhelpful as they are not in a private enough space to be transparent.

Part of the challenge is the role of trust in adopting ICTs (Caidi et al., 2010). The review findings show that there are concerns like digital safety that people have, including privacy, trauma, and racism. The literature emphasizes the importance of building trust in this context, which requires flexibility in time and number of conversations typically required to navigate these layers. Newcomers may be uncomfortable with sharing their private information digitally. This could be related to their status (for instance, for irregular immigrants), a mistrust of governments, or concerns that they are unable to ensure how their information is being used. A participant shared that some newcomers do not want to be found online, "Some don't [use ICTs] because they are trying to stay in hiding and are not wanting to be found. So, they [service providers] try to work using a trauma informed approached, especially because they don't have the stories of all clients" (Service Providers, Aug 22).

Some newcomers may experience a language barrier with the legal language present in descriptions like the terms and conditions. Service providers share these concerns for their clients, and additionally have concerns about the security of using some communication technologies. There is a need to balance accessibility and privacy in this way also, by using applications that clients find easy to use but that also maintain appropriate levels of security of information.

Privacy and security concerns are also experienced by newcomers who experience gender-based violence. An interviewee shared and important perspective to keep in mind. "IPV [intimate partner violence] is real problem, virtual access leaves a footprint. This could violate privacy and can create vulnerabilities" (Key Informant, Oct 3). The literature also discusses cultural and social factors that influence the use of ICTs, such as gender (Brisson-Boivin & McAleese, 2021). For example, as immigration services move online, it becomes difficult to ensure the safety of women experiencing gender-based violence (Andrey & Abdelaal, 2022).

This raises concerns about the added complexities of ensuring digital safety for vulnerable clients, such as racialized, women, precarious immigration status (Lukawiecki et al., 2022).

In conclusion of this section, newcomers and settlement service providers provided a rich picture of newcomers' experiences with ICTs. We discussed how much language impacts newcomers' experiences. Another significant theme was the affordability of ICTs and of migration in general. ICTs improve access to services and improve communication with settlement service providers, especially when newcomers have the choice of whether services are in person or virtual, and their method of communication with settlement service providers. They also improve access to information. Many ICTs required for settlement are designed for computer use, which was a noted barrier for newcomers, as there was higher comfort and affordability for mobile phones. While many newcomers felt unable to assess their own experience's equity, the overall conclusion was that while ICTs often provide a solution to barriers, there are still several inequities to be addressed.

2. Currently Implemented Policies and Practices and Their Effectiveness

Research Question 2. a) What policies and practices are currently implemented by settlement service providers, both IRCC-funded and non-IRCC-funded, to address digital (in)equities? b) how effective are these efforts to tackle structural racism? (Current practice)

The second research question comprises two parts and inquires. In the following paragraphs, we will first discuss the research findings related to part A, which focuses on the currently implemented policies and practices by organizations. Subsequently, we will delve into the research findings of part B which is on participants' perceptions of the effectiveness of these practices.

A. Policies and practices that currently are implemented by settlement service providers

Settlement service providers, including both IRCC-funded and non-IRCC-funded organizations, have implemented diverse policies and practices to tackle newcomers' digital literacy needs and promote digital equity. This overview presents current initiatives, policies, and practices, along with the challenges and concerns expressed by all of the participants, including the service providers, their clients and key informants.

Enhancement of newcomers' digital literacy through trainings: The discussions with project participants confirm service providers' commitment to addressing newcomers' fundamental digital literacy needs through tailored programs and workshops. This reflects their acknowledgment of the vital role computer skills play in today's society and the integration process. Newcomers have reported attending "class on computer skills" or receiving "support through workshops on digital literacy" (Newcomers, Aug 9). Some organizations administer digital literacy as standalone programs, exemplified by a service provider noting, "Computer literacy classes have started to give awareness for people to learn these technical skills" (Service Providers, Aug 3).

Alternatively, digital literacy is integrated into broader initiatives, as evidenced by inclusion of some ICT components in the "employment and entrepreneur program for newcomer women" (Service Providers, Aug 3) and workshops addressing "financial literacy (e.g., credit scores) and workplace rights (identifying sexual harassment)" (Service Providers, Aug 22). Moreover, service providers have observed a surge in demand for digital literacy classes among newcomers, noting increased client growth and enthusiasm for computer labs (Service Providers, July 28). Participants attribute this demand to newcomers' sense of accomplishment in acquiring technological skills.

Enhancement of newcomers' accessibility to ICTs: Another approach that some organizations take is enhancing newcomers' accessibility to various components of ICTs (e.g., hardware, software, internet). This goal is achieved through multiple practices, as highlighted by our research participants. One practice involves providing digital devices (such as Chromebooks) to clients who "didn't have one at home or connected them with companies selling cheaper computers," as mentioned by a service provider (Service Providers, July 28).

Another practice, as highlighted by another Service Provider participant in July 28 focus group discussion, involves facilitating client access to promotional programs, such as the "Rogers initiative, which [at the time] provided free Wi-Fi to newcomers who were low income." These efforts demonstrate a commitment to overcoming financial barriers and bridging the digital divide, ensuring newcomers have access to essential devices. However, this approach presents challenges, such as maintenance, as noted by a Service Provider: "Often lending a device means it's gone, and then they need to fundraise for more devices." (Service Providers, Aug 22) Another participant acknowledges these challenges, noting the limitations in funds and capacity to lend out devices for everyone (Key Informant, Sep 20). Alternatively, there are a variety of external programs available that newcomer can access for support. For instance, within publicly available resources, public and academic libraries act as spaces for both formal and informal information gathering by newcomers (Caidi et al., 2012). The Ottawa Public Library has been instrumental in opening its doors to hundreds of newcomers monthly through the Library Settlement Partnership and provide computer classes for newcomers, seniors, and others (Taylor, 2011).

Additionally, enhancing accessibility takes the third format by offering more inclusive digital devices. This approach aligns with the principles of equity and inclusivity, ensuring that digital services cater to diverse needs. As an example, a service provider mentioned, "In our

organization we specialized with persons with disabilities. So, we had specific computers, for example, for the individuals with low vision or blind" (Service Providers, July 28).

Offered programs in various formats (online, hybrid, in person): Settlement service providers are implementing various practices to tackle digital inequities, including offering programs in different formats such as online, hybrid, and in-person. While not all organizations utilize all forms simultaneously, adapting these three practices could benefit different groups of newcomers with different needs.

Online services, particularly utilized since the pandemic, offer flexibility in terms of time and location. One participant highlighted: "We do all our meetings through Zoom, and we accommodate our clients so they don't have to physically come into the office" (Service Provider, July 28), adding that "during the pandemic, it all started and we had to continue this because it's a wonderful experience." Online programs are particularly beneficial for those with limited mobility or those who prefer not to travel, such as seniors. A service provider in a focus group discussion mentioned:

> "We have a seniors' class...they wanted to be able to...answer emails or open their bank account... and surprisingly the seniors enjoyed the learning online platform until now... most of our classes went back to in-person and they continued online" (Service Providers, July 28).

Similarly, online sessions are convenient for mothers of young children facing household responsibilities. Participants find online sessions more convenient, with one stating: "it's convenient for them, it's saving time, it's saving other, I would say things associated with coming out of their home or you know attending classes in person" (Service Providers, July 28). Another accessible format for offering programs, which also utilizes online spaces, is providing resources for self-learning or e-learning experiences. This is achieved by some organizations through offering online courses that are self-paced, as explained by an organization representative: "We also have online courses through Moodle. So they can learn at their own speed... whenever they have time to access the course." (Service provider, Aug. 22) The shift to online sessions acknowledges the flexibility needed for individuals with various commitments.

At times, some organizations adopt a hybrid approach, conducting meetings either on Teams or Zoom and offering the option for both in-person and online meetings. This approach aligns with what a participant identifies as best practices: "In terms of policies, initiatives and best practices, I think the best practice in terms of digital equity is flexibility." (Service Provider, Aug 8) They emphasize the importance of flexibility and providing options to accommodate individual needs. The participant further explains:

> "In-person things have their own barriers with transportation and timing, and getting there and online things have their own barriers. So, from my perspective, I think the best practice is just being able to be really flexible and adaptable and responsive to individuals' needs."

Due to constraints of online methods, such as challenges of working with groups that are not able to initiate online communications, some organizations adapt by prioritizing in-person meetings, as exemplified by an organization whose staff member describes: "what we also do is, um, we go out to senior retirement homes to provide individuals with learning how to use the computer digital literacy classes. So, it's based on the needs of the learners" (Service Providers, Aug. 22).

Another aspect of in-person communications was raised by a member of a service provider organization, highlighting the intersectionality of racism and its impact on reducing the likelihood of experiencing racism during face-to-face interactions:

> "If you can't apply for a job in-person, you can't win them over with your wonderful personality and charisma... Then you have the racism layer when they see your name in the application process. They see your skin in the in-person application, but you have the opportunity to win them over with your awesomeness when you are verbally articulating your job experiences." (Service Provider, Aug. 22)

The preference for in-person applications, citing the reduction of potential racism, sheds light on the importance of considering the human aspect in digital service delivery. This insight emphasizes the need for sensitivity to potential biases in online interactions which may lack a human touch.

Capacity building in digital literacy for organizations' staffs: Capacity building for staff members of service providers could play a crucial role in enhancing their skills and knowledge, particularly in digital literacy. One notable practice observed in some organizations is the implementation of training and development initiatives for their staff focused on Digital Skills for the Workplace (DSW). This practice was exemplified by a service provider staff member who stated: "Recently we collaborated with the YW Toronto for their Digital Skill for the Workplace program. So a few of our staff including myself, we got training. It's very extensive training... the idea is we can implement or integrate that DSW within the programming and offer those services to other people who are otherwise not eligible for the programs that we offer." (Service Providers, Aug 3) This approach not only enriches the skill set of staff members but also enables organizations to expand their service offerings to a broader range of clients. By continuously investing in the capacity building of their staff, service providers can ensure that they remain equipped to address the diverse needs of their clients in an ever-changing environment.

Partnerships among organizations to achieve more digital equity: One practice observed among organizations is the formation of collaborations and partnerships aimed at achieving diverse goals. These partnerships often entail sharing resources, exchanging knowledge, and collaborating on projects that can yield mutual benefits for various target groups. For instance, a service provider highlights one such collaboration, stating: "We have another [program] that is all digital focused. It's a remote learning program that is in partnership with McMaster University and it is a remote university credentialing program for across Ontario and that's in

partnership with other YWCA as well" (Service Provider, Aug 22). This exemplifies how partnerships with other organizations or academic institutions can facilitate the development and implementation of innovative programs designed to address specific needs within communities and specifically to promote digital equity.

B. Effectiveness of the current policies and practices to tackle structural racism

The second component of the second question aims to gather participants' views on the effectiveness of endeavors to combat structural racism. Through our discussions with participants, it became evident that while some acknowledge observed improvements, there remains a significant deficiency in systematically evaluating the impact of initiatives post-implementation. Moreover, at times when participants were questioned about the effectiveness of the programs, they highlighted the challenges they encountered. Addressing these challenges, they suggested, could potentially enhance the effectiveness of the initiatives. Overall, the themes that emerge around this topic can be categorized into four main categories:

Not effective: One significant insight from our discussions is that some participants do not perceive current practices as effectively addressing structural racism. One participant articulates this sentiment, expressing: "I don't think it is [minimizing discrimination and structural racism] because that's not what it's doing. It's not changing the structures or the systems that rely on literacy and in particular digital literacy. What it's doing is just trying to get people the tools so that they can participate in that system as it exists." (Service Provider, Aug. 3). Also, the effectiveness of digital literacy programs has been questioned at times when they are part of a broader program rather than being a standalone program. As mentioned by a participant, "in employment and entrepreneur program for newcomer women - digital literacy [was covered] as an element, but not a standalone program" (Service Providers, Aug 3). This participant emphasized that digital literacy programs need to be standalone to be effective. The literature review shows that current organizational support is provided on a more ad hoc basis than a systemic way. This means that support is usually offered informally and when newcomer clients seek. Settlement organizations are not solely dedicated to advancing digital equity for racialized newcomers. However, many settlement organizations offer assistance that can alleviate some challenges and remove barriers for newcomers using digital technology (Lukawiecki et al., 2022).

Not clear because of lack of evaluation: Another participant, with extensive experience working with service provider organizations, highlights the lack of impact evaluation programs as a significant issue. They mention: "I don't think there's been a good evaluation because we don't have a national sort of understanding or agreement on what digital inclusion is." (Key Informant, Sep. 20). Additionally, another key Informant raises concerns about the evaluation of services provided to newcomers and immigrants, stating: "We would like to evaluate [to

understand] how successful these things are... but I don't remember if that actually got evaluated in the end, but that would be ideal... there's not exactly a formal evaluative component, in terms of how it's limited or improved any systemic racism" (Key Informant, Sep. 21)

Some signs of effectiveness: In contrast with two above observations, some participants refer to improvements as indicators of effectiveness. One key informant points out that: "There's a lot of improvements I can see in Waterloo regions and the people like immigration partnerships. Upstream fund brought a lot of change." (Key Informant, Sep. 20). Another participant referred to specific WhatsApp application as one of the effective means of communication (Service Provider, Aug 3) that fosters accessibility and inclusivity. Based on this which was echoed with another Key informant, it is important to do a needs assessment and find out which groups of people with which background use which means of communication.

Challenges that if addressed could lead into more effectiveness: During discussions about program effectiveness, participants emphasized the challenges they faced, which could potentially affect the effectiveness of the initiatives. Examples of these challenges are the resources (staff and budget) constraints of organizations and the trust and security concerns that some newcomers have based on their backgrounds.

Limited resources, such as staff limitations and budget constraints, present significant obstacles to the effectiveness of programs addressing racism within the realm of digital equality. Participants highlighted these challenges, with one noting, "Staff capacity is an issue that influences services and resources to help clients" (Service Providers, Aug 22). Financial constraints also severely impact the delivery of digital skills training programs. One participant emphasized the difficulty of teaching digital skills without adequate funding (Service Providers, Aug 22). Another participant echoed these financial challenges, noting the inconsistency in funding breakdown across different sources: "Because we have different funders... it all depends on what that project like the eligibility of that specific component of the project" (Service Providers, Aug 22). This variability in funding sources further complicates resource allocation, as expressed by the same participant: "Sometimes funding is incorporated within other programming, specifically for digital-related programming" (Service Providers, Aug 22). Furthermore, funding limitations hinder initiatives aimed at addressing language barriers. Some service providers lack funding for translating their services into different languages, restricting their ability to reach diverse populations effectively (Service Providers, Aug 3).

Mistrust towards official entities can significantly hinder efforts to work with newcomers. As a service provider states, some newcomers, such as those from Turkish and Yazidi communities, exhibit high levels of mistrust towards government systems. For instance, individuals from Turkey may be wary of the information they receive from official sources but are adept at using the internet to seek information independently (Key Informant, Oct 3). Similarly, Yazidi newcomers, who have endured historical persecution and genocide, may have deep-seated mistrust towards agencies and formal support systems (Key Informant, Oct 3). This lack of trust

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can pose significant challenges when attempting to engage and support these communities, as they may be hesitant to access or utilize services provided by official entities.

Overall, what stands out is that our discussions with research participants reveal that the effectiveness of these efforts can vary depending on different groups, populations, and backgrounds. What works well for one group may not be effective for another. For example, a newcomer participant mentioned, "Newcomer Centre has supported through workshops on digital literacy – but they were online. It wasn't effective because if you don't know how to navigate these software's alone it's useless. Teaching in person is more effective" (Newcomers, Aug 9). However, this perspective – as mentioned above - contrasts with the preferences of seniors who found online sessions more convenient. Again, this shows the importance of understanding the needs of different groups and offering flexible options so that everyone can choose the method or format that works best for them.

In conclusion of this section, the findings of the second research question reveal a multi-faceted and community-oriented approach to addressing digital literacy and technological access for newcomers among the service provider organizations. The findings underscore the importance of flexibility, inclusivity, and community collaboration in designing effective programs and services.

3. Strategies that Need to be Implemented

Research Question 3: What strategies should be taken to improve policies and practices concerning ICTs, ensuring that racialized newcomers receive equitable support throughout their settlement journey? (Future directions)

Findings from the literature review identified several strategies to address digital inequity in the settlement sector. Turin et al. (2022) frame three levels to addressing the digital divide. The first level entails ensuring internet connection and accessibility of internet-enabled devices (Brisson-Boivin & McAleese, 2021; Liu et al.,2021; Monteiro, 2022). The second level refers to the improvement of digital literacy (Liu et al., 2021; Taylor, 2011). The third level refers to enabling users to gain the maximum output from using ICTs, such as employment and health services. These levels allow for a more systemic way of addressing digital inequity in general and can inform policies and practices in the settlement sector.

Our conversations about the third research question surfaced following main categories of recommendations as suggested strategies moving forward: increasing funding, adopting more client-focused approach, extending the length of digital literacy programs, offering services in several languages, and conducting further research. Not every idea will be possible or even desirable for all settlement service providers, but together these strategies would improve digital inclusion. Improved digital inclusion will reduce the harms caused by systemic racism experienced by racialized newcomers.

Increasing funding: A barrier to organizational support for newcomers includes resourcing. The literature emphasizes the need for better funding and resourcing for digital literacy programs to address barriers within ICT use and access for newcomers (Brisson-Boivin & McAleese, 2021). While many settlement service providers may not be in a position to increase funding on their own, they can advocate for governmental funding or apply for grants to use some of the strategies discussed here. Many settlement service providers are offering virtual and in-person services, which the conversations confirmed is a valuable strategy worth continuing intentionally. At every stage of the project there was support for the idea of offering "both/and" virtual and in-person services and making sure that the options are equal in quality. To sustain or enhance this strategy, resources, particularly funding, are essential, as noted by one of the participants:

> "Flexibility in the funding system. There was a lot more trust during the pandemic to allow organizations to make the best decisions for needs as they arose. Has now returned toward the previous difficulties with trust between funders and their organizations." (Key Informant, Sept 20)

Funding can also be used to offer specific digital literacy class, additional funding for official language (i.e., English or French) classes, and facilitating ICT access. The latter could take the form of device-lending, hot-spot/bandwidth access, or other methods to increase access to ICT needs. A service provider framed it this way:

> "It should be a three step approach which…flows top to bottom, from the government to community services to the service provider…these three steps include the finances, the accessibility, and the usability approach: Finances, Accessibility, Usability." (Service Providers, July 28)

Given this, a strategy for funders could involve permitting service providers to allocate funding where it is most required.

Adopting more client-focused approach: In addition to the funding to make services more equitable, settlement service providers also need to keep their services client-focused in order to ensure that newcomers experience this equity. With the proper funding discussed above, having hybrid services that are client-directed promotes individual choice for a population (newcomers). By client-directed, we mean that the client can opt for either in-person or virtual services as much as possible. We also recommend including an assessment of clients' digital literacy, and access to other ICTs (such as devices and reliable internet) as part of the intake. A key informant states "The community knows their own needs, so they are the ones that should be the drivers of what is needed. Need continued support, not just one time training." (Key Informant, Sep. 29) Ultimately, focusing on approaching digital equity in a community-led way is going to allow newcomers to shape the settlement sector to support them. One participant described this as a community-led approach, stating: "There is a possibility for ICT to mitigate the barriers that exist for racialized newcomers. One needs to work with communities to find out what they want, how they want it: community-led approach" (Key Informant, Oct 3).

Another key aspect of being client-focused, as described in the literature too, is building trust and safety (Lukawiecki et al., 2022; Monteiro, 2022; National Collaborating Centre for Determinants of Health and Nova Scotia Health Authority, 2022). Trust has been identified as a critical factor in addressing digital inequity. This includes addressing digital safety. More importantly, given that the settlement sector relies on relational encounters for service delivery, trust and safety concerns must be addressed effectively for those most vulnerable. Especially clients who experience racism and sexism, belong to ethnic minority groups, have a precarious legal status, or face persecution.

The literature shows that building relationships and trust with communities that are impacted by such issues, as well as tailored programs for group-based barriers and needs, are critical to address digital inequity in the settlement sector. These include programs that are culturally relevant, trauma informed, catered to neurodivergent clients, different age groups, disability, mental illness, health and other intersectional needs. Therefore, combining safety and trauma-informed measures that consider issues like gender-based violence and other cultural norms with digital literacy programs and online settlement services can alleviate many barriers for newcomers facing those issues.

Extending the length of digital literacy programs: Another equity-promoting strategy is to extend the duration of digital literacy programs and provide ongoing individual technical support for newcomers. Digital barriers and concerns may arise at unexpected times, and having support from someone that they already have a connection with will allow newcomers to be supported throughout their settlement journeys.

Two very specific suggestions were to ensure that settlement service organizations are explicit in their eligibility restrictions for any programs or services they are providing, and to avoid collecting data such as country of origin on digital forms. Client and service providers alike commented on the frustration of funding limited to certain eligibility restrictions related to the client's status. This is an unfortunate reality unlikely to be changing in the near future, so one way to reduce the frustration is to be transparent about any restrictions. Clients found that being asked about their country of origin was anxiety-producing: when done on a digital form or website, they are unable to ask about why this information is required, and often felt uneasy about sharing it.

Facilitating and co-creating digital social spaces for newcomers can be a very powerful point of connection. The settlement journey can be a lonely process, most often involving a rupture of social supports. Settlement service providers are in a unique position to offer support through this vulnerability. Although it is sometimes not as organic as social connections forged in person, digital social spaces are still a significant way to form important connections.

Offering services in multiple languages: The literature shows that there is a need for multilingual information and tools, translation support, and mobile services to address language and mobility barriers for newcomers (Liu, et al., 2021; National Collaborating Centre for Determinants of Health and Nova Scotia Health Authority, 2022; The Systemic Issues and Social

Change Working Group, 2020). Having accessible translation support for newcomers who face language barriers within ICTs and need access to information is critical, including translation services one. Finally, the utilization of digital mediation can assist organizations in digital service delivery. The review shows that family members can play critical roles in bridging the gaps between older newcomers and ICTs. The role of family members and community networks in the integration process has been widely documented in research on newcomers. Hence, given that older people constitute a significant number of the population affected by the digital divide, this strategy can be utilized in efforts to address digital inequity by relying on already established support systems.

Settlement organizations can also provide support by hiring individuals from many different backgrounds and offering services in several languages. Newcomers who are able to have the support they need even if they don't speak English or French reduces barriers in a significant way. Similarly, having introductory videos or other media in multiple languages readily available promotes autonomy by allowing access to information on the newcomers' term. These could be tailored to a specific demographic of newcomers (such as refugees or those on a work visa) answering questions commonly asked by these newcomers, or an orientation of sorts to a particular settlement organization. Settlement service providers need to be mindful to ensure that solutions for digital inclusion account for this trend among newcomers, ensuring that their digital solutions do not create barriers but rather address them. As mentioned by a newcomer participant "it would be great if every agency that offers digital support provides more instructional media on YouTube for example to help with learning because many people learn that through videos." (Newcomers, Aug 10).

Improving knowledge mobilization: Much research and knowledge are already present in the settlement sector, but there is a lack of communication to allow this knowledge to be mobilized and accessed by others in the sector. A key informants notes: "Knowledge mobilization is a challenge in this sector, needs to be increased so that we aren't repeating the same studies over and over. Need to upscale some of the good projects that are occurring. Replicating good ideas/promising practices, and solidifying baselines. (Key Informant, Sept 20)

The development of a knowledge hub would allow future research and information to be shared among the whole sector. This would allow for an upscaling of current effective practices to be applied on a larger scale. One participant expressed: "Broadening the scope of what digital tools are capable of. Beyond just direct service delivery, adopting a more sector-wide approach." (Key Informant, Sept 20).

4. Organizational Stories that Illustrate How They Support Racialized Newcomers

While the digital divide may feel overwhelming, we believe that the settlement sector can and does have an impact in bridging that gap for newcomers. As a way to highlight the good work being done in the sector on this issue, we have compiled three case studies to showcase organizations who are working to improve digital inclusion for their clients.

Case studies are beneficial as they provide an illustrative approach to explore in depth a program, event, activity, process, or individual(s) to gain a comprehensive understanding (Creswell, 2014, as cited in Priya, 2021). For this research, case studies were utilized to demonstrate settlement organizations' best practices of digital service delivery for racialized newcomers. The COVID-19 pandemic has significant implications for the settlement sector, impacting the experiences of newcomers and shifting processes of service providers when moving services from in-person to online. In particular, the experience of moving services and IRCC requirements into digital spaces has been challenging. While some racialized newcomers arrive in Canada highly educated and tech-savvy, others may fall behind as they arrive without digital tools and infrastructure to support their way through the digital demands in Canada.

Below are three organizations, COMPASS Refugee Centre (COMPASS), COSTI, and Achev, that have been chosen as case studies due to their differences in geographical location and size. After having multiple discussions with staff and clients, it was interesting to hear the different ways each organization has adapted their practices and programming to support newcomers digitally. Smaller organizations like COMPASS may have limited capacity to implement formal digital literacy programs but strategically address digital needs in an ad hoc manner. On the other hand, larger organizations like COSTI and Achev have formal programs for digital service advancement and skill building, while also serving a larger newcomer population.

COMPASS Refugee Centre, Waterloo Region

Background

COMPASS Refugee Centre is an organization that is located in Waterloo Region. They are driven by the desire to meet the needs of refugee claimants, protected persons, and people who have been displaced out of their countries and communities. They have a deep interest in helping people seeking refuge and protection to navigate settlement journeys, which often has many barriers. They advance their mission through meaningful actions such as assisting, accompanying, and advocating for clients. This includes activities like supporting the clients in submitting IRCC documents, helping them find employment and shelter, and advocating for change at various levels of government.

Best Practices

With the increased reliance and expectation to navigate life using digital tools, COMPASS has made great efforts to support clients through a smooth transition to Canadian society despite the challenges that have persisted. Informed by COMPASS staff and clients, the CCBR team have captured the COMPASS experience below:

- Before the pandemic, court hearings were always in person, but now they remain mostly virtual. For individuals who may not have access to the internet at home or require a device, COMPASS offers private rooms to clients where they can easily attend their online hearings. COMPASS staff can assist with troubleshooting any issues and ensuring that clients have accessed the correct links.
- COMPASS has four public computers for onsite use by clients.
- Clients can access meaningful one-on-one support with their case workers, working together to submit IRCC documents online and navigating the next steps in the settlement journey.
- For some clients who have significant digital and language barriers, caseworkers facilitate logging in to clients' accounts to check on any updates and can submit forms with clients for everything from Legal Aid applications to Permanent Residence applications to IRCC.
- Case works will teach clients how to navigate through different online platforms. (Eg. Microsoft Teams links and invitations, email).
- Although COMPASS doesn't have a device lending program, they are able to refer clients to other programs or retailers that sell refurbished digital devices at a lower cost.
- COMPASS refers clients to programs and digital training workshops. When possible, case workers play a more hands-on role, teaching their clients how to navigate digital challenges.
- About 70% of COMPASS clients[1] need language interpretation, with roughly 50% being Spanish speaking. COMPASS has volunteer interpreters available to support and other language interpreters on call.

When addressing systemic racism in the sector, part of COMPASS's identity is grounded in supporting refugees from all walks of life. Their actions have been rooted in respecting and protecting the human rights of everyone. Additionally, their team consists of staff, interns, and volunteers from diverse backgrounds and perspectives. COMPASS is conscious of the differences between their clients from various geographic regions and the impact this has on someone's digital literacy. As a result, their team works hard to adapt to the needs of clients, putting their success first regardless of nationality.

COSTI, Peel Region

Background

COSTI Immigrant Services is a multicultural organization dedicated to addressing the diverse needs of immigrant communities. COSTI's approach to community services is centered around the needs of their clients, where regardless of language and cultural barriers, immigrants can leverage their existing skills,

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[1] COMPASS's 2022-2023 impact report says that 2203 people were served.

acquire new ones, and fully integrate into Canadian society. By providing a wide range of services and opportunities tailored to the unique circumstances of immigrants, COSTI strives to empower them to become active participants in all aspects of Canadian life.

Best Practices

COSTI encourages clients to learn and improve their digital skills, especially for employment and as societal interactions continue to develop and merge into the digital space. By offering various training programs aimed at enhancing computer application proficiency and digital literacy, COSTI empowers its clients to navigate the digital landscape effectively.

Some of the ways in which COSTI digitally supports its clients in their settlement journey may include:

- **Digital and Media Literacy Workshops**: COSTI organizes workshops and training sessions to teach clients essential digital skills, such as using computers, accessing the internet, utilizing productivity software (e.g., Microsoft Office Suite), and understanding online safety and security. COSTI has two approaches to their digital literacy workshops: (1) formal basic and advanced training and (2) grassroots level for teachers to loop in software they find interesting. Training sessions also include how to shop and bank online, searching the internet effectively and avoiding online fraud, and using social media and communicating with people online.
- **Online Language Learning**: COSTI may offer digital resources and tools to help clients improve their language skills through online language courses, interactive exercises, and language exchange platforms.

- **Accessing hardware and software:** COSTI has a device lending program where clients can borrow chrome books, and they have a computer lab for people who need stable internet or want one-on-one in person digital training. COSTI conducted focus groups and surveys to understand if newcomers had access to the internet, computers, etc. About a quarter of clients needed support in setting up hardware and getting started. To assist these clients, staff sent packages with illustrations on how to set up their computers and other directions.

- COSTI does ongoing evaluation of their digital programming and customizes courses based on clients' needs.
- COSTI learned how to effectively communicate with clients, keeping communication and materials simple. For example, clean and clear infographics, having oral and written translations, and simplifying documents.
- COSTI remains flexible and adjusts their support to the needs of a client.

COSTI's first digital literacy program was directed to support racialized women, as they saw the need for skill-building in this population. This program's aim was to reduce the many barriers faced by newcomer racialized women, and they have continued to address systemic racism in this way. COSTI is currently working to develop an anti-racism curriculum for staff training that includes elements of digital literacy, helping racialized newcomers understand their rights and responsibilities.

ACHEV, Peel Region

Background

Achev is a not-for-profit community-based organization located in Peel Region that focuses on employment, newcomer, language, youth, women and inclusion services. They have supported communities for over 30 years, assisting Canadians and newcomers to successfully contribute and thrive in society. Achev offers a wide range of programming that supports the various needs of their clients, allowing clients to explore their options and discover their purpose in life.

Best Practices

Achev has implemented a variety of programming to support newcomers while they navigate the digital landscape in the Canadian context. They understand the pressures caused by utilizing digital tools that manifested post-pandemic, and that newcomers arrive with different levels and skills of digital engagement. Informed by Achev staff and clients, a few of their processes for newcomer needs are highlighted below:

- **Digital and Media Literacy Workshops**: Providing free online workshops on improving digital literacy with topics that focus on Internet safety, communicating effectively online, navigating online resources, how to use various software and hardware etc.
    o Achev has also greatly supported the career advancement of newcomers via coaching on digital platforms like Microsoft Teams, Google Meets, and Zoom.
- **Accessing hardware and software**: Achev offers an in-person space for people to access internet and computers. Achev recognizes that, post-covid, digital literacy has come into the picture it's a continuous learning process.
- **Online Language Learning**: Achev holds online classes for newcomers to improve their language skills. Online courses can be self-directed, in-person, or a blend of both.

An approach that Achev is taking that would support addressing systemic racism is to become a more data driven organization, which can include collecting race-based data. The goal is to implement an assessment that would capture if there were a service bias in communities. This would help them to identify communities that have yet to access Achev services and understand what barriers, if any, are in the way.

Challenges and Limitations

The findings have revealed several themes depicting newcomers' experiences in accessing and utilizing ICTs, yet they also uncovered certain challenges and gaps warranting further investigation. This section outlines the challenges and limitations encountered by the research team throughout the project's duration, encompassing both procedural obstacles and outcome-related constraints.

Difficulty in connecting ICT experience and systemic racism: It was evident in various focus groups that connecting newcomers' experiences with ICTs to systemic racism was difficult. We observed from our focus groups that asking participants to tell us how their challenges in accessing and using digital technology were influenced by systemic racism was often met with confusion or silence. The findings focused greatly on the experiences of newcomers with digital technologies and services provided through ICTs, but little on their relationship to racism. It is not unusual for newcomers to feel reluctant to share their perspectives and experiences with racism. Literature shows how newcomers face racism in various areas such as employment, housing, and settlement. While some forms of racism are more overt, others are more subtle (Toronto North Local Immigration Partnership, 2022). In a report on social media and internet use amongst newcomers in Canada, Monteiro (2022) showed how anti-immigrant racism online can be triggering and traumatizing for them as they continue to rely on ICTs. Understandably, these experiences can take time to process. This may be partly because many newcomers have arrived recently and are still navigating the system.

Moreover, this period can be described as the "honeymoon period" filled with enthusiasm, making it harder to capture the experiences of racial discrimination (TNLIP, 2022). However, these feelings fade and are then replaced by the realization of the realities and challenges of settlement. Presumably, it would take time and reflection in retrospect to connect these experiences to more systemic issues such as racism. Talking about racism can be difficult, but these conversations are necessary to understand their manifestations and roots. Nevertheless, the language of racism is not a universal language. How racism is defined can look different from one context to another. The discourse on systemic racism in Canada is often discussed in relation to white supremacy, which is also a geographically situated discourse. This makes the conceptual language adopted to understand systemic racism somewhat inaccessible to newcomers because of its irrelevance to their contexts. This does not mean in any way that they do not understand racism, rather, that racism can look different from one group of people to another. On the other hand, service providers were more able to answer this question considering their longer experiences in the settlement system and wider exposure to newcomer experiences, making them better equipped to draw connections to systemic racism.

This aspect of the focus groups posed a challenge for the research team in being able to generate answers that spoke specifically about systemic racism. Hence, we relied on connecting the findings to the literature we reviewed, which has briefly touched on the relationship between racism and ICTs. Nevertheless, this literature remains scarce, indicating the need for

further research on this topic in general, which then studies on newcomer experiences with ICTs can build upon to highlight the unique racialized experiences of newcomers.

Limitations of sampling methods: The research team recognizes that using a snowball participant recruitment strategy can limit the representation of a more comprehensive and diverse sample of newcomers. To address this limitation, we did our best to ensure that the outreach through our research partners, steering committee, and service-providing organizations took diversity of clients they invited into consideration to alleviate this limitation. In the end, participation in the focus groups was entirely voluntary. Most of the newcomer participants we interviewed had been in Canada between 3 months – 5 years.

Language Barriers: For racialized newcomers, language constitutes a significant part of their settlement experiences. Research shows that a major barrier for newcomers is language, as they are required to be fluent in one of the two official languages in Canada to access services and support (TNLIP, 2022), and even to participate in research studies about their settlement experiences.

The research team was aware of this challenge and how it would limit if not eliminate certain demographics of newcomers from participating in this research project. However, there were attempts to invite newcomers to participate regardless of language barriers by offering translation services. One of the focus groups that were held were with newcomer participants who did not speak English. The service providing organization that arranged for this in-person focus group provided a translator, and one of the researchers leading the focus group also assisted in translating as many of the participants shared the same native language. This ensured that the experiences of newcomers who face language barriers in accessing and using ICTs is highlighted in the findings, however partial it may be of the entire sample of participants and newcomers in general. Yet, there remained the limit that those who had both language and technological barriers and were unable to participate in person were not involved in the focus groups that were held virtually.

Community Engagement: Initially, our project work plan included hosting two community forums in the Peel and Waterloo regions to present our findings and gather feedback from stakeholders. However, after consulting with the project's advisory committee, it became evident that our community partners in both regions were already planning forums. Each of these forums was set to bring together around 60 key stakeholders from the settlement sector, including frontline service providers, executive directors, managers of settlement organizations, and experts. Given this, we were offered slots to facilitate community feedback sessions during these existing events. During the two feedback sessions, the research team presented an overview of the project and sought feedback on the findings. The discussion centered around three key questions: 1) the feasibility of the project recommendations, 2) how else newcomers' experiences are influenced by systemic racism, and 3) how else the settlement sector can initiate action.

Although these sessions were an excellent opportunity for sharing our findings and fostering discussions on the subject, they were constrained by the events' tight schedules. Consequently,

we adapted our approach and organized two community feedback sessions as part of these larger events. Notably, one of these sessions in Waterloo coincided with the International Day for the Elimination of Racial Discrimination.

It is important to note that the Peel feedback session was held virtually and was shorter in duration, while the Waterloo session was held in person and longer, making the feedback in the former less detailed and engaging compared to the latter session. Both sessions were included in a longer-day program that settlement stakeholders organized, making the research project only part of a longer series of discussions. Nevertheless, the participants validated the findings, and provided helpful feedback to consider for future initiatives in the settlement sector.

In conclusion of this section, while there were some trends among newcomers and their experiences with technology, it is important to note that the newcomer experience isn't universal: many experiences were expressed by community members. Including ICT assessments while being mindful of the trends, such as the tendency for newcomers to be most familiar with mobile phone technology, will allow for client-centred approaches that promote digital inclusion and provide support for newcomers in a welcoming way.

Conclusion

In the pursuit of equitable settlement experiences for racialized newcomers, the integration of information and communication technologies (ICTs) has become increasingly critical. This research has delved into a multi-dimensional exploration of the initiatives, challenges, and potential strategies encompassing the intersection of ICTs and settlement journeys for racialized newcomers.

The lived experiences of racialized newcomers with ICTs during their settlement process illuminate a journey filled with both empowerment and obstacles. Interaction with ICTs is unavoidable and while some newcomers are tech-savvy, others have low levels of digital literacy, creating barriers to their effective use of ICTs. This barrier intersects with their socio-economic backgrounds. For instance, being a low-income family can create financial barriers to accessing technology, as the costs of tools and internet can be burdensome. Furthermore, accessing the internet in some areas can be more difficult than other areas, such as rural towns. This makes geography a factor in digital equity. While research shows that access to digital technology is one key barrier, it is not sufficient to develop digital skills. Other barriers must also be addressed to enhance the use of ICTs for newcomers. For example, educational level, language, and age play important roles for many people when using ICTs.

The challenges become more complex when the cultural and social backgrounds of newcomers significantly influence their experiences. Some newcomers reported that they did not feel able to determine how equitable their experience was as they didn't have anything to compare it to. One participant described the challenge of recognizing inequity saying, "[Newcomers can be] carrying trauma, so they believe discrimination is the norm. A feeling that if someone in authority is acting a certain way, they have the right to [rather than recognizing systemic racism]." This case underscores the importance of tailored programs and, specifically, the need for raising awareness about newcomers' rights throughout the settlement journey.

The findings show that newcomers have mixed experiences regarding the offered services. For example, while improving access to information online is vital but it sometimes turn into a overwhelming experience for some newcomers. Sometimes websites offer extensive resources, and their design can be daunting. Additionally, while mobile-friendly resources are essential to accommodate newcomers' preferences for mobile phone usage, achieving a balance between translation needs and mobile-friendliness remains a challenge.

Current policies and practices implemented by settlement service providers reflect a respected commitment to addressing digital inequities. From tailored digital literacy programs to initiatives enhancing access to ICT resources, efforts have been made to bridge the digital divide. However, challenges persist, including limited resources, trust issues, and the need for comprehensive evaluation mechanisms to measure the programs' effectiveness accurately. Moreover, while ICTs offer flexibility in accessing services online, concerns regarding privacy and security persist. Newcomers, particularly those with politically unsafe backgrounds in their countries or those experiencing gender-based violence, may hesitate to engage with digital platforms due to fears of surveillance, privacy violations, or exposure to further vulnerabilities. Additionally, the ad hoc basis of support and the focus on low-income families, rather than specifically targeting the

unique challenges faced by newcomers, indicate a gap in policy and practice that requires attention.

The effectiveness of these initiatives in combating structural racism also remains uncertain due to a lack of comprehensive evaluation. Some participants believe that the current practices do not effectively address structural racism, pointing out the necessity of standalone digital literacy programs that account for the intersectionality of the issue and the complex backgrounds of participants. Others note improvements but underscore the importance of addressing challenges such as limited resources and mistrust among newcomers towards official entities. The effectiveness varies across different groups and populations, indicating a need for tailored approaches and further evaluation to truly assess the impact of these initiatives on digital equity and racism within the context of newcomer support. The findings highlight the complex landscape of digital inclusion and equity in the settlement experiences of racialized newcomers.

The findings suggest increasing funding, adopting client-centred approaches, extending digital literacy programs, offering multilingual services, and improving knowledge mobilization as key strategies that can drive meaningful progress. By advocating for flexible funding, prioritizing client preferences, extending program durations, embracing linguistic diversity, and fostering knowledge sharing, settlement service providers can effectively enhance their capacity to support racialized newcomers. Moreover, the importance of collaboration, innovation, and community-led initiatives cannot be overstated. By working collaboratively across sectors, leveraging technological innovations, and empowering communities to drive change, stakeholders can create more inclusive and responsive support systems for racialized newcomers.

In brief, while the challenges of digital inequity and systemic racism are problematic, addressing them is not impossible. Through concerted efforts, informed strategies, collective action and specifically further research, it could be possible to build a more equitable and inclusive settlement landscape—one where racialized newcomers have the tools, resources, and support needed to thrive in their new homes. By embracing the transformative potential of ICTs and committing to principles of equity, the settlement sector can pave the way towards a future where every newcomer is empowered to realize their full potential and contribute meaningfully to Canadian society.

Recommendations

The recommendations coming out of this project are grounded in the lived realities of the stakeholders who participated in this project. Consolidating all the insights gathered through the various phases, we propose the following set of recommendations to enhance equitable support for racialized newcomers in the settlement sector. These recommendations may be useful for a broad audience of stakeholders, spanning from a variety of service provider and non-governmental organizations to governmental entities or academic/non-academic funders involved in supporting racialized newcomers. To facilitate understanding and implementation across diverse organizations within the settlement sector, we have organized the recommendations around two main concepts: "flexibility in service provision" and "capacity building for the sector".

Flexibility In Service Provision

The recommendations presented here may overlap from various perspectives, yet each one distinctly underscores a particular aspect of practices that could improve the settlement experience for racialized newcomers. A key concept across these recommendations is the emphasis on flexibility in dealing with newcomers. This flexibility manifests in various ways, such as prioritizing clients' preferences, adapting the format of services, and being considerate of clients' backgrounds. Below are the suggestions, each accompanied by a brief description.

1. **Adopt a client-centred approach:** Settlement service providers can prioritize a client-centered approach by involving newcomers in various stages of their programs. This involvement includes soliciting their insights not only on program content and design but also on delivery modes. Conducting assessments and facilitating dialogue to understand clients' perspectives, digital literacy levels, and preferred methods of accessing programs can further enhance program effectiveness.

2. **Increase flexibility in service delivery:** Embracing a client-centred approach could also involve offering flexibility in service delivery methods while prioritizing client preferences and addressing accessibility needs. For example, service providers must be equipped to adapt to diverse communication channels, such as messaging apps or video conferencing platforms.

3. **Adopt hybrid service delivery models:** Another practical example of flexibility could be expanding hybrid models of service delivery that offer both in-person and online options. This approach acknowledges and accommodates the diverse preferences and needs of newcomers. While this idea could be part of the flexible service delivery approach, we decided to highlight it separately because of its significance. Our literature review also showed that organizations operating with a hybrid service model are more likely to increase access for newcomers, as it provides them with the option of selecting the service delivery method they prefer (Taylor, 2011).

4. **Improve systemic integration of digital equity:** Settlement organizations (and policymakers) must adopt a holistic and systemic approach to digital equity (versus ad hoc solutions). This could include long-term funding commitments, the development of comprehensive digital literacy programs, and the incorporation of digital access as a fundamental right for all newcomers.

5. **Adopt tailored digital literacy and support programs:** Develop digital literacy programs specifically designed to address the barriers encountered by racialized newcomers. These programs should be culturally relevant, trauma-informed, and accessible in multiple languages, catering to specific needs such as age, gender, legal status, and disability.

6**. Enhance language and translation support**: Increase the availability of multilingual information and tools, alongside robust translation support services. This effort is crucial in overcoming language barriers that many newcomers face in accessing and utilizing ICTs effectively.

7. **Adopt a trauma-informed approach:** While this aspect could be categorized under considerations for tailored programs, we would like to emphasize its significance here as well, particularly concerning its importance when working with newcomers from diverse backgrounds. Organizations need to adopt a trauma-informed approach in service provision to acknowledge and address the unique needs and vulnerabilities of newcomers, particularly those with histories of trauma or experiencing gender-based violence. This should be done while respecting individuals' autonomy and agency.

8. **Strengthen trust and safety**: Implement strategies to build trust and ensure digital safety for vulnerable clients. This involves creating safe online spaces, protecting privacy, and addressing issues of racism through both preventative measures and responsive support systems.

9. **Address mobility and accessibility issues**: Prioritize the development and deployment of mobile services and applications that are accessible to newcomers, focusing on user-friendly design and comprehensive accessibility features to cater to a wide range of users.

Capacity Building for the Sector

Another core concept of recommendations is the need for capacity building within the settlement sector. This involves enhancing the sector's ability to offer services to clients that ensure digital equity and equitable access to Information and Communication Technologies (ICTs). The recommendations pertaining to this aspect are outlined below.

1. **Increase funding:** Advocacy for increased governmental funding or grant applications can support the sustainability and expansion of initiatives aimed at digital inclusion. This funding should be allocated flexibly to address the specific needs of racialized newcomers, including providing access to devices, internet connectivity, and tailored digital literacy programs.

2. **Foster collaborative partnerships:** Foster collaborations among settlement agencies, government entities, community organizations, and technology providers to develop comprehensive, culturally responsive ICT solutions that meet the diverse needs of racialized newcomers. This will also include engaging in ongoing dialogue and consultation with

newcomer communities to co-design and co-implement initiatives that promote equity, inclusion, and digital empowerment.

3. **Leverage community and family networks:** Recognize and utilize the role of family members and community networks in facilitating access to and engagement with ICTs, especially among older newcomers. This approach leverages existing support systems to bridge the digital divide.

4. **Commit to ongoing research and evaluation:** Commit to continuous research and evaluation to better understand the evolving digital landscape and its impact on racialized newcomers. This will ensure that policies and practices remain relevant, responsive, and effective in addressing digital inequities. Specifically, the terms such as digital divide, digital inclusion, and digital equity are commonly used but lack universal definitions. To promote digital inclusion, it's essential to establish a shared understanding within the settlement sector of what digital inclusion entails. This shared vision can serve as a map to guide efforts toward achieving digital inclusion, especially for racialized newcomers.

5. **Improve knowledge mobilization**: Establishing a capacity building and knowledge sharing hub within the settlement sector can facilitate the sharing of research, information, and promising practices among service providers. This could promote collaboration, reduces duplication of efforts, and allows for the scaling up of effective initiatives to benefit a larger population of racialized newcomers.

Our hope is by implementing these recommendations and continuing to prioritize digital inclusion and equity, the settlement sector can better support racialized newcomers in navigating their settlement journey and thriving in their new communities.

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Appendices

1. Research Activities and Timeframe

Here, we aim to elaborate on the research design, with a particular focus on the activities outlined in our submitted proposal. While aspects of this information may have been touched upon in other sections of the report, here we organize and detail the project activities for clarity.

This project involved a total of 10 activities over 10 months between May 2023 and March 2024. The activities were grouped into three main phases:

Phase 1 – Project Design (May 2023 – July 2023)

In this phase, also referred to as Laying the Foundation[2], the engagement was targeted at the settlement sector in both Waterloo Region and Peel Region. Phase 1 includes the following three activities:

Activity 1: Establish stakeholder advisory committee and research team

The goal of this activity was to begin stakeholder engagement and to make sure that the project is efficiently organized. In this activity, a stakeholder advisory committee was formed from selected representatives from both study sites (Peel and Waterloo). Members of the committee were recruited with the assistance of representatives from the local immigration partnerships in Peel and Waterloo. The role of this group was to guide each step of the project. They met bi-monthly with a goal of ensuring that the project was grounded in the Peel and Waterloo realities, that the project built on existing anti-racist efforts within each community, and that the research was as relevant and useful to the community context as possible. Members of the advisory committee helped to finalize main research questions and may also have assisted in recruiting research participants and shaping study findings and the knowledge mobilization plan. This start-up activity also included forming and orientating the CCBR research team. This team met on a regular basis throughout the project and shared responsibilities in facilitating the advisory committee. Honoraria was provided for participation on the advisory committee.

Activity 2: Conduct literature review

The next activity was to conduct a review of academic and grey literature related to the study's main research questions (March 2022). Academic literature was found by searching databases such as Google Scholar, Wilfrid Laurier University Omni Search, Scopus, Web of Science, and

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[2] The first stage among the four phases of community-based research. The other stages are: Planning Research, Information Gathering/Analysis, and Acting on Findings

STOR. Grey literature was found by searching for documents on the websites of settlement organizations outside of Peel and Waterloo, IRCC knowledge mobilization database, and other government sources. Members of the research team regularly discussed findings of the literature review. The literature review was helpful in framing the information gathering protocols (next activity).

Activity 3: Develop protocols and guides for data collection methods, including focus groups, informant interviews, case studies, and document review

Based on the literature findings, and with feedback from the advisory committee, the next activity was for the research team to draft all information gathering protocols. Four protocols were developed; one for each of the study's methods to be used (document review, focus groups, key informant interviews, case studies). Protocols included the questions to be asked, consent, and sampling and recruitment plans for each method. This activity ended with a review of these protocols by the advisory committee with subsequent revisions.

Phase 2 – Data Collection (July 2023 – January 2024)

During phase two, the focus of engagement was with participants recruited for the key informant interviews (e.g., local immigration partnerships, executive directors, and networks in the settlement sector), focus groups (e.g., racialized newcomers, and service providers (front-line and managers in IRCC/non-IRCC funded services)), and case study stories. We worked closely with the advisory committee to identify the sampling criteria, participants, size of groups, and geographic scope. This phase includes the following five activities:

Activity 4: Review organizational documents and policies

This activity involved an examination of local service providers' organizational documents and policies pertaining to information and communication technologies. The purpose of this activity was to evaluate the extent to which IRCC/non-IRCC funded service providers were knowledgeable and prepared to support racialized newcomers who may face digital inequities. The document review aimed to answer all three of the study's main research questions and focused on documents originating in Peel and Waterloo region. The research team aimed for documents including (though were not limited to) research reports, annual reports, evaluations, policies, and white papers. The documents were found through a web-search and/or by inviting advisory committee members to suggest/forward documents for review.

Activity 5: Conduct focus groups

There were seven focus groups held with service providers and newcomers in both Waterloo and Peel region. Newcomers were asked about their experiences with information and communication technologies, while service providers were asked about their use of information

and communication technologies to address structural racism, discrimination, and digital inequities.

Activity 6: Conduct key informant interviews

In this activity, four key informant interviews were held with representatives from the LIPs, executive directors, front-line staff, managers, consultants and network leaders in the settlement sector (in both Waterloo and Peel regions). The recruitment plan was determined by the advisory committee with support from the local immigration partnership councils. This was helpful when identifying exemplars to be used as case studies (see next activity).

Activity 7: Gather case study stories

Using information from focus groups and key informant interviews, we identified 3 exemplars of how information and communication technologies were applied in the settlement sector within each community. Each case was used to triangulate interviews with newcomers and service providers. The case studies were also used in the community feedback sessions (see activity #10).

Activity 8: Analyze data

In this activity the research team conducted thematic analysis on the interviews and focus group data. The detail of this process is discussed in the Research Findings section.

Phase 3 – Knowledge Dissemination (January 2024 – March 2024)

In phase three, the focus was on producing a report and facilitating community feedback sessions. As discussed in the following sections, the wider community and settlement sector was engaged with the help of the local immigration partnerships in Waterloo and Peel regions and the advisory committee. The intended audience included stakeholders in the settlement sector as well as the wider community.

Activity 9: Organize community feedback sessions

This activity aimed to prepare and hold community feedback sessions in both Peel and Waterloo regions to build local solutions for policy and practice. The intended audience consisted of stakeholders in the settlement sector (e.g., IRCC/non-IRCC funded service providers, newcomers, support workers, etc.). Advisory committee members and the LIP councils were also involved. The forums were held in-person in Waterloo and online in Peel. Facilitation of the forums focused on sharing the results of the study and generating/prioritizing recommendations.

Activity 10: Produce a final report

In this activity, we generated a report (that you are currently reading) by weaving together the analytic narrative and data segments, relating the analysis to extant literature. The report also mobilized knowledge in the form of infographics (see appendix # TBA). It outlined the research process and findings based on the main research questions. The intended audience for the report includes funders and stakeholders in the settlement sectors of Waterloo and Peel regions. Copies of the report were sent to all participants of the research study. [This will finalize after the Advisory Commitee meeting on March 4, 2024: and the advisory committee decided on other strategies for knowledge mobilization (e.g., posting the report on CCBR and LIP websites, public webinars, etc.).]

2. Timeline and Agenda of Advisory Committee Meetings

Number	Date	Objectives of Meeting
AC 1	July 2023	1. Welcome and Introductions • About CCBR • About CBR 2. Overview of the Digital Equity project • Roles and responsibilities • Design and timeline • Purpose and research questions 3. First Steps: AC Feedback • Preliminary literature review themes • Document review • Focus groups/Key Informant interviews guide, sampling and recruitment 4. Next steps • Next steps in the project • Next AC meeting
AC 2	September 2023	1. Welcome • New members • Incoming Senior Researcher 2. Project Overview • Project recap • Framework 3. Updates Since Last Meeting • Document review • Focus groups early learnings • Our challenge ahead 4. Next Steps • Key Informants recruitment • Case studies protocol, sampling, and recruitment • Advisory Committee honoraria
AC 3	November 2023	1. Welcome & Project Recap • Workplan & Timelines • Purpose & Research Questions

		• Framework 2. Updates Since Last Meeting • Key Informant Interviews • Case Studies 3. Data Analysis • Process • Findings 4. Next Steps • Community Feedback Sessions • Report Outline
AC 4	March 2024	1. Welcome & Updates • Recap • Upcoming Feedback Sessions • Final Report • Infographic 2. Final Project Reflection 3. Final Steps • Community Feedback Sessions • Finalize Report • Finalize Infographic • Honoraria

3. Infographic