



A QUALITATIVE STUDY ABOUT THE GLOBAL GENDER DIGITAL DIVIDE AND ITS IMPLICATION IN THE ADOLESCENT RESPONDENTS OF NEPAL

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ABSTRACT The 21st century digitized world entails for a necessity to digital literacy to participate for social and economic development. Digital literacy has become utmost important for the younger generations to keep up with the ongoing advancements every day. The fact is evident that there is disparity in digital literacy. Inequality in access to the technology along with the capability to use technology are generated by socio-economic and cultural factors. Gender digital divide has become one of the most common disparities. This paper argues that only accessibility to technologies is not enough in bridging the gap. The government and local agencies need to involve women and girls in decisions as well as in best practices. This paper gives synopsis of digital divide and focuses on the problems that young adolescent respondents in rural areas are facing to obtain digital literacy. It also investigates opportunities and create an avenue for future researches.

KEYWORDS : gender digital divide, technology, ownership, accessibility, digital literacy

INTRODUCTION

Amidst other existing social divides, gender digital divide has existed as one of common forms of disparities lately. Jon de Haan in 2004 has argued that the digital literacy and technologies have been sufficed the ones who already have the access to the resources, which has resulted in the greater barrier between urban and rural, rich and poor and men and women, etc.[1] The barrier has strengthened the existing inequality more as new technologies are giving more opportunities to the people who already have access to the information. The information is necessary in the modern world to participate fully in the economy, trade, receive healthcare information, new job opportunities and many others.

The most continuing inequalities is the digital divide. Researches have comprehensively provided many reasons and illustrations which shows women are behind men in owning technology and in developing technological skills. Men has accessibility and ownership to mobile phones and computers more than women, in which they spend more time than women, show interest in taking technology classes and also are more motivated to learn new skills in digital (Cooper, 2006; Correa, 2010; Fallows, 2005; Livingstone & Helsper, 2007; Losh, 2004; Wilson, Wallin & Reiser, 2003).[2] But even when women and girls have access to technology, they are deprived of the facility due to deep rooted psychological and cultural factors.[3]

In this digital age, many women are facing problems due to gap in Information and Communication Technology (ICT) skills. Women and girls from poor communities are suffering more. Every year, the International Respondents in ICT day is celebrated and commemorated fourth Thursday of April with an aim to raise awareness regarding gender gap in technology. But the effort seems to be still not enough as the statistics on digital literacy has failed to rise.

The gender digital divide does not depend only the accessibility to the digital technologies but rather it is more complex which involves cognitive and social

access (Newhagen & Bucy, 2004; van Dijk, 2005).[4] Cognitive access refers to individual resources used to access the technology (e.g.: attitudes, anxiety, and skills). Social access refers to the cultural norms and social resources embedded in a social group (Newhagen & Bucy, 2004).

It is evident that there is inequality in ICT skill globally, and there is unequal access to digital knowledge (Norris, 2001; van Dijk, 2005; Warschauer, 2003b).[5] The difference comprehends digital divide and the major to assess inequality ICT usage. The study tried to find out if increasing accessibility and ownership of digital resources provide opportunities to the marginalised? This study provided a critical outlook on digital divide for respondents in Nepal by reviewing the literature available in the internet. Using Nepal as a pilot study reference, the main aim of the study is to understand the current situation of the respondents in digital literacy.

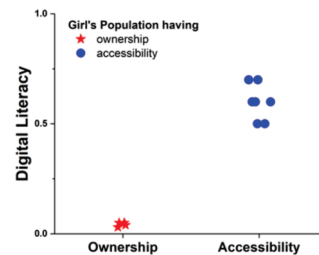


Figure 1: Result showing Digital literacy of respondents against ownership and accessibility

RESEARCH METHODOLOGY

In this study, two basic research approaches are undertaken, one from the global perspective based on the detail analysis of past literatures and another one as a pilot study focused on a small population of girls from a rural village of Nepal.

METHODOLOGY FOR REVIEWING LITERATURES

For qualitative analysis, literatures were searched over internet using keywords 'gender digital divide', 'digital literacy for adolescent respondents', 'policies on gender digital divide in Nepal' and 'ICT in new world'. Through the study, it was evident that very few empirical researches have been done on the area and the study was mostly reliant on the international papers and policies and limited resources were found in the context of Nepal.

COLLECTING DATA FOR A PILOT STUDY IN RURAL SCHOOLS OF LAMJUNG

For quantitate study, a small-scale pilot study was done in two government schools in one of the districts of Nepal. The study consisted of pilot questionnaire which included basic questions to the 20 adolescent respondents (girls) between the age of thirteen to nineteen from two rural government schools of Lamjung district. The questionnaire included the set of questions on their usage of ICT or other digital device (mobile phone, internet in particular), their confidence in using the devices, their accessibility to the digital resources at home, in school or out of school. The study also included interview with two head teachers and informal conversations with two teachers from the same schools. The study reported on results from questionnaire, interviews and observation and compared students' ICT competence between schools in regard to gender and home access.

Fieldwork in this study shaped the data collection process. The study consisted of both quantitative and qualitative data. The data collection process involved questionnaire, interviews and observations during the field work. Apart from these, informal discussions were also conducted during field visits. The respondents of the questionnaire were the students from seventh, eighth and ninth grade classroom from two schools in Lamjung. Global Action Nepal, a national and local

NGO in the area supported to identify the schools through its contact. Eventually, the head teachers were requested for permission to conduct questionnaire and interview seventh-tenth graders in their schools. During the visits, informal discussions also took place. The data collected supported in designing and framings the result of the study.

OBSERVATION

The observations included classroom observation and observation of the students using computers and mobile phones if available. The observation was done after contacting and taking permission with the schools. I familiarized myself with the student so that they do not restrict themselves from sharing their experiences and challenges. I sat at the bac during classes and explained that I would be spending time with them in the computer room or their classroom for the next few days, focusing on how they used computers at school if computers were available.

The observation period mainly included the interaction of students and teachers with each other and also with the computers. The notes during observations in field provided as a source of information for the study.

QUESTIONNAIRE

The respondents were asked to complete a questionnaire on paper format at the same time. After the completion of the questionnaire, the sheets were collected and manually transferred into Excel sheet for analysis. One common but difficult questions to the young respondents was regarding the income of their guardians/parents which most of the girls were unsure of, due to which the question was excluded in the analysis.

INTERVIEWS

Qualitative interviews were conducted with 20 students from the schools and the head teachers were interviewed during the research period. These included interviews with the teachers responsible for computer use at each school. Altogether, 6 randomly selected students and 4 teachers were interviewed. The interviews with the head teachers and teachers lasted from 30 minutes to 45 minutes and interviews with students took 20-30 minutes.

Majority of the outlines in the study are drawn predominantly from online resources. Other sources of the study included policy documents from the Ministry of Education, UN and other organizations. This study has opened door for more future researches in the area.

DATA ANALYSIS

After all data were collected, analysis process was started which included both qualitative and quantitative data. The quantitative data functioned as the primary data and provided supplementary status whereas the qualitative data served as the secondary data and provided central status in the analysis. Quantitative data relied on the questionnaires, interviews and observations.

The informal discussions with the teachers were included in field notes. The interviews (of students, teachers and head teachers) were not compared. Each answer sheets of the questionnaire were numbered and registered into an Excel sheet.

RESULT AND DISCUSSION

A.Global Scenario: A theoretical perspective based on existing literatures

a.Gender digital divide globally

Information and Communication Technology now have become irreplaceable tool in the wide world. The tool has been particularly important for certain group of people such as younger men and women as everything is digitally connected and it has become difficult to manage certain works of life without Internet access. For over two decades, respondents' education has been championed and promoted as a key strategy for poverty reduction and women's socioeconomic empowerment. There is a gender divide, with women and girls who have less access to information technology than men and boys.[6]

The gender digital divide is evident regardless of a nation's overall ICT access levels, economic status, income level or geography. It largely depends on the cultural and institutional constraints of a nation. Gender digital divide is not same in every part of the world.

According to a study, nearly 35 percent fewer women than men in

South Asia, the Middle East and North Africa have Internet access.[7] The evocative term digital divide denotes 'the gap between individuals, households, businesses and geographic areas at different socioeconomic levels with regard both to their opportunities to access ICT and to their use of the Internet for a wide variety of activities'.[8]

The gender digital divide encompasses of different factors such as accessibility to the digital resources, usage of the resources and ownership [Fig. 1]. The inequalities or the disparities are dependent on the socio-cultural and economic background, age, educational level of the respondents, location, ethnicity and even disability, with certain groups of the users who are more disadvantaged compared to others.[9]

b.Barriers in bridging the gap

The cause behind the gender digital divide is not restricted to only one factor. This paper discussed some of the prominent cause underlined by the researches. Researches show that women and girls have less access to technology and digital tools which depends on the location/are where they live in from the access point. Access to the resources has continued to be one of the prominent hurdles in bridging the gap for digital divide. The other barriers remaining social and cultural norms that prohibit women and girls giving them limited or no time to access to technology. Respondents are inherently labelled as caretakers and are obliged to perform household chores at the expense of their study and play time provided the fact that the social and cultural norms living less importance to education of respondents.

Respondents' lack of comfort with technology and lack of confidence in using ICT effectively comes from the gap in literacy and education. This also related to the lack of appropriate content for respondents and women, where they are comfortable to use.

B.Nepalese Scenario: A pilot study conducted in a rural village

a.Current situation in Nepal- accessibility and ownership

Norms for men and women and girls and boys are socially constructed and learned through the process of socialization. This also refers to gender specific roles which are dependent on context and time and are changeable. Women and girls represent a significant population in Nepal, and it is estimated that three out of four women and girls are engaged in work in Nepal.[10] The literacy rate of women is 54.7% in comparison to 75.1% of men in Nepal.[11] Low level of education and social norms that women and girls are expected to get involved in household chores and to be the care taker for family irrespective of their age and social status (rich or poor). Nonetheless, giving the limited time to access Internet or learn computer. Respondents lacking confidence in using the technology due to implanted notion that they are weak in it serves the reason behind gender digital divide amongst respondents and boys. Even ownership of mobile phones and other devices by women and girls is considered as a privilege in some parts of the country, discouraging the fact that it is a necessity in the present context. It is a shocking study that there are 38.3 million mobile users as of July 2018 whereas the estimated population of Nepal is 28.5 million but there is no record on how many of the users are women. One of the studies shows that women in South Asia are 26% less likely to own a mobile than men and 70% less likely to use mobile internet.[12] But there is no researched data in case of Nepal.

b.Perspective and recommendation according to the study

The limitation and usage of technology including mobile phones provides the significant viewpoint that the women and girls in Nepal have lesser accessibility and ownership of the resources compared to men. The pilot survey done in Lamjung, one of the rural areas in Nepal also provides the evident fact that only 10% of the respondents surveyed have access to mobile phones but not ownership and none of them had access to computers. Even they had few computers at school, they are never used due to unavailability of computer teachers. Thus, the study tried to include the question in what way the uneven access of ICT can affect in learning opportunities. The study further investigated the perception of digital literacy in Lamjung which is viewed as a privilege and taken as a tool for opportunity in education. But studies show that many teachers in developing countries are, however, using ICT on a limited scale in the classrooms. They are using ICT to only access information rather than using it as a part of a transformative pedagogy. The study also showed that the teachers do not have required level of training needed for digital skill, or even they are

deprived of the support that they need to gain knowledge on digital literacy for bringing substantive changes. To bring the substantive and affirmative change in digital literacy, government and concerned stakeholders need to focus on the access to all the students irrespective of their caste, gender or economic status followed by realistic plans for implementation and support of innovative teaching practices.

The process and the results of the study were discussed with the head teachers and teachers. I could seek possible solutions from the teachers themselves them being the key informant of the study. The most common and evident response was the change in policy guided by the local involvement in the planning and decision-making processes. In summary to bring change it was found that the policy makers need to focus on sustainability and involvement at the local level regarding resources, infrastructure, leadership, participation of parents and local communities and others.

The results provided a local perspective dependent of Nepali frame of reference as the elements served as an essential part in providing access and opportunities to those disadvantaged and marginalized. Also, it is important to mention that the study provided an avenue for possible future research as there is no enough data on the area. The unavailability of data and statistics on access to digital literacy and ICT makes it difficult for policy makers to incorporate and design gender inclusive ICT plans and policies. There have not been substantial efforts by the government and educational authorities to decrease the digital divide and increase equality in digital literacy, more research and more input is necessary and has become utmost important to address the issue.

CONCLUSION

Women and girls are in evidently being deprived of the opportunities of learning by limited accessibility and ownership to technologies and digital resources, which has resulted in their low participation at personal and community levels. The solution is education and availability of the resources to their perimeters. The study embraced inquiries regarding uneven accessibility and dissemination of ICT and digital literacy the solution to address issues in order to generate improved opportunities for the girls in rural setting. Though there has been policies and plans from the government but the way they are being approached and implemented is slow and directly effects on the respondents' digital literacy level. The strategic approaches from government in providing accessible and approachable services linked to technology in the most inaccessible rural along with investment on right resources might benefit the population disadvantaged.

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