

How to Develop Core Elements of Empowerment

A Minor Field Study of Young Women's Empowerment
Through Access to ICTs in Dixcove, Ghana

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Abstract

The aim of the study is to examine how young women conceive their empowerment processes through access to ICTs, provided by the non-governmental organization IT for Children. The thesis is a qualitative case study of young women's empowerment. Accordingly, a minor field study was conducted in the village Dixcove in the south of the western region of Ghana. Material was gathered through semi-structured interviews with young female students and key informants with knowledge of the village and lives of the women in the village. Jo Rowland's theoretical framework of women's empowerment is employed to give prominence to the young women's 'core' values, its connection to access to computers and the internet as well as inhibiting and encouraging factors to the empowerment process. The results indicate that the young women attending the IT for Children academy in Dixcove have progressed empowerment by developing 'core' elements of empowerment personally, in relationships and collectively. Factors inhibiting the empowerment process consist predominantly of external factors of high burden of house chores and work. Factors encouraging the empowerment process consist of support from family and friends, financial stability and inspiration from peers.

Key words: Women's empowerment, ICT, Digital divide, Jo Rowlands, Ghana
Words: 11096

Acknowledgments

I would like to express my sincere appreciation to a handful of individuals that made this Minor Field Study achievable. Thank you, Torsten Kjellgren founder & CEO of IT for Children and Samuel Gyasi my contact person in field. Without the support of the two of you, this research project would not be possible. Medaase, Theresa Oppong for your insights, kindness and for teaching me Twi. Thank you, Catia Gregoratti Senior Lecturer at Lund University for believing in my idea and providing advice on how to conform a research project in a developing country. Finally, I thank all young women participating during interviews. Your stories constitute the foundation of this paper.

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List of Abbreviations

ICT	Information and Communication Technology
NGO	Non-Governmental Organization
SDG	Sustainable Development Goal
UN	United Nations
GHS	Ghanaian Cedi
ITFC	IT for Children

1 Introduction

In a global and interconnected world, information and communication technologies (ICT) can provide great opportunities for the empowerment of an individual in a developing country (Davaki 2018, 8). ICTs refers to technologies that provide access to information through telecommunications. Technologies included are computers, telephony, live- and recorded broadcast technologies and the internet (Technopedia 2020). ICTs drives communication and social platforms, engage people to learn from cultures and partake in endless information (TechTerms 2020).

Unfortunately, access to ICTs is unevenly distributed and realized throughout the world. The term ‘digital divide’ addresses gaps that separate countries, segments of societies and individuals into those able to take advantage of ICT opportunities and those who are not (OECD 2020). A global trend is that women and girls have less access to technologies and the internet in comparison to men and boys (PlanInternational 2020). Inherent biases and norms decrease possibilities for women and girls to benefit from opportunities offered from digital transformation, particularly in less developed countries (Davaki 2018, 9). Gender plays a considerable role in the potential of opportunities realized through ICT access. A phenomenon of no exclusion, to the case of young women’s empowerment through computer and internet access provided by the nongovernmental organization (NGO) IT for Children (ITFC) in the village Dixcove in Ghana, the context of question in this paper.

Unequal access and usage of ICT between men and women is a phenomenon acknowledged globally by the United Nations (UN) in the 17 Sustainable development Goals (SDGs), more specifically SDG 5 target 5.b addresses to states; “Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women” (United Nations 2020). Furthermore, the World Wide Web Foundation’s Women’s Rights Online Report (2020, 3) suggests that the internet is one of the most empowering technologies in the world. But unless women are able to benefit, the digital gender divide risks generate further inequalities.

Ultimately, this study strives to contribute to current literature on the topic of women’s empowerment through access to ICTs, in the context of gender and development.

1.1 Purpose and research questions

The aim of the study is to analyze young women’s empowerment through access to computers and the internet, with a focus on young women from the village Dixcove

in the south of the western region of Ghana. By observing and analyzing the experiences of the ITFC academy, a greater understanding can be achieved of effects of ICTs on development and gender equality. Moreover, to fulfil the research purpose the following research questions are addressed:

- How are Jo Rowlands 'core' elements of empowerment experienced by the young women attending the ITFC academy in Dixcove, Ghana?
- How does access to computers and the internet provided by ITFC, contribute to young women developing 'core' elements of empowerment in Dixcove, Ghana?
- What external factors inhibit and encourage the young women to develop 'core' elements of empowerment through access to computers and the internet in the ITFC academy in Dixcove, Ghana?

1.2 Literature review

Advised in research conducted by Sandyha Shenoy (2019), prominence is given to the use of ICTs to empower rural farm women in India. She suggests that access to information is the fundamental factor for political, social and economic empowerment of women and that ICTs entails new forms of learning, livelihood options, health services and education to generate personal development for these women. A second aspect Shenoy emphasizes is that ICTs constitute tools to connect women of differing experiences on-line as well as reach out and circulate information to people who are not, through community radio broadcast, newsletters or tele-centers. Reshaping communities and male dominated hegemonies that can govern regions and marginalize rural women (Shenoy 2019). Shenoy highlights economic barriers to the use of ICTs and the realization of women's empowerment, resulting in that the potential of these technologies only apply to the already privileged, while socio-economically exposed individuals are out of reach from participation and become further marginalized (Shenoy 2019, 80; O'Rourke 1997). Another obstacle refers to women's awareness of how ICTs can integrate in their life. Considerations are women's personal capabilities, knowledge of ICTs practical usefulness and resources available to receive more information on technologies (Shenoy 2019, 81).

Furthermore, Nancy Muturi (2011) addresses the prevailing differences in the nature of access and use of ICTs in Jamaica correlated to the digital divide (Muturi 2011, 134). Despite an adoption of ICTs by the private and public sector, gender-tinged challenges hinder women from an equal benefit of technologies (Muturi 2011, 142). Social and cultural norms and structures enhance gender role socialization where men are perceived to perform better at IT, a trend strengthened by women's unfamiliarity, disempowerment, and the character of the IT-training provided (Muturi 2011, 143).

Nancy Hafkin & Helen Hambly Odame (2002) stresses that the issues of engaging young women in technology studies and science are observed more severe in Africa. Cultural factors related to gender, stereotypes and attitudes clearly inhibit young women from access and use of ICTs (Hafkin & Odame 2002, 13). For example, in Uganda during a WorldLinks programme, girls were excluded from the limited number of computers installed due to the cultural norm that “girls do not run”. Consequently, the boys got to the computers first and rejected giving them up to girls (Hafkin & Odame 2002, 13).

Thus, this paper acknowledges that challenges related to social, economic and cultural factors have not been adequately addressed. That these aspects are essential to give notice to, to assure women’s empowerment through access to ICTs. Much of previous research on empowerment, as it relates to gender and development, is conducted in South Asia. In contrast, the material I gathered through my minor field work is from Ghana in Africa.

My ambition is to contribute accumulative and fill a gap in previous research, by enhancing how young women in the village Dixcove in Ghana conceive their own empowerment processes and experiences through access to computers and the internet.

1.3 Disposition

Followed by chapter one introducing the research problem, the aim of the study, research questions, literature review and disposition. Chapter two presents the epistemological approach, method used in fieldwork, ethical considerations and the interview process. Chapter three presents the theoretical framework of the study, breaking down the concept of ‘women's empowerment’ and unfolding Jo Rowlands three dimensions of empowerment. Chapter four examines the Ghanaian context by presenting background information on Ghana and ICTs, the realities of being a young woman in the village Dixcove and the NGO ITFC. In chapter five, the results of the material collected during field work through individual interviews are presented and analyzed. The analysis is structured in two parts; ‘core’ elements of empowerment within each dimension connected to access to computers and the internet and factors that inhibit or encourage the young women’s empowerment processes. Finally, chapter six concludes the thesis with a summary of the study findings as well as suggestions for future research.

2 Methodology

2.1 Epistemology

Since the 1970s, feminist researchers have intervened in scientific theories of how social sciences should be conducted in research with women (Harding et al. 2005). The goal is to transform epistemological assumptions of how knowledge is created and views on methodological prerequisites. On the basis of knowledge, as deeply embedded with structural power relations, intersectionality and bias. A feminist epistemological perspective entails that I adjust my methodological stances towards hermeneutic in contrast to positivism and strive to understand in relation to explain the phenomenon of issue to be able to answer my research questions (Tickner 2005, 1). In contrast to case studies, feminist theorists bring in caution that statistical methods have been used historically in deceptive ways, not always conveyed the realities and conditions women live under in a particular context. Therefore, feminist research relies more on research methods that comprehend narratives, history and specific cases in contrast to finding causality (Tickner 2005, 15). As Judith Ann Tickner (2005, 4-5) points out, feminist knowledge searching is more of a developing and tentative research process that arises through deliberation with research objects, texts and data. Hence, by inducing a sense of marginalized groups' and people's subjective values, I strive to create an understanding of a contrasting view distinct from society's internalized meaning.

2.2 Method

This thesis is a qualitative case study with a focus on the NGO ITFC's ICT academy in the village Dixcove in Ghana. As argued by Esaiasson et al. (2017, 108-9), case study research suits well for intense and detailed examination of a specific case, community, event or organization. ITFC was strategically selected as the central case of the study due to that the organization constitute great conditions to generate valuable results for the study (Teorell & Svensson 2007, 152).

The analysis of the interviews was conducted by categorizing contents of the theoretical framework, achieving a deeper understanding of lived realities and experiences of the young women, when interpreting their stories through the theoretical framework in a cyclic manner (Esaiasson et al. 2017, 280-1). Thus, the starting point is ideographic in contrast to nomothetic; every phenomenon is

considered on the premise of its unique conditions without the ambitions of generalizability (Teorell & Svensson 2007, 11) The interviews constitute this paper's primary material however information from secondary material; books, scientific articles, reports and websites are deployed to complement and strengthen the structure of the study (Esaiasson et al. 2017, 297).

2.3 Ethical considerations

Conducting research fieldwork in an international setting, it is of crucial importance to be attentive to histories of colonialism, development, local cultures and values. It is important that I as a foreign researcher stay mindful of ethics to permeate the complete process of research. To avoid exploitative research and under no circumstances reconstitute relations of supremacy, dominance or control (Sultana 2007, 375). As pointed out by Brian Bourke (2014) it is essential to give notice to my positionality; as a Swedish, white, educated, heterosexual cisgender male that overlaps in multiple identities creating meaning of me as a person to other people. Through recognition of biases, I presume how best to approach the research setting, members of specific groups and engage with participants. Be reminded of my positionality's effect on the research process as well as on people I have come across meeting in the village Dixcove in Ghana (Bourke 2014, 1).

Concerning the fact, I am pursuing field work related to the topic of gender equality. The dilemma apparent is if gender should determine a presumed research with Third World women. There are mixed views on this dilemma, Regina Scheyvens & Helen Leslie (2000) develops the discourse taking on different standpoints. Accordingly, writers such as Hartsock and Oakley argues that it is appropriate for women to conduct research with women, respondents could then respond more openly and the researcher have more insights into their lives (Scheyvens & Leslie 2000, 122). On the contrary, Leonard Lagisa found his Master thesis cross gender research in Lihir, Papua New Guinea to prosper by the fact he was male. The women viewing him as an authority figure, responding more openly than he thought they would during interviews (Scheyvens & Leslie 2000, 123).

An aspect to enhance is how my research is benefitting Dixcove as a community and how participants of the study best be involved. Research should be conducted in a two-way process of interaction and not an extractive process where participants are regarded solely as sources of data (Sheyvens & Leslie 2000, 128-9; Harding & Norberg 2005, 4). Consequently, a deliberate empowerment approach is likely to raise issues which challenge established ways of doing things (Rowlands 1997, 131). My ambition has been to achieve a conformity of research by highlighting the authentic successful work of the organization and for participants involved to be proud of their work.

2.4 Interviews

The interviews are structured in two parts. The young women attending the ITFC academy in Dixcove are treated as respondents. Meaning, the thought and reasoning of the interviewees is of interest, not the source of information in an objective sense (Esaiasson et al. 2017, 235-6). In total, 12 young women in the age span of 12-17 with similar socioeconomic backgrounds were interviewed at the ITFC academy in Dixcove (See: Appendix 1). A random selection of the young women was employed however I made sure that age varied, that both scholarship and non-scholarship students represent the sample of the population and that a level of English sufficient for the interview format was ensured (Esaiasson et al. 2017, 171-2).

The Managers, administrators and teachers employed at ITFC as well as sources of information on Dixcove and the lives of women, are treated as key informants. Thus, information received from the seven informants is considered to give an understanding of the work and impacts of the ITFC academy and inhibiting and encouraging factors to young women's empowerment through access to computers and the internet in Dixcove (Esaiasson et al. 2017, 235-6). In the selection of informants to interview I used a 'snowball' sampling method whereas one person recommended me to interview the next and so on (Esaiasson et al. 2017, 190-1). In the end, all employees situated in Ghana were interviewed (See: Appendix 1). Providing a nuanced picture of ITFC and the external factors to the young women's empowerment.

Semi-structured interviews were conducted in English with all of the 19 interviewees, each with a duration of 30-60 minutes. Prior to the interviews I prepared interview guides with specific topics of what to cover. The interview guides were inspired by the principles of Jo Rowlands three dimensions of empowerment (See: Appendix 2 & 3). To enhance the possibility for me to analyze the young women's empowerment processes in terms of 'core' elements, as well as contextual aspects working to inhibit or encourage the process of empowerment (Rowlands 1997, 112, 116, 120, 130-1).

To respect integrity of the interviewees, every aspect of their involvement in the research was stated and their consent was of primary concern, minimizing possibilities of misunderstandings and misdoings (Esaiasson et al. 2017, 266-7). Considering that the young female students are minors, their parents' consent to their participation in the minor field study was a prerequisite for me to conduct interviews. Interviewees were asked for a permission to audio record answers, all approved a documentation of audio recording. All were informed of a possibility of confidentiality to remain anonymous of their name and were given pseudonyms; the 12 female students remain anonymous when cited in the analysis, while the seven key informants approved that their title should be acknowledged along with their quotations.

3 Theoretical framework

3.1 Women's empowerment

The term 'empowerment' is used in various practices and in a wide range of contexts, thus the concept's meaning is not definite and explicit, it varies in coherence (Rowlands 1997, 7). It is also clear that in the context of development and gender, scholars take on different understandings of how to conceive the idea of women's empowerment. Although, share the commonality to define it as a process rather than an end product (Cornwall 2016, 344; Rowlands 1997, 129).

Naila Kabeer (2001) relates the notion of women's empowerment to the condition of disempowerment, being disempowered entails a denied ability for women to make choices. She suggests that empowerment encompasses a process of change in contrast to a state of being, only an individual that is disempowered is prone to empowerment (Kabeer 2001, 18-9). Empowerment is thus regarded as 'the expansion in people's ability to make strategic life choices in a context where this ability was previously denied to them' (Kabeer 2001, 19).

Srilatha Batliwala (1993) view the empowerment process more of as a spiral in contrast to a cycle. Personal and collective empowerment is distinguished and empowerment in itself is thought to act as a visible demonstration of change, that the surrounding world is faced to acknowledge and accommodate with. She emphasizes that empowerment implies a redistribution of power relations with a focus on the household. Challenges the notion of women's empowerment as a threat to men and points out the liberation of men as an end result (Batliwala 1993, 9-10). Batliwala defines women's empowerment as the 'exercise of informed choice within an expanding framework of information, knowledge and analysis' (Batliwala 1993, 7). 'A process which must enable women to discover new possibilities, new options and a growing repertoire of choices' (Batliwala 1993, 11).

Andrea Cornwall and Jenny Edwards' more recent account of women's empowerment refers to a journey involving continuous negotiation and compromise with uncertain outcomes (Cornwall & Edwards 2016, 2). Stresses that context is crucial in making sense of empowerment and that women's specific circumstances varies widely, facilitating or blocking possibilities. What empowers one woman might not empower another and what empowers one generation of women might not empower an upcoming generation (Cornwall & Edwards 2016, 2-4).

In this paper, women's empowerment is understood in line with Jo Rowlands definition of the concept. Rowlands initial argument is to first and foremost unfold

the root-concept ‘power’ (Rowlands 1997, 9). When power is viewed as a ‘zero-sum’ in which the more power one has the less another has (it is not hard to see why the empowerment of women could be viewed as threatening) (Rowlands 1997, 9-11). Thus, the definition of power as ‘power over’¹ entails that when women gain power, it will be at an expense of men (Rowlands 1997, 11). However, when power is defined as ‘power to’², ‘power with’³ or ‘power from within’⁴ it creates new possibilities to perceive and apply women’s empowerment in a development setting. Hence power can manifest differently, an aspect to be aware of.

Rowlands defines empowerment to prevail when ‘women are able to maximise the opportunities available to them without constraints’ and importantly, empowerment ‘must also include the process that lead people to perceive themselves as able and entitled to make decisions’ (Rowlands 1997, 13-4).

3.2 Jo Rowlands model of empowerment

In order for me to be able to conduct research on young women’s empowerment, I need a model conceptualizing how to understand and identify aspects of empowerment within individuals. In a shortened and edited version of her PhD thesis *Questioning empowerment: working with women in Honduras*, Jo Rowlands presents an approach to conceive the idea of empowerment and how it is to be applied in field work in the context of development for women (Rowlands 1997, 129-30).

Rowlands presents three dimensions that empowerment operates: *the personal*, *relational* and *collective dimension* (Rowlands 1997, 15). The three dimensions represent the different contexts that the process of empowerment can be experienced by the individual; personally, in relationships and collectively (Rowlands 1997, 110).

1. The *personal dimension* is central to the ‘core’ of the empowerment process and entails elemental psychological and psycho-social processes and changes. Indicators are the development of *self-confidence*, *self-esteem*, *dignity* and *a sense of agency*; the possibility for a woman to interact with her surroundings and cause things to happen. Furthermore, *a sense of self within a wider context* is understood as a ‘core’ element and is crucial if a woman is going to be able to move out of the gender-assigned position that her specific context and culture has given her

¹ ‘Power over’: controlling power, which may be responded to with compliance, resistance (which weakens processes of victimization) or manipulation (Rowlands 1997, 13).

² ‘Power to’: generative or productive power (sometimes incorporating or manifesting as forms of resistance or manipulation) which creates new possibilities and actions without domination (Rowlands 1997, 13).

³ ‘Power with’: a sense of the whole being greater than the sum of the individuals, especially when a group tackles problems together (Rowlands 1997, 13).

⁴ ‘Power from within’: the spiritual strength and uniqueness that resides in each one of us and makes us truly human. Its basis is self-acceptance and self-respect which extend, in turn, to respect for and acceptance of others as equals (Rowlands 1997, 13).

(Rowlands 1997, 112-3). The process of empowerment is experienced by women individually, relating to her own conditions, history and actions. It is experienced as a feeling of development and personal change and manifested by a change of behavior (Rowlands 1997, 114).

2. *The relational dimension* comprise of established relationships between individuals. Empowerment within relationships contain changes of expectations and behaviors of the individual as well as by close friends, family members and partners and marks great impact in the women's lives (Rowlands 1997, 124-5). It is established by virtue of the individual's self-confidence, 'sense of agency' and self-esteem and is dependent on women's development of an ability to *get support, communicate, negotiate* and *defend her rights*, representing 'core' elements within this dimension (Rowlands 1997, 119). In contrast to a group setting, the individual is all by herself to use her resources to establish relationships with other people. Relationships can mean caring and support, but also struggle and disempowerment.

3. *The collective dimension* emphasize individuals coming together to achieve a more comprehensive impact than one could fulfil alone. The process of collective empowerment is built on pre-existing experiences of individuals of the group, in their participation in other collective activities or groups (Rowlands 1997, 115). Elements of empowerment experienced by individuals are discovered by virtue of them as members of the group. Core elements of this dimension are *a sense of identity, self-organization and management, a sense of collective agency* and *dignity as a team* (Rowlands 1997, 116). The collective dimension is closely connected to the personal dimension, as it is very hard for a group to achieve progress effectively without a certain degree of personal empowerment within the individual (Rowlands 1997, 115).

Every dimension consists of 'core elements' of the empowerment process. The encouragement and development of these factors changes the women's self-perception, leading to a transformation of the individual or group that is the 'key' that open 'locks' on doors of empowerment (Rowlands 1997, 111; 130). In addition, the dimensions consist of circumstances that appear to encourage or inhibit the process of empowerment (Rowlands 1997, 111).

Lastly, a great emphasize should be put on women's empowerment as context specific. Generalizations, is only to be drawn cautiously, given the importance that any organization, project or programme will have its unique circumstances and operate in a specific cultural environment (Rowlands 1997, 128). Thus, this paper is limited to experiences gained of young women attending the ITFC academy in Dixcove, without any ambitions of generalizability to other cases.

4 Background

4.1 Ghana and ICT

Ghana is one of the more democratically stable and developed countries in Africa despite its relatively small population and geographical size (31,3 million people in an area of 227,540 square kilometers) (Worldometer 2020). The official language is English however the population speak a variety of dialects stemming from the widely spoken indigenous language Akan (Twi) (Rutgers 2020). The country is located on the coast of the Gulf of Guinea in the western part of Africa. Borders in the north to Burkina Faso, Togo in the east, the Atlantic Ocean in the south and to Côte d'Ivoire in the west. It was the first in Africa south of the Sahara to become independent from British colonial rule on March 6, 1957 and since the 1990s the country's state of affairs has shown improvements from its history of corruption and military rule, hindering economic and political development of the country (SAHO 2019; Britannica 2020).

With regards to ICTs, through the Ministry of Communications, the government of Ghana plays an important role in developing an ICT infrastructure to support the digitalization of the country (NCA 2018). Ghana was one of the first African countries to liberalize its telecommunications in 1994 and is ranked one of the most technologically advanced countries in Africa (Brockton 2018). As the ICT sector is amongst the most active in the economy, it is a fast-growing market that the young generation are enthusiastic about (Oxford Business Group 2019).

However, only about 39% of the population in Ghana partake in internet usage to contrast to Sweden's 94% (The World Bank 2019). Barriers to the population accessing the internet can be understood by high costs of data and limited access to technological resources (Brockton 2018). Only 3% of Ghanaian households have internet connectivity and according to the 2012 RIA Ghana ICT Survey, only 8,5% of Ghanaians have a computer at home (Frempong 2012, 22).

With 67% of all internet use adopted through cellular devices, the experienced growth in digital technology in Ghana is predominantly limited to mobile phones (Brockton 2018). When reviewing the average wage for a Ghanaian at 8 GHS a day, it is understandable that access to computers and the internet is unaffordable, the cost of a laptop or desktop computer ranging from 700 to 1500 GHS in comparison to mobile phones costing 20 to 1000 GHS. Additionally, the price of 1 Gigabyte (GB) through either of the two main data distributors MTN or Vodafone is set at a price of roughly 5 GHS (MTN 2020; Vodafone 2020). Furthermore, The World Wide Web Foundation's Women's Rights Online Report (2020, 6) enhances

that digital literacy is the biggest barrier to internet use. Impacted by a lack of access to education and technologies, income inequalities and cultural norms, discouraging women and girls from using ICTs. In Ghana the digital gender gap in internet access is 5.8% and the access to affordable internet is yet to be developed for the many individuals to fully participate in the benefits offered through ICTs (Brockton 2018; World Wide Web Foundation 2020, 4)

4.2 Dixcove

The coastal fishing village Dixcove is located in the Ahanta West district in the south of the western region of Ghana (Wikipedia 2020). It has a population of approximately 5000 people and is distanced 35 km west of the regional capital and largest city Sekondi-Takoradi with a population of 946,000 people (Macrotrends 2020). The majority of villagers in Dixcove perceive themselves as Ahanta (NewsGhana 2017; Government School Teacher & Relative to the Palace). One of numerous subgroups of the Akan people; predominantly living in the southern regions of Ghana and Ivory Coast (Wikipedia 2020). Ahanta's share commonality by language, culture and cuisine and differentiate from another dominant Akan subgroup of southwest Ghana named Nzema (Wikipedia 2020). Furthermore, the dominant language spoken in Dixcove is Ahanta, while majority of the population are bilingual in Fante and understands Twi (Wikipedia 2020; Government School Teacher & Relative to the Palace).

Life in the village is very different from life in town or in the cities. Dixcove has no banking facilities, the ones closest by are in Agona or 35 kilometers west in Sekondi-Takoradi, making it hard for startup businesses. The village has one water supply in the form of a well to supply all villagers with water. However, the water might be dried out or dirty leaving the people to spend their few Ghanaian Cedi⁵ (GHS) on buying water. The sea is rich of fish and composes the major generator of income for villagers. The main profession being fishing and fish moldering, the fishermen may go fishing 3 or 4 days a week when the trade is going well.

4.2.1 Women in Dixcove

The division of labor between sexes is highly segregated with majority of women working as fish mongers or selling food, beverages and fruits in the streets of the village. Women will cook food to sell such as cassava, fufu, beans and rice, that they will be able to exchange for a few GHS. Furthermore, there is little employment for young women and income is mostly based in the house.

⁵ Ghanaian cedi is the currency used in Ghana. One Ghanaian cedi equals 0,14 Euro and is divided into 100 pesewas (Xe 2020).

A typical day for a young woman in Dixcove starts at 05.00 AM. After waking up the young women performs house chores such as sweep/clean the house and wash clothes for their family. Afterwards they prepare food and they might leave to the seashore to search for fish to buy to use for cooking or make a profit in the village by hawking⁶ around. The fish (mostly tuna) is bought by fishermen on credit for 30 GHS a piece for the buyer to give back the day after. The system of trade is founded upon people knowing each other, hence if someone don't bring the money the day after they will not be able to buy fish the next time. If a buyer has the money, they will pay 80 GHS, since they are good for it. Sometimes if the young women bought fish, they would have to cut the fish into smaller pieces and smoke it. In the morning the next day, they sell the fish or cook food to sell (Secretary to the Chief of Upper Dixcove).

Frequently, the mother will go to the market in Agona to leave the girl child with responsibilities and household tasks to fulfil. The mother may go three days a week to the market in Agona (depending on the demand in the village) to buy ingredients, and to look for something that can benefit their family. Regularly the mother leaves all house chores and preparing of food to their daughters. Thus, there is a difference between responsibilities of the boy child and the girl child where normally the only house chores the boy performs is to help go and fetch water and occasionally clean his own clothes (Secretary to the Chief of Upper Dixcove).

Families in Dixcove generally have five children. Moreover, in some families the father and mother may stay in the new site, referring to accommodational parts of the village, and the children stay separately outside or with friends. The parents not actually knowing when their children wake up or go to sleep (Secretary to the Chief of Upper Dixcove).

4.2.2 ITFC

The non-profit independent NGO ITFC operates in the two villages Busua and Dixcove in the south of Ghana's western region. The organization was founded 2015 by Torsten Kjellgren, inspired by his previous development work in the country. It is led by a board in Sweden and all daily operation in Ghana is accomplished by employees hired locally. The organization's administrative maintenance is minimized to maximize the value of every donation to invest in the children attending an ICT academy programme in the two villages. For each donation, 97% is attributed to the operation in Ghana, the remaining 3% is for administrative maintenance (IT for Children 2020).

ITFC is open free of charge and provides access to computers and the internet to all young individuals in the villages Dixcove and Busua in Ghana. The organization provides free ICT education from primary school level three up till secondary high school, targeting the young individuals based on their current knowledge in IT. The academic curriculum that IT-teachers follow are divided in

⁶ 'Hawking' is referred to the act of walking around carrying ingredients, beverages, fish or food to sell in the village or neighboring villages (Secretary to the Chief of Upper Dixcove).

four levels: basic, mid, advanced 1 and advanced 2. Each level contains particular things to learn in ICT that the teacher needs to cover. Basic level teaches how to handle the mouse, type on keyboard and create a folder. Mid-level teaches the Microsoft Office package (Word, Excel, Powerpoint), how to create and use email, search information on Google efficiently through keywords and basic website designing through Google Sites and WIX. Advanced 1 teaches basic Excel, computer programming through the platform Scratch, HTML and CSS. Advanced 2 teaches how to write programming in Python. Additionally, aside open access to computers and the internet, the organization provides a free nutrition programme to all students that consists of a fruit snack (banana and groundnut) three days a week and lunch (beans and gari) two days a week.

In order to discover and analyze young women's empowerment processes. I have decided to look at one of two academies run by the NGO ITFC. The academy in the village Dixcove in the south of the western region of Ghana was established in 2018 and run two classes of ICT with a total of 36 female students and 52 male students. For the purpose of my field study, the 12 young women's 'core' elements of empowerment are identified and related to access to computers and the internet. An additional analysis concerns identifying external factors that inhibit and encourage young women's empowerment processes in the ITFC academy in Dixcove, Ghana.

5 Analysis

5.1 Analysis of empowerment within young women

5.1.1 Core elements in the personal dimension

The 12 respondents attend the ITFC academy in Dixcove since its start in 2018. The young women showed an overall high developed level of empowerment within the personal dimension according to Jo Rowlands 'core' elements of empowerment and it came clear in their answers that the level of *self-confidence* they had developed is enhanced in an ICT domain and connected to when they can provide knowledge in ICT:

Yeah. Because before when you ask me anything about IT, I would only know small but now if you ask me many things about ICT I will show how to do. I am so confident in ICT. When it comes to IT and learning. (Interviewee C, Scholarship)

When they were asked to reflect on how their self-confidence had changed from before their three-year attendance in the academy, all responded encouraging:

Before I came here, I could not access the computer, I was not. I did not know how to search on the computer or make my own search and there are other things I know how to do. When I, before I came here. I know that I have improved when it comes to technology, in the future to work with and make money is possible. (Interviewee D, Scholarship)

The young women continue by explaining in various ways how they were unfamiliar to ICT prior to ITFC's existence:

When IT for Children came, I ran and come here because we were not get access to internet and ICT tools so before we were not able to get access to using the computers and other things. But now I have get access to do all of these things. (Interviewee G, Scholarship)

For the majority it was the first time they encountered with a computer:

Before I don't know how to, even switch on the computer, but now I am able to. (Interviewee F)

The young women continue by explaining how their regular school used to teach out IT to them without having any computers:

Before the IT for Children came when a teacher teaches us the ICT everything, she draws it on the board, and she got it away. But when ICT came, we have had the access to come and whatever we learn in the classroom we come and practice it. (Interviewee G, Scholarship)

Another interviewee explained further:

We don't have any machine here to use, the only teacher will teach you with its mouth and we find difficult to understand. (Interviewee B)

Another indicator of a developed level of self-confidence was shown as an expanded thinking and possibilities created for them due to the skills that they had gained from computer access:

Everywhere I can type if you give me a laptop, everywhere I can type. (Interviewee F)

Others related to their level of self-confidence amongst other people in their everyday life:

Yeah, I feel self-confident. Maybe when I am in a crowd when people ask any question about the computer so, I feel confidence when I answer it. Because many don't know, and I know but I think it is not good to be proud of it, but it makes me confident. (Interviewee E, Scholarship)

When the young women were asked to reflect on aspects of their lives were, they do not feel self-confidence, many made references to their home:

Maybe. At home, sometimes I will have a lot of work at home, so it has not helped me a lot. I sell, every day when I am busy from school I go out and sell so it has not helped me to learn. (Interviewee G, Scholarship)

Most of the young women share great obligations towards their family and perform multiple tasks of housework during the week:

Like cooking, washing and fetching water too. (Interviewee C, Scholarship)

When framed with questions of their self-perception, the young women's *self-esteem* stood out to be low in the midst of indicators of empowerment in the personal dimension:

I feel bad about myself. Because... But I wanna ask, is it good to be proud of yourself? Some people always say that it is no good to be proud of yourself that is why. (Interviewee E, Scholarship)

Some found hard to answer to questions with regards to their own well-being without shifting focus to other individuals, while others indicated a non-interest to affiliate with feelings:

I don't feel anything. (Interviewee B)

To some extent the young women indicated to have developed a *sense of agency* through access to ICT, despite their young age. Identified more thoroughly by a capability to make independent decisions:

I feel happy. Because it makes me knew many things and also, I can make my decision online when I go. (Interviewee C, Scholarship)

In many cases their decision-making through ICT was contrasted to their situation at home:

When I was at home. I can't visit my friends; I can only be in my room. Because always we are not outside, we are inside. But when we come to IT, we can search many ways and learn many ways. (Interviewee C, Scholarship)

The young women were happy to tell me about the computer skills they had gained:

I have learned many. I have learned how to create a website, how to use the word, how to insert pictures, how to use excel formulate, how to use PowerPoint. Yeah, I have learned many of ICT. (Interviewee E, Scholarship)

As well as use of the internet:

Internet has helped me because I don't know I was not having a google account, g-mail account so I don't know how to browse or chat with someone. So, with the help of IT I know how to chat with someone, video-call. Now I can create my g-mail account and do what I want. (Interviewee A, Scholarship)

Another indicator of a sense of agency is the ability to make things happen and be allowed to be creative whereas one interviewee enhanced websites:

When we were doing the websites at first, I was not able to but then I was able to type my own stories and post it on my website for others to view. (Interviewee D, Scholarship)

To identify the young women's sense of *dignity*, I posed questions of if and how they found people in their surroundings to show them respect:

Yes. Because I am able to go to school, they will listen to me because they know that I know IT. They will listen to me because they know that what I will tell them will help them. (Interviewee D, Scholarship)

Their answers varied in uplifting manner however, showed notice of great awareness of *a sense of self within a wider context*:

Sometimes and sometimes no. Because here they don't care about other people, they don't make friends when you say something small, they will spread it and then you are, people will point at you. It is no good. I don't know. (Interviewee B)

When questioned more specifically what encouraged their level of a self within a wider context, the majority referred to how they had developed skills to search on the internet:

The internet. Because it has helped me learn some basic things around the world. (Interviewee G, Scholarship)

Thereto I asked how they show respect to people in their surrounding and what their needs are amongst people to gain an understanding of their perception of other people:

Yeah. Because there is time for everything and there is something that you yourself will not understand, you will need help from someone, so you have to. Associate yourself with someone so that one help you. (Interviewee A, Scholarship)

As an additional indicator of a developed empowerment in the personal dimension, the young women were asked to reflect and picture their lives in the upcoming ten years:

My hope I will be an important person. Because now I have learned the access to the internet how to learn life and not to do bad things. (Interviewee G, Scholarship)

The young women gave notice of promising futures and most idealized their future with a profession in ICT:

I think that maybe I will be in my office typing, doing posters for others. Doing any technology for others and I'll get more money. (Interviewee D, Scholarship)

Lastly, they were asked to reflect on what could hinder them from achieving the future ten years that they previously pictured. It became apparent that economic barriers greatly threaten the young women's aspirations in the future, the ones enrolled on a scholarship provided from the organization enhanced the financial aid it gives them:

Lack of education. Not even my brothers and if I would not come to IT, I know that it would hinder my dreams and because of the scholarship they gave me. Without the scholarship I don't think I would be able to go to the secondary school now. (Interviewee D, Scholarship)

5.1.2 Core elements in relationships

The young women showed to have made changes in their relationships to family and friends. In most cases, they told of how they developed a role to *communicate* information to family members and how this made them feel important:

Because ICT has given me more confidence, when I am making my own decisions with IT, I get more confidence in my decisions that I make, because of the IT, so when I am at home, I am making the decisions about technology and that has changed. (Interviewee D, Scholarship)

Not only are they supposedly given the trust to make decisions of IT, they are also pushed to find out new things:

Okay like I am in the house and if my mother, if she is like she is having a problem and she don't know how to solve the problem like sick and If you are sick and if you go to google it will bring you solution of how you can go about it. Let's say disease like malaria, how to protect yourself, how to be able know that you have this disease, where to go in order to be cured. So, it can help us searching for this and also how to make food yeah. When we go, we want to bake something like bread, if you search it will give you all those things so that you too can do it, it will also gain you something. (Interviewee A, Scholarship)

Another interviewee continues by explaining how the computer knowledge she develops is transferred to her family members:

Through this ICT I can teach my sisters, I mean my siblings yeah, I teach them so they will know as well. (Interviewee F)

The interviewees answers showed a tendency of the young women carrying an emissary role within the family due to their knowledge in ICT. One interviewee tells me how people sometimes approach her in the village. To ask for advice on particular issues and search for information on the internet:

Most people they ask. One lady ask me how to do Bisab⁷ and I told her that as for me I don't know how to do it so when I come to IT, I will search the ingredients and come and tell. I did that to her and she did it cooked it. (Interviewee A, Scholarship)

When asked if the young women experienced to be able to *get support* from other people, answers varied:

Sometimes. They don't hear me but sometimes they help me too. Sometimes if you told someone to help you financially, they would tell you they don't have money. But sometimes you will find someone that will give back and support your financial problem. (Interviewee C, Scholarship)

Other people were more considerate and careful in their relations to people other than their family:

Yeah, I don't get anything from other people too because sometimes they do bad things, when we tell them to stop, they will tell you that wait and see. For me I don't, I don't observe any type of matter with these things. (Interviewee B)

Some of the young women were particularly aware of their gained knowledge distinct from the majority of people living in Dixcove. I questioned them on how their gained skills could be used by them in the future in order to understand their level of being able to *Negotiate*:

I mean to answer that if you teach someone about word and even many people create a website about it how to teach you word and excel but you already know it. So maybe when you get a job it will make us, us easy. We don't need any teacher or student to come and teach us what we want to know about word and excel so they must come to the IT, it helps a lot. (Interviewee E, Scholarship)

A young woman's ability to *defend her rights* is noticed more clearly in situations where she stands up for herself. It was one of the more trickier 'core' elements of empowerment to identify and was barely noticed throughout the interviews except in few occasions:

*Yes. Because I myself I respect people and I respect anyone even if you are younger or older, I respect you. People like those people over there they call me sister, sister me too I don't like this like call me (**name**) if they respect me. (Interviewee A, Scholarship)*

5.1.3 Core elements in the collective dimension

The young women's collective empowerment is built on pre-existing experiences of individuals of the group, in their participation in other collective activities or groups. The young women showed to feel empowerment in the collective dimension in different ways, however they all shared the commonality of going to church regularly:

Tuesdays, Thursdays, Saturdays and Sundays. Sometimes they just meet to improve somethings and they talk to us, the leaders and we pray. Because how the world Is doing, some young women here they even got pregnant before they enter secondary school and they are not able to go to school because they got pregnant. They advise us on that, that we should not have intercourse and sex. We should go higher and achieve more. (Interviewee D, Scholarship)

⁷ Bisab also called Sobolo is a drink made from Hibiscus flower, very common in Ghana (Secretary to the Chief of Upper Dixcove).

To understand the young women's *sense of identity* it is of interest to identify how they describe themselves to stand out with regards to family and friends:

ICT made me change because I have the access to internet, because my parents they not have IT. But when we are in school and we came to IT lab then we did not know how to search information and what I have known they have not known so I have confidence. (Interviewee G, Scholarship)

Many of the young women enhanced that ITFC had given their family benefits due to that they no longer have to spend as much money on them to support their everyday life:

My family, okay it benefits them a lot. Maybe the scholarship and it make them don't spend more money on me cause I always pay my fees so my parent don't have to bother about my fees and everything. Okay the family don't have bother anything it has benefit them more because I have the scholarship and they know I am the intelligent girl in the family. (Interviewee E, Scholarship)

Moreover, a pattern revealed in the interviewees answers was that they did not feel part of a group in general:

There are no groups here. I don't feel part of a group. (Interviewee B)

Furthermore:

I don't have any group (Interviewee D, Scholarship)

This could be viewed as that the young women have developed a level of independency. However, it can also be interpreted as that they feel reluctant or suspicious to the idea of groups in the first place:

No. Sometimes in the group. A little mistake, a little mistake can spill your whole life. So maybe in the group and someone, someone get to know about your family issues and the person will start telling everyone even your best friend will betray, even just in general a friend they start. So, in groups it is not good, I don't feel good things in group. (Interviewee E, Scholarship)

When asked about how the internet made them feel their answers indicated that it made them feel part of an entity bigger than themselves:

When we are using the internet, it makes us know more, when we are opening the word explorer, no the internet explorer, you like you see many news about the world. Updated one, latest one, trending one, you know more about the world. (Interviewee E, Scholarship)

To identify the 'core' element *Self-organization and management*, the young women were questioned if they make their own way to execute tasks in a greater setting, something that was brought forth by one interviewee in particular:

Yes. When I'm learning in course without the teacher and without the computer it may be that I don't understand this word, I will not be comfortable, and I will have to ask someone, and that person don't know. So, I have to search, so computer make me comfortable. When I'm learning ICT and I don't understand I can search on the computer and go. And without computer I will have to go to someone older than me and that person too don't know so it will be like no one know and that will continue. So, without computer I can't search and do whatever I like. (Interviewee A, Scholarship)

The *sense of collective agency* is understood as how the young women experience the collective group in ITFC to support, help and aid each other to fulfil a greater achievement than one could perform alone:

We can help each other through junior and google, google over there. Like you send me a message that I tried I can't answer this question okay, send it to me and I write it and send message to that person. (Interviewee A, Scholarship)

The last indicator of empowerment consisted of the young women's feeling of *dignity as a team*. My interpretation of this 'core' element was to find out how the individuals related to a collective coherence with ITFC:

My hopes for the future, to help other children how Andrina and Torsten help us using the computers. I also like to help other children when I go maybe ten years' time, I also wanna brought ICT Lab for them. (Interviewee E, Scholarship)

As well as to try to bring forth how the NGO had impacted their view of and sense of collectivity:

I want to be an ICT teacher. Because I have learned more of ICT and now, I can always make my decision on ICT, learning other things and taking other things to become an ICT teacher. I want to help other people who are in need too so that they also benefit from ICT and also learn more. (Interviewee C, Scholarship)

Finally, the young women were asked to reflect on why they think females in comparison to males are less inclined to access and use ICTs:

Ah okay this story for instance, the girls do not get access to the learning we are going in the school but when the ICT lab came here, they have the access to come but some of them refuse to come. Because maybe when we dismiss from school some of them are going to serve things and do other jobs at home. (Interviewee G, Scholarship)

5.2 Analysis of inhibiting and encouraging factors

The analysis that follows concerns the external factors that inhibit and encourages the process of empowerment to take place within the young women attending the ITFC academy in Dixcove.

5.2.1 Aspects inhibiting the empowerment process

Even though access to computers and the internet provided by the academy in Dixcove is open free of charge to all youths, the NGO lacks the participation of young women:

Our biggest challenge is getting them to come, that is our biggest challenge. Because once they come, they are okay, but the biggest challenge is getting them to come. (Academic Manager)

The family's approval is enhanced as a major factor to the young women's attendance in the academy:

Mostly the parents. The parents they do not know computer. Because they don't have any friend with it or no one to know. I call one girl and ask her why she not come: "Hi my mother doesn't allow me to come, they don't allow me to come." Mother will say, why are you coming to IT for Children? So always she will be working hard, she doesn't sleep. The parents they don't know about it. (IT Teacher C)

Structural norms and inequitable division of house chores inhibit young women in the village from access to ICTs:

Like the females that we would wish that they are here, but they are not here what prevents them from coming to our academy has a lot of factors. Some of them are over bedded with house chores. A typical example is a girl, that would have to close from school probably go to the house she does the cooking, she does the cleaning, she fetches water and this is a community that you know you don't just have running water in your house. You have to and sometimes you will have to fetch water a couple of times before you fill let's say the drum in the house okay. They are sent on errands and all those things. All these things come together to take out their time that we would have been able to use for the after school programme, so that is one. (Academic Manager)

A greater burden of house chores is more likely to fall on young women in a typical household, while boys are encouraged to develop their personal skills:

Assuming we are in a house, a girl can sweep around in the compound, sweep the room, fetch water and help in the kitchen cooking. Boys like I said they don't have much chores so they always have time so if a person is really certain that he wants to go find life to pursue education to higher levels, the person would be sensible enough to take his books to learn because there are not much chores to be doing in the house. Others will also go around playing with friends, football and other things, hanging around. So, I think girls have much chores in comparison to boys. (IT Teacher & Administrator)

There is also a considerate lack of encouragement of young women in rural areas. Without the support from family or friends, there is little in Dixcove to guide women to pursue personal development or invest in a future of their own:

Most importantly I think women lack encouragement mostly in these areas. They don't see any reason why they should build up to make things happen, like make life easy in the next 5 years or 10 years to come. We were brought up with this mentality that the lady is for kitchen and then the guy is for work. That is back in the old days that is how things were. With rural areas it is still kind of the mentality. A girl or a lady feels like I don't get any encouragement to learn more, maybe if I do then fine if I don't then I will just move to a kitchen. Because at the end of the day I am going to marry and then taking care of the home, that is one thing that is making girls not to take education serious sometimes. (IT Teacher & Administrator)

Traditional dynamics and power relations within the family can serve as a major factor to inhibit young women from gaining interest and support to learn more and build a future for themselves. As many of the young women need to work to generate income and support their families financially, economic factors play a major part of the barriers to young women's empowerment. The young women in the village mostly help the fishermen by carrying fish that is brought on shore into town, or sell food and vegetables in the streets:

Some kids will close from school and will have to go to the seashore to help their father with the fish they brought onshore and then they would move them, carry them on their head to their house so they are kind of like transporter. So, they will transport the fish from the shore to their house, that is their job, that is what they are supposed to do every day or any time that they bring fish from the shore. So, she knows that once I am done with school that is what I am going to do so she wouldn't even want to come and spend time to learn anything because she might get beaten up If she doesn't do that in the house. Because they feel like that is what is bringing money into the family for you to take to school, so if you don't do that how are we going to get money to feed the family. Others too hawk around after school, they sell casava

or smoked fish or vegetables around, in case you want to prepare food and you don't have vegetables in the house. (IT Teacher & Administrator)

5.2.2 Aspects encouraging the empowerment process

It remains clear that ITFC is the only place to access computers in all of Dixcove:

For them coming here first of all it is the fact that they don't have it in their house. They have never seen one before and they don't have it in school, but they are learning about it. And the teachers do not actually draw on the board for them, they already sometimes they see some of them cartooned in books. They just want to have a feel of what computers are and what they do. So that is why most of the girls are coming and then also for some of them I think they feel proud to be able to hold the computer so that they can also talk about it like computer does this and I have used this before. (IT Teacher A)

To maintain a dialogue with the parents is enhanced as an important strategy to encourage the young women to attend the ITFC academy in Dixcove:

First of all, have a dialogue with the parents so that the parents are aware of what is going on. The parents will be the one encouraging them to come. So, I think a dialogue between us, and the family will be better specifically for the girls where we can have particular timetables as to when we are supposed to come and learn. Then when we are supposed to do some chores. Because we know we can't neglect all the chores, so far as we don't want to neglect learning ICT too, we need to balance it. But sitting down with the parent is one important thing and then secondly encouragement. There was one time one woman came here she was like – "My kid says he wants to be a computer scientist. I don't know what that is, all I know is doctor and nurse. What is computer scientist?" - So, I explained everything to the woman, and she was like – "Oh wow what a noble job. Then I will encourage her to come always because I didn't know anything about the computer, I thought they were just coming to play games." No, we are not playing games here we are seriously teaching them how to operate machines. How to use machines to create some things. So, first of all I think we need to let the parents be aware for the parents encourage the kids to come. Then also us encouraging the kids with the benefits in ICT that they can actually get if they take it seriously. That is the best two things we need to do. (IT Teacher A)

A methodology used by ITFC is to issue scholarships to encourage young individuals to attend the academy regularly. The scholarship consists of a financial support to cover all school expenses (fees, books and school uniforms) as well as all medical charges if the youth get sick and needs to go to the hospital. Whatever the cost to treat the medical issue, the parents just bring the receipt and ITFC will reimburse the family's expenses for the medical treatment. Apart from the after-school snack three days a week and two days of lunch provided to all students attending the academy, the ones enrolled on a scholarship are given an additional three days of lunch during the week:

One of the reasons why we give these scholarships is that it is a way to stabilize some of the kids, the very good ones. Because then the conditions that we give to the parents are that the child will have to come to every class we organize. So, the parent has to agree to these things, you understand. We realize that the child has the potential and then we want to stabilize the child. So, we give that scholarship and we give all these conditions to the family so that they agree to it and the scholarship is worth issuing. So, once we give some of these things, we are able to stabilize these girls here and then based on that as and when they are coming, they have access to the internet they have been shown how to search for information on the internet. So, based on that and then coupled with their curiosity they are able to explore to learn more, read more and all those things and in a way builds them up. (Academic Manager)

A lot of emphasis is put on the importance to stabilize the young women. The *strategy* is to single out individuals, create the opportunity to regulate a routine for them to attend the academy with their family's consent. As well as to support and encourage their interest to invest in their future:

I think last year there was one particular time I was teaching them for one hour so teach them for 45 minutes and the next 15 minutes I showed them some of the innovative things people are creating like the apple glasses, google lens, the oculus VR and yeah those things and the new and latest inventions that people are creating in the western part of the world. They were like wow, so all these things from this. From learning ICT, they were like how you do this? They were always asking questions so I encourage them if you want to be a programmer the games, the applications that we use on the phone were all done with coding and you have to learn the basics of computing before you can do with coding and all of that. So, I think encouragement was one of the factors that we got these kids to be stable and I think that will also help to get more. (IT Teacher A)

The *activities* utilized by the organization can be understood to aim to support a sense of independency:

What we do is that we speak with young women because teenage pregnancy is very high in these areas. You can see a very young girl with two kids, thirteen years, fourteen years, fifteen years old girl with two kids. We speak with these girls and then try to bring their mind into education. They should have education perception, not always about involving yourself in sexual immoralities or sexual activities whatsoever and even if you want to how you can protect yourself from getting pregnant at this early stage. So sometimes and mostly it is how we encourage the students, how we speak with them, how we relate with them because in schools like in their schools you cannot move to a teacher and then sit with the person or you cannot even have friendly mutual relationships with the teacher. In their schools, were they go to school and learn other subjects it is not like that, they can't do that with the teachers. So, it is like you come strict, we teach you and if you misbehave, they whip you they cane you, yeah, they use cane's and other things. So, kids, it tears them away from getting close to you to speak to you. (IT Teacher & Administrator)

Especially the female employees at the facility in Dixcove serve as inspiring ideals for the young women:

Everything that we do, that is why we are particular of our female teachers, because for us they should be an inspiration to these girls. So, the likes of Theresa and Juliet for the younger ones, they inspire them because then you can say that look at young madame, you can be like her. These are the things that we try, and then the practice has always been that our female teachers get closer to these girls and try to encourage them. (Academic Manager)

Furthermore:

I believe and I think the teachers here, the female teachers too can be a factor. Theresa for example can be a factor. They will come and they will see a teacher teach ICT. Maybe they will like to come, and they will like to be free with especially the female teacher. Theresa might be a factor and my last reason be technology is taking over much of the world now, so I believe that they also want to do something for their life with the use of technology. (IT Teacher B)

6 Conclusion

This Minor Field Study aims to examine the empowerment of young women through access to ICTs in the village Dixcove in Ghana. The analysis of the ‘core’ elements of empowerment reveals that access to ICTs can provide great opportunities for young women. The interviewees’ stories suggest that the young women attending the ITFC academy in Dixcove have developed a level of empowerment, predominantly limited to personal empowerment. The results of the study indicate that the young women primarily have developed ‘core’ elements of empowerment of *self-confidence, a sense of agency, a sense of self within a wider context, communication with others, a sense of identity and self-organization and management*; through access to computers and the internet provided by ITFC.

The featured study furthermore addresses inhibiting and encouraging factors to young women developing ‘core’ elements of empowerment in Dixcove. Inhibiting factors consist of gender norms, a high burden of house chores, financial instabilities and a low sense of independency. Encouraging factors consist of support from family and friends to invest time, the scholarship provided by ITFC and the young women’s interest to learn more from ICTs.

Based on the findings of the featured study, a topic for further research is to discover how the inhibiting aspects to young women’s empowerment through access to ICTs can be reduced. To investigate how barriers to young women’s participation in ICTs, such as inequitable division of household chores, lack of support and low sense of independency, can be diminished to help close the digital gender divide.

It would also be interesting to follow up the young women in their processes of empowerment in years to come, to analyze empowerment under new circumstances.

References

- Batliwala, Srilatha. 1993. *Empowerment of Women in South Asia: Concepts and Practices*. New Delhi. Asian-South Pacific Bureau of Adult Education.
- Bourke, Brian. 2014. *Positionality: Reflecting on the Research Process*. The Qualitative Report. Volume 19. USA.
- Britannica. 2020. *Ghana*. <https://www.britannica.com/place/Ghana> (Retrieved: 2020-11-25).
- Brockton, Crystal. 2018. Survive and Thrive. *The Digital Divide in Ghana and Who's closing the Gap*. <https://surviveandthriveboston.com/index.php/the-digital-divide-in-ghana-and-whos-closing-the-gap/> (Retrieved: 2020-12-31).
- Christensson, Per. TechTerms. 2010. *ICT Definition*. <https://techterms.com/definition/ict> (Retrieved: 2020-11-12).
- Cornwall, Andrea. 2016. *Women's Empowerment: What Works?* Journal of International Development, vol. 28.
- Cornwall, Andrea & Edwards, Jenny. 2016. Introduction: Negotiating empowerment. In: *Connecting Perspectives on Women's Empowerment*. (Eds) Chopra, Deepta & Müller, Catherine. IDS Bulletin. Volume 47.
- Davaki, Konstantina. 2018. *The underlying causes of the digital gender gap and possible solutions for enhanced digital inclusion of women and girls*. Policy Department for Citizens' Rights and Constitutional Affairs. European parliament. Brussels.
- Esaiasson, Peter, Gilljam, Mikael, Oscarsson, Henrik, Towns, Ann, Wängnerup, Lena. 2017. *Metodpraktikan: Konsten att studera samhälle, individ och marknad*. 5. uppl. Stockholm: Wolters Kluwer.
- Frempong, Godfred. Research ICT Africa. 2012. *Understanding what is happening in ICT in Ghana*. <http://a4ai.org/wp-content/uploads/2014/03/Policy-Paper-4-Understanding-what-is-happening-in-ICT-in-Ghana.pdf> (Retrieved: 2021-01-02).
- Hafkin, Nancy & Odame, Helen Hambly. ResearchGate. 2002. *Gender, ICTs and Agriculture. A Situation Analysis for the 5th Consultative Expert Meeting of CTA's ICT Observatory meeting on Gender and Agriculture in the Information Society*.
- Harding, Sandra & Norberg, Kathryn. 2005. *New Feminist Approaches to Social Science Methodologies: An Introduction*. Chicago Journals. Signs, Vol. 30, No. 4.
- IT For Children. 2020. *Ger barn verktygen till en digital framtid*. <https://itforchildren.org/> (Retrieved: 2020-11-11).
- Kabeer, Naila. 2001. Resources, Agency, Achievements: Reflections on the measurement of Women's Empowerment. *Discussing Women's Empowerment: Theory and Practice*. Stockholm: Sida.

- Macrotrends. 2020. *Sekondi Takoradi, Ghana Metro Area Population 1950–2020*. <https://www.macrotrends.net/cities/21109/sekondi-takoradi/population> (Retrieved 2020-12-29).
- MTN. 2020. *Internet & connectivity*. <https://mtn.com.gh/service/turbonet/> (Retrieved 2020-12-31).
- Muturi, Nancy. ResearchGate. 2011. *Gender empowerment through ICT:s potential and challenges for women in the caribbean*.
- National Communications Authority (NCA). 2018. *Our contributions in 2018 towards Ghana's Digital Agenda*. <https://www.nca.org.gh/assets/Uploads/Key-NCA-Projects-2018.pdf> (Retrieved 2020-12-29).
- News Ghana. 2017. *The story of Ahanta Kingdom*. <https://newsghana.com.gh/the-story-of-ahanta-kingdom/> (Retrieved 2020-12-29).
- OECD. 2000. *Bridging the Digital Divide*. <https://www.oecd.org/site/schoolingfortomorrowknowledgebase/themes/ict/bridgingthedigitaldivide.htm> (Retrieved 2020-11-17).
- O'Rourke, Jennifer & Schachter, Linda. 1997. *CLOW's Janus Project: Promises and Prospects of the New Learning Technologies for Adult Learning Opportunities for Women*.
- Oxford Business Group. 2019. *ICT*. <https://oxfordbusinessgroup.com/ghana-2019/ict> (Retrieved 2020-12-29).
- PlanInternational. 2020. *Bridging the gender digital divide*. <https://plan-international.org/education/bridging-the-digital-divide> (Retrieved: 2020-11-17).
- Rowlands, Jo. 1997. *Questioning empowerment: working with women in Honduras*. Oxford: Oxfam.
- Rutgers. 2020. *Languages: Akan (Twi) at Rutgers*. <https://www.amesall.rutgers.edu/languages/128-akan-twi> (Retrieved: 2020-12-31).
- Scheyvens, Regina & Leslie, Helen. 2000. *GENDER, ETHICS AND EMPOWERMENT: DILEMMAS OF DEVELOPMENT FIELDWORK*. Women's Studies International Forum. Volume 23. USA.
- Shenoy, Sandyha. 2019. *8 Farm Women Empowerment through ICTs Integration*.
- SouthAfricanHistoryOnline (SAHO). *Gold Coast (Ghana) gains independence*. <https://www.sahistory.org.za/dated-event/gold-coast-ghana-gains-independence> (Retrieved: 2020-11-25).
- Sultana, Farhana. 2007. *Reflexivity, positionality and participatory ethics: Negotiating fieldwork dilemmas in international research*. ACME. Volume 6. London.
- Techopedia. 2020. *Information and Communications Technology (ICT)*. <https://www.techopedia.com/definition/24152/information-and-communications-technology-ict> (Retrieved: 2020-11-16).
- TechTerms. 2020. *ICT Definition*. <https://techterms.com/definition/ict> (Retrieved 2020-11-16).
- Teorell, Jan & Svensson, Torsten. 2007. *Att fråga och att svara: Samhällsvetenskaplig metod*. Stockholm: Liber.

- The World Bank. 2019. *Individuals using the internet (% of population) – Ghana, Sweden*.
https://data.worldbank.org/indicator/IT.NET.USER.ZS?name_desc=false&locations=GH-SE (Retrieved: 2021-01-01).
- Tickner, Judith Ann. 2005. *What is your research program? Some feminist answers to International Relations Methodological Questions*. *International Studies Quarterly*.
- United Nations. 2020. *Achieve gender equality and empower all women and girls*.
<https://sdgs.un.org/goals/goal5> (Retrieved: 2020-11-09).
- Vodafone. 2020. *Data Bundles*. <https://vodafone.com.gh/personal/mobile/bundle-offers/#data-bundles> (Retrieved: 2020-12-31).
- Wikipedia. 2020. *Akan people*. https://en.wikipedia.org/wiki/Akan_people (Retrieved 2020-12-29).
- Wikipedia. 2020. *Dixcove*. <https://en.wikipedia.org/wiki/Dixcove> (Retrieved 2020-12-29).
- Wikipedia. 2020. *Fante dialect*. https://en.wikipedia.org/wiki/Fante_dialect (Retrieved 2020-12-29).
- Wikipedia. 2020. *Nzema people*. https://en.wikipedia.org/wiki/Nzema_people (Retrieved 2020-12-29).
- Worldometer. 2020. *Ghana population (live)*.
<https://www.worldometers.info/world-population/ghana-population/>
 (Retrieved: 2020-11-25).
- Xe. 2020. *XE Currency Converter*.
<https://www.xe.com/currencyconverter/convert/?Amount=1&From=GHS&To=EUR> (Retrieved 2020-12-29).

Appendix 1: List of interviewees

Interviewee A, Scholarship (2020-12-01)

Interviewee B (2020-12-01)

Interviewee C, Scholarship (2020-12-02)

Interviewee D, Scholarship (2020-12-02)

Interviewee E, Scholarship (2020-12-03)

Interviewee F (2020-12-03)

Interviewee G, Scholarship (2020-12-03)

Interviewee H (2020-12-21)

Interviewee I (2020-12-21)

Interviewee J (2020-12-21)

Interviewee K (2020-12-21)

Interviewee L (2020-12-21)

Academic Manager (2020-12-09)

IT Teacher & Administrator (2020-12-11)

Government School Teacher & Relative to the Palace (2020-12-14)

Secretary to the Chief of Upper Dixcove (2020-12-21)

IT Teacher A (2020-12-21)

IT Teacher B (2020-12-22)

IT Teacher C (2020-12-22)

Appendix 2: Interview guide 1

Warm up

- What is your name?
- What is the favorite thing that you like to do?
- How old are you?

Personal dimension

- How do you describe yourself?
- How do you feel about yourself? Why?
- Do you feel self-confident? When? Where? Why?
- What helps your self-confidence?
- What does not help your self-confidence?
- Are you able to make a change? When? Where? Why?
- Are you able to make your own decisions? When? Where? Why?
- How do you picture your life in the future 10 years?
- What could stop you from that future?

Relational dimension

- Do you get support from other people? How?
- Do you feel that other people listen to you when you have something to say? Why?
- Can you express your ideas and opinions to other people? Why?

Collective dimension

- Do you feel part of any group? When? How do you describe the group/s?
- How do you feel when you are part of a group? Why?
- Do other people respect you? Why?
- Are you a member of a bigger group, association, organization or club? Why?
- Do you go to church? How many times a week? Why?

ICT

- What opportunities does your computer knowledge give you?
- What opportunities does the internet give you?
- In what ways does your computer knowledge benefit you?
- In what ways does the internet benefit you?
- In what ways does your IT knowledge benefit your family?
- Does your computer knowledge make you feel self-confident? Why?
- Does the internet make you feel self-confident? Why?
- Does your computer knowledge make you feel that you can make a change? Why?
- Does the internet make you feel that you can make a change? Why?
- Do you get support from other people to access ICT? How?
- Why do you think there are fewer girls than boys accessing ICT?
- What opportunities does IT For Children give you?
- How would you describe differences of before you attended IT For Children and now? What have you learned?

Appendix 3: Interview guide 2

Warm up

- What is your name?
- For how long have you been working at IT for Children?
- What is your understanding of women's empowerment?

Inhibiting and encouraging factors

- What inhibits the young women's empowerment in the IT for Children academy?
- What encourages the young women's empowerment in the IT for Children academy?
- What can be improved to encourage the empowerment of the young women in the IT for Children academy?
- What activities and methodologies are needed to encourage the empowerment of the young women?
- What existing or new structures are needed?
- What support can make a difference for the young women? From whom can that support or encouragement come from?
- What can get in the way of support that can make a difference? How can that be minimized?
- How can you handle and reduce the issues that hinder the young women's empowerment?
- Are there any internal power dynamics within the group in the IT for Children academy?
- What changes can be expected in IT for Children?