An Integral Approach to Health

Perspectives on Health from Mayan-Tz'utujil Women in Lake Atitlán, Guatemala

A Photovoice Study

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Abstract

Background: Health is a complex issue and can be approached from varying perspectives, from a technology-driven biomedical approach to a more intricate understanding of health as a result of social surroundings. In Guatemala, indigenous groups are experiencing poor health compared to that of non-indigenous people. In a world of continually shifting values and worldviews, it is essential to listen to indigenous women and their voices. Indigenous peoples' perspectives are often neglected, and therefore we lack a holistic understanding of the globalised world.

Research objective: The overall objective of this study was to explore how indigenous Tz'utujil women define health and what enables them to experience good health. The Integral theory has been utilised to conceptualise and explore their perspectives.

Research methods: In order to foster the participants' engagement, the study has employed the participatory research method "Photovoice", combined with individual interviews.

Findings: This study found that the Tz'utujil are adapting to changes brought by post-colonialism and globalisation, while at the same time being responsible for their family's health. They experience health through a range of influences, such as being in nature, spending time with family, and gaining new knowledge from institutions like Vision Guatemala. Their definitions of health can be presented through the four dimensions of the Integral theory.

Conclusion: Complementary perspectives, such as those from the participants that are influenced by their values, beliefs, practices and behaviours, community beliefs, and social interactions and perspectives from the support from health service systems, must be comprehensively considered in order to get a holistic understanding of health. By exploring the different connections between these components, we develop a more complete picture of health and consequently we better understand how health promotion must precede.

Key words: Indigenous health, Integral theory, Tz'utijul, Guatemala

Abbreviations

FGC – Female Genital Cutting

IOS - Integral Operating System

NGO – Non-Governmental Organisation

PAHO – Pan American Health Organisation

PAR - Participatory Action Research

PNMPTA - Programa Nacional de Medicina Popular Tradicional y Alternativa

UNDESA – United Nations Department of Economic and Social Affairs

UNDP - United Nations Development Programme

VG – Vision Guatemala

WHO – World Health Organisation

1. Introduction

In an age of increasing globalisation and complexity, there is a growing consensus that approaches to global development are not effectively managing complex dynamics of social, economic, and environmental changes. In the post-colonial era, indigenous communities are still coping with the consequences of an elongated period of oppression and are in the midst of changing their narrative as a result of conflicting belief systems. Relative to non-indigenous groups, indigenous peoples experience the most unfavourable conditions in terms of poverty, disease, and poor health (Mitrou et al., 2014). There are as many as 400 million indigenous people in the world who, collectively, represent a substantial part of the world's traditional knowledge and cultural diversity (United Nations Department of Economic and Social Affairs (UNDESA), 2009). However, much of the academic literature has failed to recognise indigenous belief systems, cultures, and worldviews. It can be argued that the multi-cultural influences and increasing globalisation experienced by the indigenous peoples make it evermore necessary to explore and understand their perspectives. This could be said of their perspectives on any aspect of development but is especially relevant when looking at health, as they might be able to offer insights that have been neglected by Western biomedical research.

Socio-ecological perspectives are central in health promotion because they recognise the importance of including the interrelationships between varying determinants of health (Pierce & Kealy, 2015). When conducting research within the field of health promotion, it is essential to take a bottom-up approach, in addition to top-down strategies. In the literature, this has been referred to as the "nutcracker" effect (Baum, 2007). Indigenous health is complex, and it seems necessary to go beyond reductionist tendencies to move towards more holistic and integrated perspectives for looking at health (Kirmayer & Brass, 2016). In a world of shifting values and constant change, it seems essential to contribute to a greater diversification of voices. In doing so, one might get a more comprehensive understanding of the ever changing and globalising world.

Guatemala is a Central American country and its health statistics are among the worst in the Latin American region (Pan American Health Organisation (PAHO), 2017). People are either indigenous Maya or *Ladinos* - people of mixed Hispanic and Mayan descent. Over half of the

Guatemalan population lives in poverty (United Nations Development Programme (UNDP), 2014). Indigenous Mayans are the most disadvantaged, and make up approximately 45% of the country‘s 14 million inhabitants (World Bank, 2009). Of the 22 states in the country, Sololá is one of the poorest. As many as 90 % of the state’s inhabitants live below the poverty line, and most of the state’s population is Maya. Guatemala is also a post-conflict society and has experienced years of repression and political violence. In 1958, a long and devastating civil war began that brought massive devastation, especially to the indigenous populations (Flores, Ruando & Phé Funchal, 2009). More than 200 000 people lost their lives and most of the victims were indigenous. This war is a symbol of how indigenous Mayans have been and continue to be historically oppressed by ladino-led government and military.

After the Peace Accords were signed in 1996 and the civil war ended, Guatemala experienced a rapidly growing number of emerging Non-Governmental Organisations (NGOs) working to help improve the conditions for indigenous peoples. It can be said that small NGOs represent the ‘face of development’, at least for most of Guatemala’s rural area (Rohloff, Diaz & Dasgupta, 2011). Vision Guatemala (VG) is a NGO that works with the empowerment of indigenous women, children, and youth in communities around Lake Atitlan. The lake is part of the Sololá state, where the majority of the population are indigenous. In the past year, the organisation has attempted to create awareness about health and to demonstrate how the community members have an impact on their own wellbeing. As part of their community health strategies, the organisation has developed initiatives such as informative workshops on different health subjects and educational and participatory activities with the community members.

VG works with the Tz’utujil community in a small village around the lake called San Pedro La Laguna. It is a small but vibrant village. Although it consists primarily of local indigenous Tz’utujil community members, there is now a constant flux of backpackers, tourists, and expats coming to the area. This flow of outsiders started decades ago. However, it has accelerated significantly in recent years, which has resulted in encounters with multicultural influences within an increasingly more globalised community.

1. 1 Problem statement

Indigenous peoples are often marginalised, and research has rarely examined indigenous perspectives through their own voices. Many scholars have recognised the need for a new

scientific discipline; an integral approach that can take on multiple angles of the economic, political, social, cultural, and environmental challenges that face the world (Lundy, 2010). The main argument of this criticism is that present approaches to health lack an understanding of our capacity to address the subjective individual and collective influences that shape health (Hanlon, Charlisle, Reilly, Lyon & Hannah, 2010). That is, we need to understand how individual values and motivation connect with the larger cultural landscape and the systems around us, and how health is encompassed within this. As Lake Atitlan is experiencing the effects of globalisation and with the influx of new technologies, it is becoming increasingly relevant to investigate the indigenous perspectives on health.

In the field of global development, it seems likely that the vast and complex global challenges call for an equally intricate response. This study employs 'Integral theory' to explore the complex ways in which we can address issues surrounding indigenous health. This is a relatively new framework for exploring perspectives on health, and little research has been done.

2. Literature review

In searching for and collecting relevant literature, mostly peer-reviewed articles and empirical articles in English language were found and used. Two Guatemalan reports in Spanish have been used. Studies were gathered through digital databases such as Oria, Web of Science, and Google Scholar. A combination of words such as 'indigenous', 'western', 'perspective', 'Guatemala', 'health' and 'health system' have been used in order to find articles.

Health promotion seeks to address complex problems and to confront multiple challenges in relation to human health. One central aim for health promotion is to avoid narrow and partial analyses of health problems. An important characteristic it that it concerns holism -- a broad conceptualisation of the determinants of health, as well as participation (Green, Tones, Cross & Woodall, 2015). The Ottawa Charter (WHO, 1986) is the founding document for these principles and endeavours of health promotion, and it has been a key contribution to global health. It explicitly emphasises the empowerment of communities with the inclusion of economic and social determinants of health. However, scholars have critically analysed the Charter and argue that it strongly reflects a Western worldview (McPhail-Bell, Fredericks & Brough, 2013). This is thought to be problematic as it may silence the voices of the indigenous and those living in developing countries.

From a Western medical perspective, health strategies are almost exclusively based on biomedical and 'scientific' discipline. Strategies are typically concerned with utilising technical knowledge in terms of improving structures, economics, social policies, and organisations (Hanlon et al., 2010). Within the structures of the biomedical approach, 'health-related matters are routinely objectified as technical problems to be solved through the application of technology and the conduct of science' (Lock & Nguyen, 2010, pg. 18). Significant attention is thus given to the results of empirical and objective study of the physical body. Such an orientation – one that gathers data from a neo-colonial and Western worldview -- is more likely to misinterpret data and fail to recognise concepts central to indigenous perspectives such as spirituality, family, and humility (Getty, 2010). Rather than focusing on individuals, it is argued that indigenous peoples give importance to the collective domain and communal solidarity. It concerns holism, balance, and harmony (Bear, 2000). Rather than focusing solely on the biological individual, indigenous medicine considers the individual as part of a social, cultural, spiritual and natural environment (Programa Nacional de Medicina Popular Tradicional y Alternativa (PNMPTA), 2016). This worldview is demonstrated by the traditional spiritual healers that many indigenous people are likely to seek advice from and who are perceived by many Westerners to be lacking any empirical and scientific basis and are thus dismissed (G.H Smith, 2000 as cited in Getty, 2010). In Guatemala, indigenous systems exist parallel to biomedical systems, and this has created a dual model in which both are used (PNMPTA, 2016).

In the academic literature, it seems like Western approaches to health and development have been applied the most. This is greatly illustrated by a study with school-age children in Guatemala that suggested using zinc as a treatment for mental disorders like depression and anxiety (DiGirolamo et al., 2010). This example demonstrates that the biomedical and scientific approach to health is not limited to the treatment of physical illnesses, but that it extends to issues of mental health and psychological wellbeing. Another example of Western academic approaches to indigenous health in Guatemala is one study that determined diabetes-related healthcare needs (Chary, Greiner, Bowers, & Rohloff, 2012). The study focused on the lack of biomedical knowledge and individual values rather than including the relationship between indigenous cultural beliefs and practices.

One attempt to avoid narrow medical focus is the rights-based approach to health. Such an approach shifts attention from biomedical determinants to power relations (Yamin, 2002) Health can thus be tackled by looking at the interactions between different groups and their

social relationships, and the right to health can empower people to guide the course of their own lives. Although powerful in addressing health inequalities, health as a human right is dependent on a series of legal mechanisms at local, national, and international levels in order for rights to be realised (London, 2008). Hence, the implementation of such an approach can be challenging as it is dependent on legal avenues that are often inaccessible to indigenous communities in order to drive international standards of health forward (Ayala & Meier, 2017).

There is a lack of literature on indigenous women's views on health that employs an integral approach, as well as participatory research methods. One participatory Photovoice study on indigenous health in rural areas of Guatemalan has been conducted, however, the study explored the views of Mayan traditional midwives rather than the general indigenous population (Cooper & Yarbrough, 2010). Another study has particularly examined the indigenous Tz'utujil women and their perspectives on health (Giralt, 2012). However, investigations were made regarding views on health related to causes of disease, rather than factors that promote their health and wellbeing. Furthermore, the results were obtained through observation and interviews and did not employ participatory research methods.

These articles highlight that studies on indigenous health focus on healthy behaviours, physical aspects of health, and health care systems, but fail to examine the role of individual and collective values, attitudes, and beliefs and how they influence healthy behaviour and health service systems. While many studies may explore one area of health, very few studies take on an integral approach that includes many perspectives simultaneously. Lundy (2010) has been at the forefront promoting the implementation of such a framework when looking at health issues. She proposes that an integral approach should become the new paradigm to guide health promotion. An integral approach to health means that human experience is best understood as the product of interactions with interior and exterior dimensions of being (Wilber, 2006). Little attention has been given to the domain of the mind: of beliefs, values, norms, self-expression, culture, and ideology.

Such a holistic approach attempts to address multiple world perspectives, rather than focus on specific systems (Akiyama et al., 2010). Scholars are concerned that research with indigenous peoples can either contribute to their ongoing oppression or their liberation, and that the choice of theoretical framework can determine the outcome of this process (Getty, 2010). It

seems evident that current research on health lacks a truly integrative approach, and a sufficient and complex framework is essential in order to fully grasp perspectives on health.

3. Theoretical framework

An integrated agenda will only be relevant if it is implemented using integral theory. This section offers a brief introduction to Ken Wilber's "Integral Model" and argues that it is highly relevant for research in health promotion.

According to Lundy (2010), anyone proposing to take a comprehensive or holistic approach to health must incorporate the full complexity of what it means to be human. Integral theory provides such a holistic approach by accounting for all the key areas of the human experience. By following this model, one pays attention to all of the factors that influence health and healthy development (Lundy, 2010). The integral model is thus an attempt to simplify and merge the complexities of the human condition and its relation to the universe (Wilber, 2005). Wilber claims that in a sense, it is a theory of everything. It is a comprehensive map that seeks to integrate elements from various systems, from ancient shaman traditions and philosophy to modern cognitive science. Through this integration, it is thought that various domains can cooperate and communicate with each other. Medicine can communicate with art, which can communicate with education, which can communicate with business, spirituality, and poetry and so forth. By providing a dialogue between virtually all disciplines, the framework can facilitate cross-disciplinary knowledge that can be used to understand and organise any situation, whether it be social change, personal development, or success in business. Thus this framework will create the first integral learning community (Wilber, 2005).

The patterns that connect all these methodologies are framed in a model, or an Integral Operating System (IOS) (Wilber, 2007). This is the "software" or the actual guiding framework that can be operated. The original model involves five basic elements, however for the introductory purposes of this proposal, only three will be described.

The first of these elements are quadrants, which involve four essential dimensions of any experience. All experiences can either be interior or exterior and individual or collective (Figure 1). This means that one can always pay attention to the internal and external experiences of the individual, to the structures within which we collectively carry out activities, and to the cultures surrounding those activities. These four dimensions are a demonstration of how interrelated individuals, communities, and organisations are (Wilber,

2007). In the context of health promotion, it illustrates how all factors influence health and healthy development. A healthy mind is linked to healthy behaviour. Healthy behaviour is linked to healthy culture, which again is connected to healthy social systems and environment (Lundy, 2010). This connection can be made with all the quadrants, as they all link to each other. Our capacity to respond effectively to health promotion issues is greatly reduced if any of these quadrants are ignored.

The second element is levels, or stages of development that unfold throughout the course of life (Wilber, 2007). A newborn child will be in the egocentric stage, beginning with ”me”, then later evolve to the ethnographic stage of ”us”, and finally expand to a world-centric stage including ”all of us”. According to Lundy (2010), it is crucial that health promotion follows this systematic recognition of universal care and concern for other people. The third element involves lines, or ”development intelligences”, and refers to areas within individuals in which growth and change can occur (Wilber, 2007). Humans have a wide variety of intelligences such as emotional, musical, kinaesthetic, moral, cognitive, interpersonal, or spiritual etc. What is common among all of these lines is that they develop through the three major levels presented above.

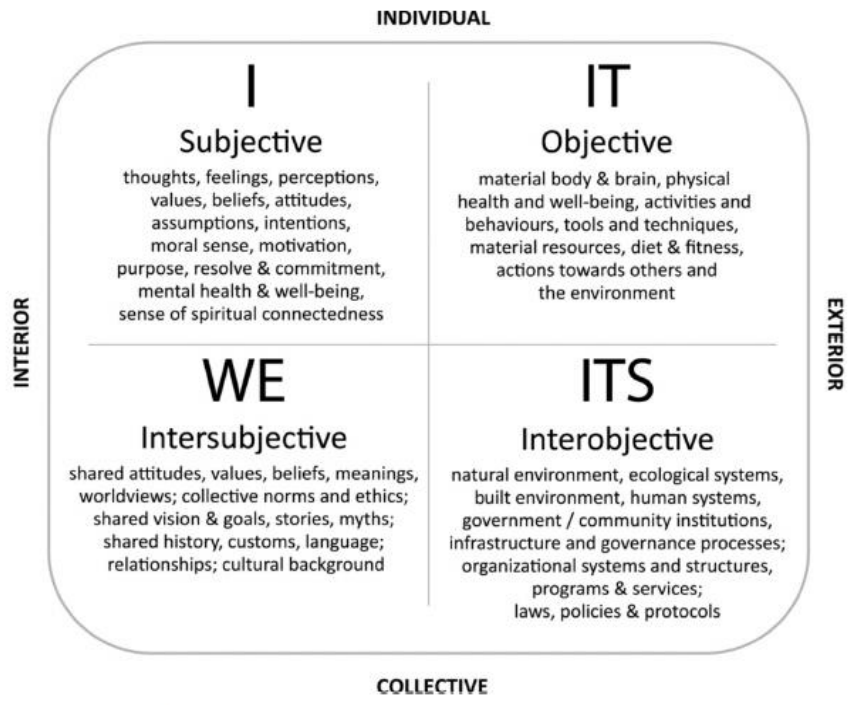


Figure 1. Integral model displaying four dimensions of life

Source: Lundy (2010)

The essence of the integral framework is to include as many potentialities as possible, so that nothing is missed in terms of possible solutions (Wilber, 2005). Lundy (2010) argues that, in a field as comprehensive and complex as health promotion, an integral approach is exactly what is required.

I employed the integral model in my research so it could purposefully guide my actions and direction for inquiry and remind me to take multiple perspectives into consideration. When engaging with my participants, I used the four quadrants to capture their interactions between the interior and exterior dimensions of the individual and collective experiences, including their emotions and beliefs, practices and behaviours, community values, and experienced support from health systems. In short, the theory has been used as a tool to sort complexity. To generate evidence in an integral approach, all stages in the research must consistently engage in the four dimensions, or quadrants (Lundy, 2010). The model has thus been implemented as a theoretical lens throughout the methodology, method, data collection, and analysis. Due to the small scale and limited time frame of this study, only the interaction between the four quadrants has been applied. The development lines of the quadrants are not explored in this research.

4. Objective

In response to the lacunae mentioned in the literature review, namely the marginalisation of indigenous voices and the fragmented approach to health, this study seeks to explore indigenous perspectives on health from an integral perspective. The objective of this study is thus to explore how indigenous Tz'utijil women in Guatemala define health, and what enables them to experience health. In an effort to gain a complete understanding of the women's views, each research question represents one quadrant of the Integral Theory.

4.1 Research questions

1. How do local women experience support from a) the health system and b) Vision Guatemala in promoting their health?
2. What practices and behaviours promote their health?
3. What collective attitudes, values, and beliefs promote health?
4. What motivates the women to promote their own health?

5. Methodology

5.1 Research Design

Qualitative research is often gathered through exploring the social and personal meanings that people ascribe to a particular experience (Skovdal & Cornish 2015). This type of research is thus ideally suited to understand local knowledge and perspectives. Approaches to data collection vary from interviews, observations, case studies, and ethnographies (Creswell, 2014).

This qualitative research project gathered and explored the social and personal meanings that people ascribe to health. It uses an integral approach to explore local knowledge and perspectives. Because of the study's integral and theoretical starting point, it uses Participatory Action Research (PAR) as a research design. Participatory approaches to research are meant to bridge the gap between theory and practice through community-based participation (Schieffer & Lessem, 2016). Its defining characteristic is that it is both participatory and developmental. It involves including the participants as equal partners throughout the entire research process -- from the development of the research questions to data collection and analysis.

5.2 Study site and participants

The research was conducted in San Pedro la Laguna, a small village located in Lake Atitlan, Guatemala. The village primarily consists of the Mayan group "Tz'utujil", as well as a few other passing tourists and expats. The study was organised through and in cooperation with the local organisation, VG, where I had been doing a 4-month internship prior to the study. The organisation conducts workshops and activities in an Integral Health Programme. The project was planned during the spring semester in Norway and conducted in December 2017, which was near the end of my internship.

The participants were purposively selected based on the likelihood of providing useful data about the topic. Therefore, I only selected women that had already been involved with VG. All of the participants were members of the organisation and had been participating in the Integral Health Programme. The programme provides health education on contextually and culturally relevant issues such as nutrition, family planning, domestic violence, waste

management, and mental health. The organisation's projects include whole families; however, women are a particular focus. VG describes the women as the heart and motor of the family, and that they are an essential part of every circle and the pillar of the community (Vision Guatemala, accessed 25.03.2018). For this reason, only women were included as participants. Men and children were excluded.

Due to the limited space for this thesis, only five women were selected to participate in the study. VG worked as gatekeepers to the participants. By participating in the everyday life of the organisation, I had the opportunity to get to know the women and they were also familiar with me, which was important in terms of rapport. However, I did not conduct the recruitment on my own due to linguistic limitations and practical considerations. The participants were recruited in collaboration with the local institutional staff in VG. The staff consists of local members of the community who have been working closely with the women for an extended period of time. Two staff members took on the responsibility to enlist participants for the study. The recruitment took place during one of the accounting meetings for the Women's Empowerment programme. The local staff explained the purpose and scope of the study and asked five of the women in the group if they were interested in participating.

Pseudonyms	**Children**	**Civil status**	**Work**	**Education level**
Maria	9	Separated	Sells secondhand clothing	No education level
Iris	4	Married	Weaves traditional "Guipiles"	6 years of primary school
Lilly	1	Separated	Tailor	6 years of primary school
Jenny	3	Separated	Sells new clothes	6 years of primary school
Anna	2	Married	Tailor	6 years of primary school

Table 1.

5.3 Data collection

Data collection was done through the participatory method, 'Photovoice'. Photovoice is a research method that enables people to identify and represent their life circumstances by speaking through photography (Skovdal & Cornish, 2015). This method was selected as an attempt to equitably involve the participants by building and creating a sense of ownership to the research process. Photovoice was developed as a method as a means 1) to promote critical

dialogue, 2) for participants to reflect on their own, as well as community, needs and 3) to reach policymakers (Wang and Burris, 1997). This method was appropriate for the given context for several reasons. First, indigenous Maya is a group of people with traditionally little power. They have been systematically oppressed through decades of civil war, rendering them 'silenced', as some say. This process has been described by Freire (1970) as a 'culture of silence', or learned helplessness. Photovoice was developed based on Freire's educational approach to empower cultures that have experienced social oppression (Carlson, Engebretson & Chamberlain, 2006).) It gives the women an opportunity to narrate their own experiences. Hence, the method can contribute to a greater degree of community participation and problem-solving (Cooper & Yarbrough, 2010). Second, Photovoice is an accommodating method that can be used to work with illiterate people. Although not all of the participants were illiterate, the cameras served as a tool for expression that would have been difficult to convey by simply writing or speaking. As their first language is Tz'utujil, the photographs helped to overcome some of the language barriers between the participants and myself.

The Integral Health Coordinator of VG assisted me throughout the whole research process. This strategic cooperation helped me get local support throughout the study, as well as help with translation and other linguistic issues. Furthermore, the idea was to teach staff members in VG the practice of Photovoice as an effort to provide capacity building for the organisation. This provided an exchange of mutual benefit for both partners.

5.4 Workshop

With the assistance of the coordinator, I arranged a two-hour workshop with the recruited women. The workshop was held at the organisation's volunteer house, an environment that was familiar to the participants because it was utilised many times for other VG workshops. In the first part of the workshop, a brief overview of Photovoice was given that emphasised it as a participatory research method that makes narrating their own story a possibility. I then outlined the objective of the project. Without detailing the research questions, I explained that I was interested in their perspectives on health and factors that enable them to experience health. I went on to present the central project tasks.. The women were directed to take pictures of:

1. What health means to you
2. Who or what helps you to achieve health

The tasks were developed from the four quadrants in the integral model, with the aim of addressing and answering the research questions. As Photovoice is participant-directed, the preliminary tasks should be malleable and directed by the participant's own needs and desires (Sutton-Brown, 2014). Although I had already created the tasks, the topic itself was broad enough to allow for more specific questions to emerge in the data. I also encouraged the participants to give input to the given tasks.

After the presentation of the theme, the participants were given a challenge to create a group dramatisation related to the task "Who and what helps you to achieve health". The task was given as practice in creating alternative ways of capturing a particular message. From my time as an intern with VG. I had observed that dramatisation is a favourable activity and it was important to make the women engaged. Doing dramatisation in a group setting was also meant to help them brainstorm ideas for ways to demonstrate stories.

Cameras were then distributed to the women. Three of the cameras were bought through VG, as I had received funding from a grant proposal written for the project. Moreover, the intention was that the organisation could use the cameras for future Photovoice projects. Two other cameras were borrowed from another local health organisation in the village. Most of the women had never touched a camera before, so a considerable amount of time was spent instructing them on how to use them. We attempted to simplify the instructions as much as possible by teaching only the basics in camera operation: how to turn the camera on and off, what buttons to press in order to take and review photos, and how to zoom in and out. My assistant then led a discussion on how to take pictures in order to capture abstract concepts and emphasized that the meaning the participants attribute to the photo is much more interesting than the quality of the photos.

The discussion on capturing a story through photographs led to the very important issue of ethics while taking pictures. A few ethical scenarios were presented and discussed in order to ensure that the participants understood the ethical implications of doing photographic research. The participants were advised multiple times to obtain verbal consent from anyone appearing in their photos. The workshop ended with all of the participants signing the informed consent, which had been distributed in the beginning of the workshop. The women allowed me to take pictures during the research process.

The time frame given to take photos was 4-5 days. The tasks were given on a Friday, and the women had until their own individual scheduled interview to take photographs. On the following Monday, I visited the home of each woman to provide any help or support they needed and to remind them about their upcoming interviews. Three of the participants were interviewed on the following Tuesday and two of them on the following Wednesday.

5.5 Interviews

When gathering data using Photovoice, the interpretation of the photographs is far more important than the photographs themselves (Wang & Burris, 1997). To help elicit the participant's understanding of their own photographs, I conducted individual interviews. To facilitate memory retention, the interviews were held on the days following the 4-5 day schedule for taking photographs. The first three interviews were held in the same location as the workshop and the other two in VG's building. They were conducted using the individual participants' photographs as guides. In addition, I used a topic guide to direct my questions in order to answer the research questions (Appendix 4). On account of the limited time and length of the project, each woman was asked to select the photos that they felt were the most significant. All participants selected 3-4 photos for each of the two tasks they were given. The first part of the interview was dedicated to task one, and the second and longer part dealt with task two. To ensure participant-directed contextualisation of the photographs, the women were consistently asked to decide what photo to talk about next.

The overall aim of employing Photovoice in this research was to provide a space for the participants to reflect on their health and wellbeing. In terms of benefits for VG, the idea was that strengths and needs could emerge in relation to their Integral Health Programme. As such, the research process could be mutually beneficial for all involved.

5.6 Data Management

All photographs and transcribed interviews have been stored on a password-protected computer. Only my supervisor and I have access to the data. Anonymity has been ensured by the use of pseudonyms. After the analysis of the data, transcription was deleted. Pictures are still stored on the password-protected computer. This is done so the participants can receive a file of their pictures in conjunction with the finished project of the master's thesis.

5.7 Data Analysis

I analysed the data by first transcribing the interviews. To prevent the loss of valuable data through translation, I chose to analyse the interviews in the original Spanish. One interview was translated to English so my supervisor could keep track of the work. The quotes selected to demonstrate the findings have been translated. Data was analysed using thematic network analysis, following Attride-Sterling (2001). This highly systematic process provided structure for a clear understanding of my data. The software programme, Nvivo 11, was used for the analysis. As the overall objective and research questions of the study are predominantly theory-based, I adopted a hybrid approach of inductive and deductive thematic analysis. This approach let me combine data-driven codes with theory-driven themes. I started inductively, developing codes as they emerged from the raw data. I organised and clustered the codes through pattern recognition. Through connecting the codes, the analysis progressed towards the identification of basic themes. A deductive framework was applied using the Integral theory to categorise the basic ideas into organising themes. Nearly all basic themes fit into the four quadrants of the Integral theory. However, there was one theme that emerged that did not fit into the quadrants (the experience of the Photovoice method). All basic themes and organising themes are demonstrated in the model below (Figure 2).

The analysis was an iterative and reflexive process. Codes were re-read and edited before continuing the analysis to ensure that the emerging themes were derived from the raw data. In the end, 4 organising themes, 18 basic themes, and 81 codes were produced. This information is provided in the data analysis table (Appendix 1).

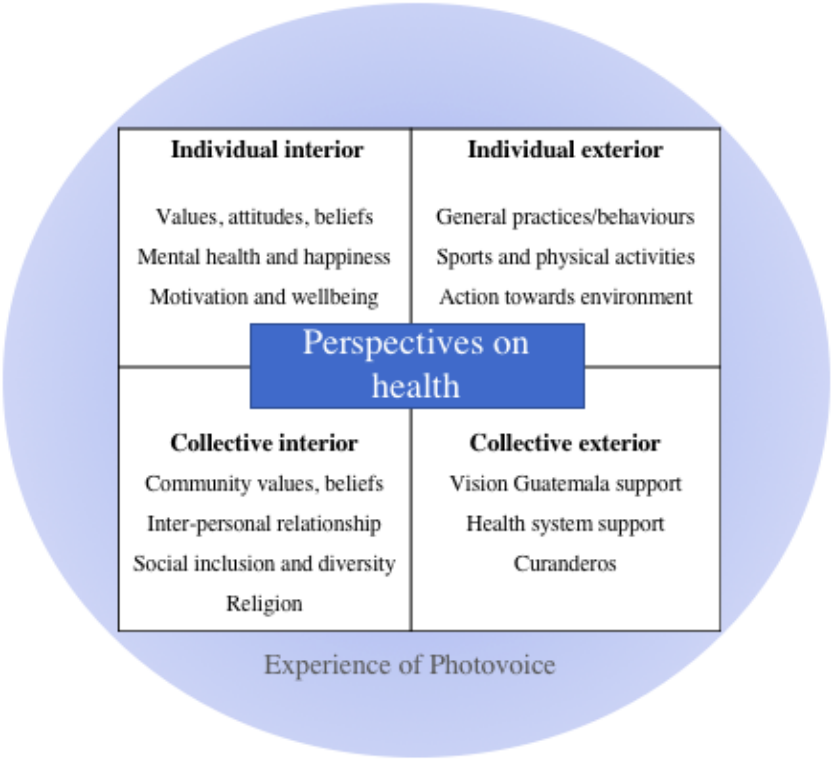


Figure 2.

5.8 Trustworthiness

Trustworthiness addresses elements of credibility, dependability, and transferability to make sure that the data analysis is not based on subjective experience (Green & Thorogood, 2004). Credibility is the general rigour of the data-collection process and representativeness of the data as a whole (Thomas & Magilvy, 2011). I could have employed multiple data collection methods and thus reduce errors linked to my methods. However, as this is a 30-credit thesis, only a modified version of Photovoice was utilised. Prolonged engagement and varied activities with the participants could have also strengthened the credibility of my research. Dependability can be obtained by explicitly communicating the techniques used for obtaining credibility (Thomas & Magivly, 2011). In order to increase the dependability of my study, I audio-recorded all interviews as well as the workshop. An external auditor was involved to review the study project, including data, analysis, and interpretations. The translated English interview was co-coded with the help from another student. Codes were checked before themes were developed. Dependability has thus been ensured by including peer debriefing and peer examination. I have also attempted to explain every step of the research process as thoroughly as possible, thus increasing the transferability of the study. This is achieved if the findings or methods are transferable to similar settings (Yilmaz, 2013). Thick description of

the study setting is critical, as it informs the applicability of research into practice. I have attempted to give an in-depth explanation of the local context, as well as how I employed the Photovoice method with the particular group. By doing so, other researchers can explore if the same method gives similar or different results in a different setting.

5.9 Role of researcher

I am currently a student enrolled at the University of Bergen and travelled to work in VG as part of an internship established by the university. My role in the organisation was a volunteer worker and student coming from a Western university. Although the culture and norms of the community differed from my own, I made an attempt to adapt to the culture as much as possible. By living in the organisation's facilities and doing a prolonged immersion into the field, I aimed to make the distance between the community and me smaller. Most of the participants knew me from health education workshops and activities like Zumba. It is possible that my representation as an educated student from a Western university and facilitator for VG have affected the quality of the data by creating an imagined pressure for the participants needing to 'give the right answers'. Thus, it is possible that power relations have influenced the answers.

Furthermore, it is important to take into consideration the subjective nature of such a process. As a researcher, I am a part of the process of producing the data and their meanings. It is possible that my individual analysis of the data diverges from that of the women. The participants and myself might have different ideas about what health is and how it relates to personal lives. I have attempted to be conscious of and reflect on my own understanding of health, as well as the Integral framework, to prevent my own views and perspectives from interfering with the data from the participants.

5.10 Ethics

All research must consider ethical implications of harm to both the participants and the community. The study was conducted in cooperation with VG. An information form was given to the participants that included the purpose of the study, its procedures, potential risks, and benefits of the study (Appendix 3). It made clear that the participants had the right to withdraw from the study at any given time. The photo-tasks were also written in the form, increasing the likelihood that the participants continued to read and understand the possibility

to withdraw from the study. One of the women was illiterate and was given extra attention in terms of information about the study. The consent form was read out and explained. All participants gave written consent.

As the study's method involves capturing visual images, there is an additional set of challenges in the ethical conduct of my research. Photography can be a personally intrusive medium and can thus lead to unintended consequences. In this case, anonymity and confidentiality were managed in numerous ways throughout the study. To ensure the participants understood the implications of taking pictures, they received training sessions and had a discussion concerning ethics of photographing. The idea was to make the participants attuned to ethical challenges that might arise and ways they could overcome these dilemmas. If they were to take any pictures of people in a public space, they had to ask for consent.

The participants were anonymised when transcribing the interviews. All recordings were deleted once transcribed. These precautions ensured ethical clearance from the Norwegian Social Sciences Data Services (NSD) (Appendix 2).

6. Findings

The hybrid approach provided structured analysis by deductively using the Integral Theory as a framework, while inductively allowing for themes to emerge directly from the data. Organising themes are thus structured using the four quadrants: Collective exterior, Individual exterior, Collective interior, Individual interior.

6.1 Collective exterior

The collective exterior includes systems and structures that support health, like organisations, programmes and services, and community institutions. The research question related to this quadrant was: How do the women experience support from a) Vision Guatemala and b) Health services? The participants shared their views on VG and governmental health services but also brought up "Curanderos" (traditional Mayan healers who use folk remedies).

Vision Guatemala support

All of the participants mentioned VG as a space for support in different areas. Obtaining new knowledge through different activities was given the most significance by the women. This response was primarily related to the to the workshops offered at VG. Many participants had a

shared motivation for participating in the organisation's activities, which was to have an excuse to leave the house to socialise.

> *"…Here [in Vision Guatemala] we have learned so many new skills that are helping us in our health."*
> *– Maria*

The participants invariably brought up healthy eating and nutrition as the most valuable capacity attained from attending workshops. In a conversation related to the overconsumption of tortillas, one of the participants stated

> *"… earlier we used to eat like that as well. But when we came to Vision Guatemala they taught us how to balance our food. How to have a good diet... how we can avoid illnesses"*
> *– Anna*

> *Earlier I used to not know... but when we came to Vision Guatemala, in the workshop that we were in, we learned how to do things, for the wellbeing of ourselves like a family, in order to have good family health…"*
> *- Jenny*

The participants experience support in their health through the health workshops and activities, but also through financial support that serves as an asset for a healthy life.

> *"….I am so happy being here in Vision Guatemala because... it was my vision and with that [vision] I am working. Before, it was just a pound or two, but now I have so much. I have like 20 Huipil (mayan clothing). And because of that I am so content, its my... how do I say it... its my dream. And now I am doing it. It's very beautiful*
> *– Iris*

Participants also mentioned participating in activities with VG for the sheer purpose of meeting new people and to gain a sense of social inclusion within their community.

> *"… to be in a group of people. For example, in Vision Guatemala we have games in our meetings that make us laugh. We get to know new people, and we get to relate to all sorts of people, right. People with different characteristics. And this place helps to motivate oneself. The group is small, but it helps me and lifts me up. I feel important in this group.*
> *– Lilly*

> *"… Yes they help me so much. Before, I never used to leave the house. Perhaps with a closed mind. But there [in Vision Guatemala] they explain everything…. They tell us ok do not eat 'this and this and this' and now I don't do that.*
> *– Maria*

Health service system support

Participants had widely varying experiences in relation to support from the local health service system. The health centre was perceived as expensive by some and accessible to others. Although the service and medical checks are free, the participants demonstrated scepticism towards having to buy a fair amount of expensive prescription drugs.

> *"Here in the San Pedro community it's really nice because there is a health centre, and if you feel bad you can go there. They don't charge. But if there are medicine you need to take, they charge you.*
> *- Jenny*

"It [the health centre] is free. They examine you, but not a lot of people trust going there anymore. Because sometimes they tell you that it's free, and when... umm... the health centre is for people without... without money or resources. But when you get there, they give you a prescription and you have to buy a large amount of [drugs]……So there are a lot of people that says: 'oh it's better to not go'. Why? They say you have to buy so much and all that... that they make you.
– Anna

However, one participant argued that the health centre is insufficient and that going to a private doctor is much more reliable, despite having to pay for the consultation.

" In the health centre they only examine you and they don't give you anything. However, a private doctor is going to ask you lots of things and they will tell you exactly how many [grams] you need to take…. In the health centre, on the other hand, they will examine you really quickly.
– Iris

Support from Curanderos

Economy was a critical factor for the participant when deciding whether or not they would go to the health centre, so another alternative was proposed -- Mayan healers or 'curanderos'. All but one participant described their experience with the healers as more acceptable than the service they receive at the health centre. Plant remedies and natural healing were perceived as more trustworthy and readily available. This perception is primarily based on the tendency to avoid expensive prescription drugs.

"When you go to a doctor, he wants money. And if you don't have it, it's better to look for plants to take. There are lots of plants..... If I hurt in my head or in my body, she [curandera] gives me a glass of medicine, but plant medicine."
– Maria
"That's what's here in the community, if you don't want to go to a doctor, you can go to a person that knows the plants. [I prefer] maybe to go do a curandera... yeah... the plants are really efficient."
– Jenny

One woman, however, argued that the healers lack the proper knowledge and stated that she would rather go to a doctor. This was due to an unsatisfactory experience she once had with a healer.

"That is what the problem is with the [plant] medicine, if you don't know how much..., that's why I am afraid of it now…. The plants are powerful but you don't know the measurement. So, its better that I go to buy the chemicals so you can just take one pill every 8 hour or so. The medicine in the plants are better, but where is the measurement?"
– Iris

Although it was not unanimous as to whether the participants preferred the health centre, private doctor, or Mayan healers, it was evident that simple illnesses could be healed with local plants.

"When there is a simple sickness you can cure it with plants…. I go to the mountains and pick herbs."
– Maria

"[Plant medicine is "health" to me] because it is more than food. You can use it for different things… There are many types of plants that doesn't only serve as food, but also for wellbeing... like a type of natural medicine."
– Jenny

Nature and environment

As presented in general practices and behaviours, the participants gave significance to the importance of how their own behaviour and actions affect the environment. And, reciprocally, the women were also attentive to how their surroundings and natural environment in turn affect their health. They emphasised the importance of surrounding oneself with clean spaces, and the essentiality of occasionally leaving the village to interact with more natural elements.

"When one is sick, like really sick... sometimes we have shivering. And if you stand in front of the sun it's like a nourishment for us. It helps ourselves a lot, but the sun also helps us with other things. For example, if the sun was not there, what would we be? It's like, if there would be darkness or bad weather where would the plants be? Where would the fruits be? Where would the vegetables be? Where would the animals be? We would not be able to nourish ourselves well, not see well nor rest well. Many things depend on the sun. Because of that the sun helps us a lot with our health."
– Anna

"Health also... implies to walk. But to walk in clean streets, without garbage. Walking would not be of any use...like protecting your health... if you are walking around like you are in a dumpster". – Iris
" I have lived 16 years in the capital, but there the environment is not fresh, there is so much gasoline and it is full of garbage everywhere. So, the environment is contaminated…. But here in San Pedro it is not allowed to burn trash. So we see that the fresh air gives us good health and it helps our health. If we let there be a lot of smoke, of course it will affect our health! In

the capital you have to close your nose all the time. But here, thanks to God, there is not much of that here… We have good lungs here, people say. Because we have fresh air."
– Lilly

6.2 Individual exterior

Individual exterior is the quadrant that demonstrates the material body and physical health, including healthy practices. The research question related to this quadrant was "What practices and behaviours promote their health?". Basic themes that surfaced through the data include general practices and behaviours, sports and physical activities, organic gardening/plant medicines, and actions towards the environment.

General practices and behaviours

All of the women highlighted healthy eating as the one of the most important factors to health. Vegetables, meat, and a "balanced" diet are all healthy eating habits according to the participants. One woman emphasised the importance of eating enough tortillas, while others argued that tortillas are not a part of a healthy diet and that they have been taught to replace them with more vegetables. It was also important to cook one's own food, and the mothers were expected to cook for the entire family. Two of the women emphasised that eating street food was unsafe as it was prone to bacteria. Nevertheless, healthy eating was highlighted as a primary healthy practice to not only prevent disease but also to thrive. Other general practices and behaviours that emerged were: getting sufficient sleep, drinking clean water, and having good personal hygiene.

"The meaning of health to me is to have a good diet, to eat healthy and all these things...to know how to prepare a dish, so you can be well with your family and then you don't have to go to the doctor."
–Anna

Sports and physical activities

Sports and physical activities that were included in the conversation include walking or running, football and basketball, kayaking, using the traditional "temascal" (Guatemalan sauna), and swimming in the lake. Although the different activities were highlighted as promoting practices for staying healthy, the women stated that they do not, or rarely, take part in many activities. The women explained that either, their workload was too heavy that they didn't have time, or that it was not that easily available to them. Physical activities were mentioned more often in relation to their own children or other people in the community. The participants explained that they only participate in sports when it is arranged through an institution, such as the local school or VG's sports days.

> *"... but I would like to be a part of a sports team. I would like to play basketball. The shirt that I have here (in picture) is from a play during Christmas. But because of work I couldn't go anymore and play with them. I only went for one game "*
> *– Anna*

Organic gardening

Two participants drew attention, in particular, to the importance of growing one's own organic food. They emphasised the physical benefits but also mentioned the economic advantage and that growing organic vegetables can help the rest of the community.

"…if we have or own [organic garden] we know what we are consuming healthy and it also helps us economically."
– Anna

"It [organic gardening] is beneficial for both the family and for the community... Not just for the family.... Like I told you before, sometimes the neighbours arrive, they look at what you have, and say "can you sell me one of these". So you can. Then for me it's very important because it's good for you and the community as well."
– Jenny

Organic gardens were also regarded as an important practice in order to help the environment.

"It is really good for the environment, because it is not damaging the soil. It doesn't use chemical fertilisers."
– Anna

They viewed it as a practice that is accessible to most people in the community. However, both argued that it was generally not very easy to buy organic vegetables in the community due to the lack of people working with this kind of gardening.

Action towards the environment

Protecting and preserving nature was a theme that was brought to the conversation several times, especially in relation to the contamination of the lake and the exploitation of natural resources in the area. Rather than talking about their own individual practices, the participants connected action towards the environment to a collective setting by focusing on what people do to either help or damage the environment.

"… maybe we as humans are not very conscious of what we are doing. Of the actions that we are doing. So that affects the lake. The way I think is well... what I think is best is whatever you can do with your family: do it. Everyone has to think of one another. A lot of people that you talk to don't consider how they affect the lake... a lot of people throw garbage and when it rains it goes into the lake.....If we already know that this is not good it is best to maybe talk to the other people. In order to help the community and the lake."
– Jenny

One participant directly emphasised that caring for the environment is not only important for the environment but for all living things.

"If we serve nature we are serving ourselves as people as well. Nature is helping us... for example, if a person has all possibilities, all the money in the world, but does not have health, it is all useless. If a person has all of the possibilities in the world, but is not helping the environment, it is useless. It's really important to help our environment - the trees, the flowers, the lake, because it is helping us in return and helping us tremendously in our lives."
– Anna
"…To always coexist with the lake and to help the lake. Not to contaminate it, because the lake is a help to us. So not contaminate it, and my wish is that I can always go with my children and live in harmony with the lake.
– Maria

6.3 Collective interior

The collective interior is the quadrant that is made up of the shared values and beliefs of the community, including shared history, culture, and norms. Interpersonal relationships have also been included in this quadrant. The research question created for this dimension is "What collective attitudes, values, and beliefs promote health?" It is not possible to fully represent the shared values of a community through five individual interviews, thus the shared values and beliefs that are presented are limited to the perceptions of the five participants. Basic themes that emerged include collective values and beliefs, interpersonal relationships, social inclusion, and acceptance of diversity.

Community attitudes and beliefs

The women highlighted the difference in attitudes between their own and previous generations. This surfaced through different topics like the separation of women and men in sports activities, misinformation about healthy eating habits, and personal hygiene habits.

It was argued that sports activities have been perceived by older generations as something that should separate men and women, or that women were not allowed to play. However, they argued that times are changing, and that the community is moving towards an understanding of equality between women and men.

> *"Sports are for girls and boys. Because if we realise it, the men play basketball and the women as well. But you don't commonly see girls playing football. But three years ago, I really enjoyed, because they started to implement this sport. Because there were many girls that also wanted to play. They used to say:"you are a woman, you can't play"... eeh but three years ago ... I know this because my daughter started to play. She was very excited, but also scared because it used to be uncommon."*
>
> *– Jenny*
>
> *"Well, here in San Pedro the atmosphere is like a group. They don't divide them. Maybe before, our grandparents told us "Boys apart and girls apart". But nowadays, they go out and play and run, with friends or relatives. They are very close".*
>
> *– Lilly*

Furthermore, almost all of the women commented on the change of attitudes towards tortillas and their role in a healthy diet. Tortillas have, for a long time, been seen as an essential staple in Guatemalan diets. This is changing.

> *"... but in our time it is different. You mix the food, you balance your diet and a little bit of vegetables and fruit. But earlier? What they taught us was to eat tortillas. Just a little food, and the tortillas takes up all the space. ... They [grandparents] tell us that tortillas makes you strong. But in these times its different. We eat more vegetables and less tortillas."*
> *– Anna*

The participants mentioned that access to education and information from institutions like VG influenced change in the community attitudes towards adopting healthier behaviour. This change was not isolated to the attitudes towards tortillas, but also other habits like drinking coffee or personal hygiene habits. The participants grew up drinking many cups of coffee every day. One started when she was as young as five years old. Since then, community beliefs have changed, and coffee drinking has progressively reduced. However, it was also argued that the current generation has lost certain health promoting values that the older generation has managed to maintain more successfully, such as connecting with nature and the divine. This was particularly emphasised in relation to the overuse of natural resources and when discussing how the current generation has no regard for "mother earth". When one woman was asked about the current generation's connection to nature, she replied:

> *"I imagine that we have already lost it... For example the trees. Many men cut down the trees to make wooden things and to sell them... I don't think they thank the trees like our ancestors. They take them, and finish. I don't know if they plant new ones… yes there are many young people that sell them and they go and consume drugs, and its already lost the whole connection, of what the ancestors had with the nature...today there is already a lot of*

contamination and a lot of our ancestors told us: look, take care of it [the lake] you're not going to pollute it because that's not good. "
– Anna

Previously, I don't know how many years ago, the lake was much more crystal clear than the lake we are seeing now. Well our ancestors told us. "
- Jenny

Interpersonal relationships

Many of the participants defined a healthy person as someone who can co-exist well with others in the community. Keeping close interpersonal relationships with their community, as well as their family, was thus important to health.

"...so the family and other relations are extremely important for health".
– Iris
To live together with other people is very important. For example, here in San Pedro they do that a lot you know, in families or in groups. To go and play by the lake, to eat, to share, it could be a fruit or swimming… it helps you know! To be able to live together.
– Lilly

One participant emphasised the importance of being with family outside of the house and how it can be good for health to communicate in different ways.

"I realise that communication is really important. Because a lot of times... in the house for instance there is not a communication like this. But if you leave to go outside you can talk about more things. I have the opportunity to do this with my children, I have two children, and we go outside walking. There we start to talk about things that we do not talk about in the house."
– Jenny

Participants seemed to feel a great responsibility for their family's health, and it was mentioned that the family is dependent on the mother to provide healthy practices for her family.

"Sometimes during the night, a person thinks about a lot of stuff. In the case of us as mothers, we have to think about our children and their needs and all that….Health is not just about me, it is about a lot of other people."
– Anna

Social inclusion and acceptance of diversity

Two participants emphasised the importance of social inclusion and non-discrimination for health. They discussed the meaning of sharing what you have with others, and that one has to include everyone in the community, regardless of any personal problem someone might be experiencing.

"...but to approach the person that needs help or support. 'Come on, lets work on it'. That is very important. To help that person. That is self-esteem... to value oneself or to give priority to another person. I once met a very special woman. She told me: 'If I don't have something, I go and get it. But if someone comes with me, I share it with this person'... this person motivated me in this way. So if you have two pairs of shoes and someone comes that doesn't have any,

you give your [extra] pair to this person. What does it serve me to have two pair of shoes?... So it's very important to help. To be united. To work together like... like sisters/brothers."
- Lilly

"... and try to not discriminate anyone. To treat people equally, whether sick or healthy. It's better to have good communication. To be people that live together, that's what I think, to have harmony. That's what I think. That's what I understood from this picture" (picture where children are playing)
– Jenny

Religion and spirituality

All of the participants mentioned God as an important figure in health. Some women spoke directly about how God is central in taking care of people because, as they believe, he protects against illnesses. Others implicitly brought their connection to the divine into the conversation by simply thanking God for perceived blessings. All of the women are members of either the Evangelical or Catholic religion.

" When one believes in God... he as well takes care of our health. Without him we could get sick."
– Maria

"Being close to God strengthens us. There are moments when we feel so alone... or there are moments when we feel burdened... But if we approach our God right, because the spiritual is... is like an encouragement. If I am very busy, [if] I am worried, looking for God helps us to surrender and motivates us to look forward."
– Lilly

One participant particularly emphasised church as a place for expanding spiritual connectedness, not only through the divine but also by meeting other like-minded people that provide social support.

"For example in spirituality, there [church] one finds people that encourage you, that motivates you… it is like it helps us in different ways. There you find people who will give you advice and tell you: its better you don't go this way. They help you... Two or three hours... praying... singing... Instead of being alone in the house. So if you go to church and look for spirituality I think it's something really, really important. ".
– Lilly

6.4 Individual interior

Individual interior is the quadrant that encompasses the subjective thoughts and feelings of the individual. The research question related to this quadrant is "What motivates the women to promote their own health?". The basic themes that emerged in the data were values and attitudes, mental health and happiness, and motivation and wellbeing.

Values and attitudes

The participants viewed health as an individual responsibility and thought that seeking knowledge that helps one stay healthy is important. Accountability for health belongs to and must be maintained by the individual. Although they are individuals, the women expressed a sense of responsibility for their family's health and their belief that people must care for those who are close to them.

> *"Health is the responsibility of each person…. Each one of us is responsible for ourselves… It is individual, but it is the source of the family and the responsibility of each one."*
> *- Iris*

> *"Mmm like I told you, to me the definition of health is a very large word. Because it is the life of oneself but also the life of other people. In the case of a mother, they [the family] are in our hands, a lot of lives. For example in the case of our children and our husbands, if we don't cook healthy ... we can cause a lot of damage to other people."*
> *– Anna*

They also highlighted the importance of confidence and that prioritising oneself is a necessity for good health. This was especially related to self-perceptions, regardless of how other people in the community treat each other.

> *"... to value oneself. I think that, because if one gives oneself priority... I don't know, it's easy that someone comes and discourages you and we speak like this way amongst women right... someone sold me a blouse for five quetzales, and I really liked it. So I go and I buy and I put it on. Although someone says: Why did you buy that? I really liked it, I loved it. And I am happy like this! What would it serve me to buy a blouse for 200 quetzales, but inside myself I don't feel good? Even though the women would say: Aaah what a lovely blouse, so beautiful. But inside I feel sad and bitter... No one will be able to discourage you. Why? Because you have confidence in yourself and in that you are doing something good, right. Why would I do something if it only makes me sad? For what? So it's better to leave it and I am going to do something that makes me happy, with a smile and laughter. That makes you smile from what you are doing! It gives me gratitude. I can smile, be happy. So I think self-confidence is really important. "*
> *– Lilly*

Knowledge and beliefs

Having the proper knowledge about certain issues was central to having good health. Knowledge could be attained through participation with institutions like VG but also through information shared within the community.

> *" Here in Vision Guatemala, what you don't know already you come here to learn. A lot of different things. Like this one time we learned how to make our own soy milk! We didn't know this before. So here we come to learn. We have done so much."*
> *– Maria*

> *"What I would like to do is to learn more... like how to cook for example. To make different types of food and to know how to properly feed... like I told you earlier, like mothers, there are so many lives in our hands. There [in Vision Guatemala's workshops] there might be many*

women who have 'comedores' (Guatemalan eating places), and they feed other people… So to be able to learn more!
– Anna

The women also demonstrated an eagerness to learn more about things that they personally felt unsure about. One participant expressed her belief in the value of personally conducting what she called 'investigations'.

"You know, we talk and we talk but we never really actually investigate.... It's not like we need to go into depth over everything but it's important that we learn a little so that we can apply it to our lives, both with our children and outside with other people…what I believe is to get knowledge. To learn in places where there is training. When you are in such a place like that, you will also learn more."
– Jenny

Although knowledge can contribute to better health, it was evident that the lack of knowledge was contributing to the occurrence of disease and something that can threaten the health of the community. One woman shared a story about how the lack of knowledge regarding personal hygiene led to problems with disease. In this story, disease was spread from decaying food that was given to the animals and then given to humans. When asked about what one could personally do to inform the rest of the community, she replied

"Sometimes one gets sick because people don't know what they are doing…. We don't know how to care of them [the animals].... A lot of people don't want to eat it because they don't trust that it is clean...So one has to share the information one knows and tell them to not give the animals food that smells. It will get sick and we will get sick... We eat this meat! So you have to be clean. It's our food!"
-Iris

Another participant stated that despite having the knowledge needed to combat disease and improve health, individuals might not act according. She was annoyed about people burning plastic although they knew it was harmful.

"... they don't want to understand. Although they know that it is harmful to us. They have already said that it is not good. But they are like... they don't do their part for having a good health".
- Anna

Mental health and happiness

Most participants discussed, in a variety of ways, mental health and its relation to happiness. Although most viewed mental health as critical for overall health, they provided various definitions for it and its determinants. Some factors that affect mental health that were listed are: having a positive attitude, good social relationships, and to being in nature.

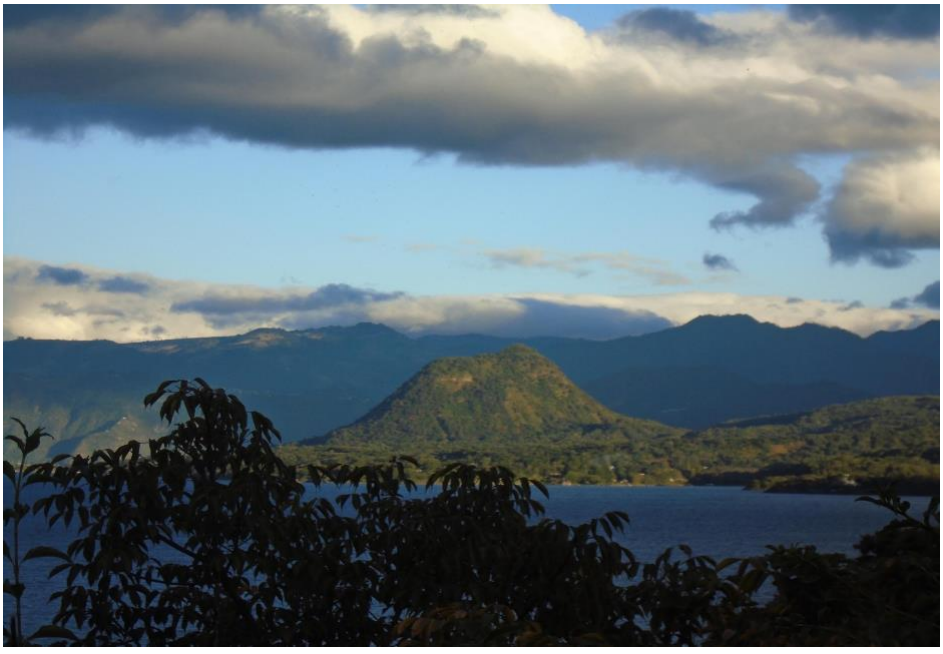
"To talk about health is not only about the physical, it's the mental as well, its emotional....The way we can improve our relationship with ourselves is to be more positive and not to have so many conflicts. I have read a little bit about causes of depression and it really damages your mind."
– Jenny

[In the picture] they are laughing a lot, and that helps them in their health because they are happy and not thinking about anything, they are totally relaxed. They are content, nothing to think about, they are really satisfied. Therefore, it supports health. If someone are sad or are thinking too much about something, they are contaminating their mentality. So family and relationships are really important for health.
– Iris

Participants identified nature as a tool for mindfulness and tranquility. They were attentive to the mental burden of work overloads, as well as to the benefits of leaving the house and enjoying their surroundings. These were assets that helped them relax and forget about any concerns they might have.

"...This night, when I noticed the moon, how the moon was doing and how the sky was full of stars... I focused on this... and that is why I am telling you that this [nature] is helping me a lot mentally. To clear up everything... that is my health as well."
– Anna

"When you are working you are only concentrating in your work and everything. But you never focus on the beauty outside. I think that to go out, to look at the things, you start to think, and you forget about all about your problems. You are already outside viewing the beauty. You look at the volcanoes, the surroundings. I thought, how do I talk about health in this photo? Well, it made me think that... it's that your mind is more tranquil, our minds need relaxation, it needs that you don't think more about work. I know that work is important but in nature you feel... motivated, looking at all the green, you are breathing clean air."
– Jenny



Motivation and wellbeing

Factors related to motivation and wellbeing were closely linked to mental health and happiness. However, they have been separated to distinguish them from other factors that

participants found motivating: positivity, confidence, healthy relationships, nature, and support from different institutions.

> *"But if one puts one's strength and will into it, you can achieve it. You can do it."*
> *– Anna*
> *"…to laugh as well helps us with our health. Because the doctors say that laughing helps us practically... especially to us women. It removes wrinkles they say. So, I think it's really important to be close to different people. To get to know each other. To laugh. To share."*
> *– Lilly*

Although each participant described different motivations, all of them highlighted nature as a key factor that motivated them to promote their own health.

> *"…when you go outside you concentrate on all the beautiful, everything that is outside…. It's a motivation. You're breathing fresh air, you feel the air that blows in your face, you feel something new.... If you are only in your house, you can't see it. But outside you can realise that the sun is going down slowly step by step, and the evening is so refreshing. So then, it is healthy".*
> *– Jenny*

> *The trees help us to breathe…. And you can also sit down under a tree and think about things without anyone disturbing you. Because the trees as well, helps us to clear up. That's why I focused on this."*
> *– Anna*

One participant shared a story about how growing a flower in her mother's garden worked as motivation for mental health and happiness.

> *"Here you see the organics, I planted this flower and I put water in there, every day every day... and now this flower is so nice. If one has one like this, you must be a happy person. You look at the flower, your beautiful flower, and it starts to help you in your mentality. To me, it's like... it makes me happy every time I go there and look at this. This is in the house of my mother who died, but I planted this flower there...Every time a person comes on a visit they say: Oh how beautiful your flower is. And I feel so happy. You start to look around, you start to think about how you can grow more flowers. Because of that I'm happy and it helps me mentally."*
> *– Iris*

Two participants included work as another motivating factor. They explained how the act of working helped them forget about their problems and also how motivation came from the pride they felt in their accomplishments.

> *" It [work] helps me in my health because if I want to end the situation of my problems, maybe I just stay that way and I never move forward, I never get out of my depressions. But with work. It motivates me. I feel healthy. Do you understand? So there is no room for my problems. There is nowhere for the headache to take room.*
> *– Lilly*

> *" And now I am here, I am very content because of my work. With this I am eating, I am making a little bit of money. And because of that I am here in Vision Guatemala, just like the others that are here too. With those money that you give me, or the loan that is like that... With that money I bought things and I started doing my weaving. Because of that I feel very happy."*
> *– Iris*

However, work was also seen as limiting and time consuming and thus not a motivation for health. When asked about habits of being outside in nature, one woman responded:

> *"... What is not helping us is work. Sometimes we work all of the time. So if we have time, we go on the Sundays. And if not, like, we have a lot of things to do, we don't go. But when we have time yes.... Earlier yeah, I used to spend more time on myself. I used to go running".*
> *– Anna*

6.5 Experience of Photovoice

The participant's gratitude for the project was regularly expressed throughout the interviews. They discussed their own experience with the method and claimed that the study made them take time for themselves, something they rarely did in their own spare time.

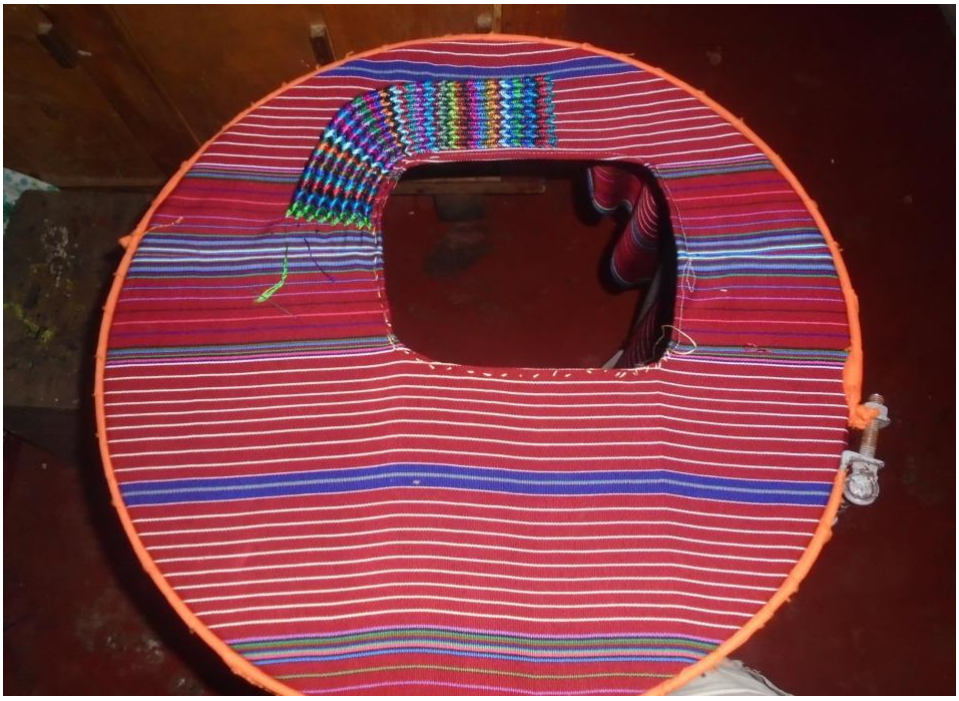
> *"For me it was really fun. Like I told you, I never go out. We keep in our house for our work you know. But that day I went out to take photos. So for me, it was a really beautiful experience. We went to the park, to the market. We went to the beach. It was a very nice thing that I had never done before.... So for me yeah, maybe it was a little difficult to see at first you know. How to identify each photo. But to me it was something very special, this day when I was taking photos. It's really good I think, to know how you identify with the word health. So we went out. And it was really fun.*
> *– Lilly*

The Photovoice project was an opportunity for the women to leave the house and explore their village in a way they had not done before.

> *" ... leaving the house... go to visit places that you have never visited before. That's really beneficial for you. Because to only be inside the house... we never take time to ourselves! So therefore, I realised that this was something... an experience that I will never forget... It's true! [laughing] Because I never leave the house!"*
> *– Jenny*

> *"In my case, I don't go out for fun much, I only go to the market, or to the church. So I think you gave me, how do you say... the power… to go out and just enjoy my own town…. Thank you so much, really. For taking us into account. Because this way... we went out, we took photos, we walked around in San Pedro, and it was very nice to me. It was so nice because... we smiled and just enjoyed and the whole thing was very beautiful. Thank you."*
> *– Lilly*

> *"...That evening when we started to work with the photos, we went out in the streets and we sat down in the street and started to talk. We were talking about different things like our needs and my mind just started to spin... when I started to notice the moon while I was sitting there that night. I looked closely at the moon while thinking... Just noticing how the moon was."*
> *– Jenny*



One woman shared how the Photovoice project made her realise that she had never stopped to take a picture of her own work before. She noticed tourists or other people take pictures of it, but she had never taken her own. She claimed feelings of pride in herself and her accomplishments, and that she wants to start taking photos of her work, so she can show customers all the designs she can create.

Unprompted, the women explained the benefits of the Photovoice method and their experiences with it. Some had a strong desire to continue talking about their pictures and stayed longer than the scheduled time for the interview. One participant wrote about her reflections on all her pictures and how she valued the process for making her reflect on her own life and health.

7. Discussion

The overall purpose of this study was to explore how local indigenous women define health and what enables them to experience health. The Integral theory has been implemented as an analytical tool as a means to sort complexities by organising, emphasising, and demonstrating the different areas that encompass health. In summary, these areas highlight four dimensions, or fundamental perspectives, that can be administered to explore any phenomena. Although presented as separate aspects of health, the quadrants are not independent, but are always interchangeably implicated in one another. Thus, they cannot be seen in isolation. Esbjørn–Hargens (2010) describes this process as “tetra-meshing” and explains that the quadrants’ co-

existence represents the inherent way in which we experience reality in each moment. In an attempt to better recognise the complexity of the women's perspectives on health, I will explore the inter-relatedness of their motivations, behaviours, culture, and external environment in the following section.

A simple illustration of the reciprocal relationship between all of the quadrants can be found in Jenny's experience of health when being outside in nature. She defines health as something that can emerge through external surroundings, that is the natural environment around the lake (collective exterior). Being outside in clean air and beautiful surroundings affects her internal motivation for health (individual interior), which again influences her behaviour and practices of doing activities outside in nature (individual exterior). Being in nature, particularly by the lake, is a traditional activity for families and groups of friends, as well as provides an opportunity to strengthen interpersonal relationships with others in the community (collective interior). Experiencing health through nature is thus linked to all of the quadrants.

Although it is possible to simultaneously demonstrate the inter-relatedness between all of these perspectives, the relationship between each of the quadrants will be explored section by section, as demonstrated in figure 3.

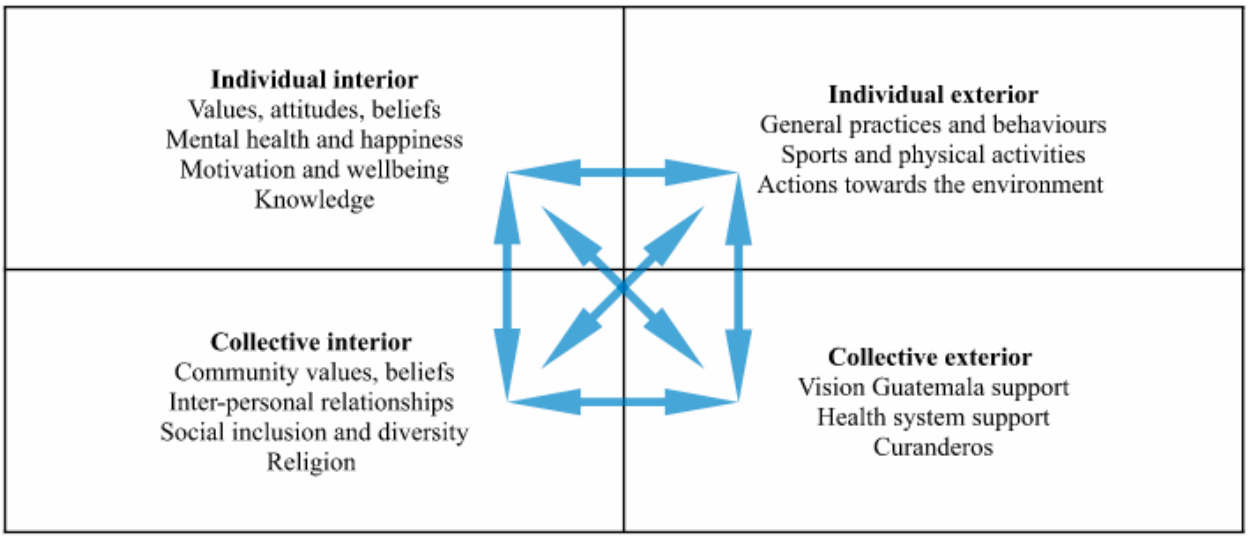


Figure 3.

7.1 Collective Interior and Collective Exterior

The connection between collective interior and exterior concerns the ways in which collective values and beliefs and social relationships relate to external surroundings, such as health service systems, VG, and the natural environment.

It is clear that collective indigenous values and beliefs have an impact on whether the women prefer the health service system or traditional Mayan practices. Within an indigenous context such as Lake Atitlan, Mayan medical practices are accepted and preferred by some because the general population approves of them, not because they have an empirical basis and established validity of treatment (Giralt, 2012). Community values influence the individual choice of health provider. When exploring the relationships between culture and health systems, being aware of this fact can provide important insights into the challenges some biomedical clinics might experience in an indigenous context. To build more trust amongst its users, biomedical health services could incorporate traditional healing practices, or even just explain the process in a culturally appropriate manner. A study conducted with indigenous people in Canada pointed to the significant gaps in knowledge when attempts were made to make public health services responsive to marginalised people (Browne et al., 2012). Much emphasis in this regard is put on the importance of organisations and public health systems to adapt to locally relevant strategies.

The participants emphasised that health, or the absence of health, did not only come from physical origins but also spiritual. It is possible that religious and spiritual beliefs influenced the women's preferences for the health centre or Mayan healers. After all, Mayan traditional healing practices are spiritual in nature. However, all participants were members of either the Evangelical or Catholic church, like most living Mayan in Guatemala (Carlsen, 2009). To better understand how religion can affect the choice of health provider, one might have to properly explore the underpinnings of how religion, through colonialism, has influenced traditional Mayan spirituality. To do so, one would also have to differentiate between the Orthodox Catholic and Evangelic Protestant religions. A study conducted in Botswana found that religion and the intensity of one's faith were indicative of one's attitudes and behaviours related to HIV (Haron & Jensen, 2008). This was further related to the influence religion can have on public health and health policies. An in-depth analysis would be necessary to fully understand how religion interacts with traditional Mayan spirituality and practices.

Nevertheless, the multitude of religions and spiritual beliefs existing in the Mayan population as a result of colonialism illustrates the complexity of Mayan collective spirituality. It can be argued that health providers need to consider spiritual and religious beliefs when providing healthcare.

While community values can influence the ways in which social systems work, it is also possible that social systems, such as VG, create their own form of social culture or collective norms that the women follow within the organisation. An example of this is how the women felt a high degree of non-discrimination compared to other social systems they participated in. At VG, they were seen and treated as equals. VG actively strives to create an inclusive culture in which the whole family, including men and children, work together to create sustainable change in the family as a whole. Working towards inclusiveness and gender integration is, according to some scholars, "rare" within development work (Chant & Gutmann, 2002, p. 271). Although this study can't draw conclusions about the larger social culture at VG, it was evident that interpersonal relationships and social coherence occurred within the organisation.

Based on the above, it can be argued that, in order to support larger groups, it is necessary for systems to have a general understanding of the community's cultural judgements and how they affect the community's health. From this recognition, one can adapt to locally relevant strategies. Research has shown that when the community is included in NGO or development projects, the benefits are wider and trust is strengthened (Baez, 1996). VG's team, with the exception of the volunteers and interns, consists of local members who are familiar with the Mayan culture, norms, and general beliefs. Being Tz'utujil, they are a part of the local context and are thus more likely to act in a culturally appropriate way. This might help establish trust between the organisation and its participants and also strengthen the women's experience with support from the organisation.

With that trust comes the power to change collective values and beliefs that no longer serve the community. One way VG might have used culturally relevant strategies for changing certain collective beliefs is demonstrated by the example of the overconsumption of tortillas. Maize has a powerful place within the indigenous community in Guatemala, and tortillas have been seen as the primary source of food for decades (Mendoza et al., 2017). In addition, several other Guatemalan dishes are largely based on maize, which is unfortunately susceptible to bacterial contamination derived from fungi (Appell, Kendra, & Trucksess,

2010). As the participants mentioned, they have been told from birth that "tortillas give you strength". In order to change non-beneficial beliefs and spark critical thinking, VG often uses informal pedagogical approaches such as dramatisation, drawing, or interactive games.

The potential of informal education and "free" pedagogy as an approach towards changing harmful communal beliefs has been explored in research, such as the case-study in an African NGO in Tostan (Gillespie & Melching, 2010). The research applied a human rights-based programme of informal education to eight different African countries to elicit discussion about the controversies related to female genital cutting (FGC). Tostan's educational approach is non-prescriptive, based on specific needs from the community, and thus rooted in local practices. The approach has been identified by other scholars (Shell-Duncan, 2008) as a great alternative to health-based Western approaches that often lack an understanding of communal worldviews and cultures, adhering excessively to formula or law.

Regardless of the system, organisations or healthcare systems, the relationship between the collective interior and exterior demonstrates the importance of providing culturally appropriate care and developing an understanding of the cultural and historical context of the people they serve.

7.2 Individual Interior and Collective Exterior

The relationship between the individual interior and collective exterior concerns the role of the individual person's values and beliefs and their interaction with the external environment, often despite the individual being a part of a larger community. It also pertains to how motivation emerges from external surroundings.

As mentioned above, it can be argued that choice of healer versus health service is embedded in culture and collective norms. However, the participants displayed varying individual attitudes in their preferences. This reveals that individual values and beliefs can have a stronger influence than cultural beliefs. This is consistent with other studies that have demonstrated that personal motivations and beliefs can be more influential than cultural values in regards to the choice of traditional versus modern health facilities (Steen, 1999). It was concluded that these motivations are often ignored by research.

An additional connection between the individual and systems is that of knowledge through health education. VG has made several efforts to increase the women's knowledge, as well as to increase confidence to help them understand that they can be the protagonists of their own wellbeing (Vision Guatemala, accessed 25.03.2018). The women stated that they have increased their knowledge tremendously through VG's workshops. One obvious example is that of healthy eating. Having a 'balanced plate of food' was one of the dominant conversation topics in the interviews. This could be because of the focus on this subject in the organisation's workshops. It is also possible that this was just a general topic of importance in the community. Nevertheless, it was evident that the degree of knowledge varied. That is, that each individual had her own interpretation of the messages from the health education.

The connection between the inner individual and collective systems also opens up for the recognition of how motivation arise from external surroundings. In health promotions, one needs to understand what characteristics of the individual's motivation can be influenced through environmental factors (Green et al., 2015). Attaining knowledge was one of the many motivations the women got from being a part of VG's social system. The organisation also motivated them in terms of having a place to go for social relationships and non-discrimination, as well as support in the form of financial and economic safety. It is clear that VG has great power in influencing the women in a positive manner. Yet, perhaps the strongest motivation presented was being outside in nature, in the external surroundings. Nature appeared to be a setting where the women had the opportunity to go into deep, reflective thought about their own life. As their motivations were strongly linked to mental health, it can be said that support from these systems and being outside in nature were factors that also supported what the women considered to be a healthy mind.

7.3 Individual Exterior and Collective Exterior

The relationship between individual and collective exterior provide space for the exploration of healthy practices within social systems, but also the interplay between the natural environment and environmental behaviours.

As discussed above, knowledge can often be attained through health education in social systems like VG. However, for education to be effective it is critical that the knowledge transforms into actual practice. One way to improve healthy practice is by availability, that is,

to create a space for healthy practice to occur. This availability could be created in social systems. This idea is quite prominent in the health promotion endeavour and links to one of the five action areas in the Ottawa Charter (World health organisation (WHO), 1986) - creating supportive environments. It is based on the idea that behaviour occurs as a result of, among other factors, environmental surroundings, and therefore the environment can be moulded to change behaviours. Social systems can create participatory initiatives, not only in policy decision and systems but also within communities. Supportive environments thus create a basis for a strengthened community (Viner et al., 2012). For instance, the women stated that they would have played sports if the option was available to them. There were not many teams in the community for women of their age. Thus, systems can support healthy behaviours by providing a network, or a platform for it to occur. The participants mentioned that VG could serve in such a capacity and that a woman's basketball team in VG could be a good idea that creates an opportunity for women to get together and play.

Another connection between these quadrants is that of behaviours and actions towards the environment. The women's actions, such as burning garbage or doing their laundry in the lake, affected the environment by polluting and/or contaminating it. These actions create a toxic environment that influences people's health. For the women, living in unity with nature meant being in a reciprocal relationship, wherein if you 'give something you get something back'. Nature, its plants and trees, are all living organisms, after all. Thus, living in unity with nature means that all living things live in harmony with each other. For some of the women, creating this health-giving relationship between one's own actions and nature could be done through practices like organic gardening.

7.4 Individual Interior and Collective Interior

The connection between individual and collective interior demonstrates the interaction between one's own individual values and motivations and a collective community. As reiterated by Wilber (2005, p.33), "Individual consciousness does not exist in a vacuum; it exists inextricably embedded in shared values, beliefs, and worldviews". This signifies that how a certain culture views any subject will have a profound effect on how an individual views it.

Although health was seen as an individual responsibility, it was evident that the women also felt a great responsibility for the health of others. Their roles as mothers placed responsibility for the health of others in their hands. The idea of the Mayan mother being responsible for their family's health is consistent with Guatemalan literature that explains the designation of Mayan women as "the guardians of life and ancestral culture" (Camus, 2002 as cited in Giralt, 2012, p.441). As such, Mayan women are the primary caretakers of the family and responsible for assessing the family's health and deciding how to proceed if illness occurs. This highlights how, as a result of cultural traditions, the Mayan mother feels responsible for and values her family's health.

Occasionally, however, individual values go beyond cultural norms and traditions, especially if the cultural norm is not serving or is harming the individual. Jenny's daughter, who wanted to play football but was apprehensive about it due to the gender norms of the community, is an illustration of this. Although the cultural norms stipulated that it was only permissible for boys to play such sports, she had the confidence to participate despite her fear of how the other children would react. Through her own motivation and confidence, she was empowered to act regardless of how the others in the community might react. In other words, there is a distinction between norms within communities and an individual's perception of those norms based on their subjective judgement (Green et al., 2015). Another example of this is Lilly's strong expressions of not caring what other people in the community thought about her choice of clothes. As long as her clothes made her happy, why should she care about what other people think? Having confidence to make individual choices despite the opinions of others was important for her personal happiness.

Although stories like Jenny's and Lilly's are small in the larger picture of health, they demonstrate the importance of being the protagonists of their personal wellbeing. Looking at these experiences of empowerment in the space between the individual and collective interior can be of great significance in a context in which people are being oppressed or marginalised by the larger cultural community.

7.5 Individual Exterior and Collective Interior

The interplay between individual exterior and collective interior works with how culture and collective attitudes relate to healthy practices and behaviours. It also involves looking at

interpersonal relationships and what causes certain healthy practices to arise within a certain community.

Cultural beliefs change overtime and may be influenced by, for example education. In turn, changing cultural beliefs will change individual behaviour. Picking up on the subject of tortillas, one of the younger participants claimed that the overconsumption belongs to the older generation, and that 'these times are different'. The younger participant had already put her new knowledge into practice and always made sure she did not eat an extensive amount of tortillas. Interestingly, two of the older participants argued that tortillas are part of a healthy diet that 'gives you strength'. It seems as though the difference between generations, that is age-specific culture, could influence whether people apply their new knowledge into actual behaviour. It might be that older women in the village feel more closely tied to tradition compared to the younger generation. Thus, the traditional practice of eating a lot of tortillas could be more difficult to change when the practice has been embedded in the culture for an elongated period. Another example of how cultural beliefs shape healthy practices and behaviours is that of women not wanting to play football in the streets, due to the belief that men should primarily be the ones playing sports outside. According to the women, this norm had started to change, at least within the younger generation, and the culture is increasingly becoming more inclusive.

The connection between the larger cultural landscape and individual practices raises the very important notion of social participation. In Guatemala, the creation of agency and participation within indigenous communities has been, and still is, limited as a result of conflicting power relations, political violence, and repression that have been present in the country's history (Flores, Ruando & Phé Funchal, 2009). Some researchers have found that using traditional 'community engagement' mechanisms are proven to be quite effective in creating healthy practices as they limit social disruption and the community becomes much more receptive to biomedical research activities (Tindana et al., 2011).

Interpersonal relationships were significant in creating healthy practices, as nearly all practices were done in large groups, whether it was with family or with friends. For instance, swimming in the lake was seen as a family activity and something they did not only for enjoyment, but also for cleaning up dishes and doing laundry. Doing any practice alone was never mentioned in any of the conversations. Understanding that some communities do things

in groups could improve the efficacy of the design of any health promoting intervention in an indigenous context, as indigenous peoples' outlooks tend to value community and solidarity (Getty, 2010).

7.6 Individual Interior and Individual Exterior

The relationship between individual interior and exterior concerns how individual values, beliefs, motivations, and knowledge influence healthy behaviours, and in converse. This interaction is particularly important in terms of translating intention into healthy behaviours.

Individual interior can be challenging to explore in a vacuum, as the inner experiences of being human are influenced in various ways. For example, as presented in the findings, the case of motivation was related to a multitude of individual, social, and structural factors. Although motivation was inspired in many ways, it seems clear that motivation is integral to any behavioural decision. Motivation and intention to create and maintain healthy practices is related to a range of self-concepts, such as self-esteem and self-efficacy (Green et al., 2015). These concepts both indirectly and directly have a significant effect on health and health-related practices. The participants of this study demonstrated in various ways, that confidence was important to their own wellbeing. Other studies have shown that people with higher levels of confidence or self-esteem are more likely to behave in ways that maximise health (Geckil & Dünder, 2011).

Attaining knowledge can also contribute to the intention to act. However, despite the attainment of knowledge about a certain topic, it is not given that the knowledge will automatically transform into healthy behaviour, as knowledge alone very rarely leads to action (Green et al., 2015). This was highlighted by Anna, who was irritated by the fact that, although many people knew the dangers of burning garbage, they still did it, in spite of their knowledge of it being harmful to their health. This could be an example of cognitive dissonance (Festinger, 1957), inconsistent psychological beliefs, which demonstrates how challenging it can be to translate knowledge into action. The reason for inconsistency in knowledge and behaviour could be due to the influence of the actions of others in the community, or that personal individual values do not correspond with the knowledge attained.

It seems evident that understanding the characteristics of inner experiences and how they link to healthy behaviours is essential in order to enable people to gain control over their own health. This is especially true from an empowerment perspective (Green et al., 2015). In terms of health promotion, interventions could be tailored to strengthen levels of motivation and thus increase the likelihood of effective outcomes.

7.7 Tetrameshing

Following Esbjörn-Hargen's (2010) procedure for employing Integral theory into action, I have attempted to 'tetramesh' the perspectives of the women in order to organize a cohesive whole. The inter-relatedness of all the quadrants demonstrate how Tz'utujil women define health, but it draws even more attention to the complex influences that are necessary to consider when looking at factors that enable experiencing health.

7.8 Worldviews in Constant Change

Integral theory recognises that values and worldviews are changing. Values are often presumed to be recognised by researches as culturally specific, however they change as humans develop, both as individuals and through generations (Esbjörn-Hargens, 2010). The stories from the women show wide variety in values and beliefs, but also demonstrate how generations have changed over time. This change could also be related to the concept of hybridity, which involves the unification of ideas and concepts that also simultaneously contradict each other (Kraidy, 2017). The Latin American region is particularly susceptible to hybridity due to the history of colonialism, which has led to extreme cultural fusion and the alteration of social dynamics. In Lake Atitlán, hybridity reveals itself in various ways: through language (Tz'utujil and Spanish), Christian and Mayan religions, and collective memories of structural violence. Moreover, over the course of the last decade, Lake Atitlan has gradually been influenced by tourism and this might continue, as it appears that the lake is transforming into a major tourist destination. The Tz'utujil women do not typically interact much with backpackers and expatriates, however they might be influenced through a new emerging culture in the lake, as well as through a growing influence of technology and the free exchange of information. Thus, it seems as though the community members are maintaining some traditional ways of living while merging aspects of modernism into their everyday lives.

In specific regard to health systems, hybridity can be seen through the interaction between traditional and modern health services that have occurred in the area. This is evident in the emergence of the dynamic model. A Guatemalan report on Mayan medicine and health discusses the relationship between the traditional and modern health service scheme throughout the Mesoamerican region:

> *"The opposition scheme, which has prevailed in some countries within and outside the region, has led to a position of sterile competition and useless demarcation of territories, which must be overcome by a scheme of complementarity, inter-dependence and revaluation among traditional medicine and modern medicine. Indeed, the separation between traditional medicine and the formal institution is an artificial phenomenon. The region interchangeably uses both systems and it has produced, over time, a dynamic model in which, although the two types of medical practices do not always harmonize, it expresses the possibility of complementation". (Organización Panamericana de la Salud, qtd. in Conociendo la Medicina Maya, 29)* (Originally in Spanish, translated by author)

García Canclini (1990) highlights that the lines between the modern and traditional seem to become increasingly blurred and argues that this creates a new way of conceptualising societies. To understand these new societies and to succeed with development initiatives and research, significant communication with the community in which the research is supposed to serve is necessary (Escobar, 2011). New ways to better meet human needs stem from interactions on a grassroots and local level.

7.9 Bringing Science and Tradition Together into a new Paradigm

In this regard, the Integral theory seems to be quite useful as it provides a territory for exploring and accepting domains beyond what Western science has traditionally recognised (Esbjörn-Hargens, 2010). In 'The Marriage of Sense and Soul' (1998), Ken Wilber presents what he calls 'The Great Chain of Being', which attempts to integrate scientific materialism with tradition. Science represents the external while tradition, also presented as religion, represents the interior dimension. To integrate science and tradition is thus to integrate a premodern, traditional/spiritual worldview with a modern and scientific worldview. This integral perspective takes on the idea that consciousness evolves when a series of worldviews develop together, which results in new perspectives and values (McIntosh, 2008). A truly integral approach to any subject would have to reconcile these two in some way (Wilber, 2001). This perspective goes beyond postmodernism, as a postmodern perspective is predicated on the underlying success of modernism (McIntosh, 2008). Integral thinkers recognise postmodernism's success and view it as more evolved than other perspectives,

however it is not evolved enough to respond to current global problems. Thus, to adequately address global challenges like health, the next worldview or paradigm will likely be enacted by Integral philosophy. It will attempt to include all perspectives at once, in order to organise a cohesive whole.

7.10 Criticism of Integral Theory

Some critics argue that this worldview is impossible: In research, every scientist is required to argue for her chosen discipline and her rejection of other perspectives needs to be explained and accounted for (Markus, 2009). Integral theory, however, holds that "everybody's right", and that every major approach has some degree of truth to it. It can integrate the good and the bad of each worldview (McIntosh, 2008). If one does not look at the bigger picture, then only a fragmented and incomplete view is presented. And this, according to Wilber (2010), is an ineffective way of looking at the world, as most disciplines only include scientific realms and thus limit everything to a modern worldview.

There is a scarcity of academic and peer-reviewed criticism on the Integral theory. Most of the critique is to be found through online essays at www.IntegralWorld.net, a website dedicated to critical discussions on the theory. Criticism mostly centres around the theory's 'optimism' and unrealistic hopes for research, which according to critics such as Markus (2009), can't be materialised. The chief argument is that the theory puts heavy emphasis on the interior and subjective dimensions, and by doing so contributes to some sort of 'nature mysticism', with its inclusion of concepts such as spirit, consciousness, values, and worldviews as if they were 'fundamental factors of human history.' It is worth noting that criticism of using concepts connected to spirituality within research is more often directed towards the lines, or levels of the Integral theory, concepts of the model that have not been included in my own research.

Whether or not one agrees with the criticism, it is evident that, in order for a theory to operate within science, there must be a critical dialogue on its application in research. The lack of academic and peer-reviewed criticism of the theory might be a sign that it still has a long way to go in order to gain legitimacy within academia. However, as Esbjørn Hagernes (2010) points out, one needs to first apply a theory in action in order to investigate what does not work. Only then can one pinpoint its flaws.

7.11 Limitations

Several limitations were identified in connection with the research process. It is possible that valuable data has been overlooked due to the lack of sufficient follow-up questions because of my own limitations with the Spanish language. However, like myself, Spanish was not the mother tongue of the participants, and it could be that both the participants and I met each other 'half-way' in our communication. Furthermore, the women's participation and knowledge attained in VG might have influenced their answers. It is not possible to know if their replies would have been similar if they had not participated in VG's workshops. However, I argue that the women's reflections and their perspectives are significant and meaningful regardless of where they 'learned' them from.

Although employing the Integral framework was useful in order to conceptualise and more easily grasp and explore complex ideas related to health, my study could have benefited from looking at a more in-depth and specific subject rather than something as broad as "health". It is likely that having a more specific theme would have provided richer and more in-depth data. Health as a subject includes many sub-themes that individually could have been applied to Integral theory. By taking on such an extensive theme, I was only able to scratch the surface of health and its influences. On the other hand, as the goal was to explore and understand the women's views, looking at health from a broad viewpoint allowed me to get a comprehensive picture of their perspectives.

Furthermore, it has been argued that a truly Integral approach utilises a mixed methods approach -- both quantitative and qualitative procedures. This is due to the numeral and measurable nature of the exterior quadrants (practices and systems), which is related to objectivity and 'matter'. Quantitative studies could represent the external dimensions and the qualitative the interior dimension. Nevertheless, multiple methods, be they mixed methods or the triangulation of methods, could have enhanced the validity of the research.

Photovoice, as a method, also has its limitations. It requires resources like cameras and is quite time consuming. Photography might also limit access to data, as one excludes what is *not* photographed and subsequently not discussed in the interviews. However, I attempted to explore the women's views beyond what was conveyed through the photographs, by using my

topic guide (Appendix 4), as well as by giving them an opportunity to comment on issues throughout the conversation. Rather than facilitating group discussions, a common application of this method (Wang & Burris, 1997), I chose individual interviews to enable me to gain more in-depth insight of the individuals' understanding of health. I could have made the research process more participatory by giving the women an opportunity to shape the Photovoice tasks. However, I believe that by having prepared straightforward tasks the women were less confused and more motivated, as it made communication clearer.

7.12 Photovoice – an Empowering Method Suited for Marginalised Communities?

The last section of findings not yet discussed was the theme that did not relate to any of the research questions, which was about the use of Photovoice. Although a few limitations were noted, as described above, my study provided an opportunity to engage in dialogue with the women and give them a platform to reflect on their own health, as well to demonstrate a positive regard to indigenous perspectives. Empowerment and participation are central topics to the health promotion agenda (WHO, 1986), and concerns emancipating communities into being the protagonists of their own health (Green et al., 2015).

In order to meet the changing needs of indigenous communities, many institutions and research centres have recommended community engagement and participatory approaches to research (Tindana et al., 2007). If the goal of doing research within a marginalised population is to empower and inspire people to take control of their own health, it is evermore necessary to employ culturally appropriate research methods. I argue that the modified version of Photovoice employed in the study has contributed to this endeavour. I have attempted to implement learning preferences specific to the participants' cultural context. The dramatisation served as a brainstorming technique but also helped the women feel comfortable about the research process, thus my approach benefited from being rooted in local acceptance and cultural practice.

8. Conclusion

In a world of continually shifting values and worldviews, it is essential to listen to the indigenous peoples and their voices. Many professionals from the field of development have recognised a need for a holistic approach to health. Indigenous perspectives are often

neglected, resulting in the lack of an intricate understanding of the globalised world and the way it affects indigenous health. Health is complex and can be approached from varying perspectives, from a technology-driven biomedical approach to a more intricate understanding of health as a result of social surroundings. To gain a comprehensive understanding of health, one needs to take multiple perspectives into account. This study is one of the few exploring indigenous health beliefs through participatory research methods. My overall objective of learning how indigenous local women define health and what enables them to experience health has been answered through the sub-objectives, which were all related to the Integral Theory. Employing this Integral approach, I aimed to explore how individual and collective values and beliefs interact with behaviours and social structures. The Integral theory has thus been utilised as a lens throughout the entire research process.

Indigenous Tz'utujil women's views on health consist of intricate understandings and their definitions vary depending on the individual. The women are able to experience health through a range of factors, such as being in and appreciating nature, doing activities in groups, and by attaining new knowledge through organisational workshops. They are adapting to changes brought by the post-colonial era and globalisation, while at the same time being responsible for their family's health. Their views can be presented and explored through individual/collective and interior/exterior dimensions. For example, the relationship between collective values and systems opens up for the recognition of organisations and health systems to adapt to locally relevant strategies. With this trust, health providers, whether they are health educators, organisations, or health service systems, might have the power to influence healthy behaviours and improve practices and, in turn, increase health support. However, it is clear that individual values and motivations play a significant role in the process of become the protagonist of one's' own wellbeing.

The different dimensions of individual/collective and interior/exterior are complementary perspectives and by looking at their inter-relatedness we can better understand the factors that promote health and how they influence one another. Due to its small scope, the results from the study might not be remarkable; however, the study has contributed to participatory research in a context where indigenous perspectives are not generally heard. As such, it has attempted to recognise and appreciate indigenous worldviews, culture, and belief systems.

8.1 Recommendations

My findings indicate that indigenous people's perspectives are important in order to fight the health equity gap in Guatemala. The women's views on health service support highlight some of the barriers the community is experiencing in relation to costs of prescribed biomedical products. Health check-ups always come with a list of expensive medicine. For the participants, this could be reason enough for not taking themselves or relatives to the health centre when they are sick. As the women have little knowledge about which medications are essential, and what are not, health promotion could help overcome this barrier through education or monetary of the system.

The women's values, beliefs, and motivations are useful insights for the Integral Health programme in VG and could possibly guide further workshops. A concrete example is the participants' collective wish to start a women's sports team, which could be created through the organisational platform.

The study has contributed to the Integral theory and its application to empirical research. It is evident that literature lacks indigenous Mayan perspectives on health and more studies need to be done in order to interpret and fully understand this subject matter. Furthermore, it would be interesting to see how Tz'utujil men perceive health and compare it to the photos taken by the women.

9. References

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Appendix 1

Codes	Basic Theme	Organising Theme
Being happy internally attracts others It's important to be happy with simple things Health is to have a positive attitude When you are healthy you are care-free Health is to balance happiness and sadness Leaving worry at home	Mental health and happiness	**Individual interior**
Work as motivation If you out your mind into it, you can do it Others healthy actions motivate me Time for reflection and thought Knowledge is power It's important to actively seek knowledge	Motivation and wellbeing	
To give yourself priority Health is an individual responsibility Health is your whole life Ability to appreciate nature A healthy person has self-confidence	Values and attitudes	
It is important to do investigations Lack of knowledge is a threat to health Knowledge can be attained through participation	Knowledge and beliefs	
I am a very participatory person Eating healthy is the most important Always make the food yourself Drinking clean water Good personal hygiene Sufficient sleep	General practices and behaviours	**Individual exterior**
Walking or running Football and basketball Kayaking and swimming in the lake Traditional "temascal" Finding time for activity despite of work	Sports and physical activities	
OG serves the whole community OG is an economical recourse It's important to grow your own food I pick my own herbs in the mountains Plant medicines are more than food	Organic gardening	
We need to clean up the lake We are overusing all our resources Climate change brings consequences to our health	Actions towards the environment	
Men and women were not allowed to play together Different generations think differently Passing on important knowledge Tortillas make you strong Everyone drinks a lot of soda Community lacks knowledge	Community attitudes, values and beliefs	

I take care of my whole family's health My family support me in healthy actions Good relationships with others in nature	Inter-personal relationships	**Collective interior**
Sharing what you have with others Being of help to others Create harmony in the community by not discriminating In the community there are many support groups	Social inclusion and acceptance of diversity	
God takes care of us Connectedness is found through church Interconnectedness with nature and all beings An animal is like a person	Religion and spirituality	
We need to clean up the lake We are overusing all our resources Climate change brings consequences to our health Clean air and water equals healthy life Community is not aware of the harm	Environmental issues	**Collective exterior**
Accessibility of free growing fruits and vegetables It's important to just be - in nature Nature supports your mental health	Natural environment and accessibility	
Through VG I have an excuse and time to be social VG motivates me to be healthy I like VG because it's playful and fun In VG, no one discriminates Without VG, I would not have been in work I wish VG could teach me how to write I wish VG would have a sports team It would be great if VG could do medical checks	Vision Guatemala (VG) support	
Conventional medicine is too expensive One can find plant medicines yourself	Health service system support	
People trust "curanderas" more than doctors Curandera is old fashioned and lack knowledge Conventional system more reliable	Curanderos	

This made me take time for myself I got to connect with my family I did investigations after I photographed I never leave the house, but today yes These tasks made me reflect on my life	Experience of Photovoice

Appendix 2

Marguerite Daniel
Christiesgt. 13
5015 BERGEN

Vår dato: 21.11.2017 Vår ref: 56675 / 3 / STM Deres dato: Deres ref:

Tilrådning fra NSD Personvernombudet for forskning § 7-27

Personvernombudet for forskning viser til meldeskjema mottatt 18.10.2017 for prosjektet:

56675	*Perspectives on health through an organic gardening project in Lake Atitlan, Guatemala*
Behandlingsansvarlig	*Universitetet i Bergen, ved institusjonens øverste leder*
Daglig ansvarlig	*Marguerite Daniel*
Student	*Aurora Tjelflaat*

Vurdering

Etter gjennomgang av opplysningene i meldeskjemaet og øvrig dokumentasjon finner vi at prosjektet er unntatt konsesjonsplikt og at personopplysningene som blir samlet inn i dette prosjektet er regulert av § 7-27 i personopplysningsforskriften. På den neste siden er vår vurdering av prosjektopplegget slik det er meldt til oss. Du kan nå gå i gang med å behandle personopplysninger.

Vilkår for vår anbefaling

Vår anbefaling forutsetter at du gjennomfører prosjektet i tråd med:

- opplysningene gitt i meldeskjemaet og øvrig dokumentasjon
- vår prosjektvurdering, se side 2
- eventuell korrespondanse med oss

Meld fra hvis du gjør vesentlige endringer i prosjektet

Dersom prosjektet endrer seg, kan det være nødvendig å sende inn endringsmelding. På våre nettsider finner du svar på hvilke endringer du må melde, samt endringsskjema.

Opplysninger om prosjektet blir lagt ut på våre nettsider og i Meldingsarkivet

Vi har lagt ut opplysninger om prosjektet på nettsidene våre. Alle våre institusjoner har også tilgang til egne prosjekter i Meldingsarkivet.

Vi tar kontakt om status for behandling av personopplysninger ved prosjektslutt

Ved prosjektslutt 05.12.2017 vil vi ta kontakt for å avklare status for behandlingen av personopplysninger.

Dokumentet er elektronisk produsert og godkjent ved NSDs rutiner for elektronisk godkjenning.

Appendix 3

Carta de consentimiento y la información para el proyecto de investigación
Título del estudio
Un enfoque integral de la salud: Perspectivas de la salud a través de la comunidad local (Tz'utujil) del Lago de Atitlán, Guatemala

Propósito del estudio
Soy un estudiante de Maestria en Desarrollo Global y Promoción de la Salud en la Universidad de Bergen, Noruega. Como parte de mi maestría, estoy haciendo un proyecto de investigación de mi propia elección. El propósito del estudio es aprender sobre las perspectivas de la salud mediante la toma de fotografías. Les estoy pidiendo a las mujeres porque usted es una participante de Vision Guatemala y ha mostrado interés en mi estudio.

Información sobre el estudio
El estudio trata de lo que la salud significa para usted. Este será un estudio de Fotovoz, que consiste en tomar fotografías. La participación en esta investigación, por lo tanto, significa que usted va a pasar unos días tomando fotografías alrededor de su pueblo. Voy a pedirle que presente 6 fotos en total. Después de tomar las imágenes, vamos a utilizar alrededor de 1 hora para discutir las diferentes fotografías que han tomado. Hay dos tareas en las que tomará fotografías:

Toma fotos que muestran

1. **El significado de "salud" para ti**
2. **Qué o quién te ayuda a alcanzar la salud**

Con mi firma declaro que estoy consciente que la información personal dada se almacenarán en una computadora protegida con contraseña. Solo mi supervisor y yo tendremos acceso a los datos. y las fotografías tomadas por mi persona son propiedad de Vision Guatemala para el estudio de la salud, y se hará uso de este material cuando así lo requiere el proyecto.
En el informe no voy a utilizar su nombre o dar ninguna información personal. Voy a utilizar nombres falsos para proteger su privacidad.
La participación en este estudio es completamente voluntaria. Puede retirarse del estudio en cualquier momento y se borrara toda su informacion.

Firmado:_____ **Firmado:**_____
Participante Investigadora

Short summary of the consent form in English

The title of the study is 'Perspectives on health through the Tz'utujil community of Lake Atitlán, Guatemala'. I am doing this research as part of a master's programme in the University of Bergen. The purpose of the study is to learn about health perspectives by taking photographs. It is about what health means to you. You will spend a few days taking photos around your town. We will then meet and use about 1 hours to discuss the different photographs you have taken. Take photos that shows:

1. The meaning of "health" to you
2. What or who helps you achieve health

Signing this form means that you are aware of that data will be securely protected. The photos are property of Vision Guatemala and pictures will be used when the study requires it. I will use fake names to protect your privacy. Participation of this study is completely voluntary and you can withdraw from the study at any time during the process.

Appendix 4

Generally:

1.Tell me about this photo

For task one:

2.How does … (from the photo) … show “health” ?

For task two:

1.How does (person/ medicine/ activity/ etc.) in the photo help you achieve health?
2.Tell me how you use/interact with this to achieve health
3.What does your family/the community think/believe about this? How does that affect you?
4.How does this affect your own beliefs/motivation?