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Causes of Gender Digital Divide in Ebonyi State and Its Possible Solutions

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Abstract
Digital divide describes a gap between those who have access to information and communication technology and the skills to make use of the technology and those who do not have the access or skills to its use within a geographic area, society, community or a specified group of people. Empirical studies clearly show that women in the developing world have significantly lower technology participation rates than men; as a result of entrenched socio-cultural attitudes about the role of women in society. In this, Ebonyi state has her own share as one of the states in one of the developing countries - Nigeria. However, as studies are beginning to show, when those women are able to engage with Internet technology, a wide range of personal, family and community benefits become possible. This seminar gives an overview of the digital divide with specific consideration to gender digital divide in Ebonyi state, before focusing specifically on its major causes and possible solutions. Current gender disparities in Internet use will be outlined and the barriers that potentially hinder Ebonyi women's access and participation in the online world and all other related technologies has been considered. We will also consider a promising avenue for future research.

1.0 INTRODUCTION

Digital divide is the term used to describe the discrepancy between people who have access to and the resources to use new information and communication tools, such as the Internet, and people who do not have the resources and access to the technology. The term also describes the discrepancy between those who have the skills, knowledge and abilities to use the technologies and those who do not. The digital divide can exist between those living in rural areas and those living in urban areas, between the educated and uneducated, between economic classes, and on a global scale between more and less industrially developed area. According to Curtis (2012) "the digital divide is composed of a skill gap and a gap of physical access to Information Technology (IT) and the two gaps often contribute to each other in circular causation. Without access to technology, it is difficult to develop technical skill and it is redundant to have access to technology without first having the skill to utilize it". (Kularsk's, 2012) quote sums up the reiterative nature of the problem.

1.1 The Background of Study:

More than two decades ago, apparent inequalities in Internet access gave rise to "concern that the new technology might exacerbate inequality rather than ameliorate it", which resulted in analysts focusing on what has been called the digital divide between the online and the offline (Kularsk, 2012). The digital divide is often conceptualized as the gap between those who have access to vital Information and Communication Technology (ICT) resources and those who do not (Dimagio, 2004). Pippa described the digital divide as shorthand for any and every disparity within the online community, including access between developed and developing nations, the rich and poor, and men and women within those nations. She further describes the digital divide as a democratic divide between those who do and do not use the panoply of digital resources to engage, mobilize and participate in public life (Eorris, 2001).

ICTs have become an irreplaceable tool in society. The number of people going online to conduct everyday activities, such as business and banking, education, seeking employment, civic engagement and forming and maintaining social relationships, is increasing every day. For many of us, being digitally connected is an integral part of our day-to-day lives and it is difficult to imagine having to function without Internet access. For certain groups of people, such as women in developing countries, the Internet has real potential to mitigate or even remove the barriers that have precluded them from participating more fully in digital society. However, although their lower starting point provides for greater possible gains, these women continue to face gender-related discrimination that prevents them from accessing the full benefits of ICTs (Hilbert, 2011).

1.2 Statement of Problem:

Digital divide has seen proved by many scholars in different studies to perpetuate or reinforce gender inequality in Ebonyi state. The more women engage with technology (ICT), the better educated they become and more likely they will be to engage in activated that benefit themselves, their factures communities and the state in general.

1.3 Significant of the Study:

There is clearly need for research to be done to more fully understand the socio-cultural factors that both inhibit and encourage the engagement of women in IT technology. This understanding is useful in devising strategies that incrementally improve the solution overtime especially now that the state's economy is biting.

This study arguably, tends to reduce the age-old practices against Ebonyi women to bring long-term benefits and revolutionary charge.

1.4 Aim and Objectives:

The more the Ebonyi Women engage in ICT the more they are expose to knowledge and skills that will improve their living standard and host of other benefits. The aim of study is to point out causes of gender digital divide in Ebonyi state and its possible solutions. The objectives are as follows;

(a) To determine the level of women participate to technology in Ebonyi state.
(b) Look into the reason and natural causes of gender digital divide in the state
(c) Finally, the research will also consider all avenue to ensue that it is minimized or eliminated entirely in the state to make sure that Ebonyi Women meet up with all the opportunities globally just like their men counterpart.

1.5 Scope of the Study:

There are many social problems or challenges facing Ebonyi citizens but considering the importance and the role of women in every society, this study is restricted to causes of gender digital divide and its possible solution in Ebony state specially.

SESSION TWO

2.0 LITERATURE REVIEW

Recent studies have explored the concept of the digital divide as a 'gloss' for long-standing societal inequalities (Seedco, 2002). On its own, the digital divide frame often results in digital solutions that overemphasize the importance of the physical presence of computers and connectivity to the exclusion of other factors. To scrutinize the digital divide we must move beyond an examination of physical access to ICT.

Neumann and Robinson describe the digital divide as formal and effective access barriers (2001). Formal access refers to the physical availability of the tools and resources to access the information highway and participate in the new economy. In contrast, effective access includes having disposable income to afford connectivity to the Internet and the means to acquire the skills and abilities necessary to fully participate in the information society.

Recognizing these effective access questions bring us to broader set of socio-economic issues. Understanding the complexities of the digital divide requires close examination of broader issues across multiple dimensions. The roots of disparities between the rich and the poor are extensive, including discrimination based on income, education, race and culture, age, gender and disability and economic shifts due to economic globalization. Many academics, for example, associate the digital divide with increased competition and globalization Alexander (2001)(EKOS, 2002)Ferlander&Timms, 1999; Nelson &Servon, Hoffman (1998)(Schon, Sanyal, and Mitchell, 1999; Sciadas, 2002).Wolpert (1999) argues that information technology will do nothing for low-income communities other than drive the working poor out of the mainstream economy and deprive more people of its benefits. One of the main conclusions from the influential book by (Schon ,1999) concerns the need to address social inequities in order to capture the benefits of information technology.

Unless the broader barriers to human and social capital that hinge on educational levels, computer related training, employment and economical opportunities are addressed, they believe that the gaps between the rich and the poor will remain high (Schon, 1999). Poverty will continue to be the impetus of inequities in the information society and systemic discrimination will prolong the distance between the rich and the poor unless socially inclusive principles are adopted and implemented in telecommunication policies and practices.

2.1 Characteristics of the digital divide:

There is a general consensus in the literature that there is a significant digital gap. According to Castell (1999) information based cities deepen spatial segregation and exacerbate the gaps between the rich and the poor. These gaps are apparent not only according to income, but also race, age, disability and education. The research substantiates the view that income and education are key factors in the digital divide (Becker, 2000; Ferlander&Timms, 1999; Koss, 2001; Novak & Hoffman, 1998; McConnaughery&Lader, 1998; Shapiro & Rhode, 2002; Wilhelm, 2002).

Sciadas (2002) states the digital divide is significant in Canada and that penetration rates increase as income increases. In the United States higher educated and higher earning households are five times more likely to have access to technology and the information highway (Shapiro & Rhode, 2002). According to a Canadian

study completed by EKOS (2002), the income-based gap in access to computers and the Internet from home is persisting and widening. The same study found that the gap in Internet access from home has widened from a 39-point gap in 1997 to a 48-point gap in 2001. Dickinsonet and Sciadas (1996) noted similar concerns for income disparities and access to the Internet.Canada (2004) collects data in the Household Internet Use Survey (HIUS) on both age and education (in addition to income) according to place of Internet access in Canada. Digital gaps exist according to both criteria. Individuals less than age 35 have a home Internet access rate of 60.8% compared to 22.7% for those age 65 and over (Canada, 2006b). The data on education levels and Internet access from shows that those with a university education have a home access rate of 78.7% where as those with less than high school have a rate of 25.5% (Canada, 2006c).

With respect to children, at the end of 2001, only 14 percent of low-income children living in the United States had access to the Internet at home as compared with 63 percent of children in families earning more than $75,000 per year (Wilhelm, 2002). Becker's findings closely resemble Wilhelm's although Becker indicates that low-income children's use of computers is less than higher income households because they do not have access to the Internet (Becker, 2000). The impact of the digital divide on young children also contributes to developmental lags in terms of skills (i.e. motor) and schemas (cognitive) within a classroom (De Craene&Cuthell, 2006).

But the digital gap may be connected to more variables other than income and education. Studies in the US (Alvarez, 2003) found an unexplained racialized digital gap. Research by Alvarez's (2003) found that half of the lower IT access rates of African American's reflect lower incomes and levels of education, but that about half of the 20-point lower access by African American's still remains after these status and other demographic characteristics are taken into account. This racialized digital gap has not been adequately investigated - therefore little is known about the processes and barriers involved.

SESSION THREE

3.0 CAUSES OF GENDER DIGITAL DIVIDE IN EBONYI STATE

Digital divide have being perpetuating or reinforcing gender inequality in Ebonyi state. Digital technologies could, potentially, enable women in Ebonyi state to overcome longstanding inequalities by providing employment opportunities and chances to increase income, in addition to access to cost effective health care and education. On the flip side, it has been argued that women are at a natural disadvantage because they are, purportedly, less tech savvy, more technophobic and the technology itself has not been designed to meet their needs (Hilbert, 2011)

3.1 Economic Status:

Norris's definition, which differentiates ICT access on the basis of "haves" and "have-nots", has evolved and the digital divide has become a complex phenomenon that can be understood in a myriad of ways. Van Dijk and Hacker the idea that access to digital resources is a multi-faceted phenomenon consisting of four factors that work to regulate access; psychological, material, skills and usage. What began as a simple concept of there being "haves" and "have-nots" in the digital world, has evolved into a finer-grain conceptual framework.

Psychological access is where the user has little interest in gaining access, or has negative attitudes towards computers. Material access relates to not having the physical infrastructure. Skills access is where a person does not have the digital literacy skills to be effective on-line and usage access is where a person does not have the time or opportunity to access digital information, regardless of their skill level. The 4A perspective—awareness, access, attitudes and applications—focuses on digital gaps at the local/community level in addition to the national/global level, while the access-use definitions highlight the socio-economic factors, such as income and gender,that influence a person's ability to access ICT (Van Dijk,2003).The knowledge gap hypothesis similarly posits that people of high socio-economic status are at an advantage because they find out about new sources of information first and because they can afford access to them while they are new (DiMaggio,2012).

The majority of existing research on the digital divide has focused on inequality of access. Although this is important because it is likely to reinforce other inequalities, such as opportunities for economic mobility and social participation, a more thorough understanding of digital inequality is required that looks at the Internet in its broader theoretical context and considers how ICT's impact on existing social inequalities (Kennedy,2009).Although the definition of the gender digital divide remains deficit-focused, it has been tempered over the past decade with an acknowledgement that the divide is not simply an issue of access, but also of obstacles to Internet use (Hilbert, 2003M). That is, as ICTs diffuse widely across the world it becomes less useful to look merely at the binary classifications of ICT "haves" and "have nots" because the provision of physical ICT products does not guarantee that individuals will have the necessary skills to enjoy the benefits brought by ICTs (Norris,2007).

3.2 Social inequalities faced by women:

The large majority of women (an estimated four out five live in developing countries and they often suffer even more gender-related discrimination than their counterparts in developed countries; they are more likely to be unemployed and have fewer employment and educational opportunities (Johnson,2014), with large numbers (approximately 60% according to UN statistics ending up as unpaid family workers. These women are trapped in traditional family roles and lack the basic digital literacy skills that could allow them to achieve more of their potential (Melkote,2014).

Role definition underlies many of the reasons why women do not make ample use of technology. In Southern India, according to Vinitha Johnson (Dugdale,2006). A woman's existence is defined as a source of support for her family and the wellbeing of the family unit. Culture, the media and society define the roles of women and they are not generally encouraged to fulfill their individual needs, or pursue self-growth, even in educated families. Similarly, in Ghana, there is strong correlation between an individual's work environment and access to digital resources. "While such access may seem gender neutral at face value, traditional gender roles, institutional structures and economic realities force disproportionate numbers of females into the informal sector where such opportunities for access are limited" (Zavodny,2005).

The percentage of women using the Internet lags behind the percentage of men using the Internet in Ebonyi state across all age groups. However, highly educated women are a notable exception, as they reportedly use the Internet as much as men, suggesting that given an education and the means to do so, women will make just as much use of the Internet as men, refuting the assertion that it is lack of capacity that causes women to otherwise not use the Internet.

3.3 Education and training initiatives

With regards to increased life opportunities for women in developing countries, the Internetcan reduce physical barriers to education and learning by allowing women to receive long-distance education via the Internet, particularly with the rise of high quality, free courses in a wide range of disciplines—the MOOC phenomena (Massively Open Online Course). It is not enough to simply have access to ICTs. It is equally important that women have the knowledge and resources to translate access into effective use. ICT initiatives will only be effective if the information is useful and relevant to the end user and where the end-users have the capacity to act on it (Hafkin, 2001). Intel recognizes the vital role technology plays in both improving the quality of and access to education. Through access to technology,scholarship and community learning programs, Intel provides girls and women with opportunities for quality education and personal growth(Hargiatti,2006).

In 2012,Melhem, Morrell and Tandon claim that "women and girls are poorly placed to benefit from the knowledge society because they have less access to scientific and technical education specifically and to education in general". Access to education continues to be a greater barrier for women than men and it is estimated that two-thirds of the world's illiterate population are women, especially technical and scientific related disciplines.

3.4 Cultural factors:

According to Moolman, Primo and Shackleton (2013) gender digital divide is one of the most significant inequalities amplified by the digital revolution. Of the few studies that have sought to address Internet use specifically, most have found that women in developing countries are significantly less likely to use the Internet than men. Women are estimated to constitute 25% or less of Internet users in Africa, 22% in Asia, 38% in Latin America, and a mere 6% in the Middle East(Clauss,2013). Only 20% of Internet users in Greece are women and slightly more than 25% in Portugal (Ymogi,2002). In Africa (where the gender digital divide is thought to be the widest), in 11 of the 13 countries, more men than women use the Internet. In one of the most technologically advanced countries, Kenya, 21% of men and 11% of women (in the population sample used for this study) had used the Internet in August 2008.

African women are also less literate and can also be attributed to her peculiar cultural practice which popularly put women as less advantaged. EbonyiState is not left out of this problem. In EbonyiState the cultural practice of not allowing young girls to use phones, computers and other ICT tools in other to stop her from interacting with the male age group is still prevailing. This goes in very long way to promote gender digital divide.

3.5 Limited free time:

Women invariably bear a disproportionately heavy burden of household and family responsibilities.Due to the combination of domestic chores and their role as primary caretakers, women have very little free time to experiment with new technologies. They are further constrained by social norms that confer control of technology to men (Moni,2002). A major digital divide based on gender is emerging in India, which is partly attributed to the constraints that women face in accessing education due to a lack of time to attend school,

familial and household duties and socio-cultural norms that give a low priority to education (Junia,2012).

Moreover, the extent to which women exercise autonomy in using the web significantly influences the extent to which they can access it. There are several factors that contribute to a woman's autonomy. Location of access, for example, is important. If Internet access is only available outside the home, and the user has to travel long distances to an Internet-enabled facility, this is likely to reduce one's likelihood of pursuing the online environment. If access is available within the home, to what extent is women's autonomy limited by the actions of other family members? The greater the autonomy of use, the greater the benefits the user is likely to derive (Maxal,2008).

3.6 Financial and/or institutional constraints:

Chadwick *et al.* (p. 380) note that, "due to its role as a means of information gathering andsharing, use of ICT corresponds to having increased power and control within society. The digital divide draws attention to how disempowered groups with limited economic resources have reduced access to ICTs". There are still 1.4 billion people living on less than US$1.25 a day, and at least 70% of them are in rural areas (Zaky,2003). Moreover, women often do not control finances or have sufficient personal income to purchase products or pay Internet service providers for monthly access. As such, due to financial and institutional barriers, women lack the means to use, rent or purchase established and new technologies that could help them advance economically. The combination of laws, policies and social customs in many developing countries prohibit women from owning property and obtaining loans for technology purchases.

A vicious cycle is thus perpetuated in which "women cannot develop their skills, which prevents them from earning higher incomes, so they cannot afford the technologies that mightboost them to the next rung on the economic ladder".

3.7 Social norms favoring men:

Technologies are often considered to be within the purview of men and gender norms about men's control of technology, information and knowledge limit women's opportunity to learn, use and benefit from technology (Humin,2004).Given that women enjoy fewer educational and career opportunities globally and, in some places, they face having to endure restrictive gender norms, it is not surprising that most of them are women (Supon,2014)..As a result, conservative gender roles become even more entrenched due to a lack of exposure to alternative perspectives and women become increasingly marginalized as social connections are increasingly fostered and maintained online (Evin,2002).. Even in countries where access is no longer an issue, "inequalities in actual use can hamper women's opportunities on both economic and social fronts. Access is necessary, but not sufficient, to close the gender digital divide" (Ymogi,2002).

Given the rapid proliferation of ICTs, most individuals are likely to have access; however, high rates of access do not imply high rates of usage and, as such, "the discourse on the digital divide has expanded to include a consideration of other factors that generate digital inequality" (Eleny,2000).

In terms of women non-users, we need to ask whether this is a choice that is freely made without constraints or whether this choice is influenced by larger social factors. Someone who has not completed high school, for example, may not be aware of what information is available online or how to navigate it. Simply giving such a person a computer and/or Internet access would not guarantee use and the results of this study certainly bear out this contention: computer ownership and use was positively associated with education in all five countries. Moreover, women are significantly less likely to use a computer at home, given ownership, which suggests that living in a household where a computer is available does not necessarily mean that women will use it; access does not translate to use in many cases.

There is further evidence that perceived benefit is another factor that influences women's use of ICTs in developing countries. Regardless of whether or not Internet access is available, women are less likely to use ICTs if they perceive the benefits of doing so to be low. However, Ono and Zavodnynote that "both actual and perceived benefits of IT use may be related to larger social forces that are tied in with inequality at the macroeconomic and societal level".

Melhem*et al.* (p. 22) similarly assert that "social and cultural factors limit women's access to shared ICT facilities, such as tele-centres, which tend to become meeting places for young men, and hence deter women's absorption and adoption of ICTs to access information and knowledge". Furthermore, common access points such as tele-centres are often not open for women and, in several cultures, women's use of such facilities and their interaction with men in public locations is frowned upon.

3.8 Rural and urban setting:

While these four arguments are meant to lead to a solution to the digital divide, there are a couple other components that need to be considered. The first one is rural living versus suburban living. Rural areas used to have very minimal access to the Internet, for example. However, nowadays, power lines and satellites are used to

increase the availability in these areas.

3.9 Financial access:
The cost of ICT devices, traffic, applications, technician and educator training, software, maintenance and infrastructures require ongoing financial means.

3.10 Socio-demographic access:
Empirical tests have identified that several socio-demographic characteristics foster or limit ICT access and usage. Among different peoples, educational levels and income are the most powerful explanatory variables, with age being a third one Others, like gender, don't seem to have much of an independent effect.

3.11 Limitations of Study:
This research was achieved successfully,through there were some challenges encountered which includes and not limited the following;

- **Time limitation:** Time expected to finish this research was one of the challenges as the researcher could not visit all women challenges oriented organization and other important places.
- **Income:** The researcher also suffered financial challenges because of the overwhelming economic situation now.
- **Access to accurate organizational information;** this was due to the obvious character of Nigeria workers in exposing their organizational data.

SESSION FOUR
4.0 DISCUSSION/SOLUTIONS OF GENDER DIGITAL DIVIDE
Access to the Internet can provide a wealth of opportunities for women in developing countries. Opening up avenues for learning, communication, generating income and business pursuits. According to Chadwick government initiatives to address the digital divide may be necessary to ensure that this often economically under-privileged group are able to get online and receive the full benefits of digital inclusion". A number of positive initiatives have commenced to address impairments to Internet access and use by women in developing countries and these are considered below.

4.0.1 Educating and Training Woman Facilitators:
women Overcoming Internet access barriers requires action on a number of fronts. In order to reduce inequality in Internet access, we need to educate and train people to facilitate access and modify attitudes that may serve to impede access (Yabi,2007).The Women and the Web report revealed that one in five women in India and Egypt believe that the Internet is not appropriate for them, or that their families would disapprove, and that engaging online would not be beneficial- regardless.

These attitudes are presumably derived from their socio-cultural conditioning. 40% of women in this study, moreover, cited a lack of familiarity or comfort with technology as a reason for not pursuing Internet use and, typically, women who were uncomfortable with technology lacked the exposure to Internet technologies that would allow them to develop their computer and digital literacy skills.In addition, it has been reported that one of the consequences of having relatively few women web developers and programmers is a lack of content relevant to women's needs and interests. Moreover, 90% of online content is in English, yet only one-third of users worldwide speak it, which may create barriers to access for non-English speakers, many of whom are women living in rural and remote areas. Furthermore, the content associated with new technologies, and terrestrial media generally, is largely male-centric. In 2010, the Global Media Monitoring Project (GMMP) reported that only 12% of all news stories across the world's media focus specifically on women. The GMMP further noted that 46% of news stories reinforce gender stereotypes while just 6% challenge them. It is therefore unlikely that women in developing countries will be motivated to seek information online if the content is inaccessible (not available in their native languages) and irrelevant for their needs.

4.0.2 Free distribution of Ict devices
Governmental and non-governmental agencies should address the following type of Access to IT facilities; physical Access:Involves, "there should be free distribution of ICT devices, individuals need to obtain access to computers, landlines, and networks in order to access the Internet. This access barrier is also addressed in Article 21 of the Convention on the Rights of Persons with Disabilities by the United Nations.

4.0.3 Encouraging democratic governance and freedom of Information:
Guillen & Suarez argue that that "democratic political regimes enable a faster growth of the Internet than authoritarian or totalitarian regimes"(Jami,2005). The Internet is considered a form of e-democracy and attempting to control what citizens can or cannot view is in contradiction to this. Recently situations in Iran and China have denied people the ability to access certain website and disseminate information. Iran has also prohibited the use of high-speed Internet in the country and has removed many satellite dishes in order to prevent

the influence of western culture, such as music and television(Zaki,2002).

4.0.4 Programming and using local languages as computer language

Many experts claim that bridging the digital divide is not sufficient and that the images and language needed to be conveyed in a language and images that can be read across different cultural lines.Using previous studies (Gamos,2003; Nsengiyuma and Stork, 2005; Harwit, 2004 as cited in James), James asserts that in developing countries, "internet use has taken place overwhelmingly among the upper-income, educated, and urban segments" largely due to the high literacy rates of this sector of the population. As such, James suggests that part of the solution requires that developing countries first build up the literacy/language skills, computer literacy, and technical competence that low-income and rural populations need in order to make use of ICT.

4.0.5 Encouraging women Education:

From an economic perspective, Pick and Azari state that "in developing nations…foreign direct investment (FDI), primary education, educational investment, access to education, and government prioritization of ICT as all important"(Dandy,2004). Specific solutions proposed by the study include: "invest in stimulating, attracting, and growing creative technical and scientific workforce; increase the access to education and digital literacy; reduce the gender divide and empower women to participate in the ICT workforce; emphasize investing in intensive Research and Development for selected metropolitan areas and
regions within nations".(Jabon,2013).

SESSION FIVE

5.0 CONCLUSION

In summary, there appear to be a number of barriers that prevent women in developing countries from accessing and using the Internet: “For many women, ICTs remain inaccessible due to affordability issues associated with poverty, lack of basic technological skills, low levels of literacy and numeracy, geographic isolation, and poor technology infrastructure…as well as the cultural expectations, norms and mores that influence the ability of women to own and/or access ICTs in public places” (Ymogi,2001). (p. 135).

The reason why fewer women access and use ICTs is a direct result of their unfavourable conditions with respect to education, employment and income. When these variables are controlled, women are generally more active users of digital technologies than men.

It is becoming increasingly clear from the various initiatives in developing countries around theworld that women have the capacity, and in many cases the desire, to engage more fully with ICTs, yet for a range of socio-cultural reasons, for example traditional ideas of the place of women in society being domestic, women are being denied or are denying themselves access to technologies. The consequences of not having at least equal participation rates as men with Internet technologies are significant at both a personal and community level. If an otherwise capable woman is prevented from progressing beyond the traditional roles of child-rearing and housekeeping, she is unlikely to reach her full potential as a human being. At the community level and beyond, the impact of such women being unable to participate in economic activities will have a dampening effect on the often-struggling economies of these developing countries.

There is strong evidence to suggest that education is a solution. A woman who is educated to at least secondary level acquires both the ability and the desire to engage with the possibilities that Internet technologies offer, whereas a woman who is uneducated is more likely to subscribe to the traditional role of women and not engage with technology, regardless of their access to it. The more women engage with technology, the better educated they become and the more likely they will be to engage in activities that benefit themselves, their families, and their communities.

5.0.1 Suggestion for further studies:

They will then be more likely to undertake more of the kind of education that leads to improved living standards and a host of other benefits. For future study, there is a clear need for research to be done to more fully understand the socio-cultural factors that both inhibit and encourage the engagement of women with technology. This understanding would be useful in devising strategies that incrementally improve the situation over time. This slow-paced approach may seem counter-intuitive, given the need, but arguably when dealing with age-old cultural practices, the slow and steady approach is more likely to succeed and produce long-term benefits than any effort at revolutionary change can produce.

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