Productive leisure activity among women living with breast and ovary cancer: An alternative intervention strategy to improve their subjective well-being (SWB)

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Abstract

Title: Productive leisure activity among women living with breast and ovary cancer: An alternative intervention strategy to improve their subjective well-being (SWB)

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Key words: Breast cancer, leisure engagement, life satisfaction, social support, subjective well-being

This study explored the relationship between leisure engagement and the subjective well-being of women with breast and/or ovary cancer diagnosis in Portugal, Honduras and Nicaragua. A mixed methods approach was designed where 7 participants were involved in a leisure activity (assembling post-surgical bras) in a peer-based group. Furthermore, 128 participants were surveyed through a questionnaire including 7 life domains mentioned as indicators of SWB. This study gathered data regarding the social support sources of participants and their experiences with illness. In addition, the quantitative portion of the research indicated the main benefits of being engaged in a leisure activity: developing new talents, building a support network, increasing self-esteem and avoid overthinking about illness. Crucial to the preliminary data needed to implement an intervention strategy to foster SWB for women affected by BC/OC, valuable results were obtained regarding the interest of participants in textile art leisure activities. The sample from Honduras reported that 84% of its participants were interested in this activity, 74% of women from Portugal and 47% of Nicaraguans. The study confirmed there is a positive association between SWB and participating in a leisure activity. Statistically significant data was reported when correlating SWB and leisure engagement, SWB and country, and SWB and organizations in charge of supporting cancer patients. This presents empirical evidence for the usefulness of leisure activity engagement as an indicator of SWB. Future studies should consider testing the correlation between leisure domain and SWB.

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BC: Breast Cancer

OC: Ovary Cancer

LA: Latin America

SWB: Subjective Well-being

1 Introduction

Breast cancer (hereafter referred to as BC) is one of the main causes of death (WHO, 2017) and women's risk of developing it currently grows at a very fast rate (NHI, 2017). Since the initial stages of cancer such as diagnosis and further steps of treatment patients suffer from loss; loss that goes beyond physical health and has a consequence in their overall quality of life. Cancer brings emotional turmoil such as low self-esteem, changes in relationships with others (Devins et al., 2015), anxiety, rage and more serious affections like developing depression (Reynolds, 2002). Women living with cancer describe their illness as a deep loss of subjective control (Reynolds & Lim, 2007a). Some of them are not able to carry out their regular routines, their expectations about the future become uncertain and therefore roles that they have commonly played in society have to be adjusted accordingly. Some women take sick leave from work for long periods of time, others may feel lack of energy to maintain their regular activities (Reynolds & Lim, 2007a) and sometimes even being honest about their illness to their families and children may be challenging. Researchers put forward that when mothers are going through cancer, it becomes hard for them to keep an open communication channel with their children and this makes them feel unsatisfied with their parental roles (Cho, Yoo, & Hwang, 2015). In contemporary society, women are predominantly the caregivers (Nordenmark, Björk Eydal, & Rostgaard, 2014). The role of taking care of their children and families is still a task that is more common for women than for men. For this reason, when they have to be taken care of and not the other way around, their roles in society may be defied.

Other than bringing emotional burden, when cancer strikes, the body undergoes physical alterations related to the effects of medicine, surgery and other types of interventions. Physical obstacles add up to the already existing challenges faced by women living with cancer bringing diverse consequences in their lives. To exemplify, some women have to undergo mastectomy (Öster, Åström, Lindh, & Magnusson, 2009). Organ mutilation requires a recovery period and adapting to changes in the body image. Cancer-related lymphedema, which is the swelling of the arm after surgery, also affects the quality of life of these women (Williams & Williams, 1999). Lymphedema causes chronic pain, limited arm mobility, decrease in social functioning, and once again, challenges their body image as the shape of the arm may suffer significant changes (Pusic et al., 2013). All these alterations in health and life circumstances, lead to tremendous consequences for BC patients. For this and many other reasons that would be further discussed throughout this dissertation, alternative interventions must be called for to raise the Subjective well-being (hereafter referred to as SWB) among women living with cancer. Even though significant medical advances regarding detection, diagnosis and treatment have been observed in the past years (Puig, 2004), increasing the psychological well-being of individuals living and suffering with this disease has not been the main interest. This has caused the development and application of alternative strategies to be kept as a secondary goal in oncological research.

SWB is commonly defined as "[…] people's emotional and cognitive evaluations of their lives. […]" (Diener, Oishi, & Lucas, 2003, p. 403) and it is what lay people call happiness. However, psychological well-being is also put forward as an inclusive term for it (Diener, Pressman, Hunter, & Delgadillo-Chase, 2017). Researchers have shown that there is a link between being involved in leisure activities and the increase of SWB (Kuykendall, Tay, & Ng, 2015; Perruzza & Kinsella, 2010). Following this research line, oncological studies have also confirmed this theory (Puig, 2004; Reynolds & Lim, 2007b). Based on these notions, this dissertation aims to contribute to develop a leisure intervention strategy to foster SWB in women that are currently living with cancer or that have been diagnosed at any point in their lives as it has been observed that consequences may last many years.

There is limited research in the field of “creative occupations” and oncology or “leisure activities” and its relevance to increase SWB in oncological populations. However, literature reviews on this topic depict creativity as a restorative force with respect to health and SWB. Researchers argue it can be a tool that transforms the illness experience into something positive, motivate a sense of purpose in life and build social support (Geue, et al., 2010; Perruzza & Kinsella, 2010). Creativity is also an asset that increases self-esteem, empowers individuals, develops capacities and stimulates autonomy and competence (Perruzza & Kinsella, 2010). When creativity as a tool is put together with leisure activities done in a community-based approach, positive outomes can be expected. In oncological research, peer support is highlighted to foster the redefinition of personal sensitivities of surviving cancer by comparing themselves to individuals living similar experiences (Devins, et al., 2015). Consequently, creativity can be seen as a means to increase SWB among women that have been diagnosed with cancer (McDonough, Sabiston, & Wrosch, 2014). Social support creates conditions where individuals self-disclose and disengage from their own goals to focus in actions that can have an impact in their community (McDonough, Sabiston, & Wrosch, 2014). Sharing a space and a productive leisure with other BC survivors has the power to promote a positive group image (Devins, et al., 2015) and therefore enhance SWB. Engaging in social activities renders the opportunity to rediscover one’s self through internalizing personal experiences. In the case of women living with cancer, this insightful process may shift their perceptions of BC positively. The art of creating something in a safe place has the potential to allow participants deal with complex internal experiences and reconstruct the relationship between self, body and other perceptions (Öster, Åström, Lindh, & Magnusson, 2009).

During and after BC treatment, specialized garments become an everyday need. Arm sleeves and post-surgical bras are medical supplies that are needed by the majority of women undergoing mastectomy for their healing processes. The post-surgical bra facilitates mobility for the patient and provides support for drainage collection (Matory, 1995). Working in the production of garments related to their own physical needs can help them connect their self and body-image in a non-invasive way. Moreover, autonomy is given back to them so they can take the lead in their own health challenges. As experts in their own lives, BC survivors should have advocacy and agency in regards to their treatment and this includes the production of the medical supplies that they need. Additionally, knowing that they are part of the problem-solving of challenges faced by their own community gives back a sense of control, leadership and the knowledge that they have a life that goes beyond cancer and as so, they can contribute in someone else’s life.

1.1 The research

1.1.1 Structure of dissertation

This dissertation is structured in five chapters. The first chapter entails a general overview of the research defining the problem statement and provides the reader with an introduction of the research approach. This part also sheds light into what motivated the topic of cancer and the interest in developing a leisure strategy that promotes the SWB of women touched by it. In addition, the first section contains the research objectives clearly defined along with the scope of the study. The second chapter covers an up-to-date review of the literature on the subject of SWB and leisure. The main concepts and theories regarding these topics is explored and later on related to BC to understand the factors that influence the SWB of women affected by it. Special attention is given to leisure activities as a life domain with the potential to foster SWB. To contextualize this subject, the literature review includes the physical and psychological challenges faced by women after BC diagnosis. Moreover, basic information about their treatment and the need of coping with a life beyond cancer is discussed; especially the need of medical supplies such as post-surgical bras and compression arm-sleeves as a consequence of breast surgery. In this section of the dissertation, the research also elaborates on the theoretical framework that is further used to address the research questions and analyze the data collected.

The following part of the thesis contains the research methodology used to carry out the study along with a detailed account of the research design choices and techniques. This third portion of the thesis explains the challenges faced by the researcher during the investigation process and the adaptations that had to be done to successfully gather the necessary data. The fourth chapter of this study presents the data analysis. In this section, the findings are discussed in light of the theories, concepts and previous studies mentioned in the literature review section.

1.1.2 Purpose and aim

The main purpose of this research is to explore how being engaged in a productive leisure activity can impact the SWB of BC patients in three different countries (Honduras, Nicaragua and Portugal). It is also intended to promote social support by generating a setting where BC patients can gather together and work for a common goal; which in this case would be learning how to do post-surgical bras for themselves or donate them to other women lacking economic resources to obtain them. Bringing them together provides the opportunity to connect with others living similar situations and therefore they can discuss their particular challenges and concerns associated with illness. Since social support has been mentioned as a factor that fosters SWB (McDonough, Sabiston, & Wrosch, 2014), an intervention strategy can be developed and used as a tool for women living with BC. In a context where BC survivors come together as a group, social support, self-disclosure and switching from individual to common goals can be generated (McDonough, Sabiston, & Wrosch, 2014). Similarly, this can promote personal growth, life values, develop social relationships, emotional expression (Brajša- Žgnec, Merkaš, & Šverko, 2011), and enhance their overall quality of life. In other words, other than comparing the different situations experienced by BC women in the different countries included in the study, one main goal is to provide information for future interventions to support the BC community.

Specific objectives

- To compare the SWB of women living with breast cancer in Honduras, Nicaragua and Portugal.
- To determine if leisure activity engagement has an impact in the SWB of BC patients.

General objectives

- To investigate the effects of leisure activity engagement in BC patients.

- To observe and analyze through a workshop the effects of a productive leisure activity engagement.
- To development an intervention strategy to cope with cancer illness and empower women living with it.

1.1.3 Research approach

To produce a relevant contribution for the field of social work with families and children, this dissertation was designed to collect data through a mixed methods approach. The researcher considered that using a quantitative tool could provide valuable information on the SWB of BC patients in the comparison of the different countries included in the study. To fulfill other research objectives such as the impact of leisure activities in the SWB this population, the researcher designed a workshop intervention so they could engage in a group-based setting.

1.1.4 Rationale and significance of the study

This dissertation project emerges as an initiative to increase SWB among BC survivors. I believe promoting a social setting where women can be productive and creative can have a positive impact in multiple aspects of their lives. Cancer can be an isolating experience and therefore being able to transcend the illness experience can empower women strengthen them through shared-action. Similarly, the sense of belonging to a group and social participation is linked to an increase in SWB (Brajša- Žgnec, Merkaš, & Šverko, 2011; Leung & Lee, 2005).

I consider women's empowerment and their perceived well-being a topic of the utmost relevance in a global context where cancer incidence grows and women still lack basic resources for an appropriate and dignified treatment. Coming from a developing country and observing firsthand the deficiencies in the public health system motivated me to contribute with a fresh perspective on alternative interventions to increase the well-being of women touched by cancer. Moreover, producing these medical supplies solves their issues of lacking resources to obtain them as the prices can be more accessible if there is a work contribution by volunteer work.

Working in collaboration with BC survivors by assessing their SWB and generating a creative intervention gives the opportunity to foster support networks and include them in participating in the solution of challenges faced by this community. The knowledge and experience of cancer patients is valuable. For this reason, including them in research processes should be highlighted in oncological research as no one better than them can give insights into what suits them the most. Participating in research can also promote agency and self-determination in this population as they would be able to have a saying in decisions that concern their own health issues. In this case, inviting BC patients to participate in the production of a medical supply that they need for their treatment may be an empowering tool for them and allow important research data to emerge.

While there is an ample body of literature relating leisure activities and SWB, little has been published to contribute to oncological research in this topic. This research puts forward a professional contribution to social work by shedding light into a community-based approach. However, the impact I wish to have with this dissertation is directly to the BC community by supporting their transition into a life with cancer by fostering a social support network. For future implications, suggestions will be given for patient advocacy in the health system and informing public policies.

2 Literature Review

2.1 Subjective well-being

2.1.1 Concept and structure

2.1.1.1 Defining and contextualizing SWB

Something that human beings have in common is the universal goal of pursuing happiness. There is no secret formula that one can apply in order to achieve this state. However, since the 1980's, what lay people referred to as happiness (Diener et al., 2003), and had already been of philosophical interest, became a ground of attention for academics in diverse disciplines. With this interest, the term of SWB was first coined and became a research field of its own (Miao, Koo, & Oishi, 2013). Researchers studying SWB focused on what underlies the state of happiness and to the current times they have conducted multiple studies with methods such as surveys, laboratory experiments and theoretical approaches to examine its correlates (Diener et al., 2003) and social indicators. Regardless of this, it should be acknowledged that the concept of SWB doesn't replace the concept of happiness, but counts as an empirically-researchable approach.

The main fields that influenced the development of SWB studies are various. According to Diener et al (2003), sociology contributed by focusing on the effects of demographic elements in the quality of life. Humanistic psychology highlighted the importance of positive well-being and other mental health branches influenced the SWB field by developing an explanatory theory of happiness beyond the absence of symptoms of depression and lack of negative affect (Diener et al., 2003). As a counterproposal to a tendency of pathology of personality, SWB was now seen as the presence of happiness, peace, fulfillment and life satisfaction (Diener et al., 2003). Researchers observed humans were driven by incentives and not only by avoiding despair (Diener, Suh, Lucas, & Smith, 1999). It was then that a shift occurred and the interest went from explaining mental processes by the presence or absence of negative affect (pathological symptoms) to increasing understanding in happiness and its structure. Scientists also wanted to shed light on the individual perspective of this phenomenon. Thus, instead of assessing happiness by objective indicators such as economic and social components (Diener et al., 2003), subjective measures such as pleasant moods or emotions, positive affect and life satisfaction were set as a research target (Diener & Ryan, 2009).

For the scope of this dissertation, even though it is acknowledged objective factors are relevant for an in-depth understanding of SWB, the factors that will be considered exhaustively are subjective ones. SWB, as inferred by its words, is the *subjective* experience of individuals and therefore personal perceptions are of the utmost importance to this research. One key point emanating from the literature is that scientists have not yet reached consensus on a sole definition of SWB. It is commonly defined as "[…] people's emotional and cognitive evaluations of their lives. […] (Diener et al., 2003, p.403)." However, recent research stresses the most inclusive term is psychological well-being (Diener et al., 2017). As previously mentioned, SWB can only be conceptualized in terms of individual life experiences and the personal judgements of these experiences (Diener & Ryan, 2009). Those judgements are cognitive reflections that are categorized as appreciations of life in different domains such as home, social relationships, work, family, leisure, among others (Diener et al., 2017). Furthermore, cognitions are evaluated in terms of affect where feelings and emotions are the ground of attention (Diener et al., 2017). Since SWB is a broad term and depends on different correlations, it is described as an umbrella concept and not a specific construct. Researchers argue it is a general field of interest that can be studied by innumerable approaches and research disciplines (Diener, Suh, Lucas, & Smith, 1999). Due to this and the fact that it has several correlations and indicators, SWB cannot be easily pinned down. It is not caused by a specific domain and cannot be enhanced in such way. Instead, SWB levels can be increased by multiple factors interplaying together and causing a significant variation. For example, SWB is a term that has been used by western cultures. The majority of studies conducted are based in western societies and therefore a generalization of its correlates and the causal direction should be avoided. Happiness is experienced differently around the world as it is shaped by individual perceptions affected by factors like culture and context. As so, values, norms, and any other cultural background must be acknowledged as influential in the personal experience of happiness. This information should be kept in mind when analyzing SWB measurements and considering its correlates and variance.

To be able to measure and pinpoint its correlations and predictors, SWB is studied by three main components. This components are positive affect, negative affect (lack of), and life satisfaction (Diener, 1984). Recent studies also consider *optimism* to be another form of well-being or at least an important characteristic related to positive expectations about the future (Diener et al., 2017). All these components are to be assessed independently as it is demonstrated they are to some degree independent of each other (Diener et al., 2003). Momentary feelings such as enjoyment or long-term emotions like contentment are examples of positive affect experienced when people consider their lives to be going well (Diener et al., 2017). Contrariwise, when individuals perceive things in their lives are not well, negative affect is experienced through feelings of sadness, stress, anger, worry or even depression on a chronic long-term experience (Diener et al., 2017). Health social determinants follow the notion that there is a link between physical and mental health. It is known that there is a relationship between them; however the causal direction is still not clear. For this, policies that have the goal of increasing physical or mental health should consider both variables and the direct and indirect cross effects one has over the other (Ohrnberger, Fichera, & Sutton, 2017) to understand in-depth how to enhance them and adapt health policies accordingly.

2.1.1.2 Predictors of SWB

Countless elements are highlighted as predictors of SWB or life satisfaction. Since societies are dissimilar and driven by unique sets of needs and values, what predicts their SWB varies from culture to culture (Oishi, Diener, Suh, & Lucas, 1999). Considering Maslow’s hierarchical pyramid of necessities in his need gratification theory, individuals tend to prioritize their needs and structure their motivations accordingly (Maslow, 1948). Higher needs such as self-esteem or love become salient only when primary needs are satisfied (Oishi, Diener, Lucas, & Suh, 1999).

In this same line of thought, the capability perspective put forward by Nussbaum and Sen (1993) stress the importance of ‘functioning’ as a predictor of well-being. One the one hand, one’s capabilities are the personal characteristics and personal arrangements, among others (Nussbaum & Sen, 1993). While on the other hand, “*functionings* represent parts of the state of a person -in particular the various things that he or she manages to do or be in leading a life” (p.2)

(Nussbaum & Sen, 1993). Highlighting capabilities, these authors argue that valuable functionings such as agency attainment or agency seen as a way of freedom can be attained (Nussbaum & Sen, 1993). For instance, being socially integrated or belonging to a community can have a central role in the well-being of someone (Nussbaum & Sen, 1993). However, supporting the need satisfaction theory of Maslow, according to Nussbaum and Sen (1993), individuals living in poor economic conditions where basic needs are lacking, a smaller number of relatively important functionings become central to their needs. In other words, in places where there is extreme poverty, standards of functionings are based on basic needs as opposed to wealthier countries.

Two studies conducted by Oishi, Diener, Lucas et al (1999) collected data from 43 different societies with socio-economic, political, geographical and cultural variations. These findings support poorer countries evaluate life satisfaction based on physiological and security needs gratification (primary needs) (Oishi, Diener, Lucas, et al., 1999). If a society lacks access to food, water, clothes and their life is in constant threat due to high rates of criminality or hazards caused by poor infrastructure or natural phenomena (hurricane, earthquake, among others), secondary needs will not be prominent. Contrary to this, nations that are more privileged tend to judge their SWB based on higher level growth needs (Oishi, Diener, Lucas, et al., 1999). To exemplify, achieving financial satisfaction may be an important factor for the SWB of poor nations while love, sense of belonging and home life satisfaction is a more relevant correlate of SWB in wealthy countries. With this said, it is important to mention individual differences and cultural values become salient once primary needs are gratified.

Commonly, the main correlates of SWB studied are genetic predisposition, demographic characteristics (sex, age, status, religiosity), personality and temperament, culture, coping capacity, individual goals, resources, interpersonal relationships and so on (Diener et al., 2003; Diener & Ryan, 2009; OISHI, 2012). Researchers are still trying to understand the interrelation between SWB and the factors that can influence it. It is documented that they are responsible of an amount of variance of SWB but it is still unknown how one affects one another. For instance, some researchers may argue happy people have better social relationships, while other researchers may explain this by stressing that having better social relationships increases the SWB of people.

Another way of studying SWB and its predictors is by focusing on the different life domains and the individual satisfaction of each of them. For example, variance in SWB can be interpreted by focusing on specific life areas such as financial, home and job satisfaction (Oishi, Diener, Lucas, et al., 1999). Other domains that have been related to quality of life and SWB are engaging in activities during leisure time (Kuykendall et al., 2015) and having social support (Pilkington, Windsor, & Crisp, 2012). The two last domains mentioned are of interest as theoretical explanations of SWB for this dissertation since it has been documented they predict a variance in the SWB of oncological patients. Moreover, they are of main focus because one of the aims of this thesis is to put forward a project that engages oncological patients in a creative and productive leisure activity that promotes social support among their peers. This is supported by evidence that states being involved in community-based groups putting spare time into a productive activity increases the levels of SWB (Perruzza & Kinsella, 2010).

2.1.2 Top-down versus Bottom-up theories

Several theories have emerged explaining what underlies SWB. These theories range from evolutionary approaches, cognitive theories, biological predisposition, to personality or temperament arguments. Yet, researchers from different fields still fail in pinpointing specific correlates that influence SWB and the causal direction. There are two main ongoing debates in the field of SWB. Is happiness a trait that some humans possess or is it an achievable state? Is happiness an innate capacity of human beings or is it something that must be worked for to obtain? Top-down theories stress higher levels of well-being are present in individuals that have the genetic propensity to experience it (Diener & Ryan, 2009). This predisposition to positive experiences influences the interactions that individuals maintain with the environment (Diener, 1984). On the contrary, bottom-up theories rely on the importance of pleasant inputs and the collection of these experiences is what determines high levels of well-being. In other words, accumulating happy moments produces a happy life (Diener & Ryan, 2009).

Following this same line of thought, top-down theories consider that personality is one of the main predictors of variance in SWB (Diener et al., 2003). Lykken and Tellengen (1996) conducted a study applying self-rating happiness questionnaires to 2,310 members of a twin registry. The conclusions of this study state there is a genetic predisposition of 44% to 52% of positive and negative affect. In other words, this data supports some people are inherently predestined to live happier lives than others (Lykken & Tellegen, 1996). Factors such as socioeconomic status, education, family income, marital status and religion account for not more than 3% of the variance of one's happiness (Lykken & Tellegen, 1996). Relying on this twins study (Lykken & Tellegen, 1996), modifying happiness or unhappiness is not dependent on the individual itself but their genetic composition.

Inconclusive results have been a motivation engine for researchers to implement similar studies only to support once more that the theory of happiness and individual propensity is not consistent across studies (Diener et al., 2003). Researchers argue if some people were prone to experience happiness more than others, this trait would stable across time regardless of the situations an experiences in their lives (Diener et al., 2003). However, happiness is not consistent in cross-sectional studies and it has been documented external factor have indeed an impact on it (Diener, 2007; Diener et al., 2017; Fordyce, 1977; Leung, Ha Cheung, & Liu, 2011; Tam, Lau, & Jiang, 2012).

The two main traits associated with personality and that have most research attention are neuroticism and extraversion as negative and positive affect respectively (Diener et al., 2003). As mentioned previously, positive expectations about the future (optimism) is now considered a trait that goes in line with the view of individuals having internal cognitive structures that determine this positive perception of future outcomes (Diener et al., 2003).

Moreover, bottom-up approaches rely on various factors that consistently impact SWB (Diener et al., 2003). According to this theory, external circumstances such as events happening in one's life and demographic characteristics influence happiness (Diener et al., 2003). Psychologist, social workers and health practitioners should give more focus to bottom-up approaches of SWB as it opens the way for relational-based intervention such as face-to-face encounters. Also, since professionals working in this field aim to alter the structural dimension of SWB as a crucial part of the role they should accomplish, this should not be neglected. For instance, clinical trials have been conducted to promote happiness because of the diverse benefits it has in society as a whole (Kushlev et al., 2017). These types of interventions can impact life satisfaction, emotions and meaning in life positively (Kushlev et al., 2017; Sin & Lyubomirsky, 2009). Engaging people in intervention programs designed to improve SWB can have a long-lasting impact in their lives. This can be used as evidence that happiness can be altered by external factors such as being involved in activities that are productive and enjoyable for leisure time.

Both approaches have a strong ground support and therefore results are open to debate. To an extent, it can be argued increasing levels of SWB has no specific formula. Human beings are diverse. Societies and cultures have different needs and demands; they have different ways of expressing and experiencing emotions, concerns, values, and so forth. For this reason, personality and temperament, judgement of events, comparing one's situation to standard conditions, leisure activities, pleasure events, and numerous factors can explain a level of variance of SWB. For this thesis, given that the main aim is to investigate the impact of leisure activities in the SWB of BC and OC patients, bottom-up theories are more relevant. Based on top-down approaches, participants would engage in this type of activity because they already have a predisposition to be happy and therefore search for pleasure activities. Since personality and temperament traits will not be assessed, the main focus of attention of this dissertation is bottom-up theories as another goal of this study is engaging participants in a leisure workshop where they will be doing a productive activity in a peer group context.

2.1.3 Why is SWB important?

To achieve a good life and what has been referred to as good society, high levels of SWB are required (Diener et al., 2003). In an individual approach, SWB is a necessary component to be a happy and fulfilled human being. Nevertheless, it is not the only mandatory component. To simplify, if a society is characterized by high indices of SWB, but other elements such as fairness (Diener et al., 2003), security, and basic needs are not met (Oishi, Diener, Suh, et al., 1999), the overall life satisfaction of this society will not reach high levels. SWB is therefore necessary but not enough to account for a good life (Diener et al., 2003). Agreeing with Diener and Ryan (2009), SWB contributes to a more stable, productive and high functioning society. Commonly people are in the pursuit of happiness through diverse and individual means. Nonetheless, various psychosocial problems usually attended in the social work arena can be solved by improving SWB. To support this argument, one can elucidate that societies having higher levels of SWB show more tolerance to controversial processes like migration and democracy (Diener & Ryan, 2009). Moreover, these societies show more interest in supporting altruistic causes like volunteering, belonging to charity groups and in general, driving their lives by healthier behaviors such as physical exercise, using seatbelt (Diener & Ryan, 2009), not smoking, respecting the law, among others. A society that is more tolerant, respectful of the law and carrying for others are bound to be less conflictive and peace promoters. One can only assume that a society that fulfills these characteristics can achieve higher levels of SWB.

For decision-makers and policy developers to evaluate their approach and improve societies beyond the economic development, relevant information of what underlies human happiness must be available (Diener, Oishi, & Lucas, 2015). It is true that indeed, economical and societal indicators of well-being are important. However, to have a complete picture of what improves the quality of life of people; national accounts of well-being should also be considered (Diener et al., 2015). Diener proposed various national accounts of well-being and argued they are as important as economic accounts (Diener et al., 2015). He considers that to deliberate policies and enhances the quality of life of nations, the additional information rendered by SWB measurements are of the utmost importance to assess aspects of quality of life that are beyond the scope of economic factors for public service deliverance (Diener et al., 2015).

According to the Organization of Economic Cooperation and Development (OECD), a nation that has high levels of well-being reflects a good society in many aspects. For instance, it is claimed that the rule of law and the respect for human rights are higher in a society with increased levels of SWB (Huang, Grover, Helliwell, & Wang, 2014). Governments tend to be less corrupt, more efficient and have better services reflecting good quality of life or well-being (Huang et al., 2014).

Another reason to put forward the importance of assessing SWB is the fact that people value it (Diener et al., 2015). Individuals want to know more about happiness as per they pursue it as a main life goal. For this, when a government highlights the role of national accounts of SWB in societies, it supports its citizens accomplish their aims and desired outcomes (Diener et al., 2015).

The literature suggests there is a broad understanding of what constitutes a good society and how the level of SWB of its citizens can be elevated. This body of evidence supports implementations of policies and programs that go hand in hand with the aim of improving people's quality of life and thus having a positive influence in society as a whole. To elucidate, some examples of relevant policies that increase SWB are effective mental health services through public assistance programs, anti-bullying intervention programs, parental skill training, supporting caregivers of people living with dementia, and so forth (Diener et al., 2015).

2.1.4 Can we measure happiness?

Even though the field of SWB has advanced in theoretical explanations and methods of assessment in the last 40 years, scientists keep developing tools that can measure "happiness" and all its components. It is argued there is still no measure of SWB that is entirely appropriate (Diener, 2009) or considered the yardstick of this concept. Quality of life or overall well-being is commonly assessed through objective factors by economists. Governments are interested in predictors such as increase income per capita, productive economy, efficient public services, equality of resource distribution or other indicators that can be quantified by standardized guidelines (OECD, 2013). However, after Diener's proposal where he suggested attention to national accounts of SWB, more than 40 countries implemented this approach to better understand the quality of life of nations (Diener et al., 2015). In this agreement, signed by more than 50 economists, psychologist and other professionals, Diener highlights the importance of tracing psychological well-being to guide policies and actions in societies (Diener et al., 2015). It is evident that economic accounts of well-being explain high levels of variance in quality of life (Oishi, Diener, Lucas, et al., 1999). However, well-being indicators go beyond objective assessment of income, wealth or the capacity of consumption one has (Stiglitz, Sen, & Fitoussi, 2010). The fulfillment of basic needs such as food, water, housing or security can be achieved through economic stability. Thus, regardless of this, high levels of economic indicators are not sufficient to account as an explanation for overall SWB. Individuals having fulfilling all these factors can also have low levels of SWB. Stiglitz et al (2010) argue that the traditional approach to quality of life is no longer sufficient as they reported that there are more determinants to human well-being such as the opportunities that are available to people, having a purpose and meaning in life, and enjoying the opportunities that present in life. Other characteristics that should be considered are the feeling of belonging, living a fulfilled life, autonomy, experiencing feelings and attitudes (Stiglitz et al, 2010). In their report, these authors conclude that to have a more objective measure of well-being, it is necessary to assess the link between various domains that may influence the SWB of individuals (Stiglitz et al, 2010).

It is argued that for a thorough understanding of the pursuit of happiness and its correlates, it is necessary to consider individual subjective experiences (Diener et al., 2015). Surveying people's personal evaluation of their overall life satisfaction, their cognitive and emotional judgements and other components that influence SWB lobbies a broader understanding of what drives people into happy lives. Perceptions of what is good or undesirable in life may vary from person to person (Diener et al., 2017). Some people judge their lives with high levels of SWB while others in similar circumstances rate their SWB poorly. If one follows economic appraisals of quality of life, only wealthy, secure, and educated countries would be able to achieve happiness. While this is debatable, research shows individuals in poor nations can feel as happy as individuals living in wealthy ones (Oishi, Diener, Lucas, et al., 1999).

A variety of methods have been used to grasp people's life satisfaction judgments. Surveys, informant reports (family and friends) and sampling of moods are commonly used to measure the emotional components of SWB (Diener et al., 2003). Cognitive components are assessed through life satisfaction and fulfillment surveys in different life domains (Diener et al., 2003). The preferred research method for SWB, however, is self-report scales. These scales require respondents to rate their general evaluation of life satisfaction and experience of positive and negative affect (Diener et al., 2003). That is, evaluate their lives from their own standpoint. For this reason and the fact that skepticism has always been present in behavioral sciences, researchers argue self-reports contain artifacts (Sandvik, Diener, & Seidlitz, 1993). Happiness is a goal people most likely want to achieve. Nations seek common happiness. Consequently, there is high desirability to present one's self as happy and fulfilled rather than unhappy. In this line of thought, being unhappy is related to failure and people do not want to depict themselves as failures (Sandvik et al., 1993). Another limitation in self-reports is the current mood when responding the scale (Sandvik et al., 1993). When people evaluate their life satisfaction, they base upon salient information of their lives (Diener, 2009b). That is, their interactions with situations they consider relevant. Regardless of existent artifacts in this measurement method, self-report scales still show high reliability and have proven to correlate with various other methods measuring the same concept (Sandvik et al., 1993). Agreeing with this, Diener (2009) claims the evidence of validity of self-report scales is substantial and the artifacts are not significant.

In order to measure SWB of participants in this study, a self-report scale was applied. The main components of SWB (life satisfaction, and positive and negative affect) are assessed through a Portuguese adjusted version (Back-Wiklund, Van der Lippe, Den Dulk, & Doorne-Huiskes, 2011) of the Satisfaction with Life Scale (Diener, 1985). To assess other areas like leisure activity involvement or quality of oncological medical services in the different countries included in this research, the questionnaire applied to participants responds to relevant inquiries. The scale and questionnaire are thoroughly further explained in the methodology section.

2.2 Productive leisure and SWB

2.2.1 Concepts and approaches to leisure

In spite of leisure being a universal phenomenon present in every culture around the world, a clear definition has resulted problematic given that this word does not exist in all languages (Purrington & Hickerson, 2013). Similar to the studies of SWB, most of the scientific research conducted in the field of leisure focuses on western populations and for this reason developing an operational concept has been impossible (Purrington & Hickerson, 2013). The understanding and practice of this phenomenon is common among lay people. Individuals can relate to having free time and carrying out activities to fill up their spare time. However, the lack of a shared definition is indeed a challenge to the research community specifically. To be able to compare countries or societies, a formal definition has to be developed to avoid biases. Researchers show interest in comparing different leisure behaviors and activities cross-culturally. Thus, before having an accepted definition that takes into consideration cultural diversity, the study of this phenomenon across cultures becomes difficult if not impossible (Purrington & Hickerson, 2013).

Commonly, leisure activities are seen as subjective because it is the individual perspective of them that matters. What for someone is considered as a leisure and joyful activity, for another person can be seen as work and would not be an option to get involved in their spare time. Leisure activities around the world are universal. Humans engage in art, dance, music, sculpture, sports, acting, social and cultural activities among others. Nevertheless, it is the individual who characterizes them in a unique way and gives them meaning (Perruzza & Kinsella, 2010). In other words, even though music is universal, the type of music listened by people around the globe is different. Dance is also a common activity, but the way people dance and the music they dance to differs. Similarly with the sports played in different societies and the level of interest one can have in any other kind of hobby.

There are multiple approaches to leisure. Some researchers argue it can be structurally or subjectively defined by the person carrying out the leisure activity (Kuykendall et al., 2015). On one hand the structural approach puts forward the notion of leisure engagement as the time and frequency one participates in leisure activities and its defined by the norms stated by researchers (Kuykendall et al., 2015). On the other hand, the subjective approach defines leisure engagement similarly, but, in this line of thought, the main focus is the individual's view of what is considered leisure (Kuykendall et al., 2015).

The concept of leisure or spare time is also related to occupation. People *occupy* their leisure time in multiple activities. According to Peruzza and Kinsella (2010), occupation is considered as anything and everything people do in their day to day life. Despite some authors disagreeing leisure activities can be productive, other researchers put forward the concept of *productive leisure*. This notion includes paid or unpaid work such as volunteering and caregiving among others (Baker, Cahalin, Gerst, & Burr, 2005). In other words, individuals can engage in hobbies or chose spare time activities that can be enjoyable and simultaneously solve a problem. Volunteering or being part of a charity group can fulfill the purpose of entertaining someone in their free time and contribute to society. Additionally, it has been documented volunteering as a leisure activity fosters the fulfillment of basic psychological needs such as increasing autonomy, developing competence and the capacity to relate to other people's circumstances (Mojza, Sonnentag, & Bornemann, 2011).

As mentioned above, leisure is a phenomenon present in the different societies or cultures around the globe. Regardless of the description or the word used to refer to it, people carry out activities when they have spare time. Due to the universality of leisure-time, researchers have been interested in understanding the fundamental nature of it. Researchers specialized in this field have two main arguments: do humans engage in this type of phenomenon because of a temporal reason or is it because it is a channel to fulfill their psychological needs (Purrington & Hickerson, 2013)? In other words, being engaged in leisure activities can be seen as the need of mental state experiences or simply a behavioral nature because there is spare time for it (Purrington & Hickerson, 2013). Some authors also debate if there is a difference between work and leisure and if they necessarily have to take place in two dissimilar contexts (Purrington & Hickerson, 2013). Arguments are in favor of broadening the concept of leisure activity and allowing it to be productive at the same time. Volunteering work is an example of this. Some people have paid jobs that are also done voluntarily by other individuals. This does not change the fact that it is a leisure activity to the volunteer and involvement is dependent on spare time and pleasure. Volunteer work has been described as a valuable leisure-time activity that has positive effects in the individual. For example, the amount of time individuals engage in this activity is related to the possibility of detaching from paid work's burden and serves as a recovery experience (Mojza et al., 2011).

2.3 Life after being touched by illness

2.3.1 SWB and health challenges

It is demonstrated increasing SWB improves health and also the chances to live a longer life. Researchers interested in the field of happiness have designed experiments that foster high levels of SWB (Diener et al., 2017). Fortunately, several studies have proven this to be plausible. When well-being levels are higher, negative affect declines and positive affect raises nurturing health benefits (Diener et al., 2017). In their paper, Diener et al (2017) discuss some studies that were successful in raising participant's quality of life, hence, their health. Drawing on these results, arguments are in favor of correlating SWB and health, even though the causal direction is not completely clear at the moment.

Cancer diagnosis and treatment come with various negative effects. It is undeniable that women touched by BC or OC experience loss; loss that goes beyond physical challenges. Women living with cancer describe their illness as a deep loss of subjective control (Reynolds & Lim, 2007a). They consider it threatens their SWB by altering their daily activities and social relationships following evident cognitive and emotional load (Reynolds & Lim, 2007a). Additionally, cancer patients consider they have little control over their illness and sometimes the optimistic expectations they had about their health are defied (Pinquart & Fröhlich, 2009). The process of being diagnosed with an enduring illness like cancer comes with emotional load. Part of this emotional burden ranges from anxiety and rage to chronic and more serious affections such as developing depression symptoms (Reynolds, 2002) or other psychiatric disorders. When a woman is facing the battle of cancer, even the ability to cope with daily stressors can become a difficult task. Moreover, it is important to have in mind that plans about their future are also challenged when facing cancer. No one lives a life planning to receive an illness diagnosis. This usually comes unexpectedly and therefore no one is ever prepared for an event like this. When one confronts a reality that threatens everything that was once taken-for-granted self-identity it put at stake (Reynolds, 2002; Reynolds & Lim, 2007b). For instance, a main part of self-image is related to one's occupation. People need to feel active and useful in order to consider their life satisfaction acceptable. This is why when elders reach retirement age they suffer a decline in their overall well-being and it is through volunteer work that they balance this effect (Lowis, Edwards, & Singlehurst, 2010). Similarly, after illness diagnosis these day to day activities or occupations are threatened and sometimes abandoned. The activities patients engaged in before cancer treatment are withdrawn due to lack of energy, loss of confidence or even because they still haven't found a way to cope with the changes in their new lives (Reynolds, 2002). Women living with cancer have described various other difficulties related to cancer. A study conducted by Reynold and Lim (2007b) evidenced that engagement in art therapy was helpful to reduce negative effects of cancer such as pain, insomnia, loss of social roles, activity restriction and altered social relationships. Findings in this study depicted four main ways that being involved in art as a leisure activity is beneficial for women living with cancer. The first benefit participants referred to is the possibility to express their feelings in a symbolical way (Reynolds & Lim, 2007b). Additionally they considered their self-worth increased and they could now define themselves beyond the role of being a cancer victim (Reynolds & Lim, 2007b). Lastly, they had the opportunity to challenge themselves and regain the feeling of achievement and capacity (Reynolds & Lim, 2007b). Like any other kind of art, textile art is a tool that has been demonstrated to be a resource for illness transformation (Perruzza & Kinsella, 2010; Reynolds, 2002; Reynolds & Prior, 2006). This type of art falls into the category of creative occupation which fosters high value to health and promotes well-being (Perruzza & Kinsella, 2010). Women that have dedicated spare time to engage in textile artwork have managed to transcend feelings of preoccupation into global awareness, change feelings about the illness, achieve a fulfilled life and become more reflective, creative and stronger (Reynolds, 2002).

Human beings are inherently creative and as so, they engage in alternative ways of solving problems with inner tools (Perruzza & Kinsella, 2010). Similar to creativity, the process of healing takes place within the individual (Perruzza & Kinsella, 2010). Individual's own perception of their internal world is what is important. Consequently, when a life has been disrupted by the diagnosis and treatment of cancer, healing tools that promote a symbolic representation of their illness comes in handy as a coping strategy. A study conducted with 353 women recently diagnosed with cancer assessed the importance of perceived social support and the impact it has on the SWB of patients (Pinquart & Fröhlich, 2009). Participants that informed having a solid social support and higher levels of purpose in life predicted high levels of SWB in a time range of 1 month up to 6 years (Pinquart & Fröhlich, 2009). Being a part of a community group or being engaged in peer-based activities renders the opportunity to build a support network, regain social roles, and transform their illness into something meaningful and purposeful. Participating in a creative occupation, shared with others in similar experiences can boost talent discovery and skills. Consequently, there is a chance for patients to express the grief connected to illness suffering and distract themselves from related thoughts (Reynolds & Prior, 2003).

Supported by many findings of studies relating art work engagement and SWB, Perruzza and Kinsella (2010) found out the following repetitive themes: perceiving agency, building a sense of self, transforming illness experience, improved ways of expression, finding purpose in life and building a stronger social support. Women that are actively engaged in artwork consider it has a central role in their lives and improves their well-being (Reynolds & Prior, 2003). Additionally, the benefits transcend the self as one of the meanings of art referred by women is the importance of their contribution to others (Reynolds & Prior, 2003). In other words, they consider that being able to support others through hand-made gifts, sewing projects, fund raising or charity is an opportunity to give back to people that have once supported them and make a difference in their lives (Reynolds & Prior, 2003). This makes them reclaim their power and hope after a disempowering process like cancer experience (Chiu, Mitchell, & Fitch, 2013). It makes them feel there is a common characteristic between each other and that they can all swap places and become the supporters when they were once supported. Commonness is also shared when people gather together following an interest or a shared project. Though community-based activities, for example, friendships can be promoted and a solid social network fostered. As social beings, humans need to meet their sense of belonging. In other words, individuals need to meet their psychosocial needs of peer to peer relationships, feelings of being important and capable of impacting the lives of others. Following similar goals and engaging in creative arts as an occupation in a collective way can give this sense of belonging to a safe and supportive environment and promote the psychosocial needs mentioned above.

2.3.2 The need of alternative intervention strategies

Considering breast cancer is one of the most common causes of death worldwide (WHO, 2017), little attention is given to the promotion of alternative ways to increase the well-being of women living with this illness. Researchers study the causes of cancer and by now treatment has improved significantly. Technological and medical advances are in a state of the art when it comes to detection, diagnosis and treatment (Puig, 2004). Although these advances have indeed been a boon understanding the illness itself and finding a cure, efforts to manage the overall well-being of individuals living and suffering with this disease have not kept pace. It is time to shift the research focus from the disease itself and broaden the options where an individual suffering from an illness and in need of support is highlighted. Researchers and professionals working in oncology have failed promoting creative ways to boost the overall SWB and health of patients even though, as discussed in the section above, it is extensively evidenced by science that their quality of life can improve through strategies such as creative and purposeful occupations (Reynolds & Prior, 2006) or other alternatives like massage to decrease nausea, acupuncture, hypnosis, guided imagery, and mind-body interventions (Schiff & Ben-Arye, 2011). Studies have put forward valuable information of strategies used to increase the psychological well-being of BC patients. For example, hypnosis and guided imagery are commonly mentioned as alternative strategies to improve the quality of life of these patients, improve depression symptoms and increase natural cell killers (Archer, Buxton, & Sheffield, 2015; Bakke, Purtzer, & Newton, 2002; Schiff & Ben-Arye, 2011, 2011).

In an illness like BC which is characterized by loss (Reynolds & Lim, 2007a) and decrease of life quality, anything that can be beneficial for patients and effective in diminishing treatment-related symptoms should be considered. Regardless if available complementary strategies are not within the field of the practitioner in charge of a case, individuals living with cancer need to be informed of alternative interventions proven to be successful in ameliorating the side effects of conventional treatment (Schiff & Ben-Arye, 2011). That is, once physiological aspects of illness are assessed, toxicity effects of medical treatments should be addressed through psychological and/or untraditional interventions which to date receive less attention (Schiff & Ben-Arye, 2011).

When cancer strikes, the current recommended traditional treatment is still chemotherapy and radiotherapy (Schiff & Ben-Arye, 2011). This is applied when a malignant disease cannot be cured by surgery (Schiff & Ben-Arye, 2011) and generally these approaches are similarly after a surgery that has not been successful in getting completely rid of the illness. As mentioned above, these two treatments come with tremendous side effects. The most common symptoms of chemotherapy and radiotherapy are nausea, vomit and mouth dryness (Schiff & Ben-Arye, 2011). Fortunately, research has documented complementary and alternative interventions that result in the successfully decrease of symptoms. In their study, Schiff and Ben-Ayre (2011) discuss multiple studies that show the beneficial impact of alternative interventions when it comes to treatment related symptoms. For instance, in one of these studies where researchers conducted hypnosis sessions, patients were given the suggestion of increasing salivation to reduce mouth dryness (Schiff et al., 2009). After a month practice, nine of twelve patients had improved this symptom to a 66% and it directly correlated to the times they had heard the hypnosis CD as part of the task was to listen to it twice a day after the first session with the hypnotherapist (Schiff et al., 2009). Qualitative findings of this study also reported participants considered their overall quality of life had improved after hypnosis sessions and consequently they felt more in control of their current illness situation (Schiff et al., 2009). Similar to the benefits of hypnosis, other mind and body interventions, acupuncture and guided imagery are also documented as favorable when the quality of life results impaired by the noxious effects of chemotherapy and radiotherapy (Schiff & Ben-Arye, 2011).

It is well known that after BC surgery, wound healing and inflammation are part of the recovery process. At this phase, various systems work together and are involved in healing. The immune system is one of those (Girard, 2013). According to Kopp et al (2003), high levels of SWB are predictors of a better and faster healing process after surgery. There are diverse studies showing how SWB can be increased. Findings show that after surgery, individuals that received different types of interventions such as guided imagery, breathing exercises or stress management recovered faster (Girard, 2013). In a systematic review where more than 30 studies with at least 100 participants were analyzed, 65% of the findings found a positive relationship between psychological well-being and health (DuBois et al., 2015). This means that to promote health, researchers should document more intervention strategies that potentially increase SWB. This can also be put at the service of policy-makers to promote overall individual well-being and health-related positive outcomes. For example, if intervention strategies are successful, mortality might decrease along with re-hospitalization and health benefits can be reported (DuBois et al., 2015).

For the scope of this dissertation, alternative strategies are of main focus. In this case, findings are based on the need of engaging women living with breast and ovary cancer (hereafter referred to as OC) in a productive leisure activity. It is considered productive because it gives them the opportunity to participate in the process of assembling a garment that is most likely used by them in their treatment and additionally addresses a social problem. The main intention is involving cancer patients in volunteer work and thereafter donate the product to women lacking resources to obtain compression arm sleeves and post-surgical bras. This will be further discussed in the methodology section of this research. However, to have a background of this project, it is important to explore creative and productive leisure engagement and give a picture of what has been already documented in research.

Involving one's self in a creative art therapy is being part of a therapeutic process where multiple artistic approaches are used as a means of obtaining emotional expression, self-reflection and promoting human potential (Puig, 2004). Group-based interventions are beneficial for various reasons. To mention some benefits fostered by community groups one could highlight the relationships made with peers, personal growth, increase of autonomy, purpose in life and self-acceptance (MacCormack et al., 2001). Likewise, they allow women living with cancer to be active and participating in society; especially, when this has been restricted by their illness. Literature shows multiple benefits in keeping a busy mind. Nonetheless, most of the studies conducted are limited to elderly population and not much has been done relating this topic to oncology. Most intervention strategies discussed for leisure activities focus on motivating participants to get involved in various activities in order to pass time. As discussed earlier, notion of leisure time is commonly related to filling the spare time of the day with joyful activities. Though it is important, when your daily activities such as work or occupations are interrupted by the course of an illness, the productive status of one's self is challenged. As a way to face this challenge, leisure activities can go beyond simply engaging in distracting activities and generate a productive status in their lives. Having a productive status can be conceptualized broadly and it relates to being engaged in a productive activity. As mentioned before, it does not necessarily have to be work related or paid. To classify as productive, this activity has to have beneficial impacts to the individual engaged and also contribute to the larger society (Baker et al., 2005). To illustrate, these activities can be volunteering, providing care to someone else, formal social and civic contribution or pursuing studies to self-improve (Baker et al., 2005). Agreeing with Baker et al (2005), their definition of productive activity suits the needs of this research. According to them, this activity should fulfill certain criteria such as not being purely consumptive; there has to be a social component, have meaning for the individuals involved and it should promote belonging to a social network (Baker et al., 2005). Consequently, giving a cancer patient a productive status can also relate to the feelings or judgements they may have of their own lives and the challenges faced. For instance, cancer patients sometimes consider they have lost their social or parental roles (Asbury, Lalayiannis, & Walshe, 2014). This can make them feel unproductive because they are not taking an active role in the problem-solving of life situations that formerly were their responsibility. These activities may be simple duties but could represent much more than that for them. To set an example, a woman that was commonly running errands is not able to do it anymore because her health might be threatened due to her vulnerable immune system after receiving chemotherapy; a mother that has no energy to take her children to the park or cannot manage to finish her tasks at work because it requires more than what she is capable of giving at the moment and the like. It all comes down to the fact that those social roles matter and have an impact in people's well-being. Supporting the importance of social roles, in a study that examined the SWB of participants and measured productive activities, it was concluded that participating in diverse productive activities correlates positively to social integration and provides meaningful social roles (Baker et al., 2005). It should be clarified, however, that this study was limited to elderly population as research tends to focus these types of interventions for the later life.

As mentioned above, an activity can be productive if certain criteria such as being meaningful and having a social impact are fulfilled. Thus, it should also be acknowledged that leisure activities can also be productive in a monetary way and simultaneously adapt to the singular needs of cancer patients. Meaning, they can generate an income to individuals, support to others and at the same time keep people busy in their spare time and not only passing time. Leisure activities, especially for people living chronic conditions of illness, should foster personal growth and self-development. The experience should have a purposeful value for them and impact their lives positively. An ongoing project in Norway (“SISTE NYTT,” n.d.), for example, employs people living with a drug addiction with no formal contract. They are offered a job in selling magazines and the enterprise adapts to their needs. It is a reality part of the challenges this population faces has to do with committing to a schedule and being able to keep a job (“SISTE NYTT,” n.d.). Similarly, a project designed as a leisure intervention to increase SWB of cancer patients can adapt to their needs and motivate them to participate, socialize and keep themselves involved as long as they can and as long as they want.

When a product is in high demand by a community and at the same time produced by them, chances are it can be empowering. Self-determination and autonomy have to do with individual decision-making regarding one’s own health. In this case, including patients in the elaboration of garments that they need for their own recovery process can be seen as a strategy to promote participation in their own health matters. No one could know more about the needs of a patient than the patient itself. They are experts in their own lives and the course of their illness, and as so, they should be part of the decision-making regarding their treatment. A study conducted based on the “Breast cancer survivor’s dragon boating” supports the empowerment of patients by including them in the research process (Chiu et al., 2013). Chi et al (2013) argue than knowledge needs to be co-created and there should be reciprocity between patients and researchers. This balances the power dynamics between both parties and promotes respect by giving a voice to patients (Chiu et al., 2013). Following this same line of thought, this dissertation project aims to include BC and OC women in designing, elaborating and selling or donating medical supply (post-surgical bras and compression arm-sleeves) needed in their treatment so that they can have a say in their own healing processes.

Another ongoing project called “Knitted knockers” also follows a similar idea (“Knitted Knockers,” n.d.). This project started by a friend of a woman who had a mastectomy and felt uncomfortable with herself. As a gift, her friend decided to knit her a knocker to be used as breast prosthesis. After seeing the positive impact this knitted knocker had in her friend’s life, she decided to do more knockers for other women that had been though similar surgeries. Currently, volunteer knitters provide free knockers to whoever requests it (“Knitted Knockers,” n.d.). The aim of this project now has become to connect volunteers with BC survivors and provide information on how to do their own knockers. This product, brings women together; but also, solves a social problem by providing an alternative option for expensive, uncomfortable and sweaty traditional breast prosthesis to comfortable handmade knockers that serve the same function (“Knitted Knockers,” n.d.). In other words, this is an example of productive leisure where volunteers engage as a hobby and at the same time has a positive social impact for the breast cancer community.

2.3.3 Post-surgical bras and compression arm sleeves

The most common approach to breast reconstruction or mastectomy is the usage of a post-surgical bra as a treatment method (Bathla, Tan, Shrotri, & Martin, 2016). This medical supply is used in the recovery stage of BC and while patients are still convalescent. The ergonomic characteristic of the bra suits the needs of patients and holds the drainage collection bulb in charge of gathering the fluids after surgery. Additionally, this garment provides the necessary adaptations for compromised arm movement. Since this supply has adjustable Velcro on both shoulders and vertically on the chest, medical staff or caregivers can help patients easier without causing mobility discomfort to them. Due to the characteristics of the bra it is easier for medical staff to clean the patient's wounds or eventually for caregivers to help them dress up if they lack arm mobility after surgery. When breast reconstruction processes involve the use of back muscles, reduced level of movement may occur in the upper limbs. The Tiloop bra, for instance, is a post-surgical garment used after breast reconstruction that has proven to reduce pain (Bathla et al., 2016). In a study conducted that tested this bra with women that have undergone implant based breast reconstruction, out of the whole sample (191 participants), 70- 85% of cases were assessed with bra fitting after surgery (Bathla et al., 2016).

A common symptom that appears as a consequence of breast surgery is lymphedema. Lymphedema is a long-term, chronic and progressive condition characterized by the swelling of the arm and it's the most common complication after breast surgery (Ochalek, Gradalski, & Partsch, 2017; Pusic et al., 2013; Williams & Williams, 1999). Additionally, it causes skin alterations and changes in other underlying tissues (Williams & Williams, 1999). All these changes, lead to physical and psychological consequences. The most common consequences are chronic pain, limited arm mobility, body image issues and decrease in social functioning (Pusic et al., 2013). Pusic et al (2013) gathered studies of diminished health-related quality of life in patients that had breast-cancer related lymphedema. In their systematic review they concluded that the physical and psychological consequences of lymphedema affect BC patients' quality of life significantly (Pusic et al., 2013). Even though the treatment of this chronic condition cannot be cured, it can be however controlled with the appropriate therapies (Pusic et al., 2013; Williams & Williams, 1999). To mention, the most common therapies used in this cases are complex decongestive therapy, exercise and applying compression to the arm (Pusic et al., 2013). The most common compression garment is the arm sleeves. Combined with prescribed exercise, they produce significant benefits by decreasing the swelling of the arm (Ochalek et al., 2017) and reducing pain caused by it. BC treatments such as axillary node dissection and mastectomy relates to most of the risk factors of developing lymphedema (Ochalek et al., 2017). For this reason, the use of compression arm sleeves is recommended for patients that have been through this process. According to Ochalek et al. (2017), patients should wear this garment 3-12 months after surgery and an estimate of 10 hours per day to be able to see the effectiveness in reducing lymphedema. The main effects of applying compression to the arm are the following: stimulation of the arm so the fluid moves to the root of the affected arm, prevents the accumulation of edema, augments muscular pump, supports tissue to increase patient's comfort, preserves the shape of the arm and improves the condition of the skin (Williams & Williams, 1999).

2.4 Overview of health systems in Portugal, Honduras and Nicaragua

To guarantee the well-being of a population and minimize potential risks, governments provide welfare systems that include social spending, welfare programs and welfare institutions (Cruz-Martínez, 2014). Considering the dimensions of welfare systems in industrialized regions such as Europe or North America, Latin-America (hereafter referred to as LA) has not yet developed one (Cruz-Martínez, 2014). Since the 1980's government expenditures have been reduced, public goods privatized and the state has ceased to finance social security (Huber & Bogliaccini, 2010). Reforms on welfare schemes were attempted; however, they have not met the expectations due to high administrative costs, lack of equity, and gender impacts (Huber & Bogliaccini, 2010). For this reason, social expenditures in LA are low and access to basic needs can be a luxury. A large portion of the population in LA has access to poor quality healthcare rather than a dignifying one (Huber & Bogliaccini, 2010).

According to a study that measured the overall health system performance of 191 World Health Organization member states, specific schemes are considered to obtain an overall outcome (Tandon, Murray, Lauer, & Evans, 2000). This measurement complies with goals such as the improvement of the overall quality of health of the population (level and distribution), increasing respect to service users in the delivery of services (responsiveness), fairness in financing and financial risk protection (Tandon et al., 2000). Averages of indicators such as the Human Development Index (HDI), which reflects the level of development of a country in terms of longevity, educational attainment and income per capita, are also considered (Tandon et al., 2000). Since Portugal is one of the countries with higher performance when it comes to ranking the overall efficiency of its health care system, comparing it to LA countries like Honduras and Nicaragua could give valuable insights into policy development and changes that could be addressed to impact the SWB of BC patients; given that the literature refers a correlation between health and increases in levels of SWB (Diener et al., 2015).

In health care systems, three main dimensions are considered in order to classify their prevailing modality (Böhm, Schmid, Götze, Landwehr, & Rothgang, 2013). In Portugal, the state is the main actor in all three dimensions (regulation, financing and service provision) allocating it as a National Health Service type (Böhm et al., 2013). This means that the state owns hospitals and physicians are salaried primarily in public facilities (Böhm et al., 2013). These results diverge with the health care systems of Honduras and Nicaragua where as compared to Portugal that ranked 12 in the overall efficiency of their health system, Honduras and Nicaragua were considered poor performers and were placed in positions 131 and 71 out of 191 countries, respectively (Tandon et al., 2000).

It should be noted that there is a possibility that official data regarding Honduras and Nicaragua is inconsistent and inaccurate in the presence of challenges faced in past and current years. For instance, in 2014, Honduras' social security (Instituto Hondureño de Seguro Social), which is the healthcare institution, was looted by public service officials. According to La Prensa (2014), an estimate of USD 231.5 million of unjustified expenses were made, USD 27.7 million destined to digitalizing information and a total of USD 230 million over-payed for a debt of USD 69 million. The condition is so precarious, that people who have payed taxes during their entire life have no access to healthcare. The main consequences are deaths of people who received expired medications, capsules filled with flour or no medication at all. In these health facilities, basic medical tools such as syringes, gauzes or beds for hospitalized people are no longer available. To date, true figures of fraud remain unknown as new figures keep emerging (LaPrensa, 2014).

The current situation in Nicaragua also makes official databases problematic as there are no up-to-date reports. For example, in the past month a student-led protest was triggered by reforms made to the social security system (Robles, 2018). These demonstrations are now demanding a new electoral council and the resignation of the president and his wife, the vice-president (Robles, 2018). As a consequence, wounded protesters have been repressed and denied access to health services at public hospitals (Reuters, 2018). At least 77 have died and the majority of them are students (Reuters, 2018). This will definitely have an impact in future reports of health care efficiency and therefore highlighted in this section.

3 Methodology

This dissertation is driven by the ambition of developing an alternative intervention strategy to increase the SWB of women living with BC and/or OC. To support this, the literature was based on principles stating leisure activities are a tool that foster positive influences in people's SWB. To examine the need and feasibility of this project a mixed methods approach was designed to compare several life domains in two countries of LA and Portugal. The countries of LA chosen to participate are Honduras and Nicaragua. This was motivated by the potential interesting findings that could be obtained by comparing the poorly rated health systems of these two nations with a genuine and efficient public health system of Europe as is the case of Portugal (Tandon et al., 2000). A strong body of evidence shows that when women are diagnosed and treated for cancer, their life circumstances change. Women in this position find it hard to balance between their illness and important aspects of life. Having a BC diagnosis characterizes their lives with such a loss that the idea of controlling one's life and physical and emotional stability becomes challenged (Reynolds & Lim, 2007a). These consequences are also affected by their current life situations such as gaining access to medical resources or lacking support during the battle of cancer. Since the countries compared in this dissertation vary in their socio-demographic characteristics, one purpose was to compare the SWB of BC patients in Honduras, Nicaragua and Portugal. Additionally, another objective was exploring the relationship between being engaged in leisure activities and changes in the levels of SWB. This chapter explains and describes the methodology implemented in this dissertation and enlightens the reasons behind choosing specific research strategies. The first part of this section entails a thorough explanation of the research design. The initial objectives of this project are explained so that the reader can be aware of the basis and motivation of this research as it is necessary to understand future implications. Since the researcher encountered diverse obstacles to carry out the original methodology, it was necessary to reorient the main aims along with some changes in the research design. Later on, this chapter elucidates on the different approaches used such as the workshop and a thorough description of what it covered, the participant observations made during this activity and the application of questionnaires. Thereafter, the next section presents the sample studied, the criteria considered for participation, the recruitment process and a brief overview of the organizations that provided support to reach participants. Lastly, this chapter also presents the ethical principles considered throughout the whole study and challenges other than the methodological ones faced by the researcher.

3.1 Research design

This study brings about different stages oriented through a mixed methods approach. This approach was driven by the necessary criteria that guide social sciences: reliability, replication and validity (Bryman, 2012). To guarantee this, the assessment instruments were developed after reading an ample body of evidence related to the research topic and complemented by Diener's Satisfaction with Life Scale (Diener, 1985). Since this scale shows favorable psychometric properties, high internal consistency and temporal reliability it is commonly used to measure SWB.

Initially, a theoretical background was thoroughly reviewed and it was based on the main concepts of SWB and leisure. It was also necessary to contextualize cancer illness by providing an overview of BC/OC and the different up-to-date strategies available for treatment. For an in-depth understanding of SWB as a phenomenon, the researcher gathered and critically read literature that related multiple life domains and SWB. The field of leisure activities was central to the literature review as developing a creative intervention strategy was one of the main goals of this dissertation. To assess the existing literature, a systematic approach was taken. According to Bryman (2012), this evident-based approach is the preferred one to provide advice to practitioners and clinicians. Since the dissertation subject is related to social health and practice, the researcher considered this as an optimal alternative founded on scientific evidence.

Before facing methodological obstacles that motivated adapting new strategies to collect data, this dissertation was designed differently. Originally, the main objective was to compare the SWB of women with BC diagnosis before and after being engaged in a set of workshops (8 to 10 sessions). These workshops aimed to promote social support and provide participants with a safe space where they could share their experiences with other women living similar life circumstances. The main idea was to gather a group of women affected by cancer and give them common activities and goals. In this case, to raise awareness and at the same time solve a problem encountered by other women going through cancer, during the workshop sessions they would learn how to do simple post-surgical bras and compression arm-sleeves that would be later on donated to women with BC that needed this supply. To create a comfortable ambiance, bonding activities and icebreakers were going to be included as part of the activities. Also, other activities were to be designed to promote a network so that it could be kept even after the study was finished. The idea of this project came from observing the need of these garments in Honduras and Nicaragua and the lack of economic resources some women have to be able to afford it. When conversing with the medical staff in different oncological organizations in these countries, they would refer the necessity of leisure activities for these women as some of them travel from far away and spend a lot of time in the medical facilities, sometimes alone and these medical organizations have no leisure options to offer to them. It was hypothesized that involving them in a productive leisure activity with their peers that are also women going through the same illness-related struggles would benefit them in multiple ways. Also, it was a way of showing them that their illness could be conceptualized differently as they could also support other women and transcend their own experience.

Since there were diverse obstacles such as the availability of support from oncological organizations, openness to allow reaching their members, bureaucratic processes and time constraint, it was difficult to gather the number of participants needed for this research design aforementioned. For this reason, workshop sessions were reduced to one for qualitative purposes for this research and a questionnaire was developed to explore the SWB of participants, their leisure engagement and potential implications of this. These two tools will be further explained in the ¨Research tools and analysis¨ section. In the following paragraphs, the research design implemented after methodological obstacles and therefore re-adaptation is explained.

The epistemological approach taken to understand the phenomena under investigation was interpretivist. Since participant’s own perspective of their SWB and life circumstances were of main focus, their personal interpretation of the information was the stand taken to respond and further explore the research questions. The researcher highlighted her interest in the social views of the BC community and their personal experiences. This research option was considered based on the technical version of mixed methods approach which argue these method strengthens data-collection and data-analysis by merging qualitative and quantitative characteristics to enrich research questions (Bryman, 2012).

The complete scheme of the workshop and the materials used will be elucidated in the forthcoming chapter. Initially, this qualitative tool was the main methodological approach of the research. However, as explained above, due to the difficulties in reaching participants, support of organizations and time constraints of the deadline for this thesis, the workshop sessions were reduced to one intervention only. This intervention was designed to explore a connection between engaging in a creative or productive activity and the influence this has in the SWB of BC and/or OC patients. As a technique for data-collection, participant observation and self-reported questionnaires were employed. The researcher wrote comments, hypothesis, general observations and the contextual implications in a fieldwork diary. This way, the qualitative data could then be extracted and analyzed by grouping relevant excerpts into different categories.

3.2 Research tools and analysis

3.2.1 Questionnaire

To develop an adequate tool, questions were divided into six categories supported by evidence-based literature. These themes were chosen because it is argued they are the main predictors of SWB. Also, the themes were chosen due to their relevancy in fulfilling the research objectives. Life domain approaches to SWB state there are different ways to organize the areas of life considered to explain a degree of variance of SWB (Diener & Ryan, 2009; OISHI, 2012; Ruiz Paiva et al., 2009). After an in-depth and systematic literature review, the categories considered crucial to answer the research questions raised are the following:

A. *Socio-demographic characteristics.* This section of the questionnaire contains information such as age, country of residence, education, occupation, status, current household, and children's economic dependency. All these factors can explain an amount of the variance of SWB (Oishi, Diener, Lucas, et al., 1999) and it is important for the comparison among countries as their socio-demographic contexts differ.

B. *Work domain.* As an area that is commonly affected when women are diagnosed with cancer, the researcher considered work domain to be an important theme of the questionnaire that would depict interesting differences among countries. It is stated that women working after BC diagnosis or treatment are often more satisfied with their lives (Olsson et al., 2017). The questions elaborated in this segment relate to sick leave, work policies, health-related alterations at work and economic hardships encountered by women living with cancer and still belonging to the labor market.

C. *Medical information.* Since the sample aimed for was women diagnosed with BC/OC at some points in their lives, it was also important to know their current situation, the type of cancer and stage of development. This theme is supported by health-related challenges affecting the overall quality of life of people and the potential ways of enhancing this life domain (Moskowitz et al., 2012).

D. *Medical supplies*. To explore the feasibility of an intervention strategy, it was necessary to include in this tool the need of post-surgical bras and compression arm-sleeves. This section was also important to acquire the participant's opinions regarding the experience obtaining these medical supplies and their price in the market. Having access to these tools can have an impact in the SWB of patients as they are a crucial garment for some of them during and after treatment.

E. *Leisure domain.* This section was developed to explore the leisure activity engagement of participants and understand their main interests. Researchers argue activity involvement explains variance of SWB (Kuykendall et al., 2015; Perruzza & Kinsella, 2010) and by exploring this domain new strategies can be developed to offer more options for to enhance the quality of life of people and especially women living with cancer.

F. *Social support.* This part of the questionnaire explores participant's main support source and their interest in creating a social support network. Additionally, this domain is important to meet the research objectives because it unveils the willingness of volunteering in a project that supports other women with BC because volunteer work is a potential tool to emanate positive affect and increase SWB (Mojza et al., 2011; Pilkington et al., 2012).

3.2.1.1 Scale SWB

The tool selected to explore SWB was Diener's Satisfaction with Life Scale (Diener, 1985) and was included as a question of the survey. This scale has been one of the preferred one by authors interested in the field of SWB. This kind of self-report scale has showed convergent validity when compared to other instruments such as observation reports, facial measures and physiological measures of SWB among others (Sandvik et al., 1993). Due to the need of a validated instrument that reflects the concept in question (Bryman, 2012), the researcher asserted this scale to be the adequate measurement tool to fulfill the objectives. Since the languages of questionnaires were Portuguese and Spanish, a Portuguese adjusted version of this scale was applied (Back-Wiklund, Van der Lippe, Den Dulk, & Doorne-Huiskes, 2011). Later on, a translation was made to meet the needs of the Spanish version for the Honduran and Nicaraguan sample.

This scale comprises five statements that must be evaluated by participants in a 7 point likert-type scale ranging from 7 (strongly agree) to 1 (strongly disagree). These statements assess the global satisfaction of participants and the frequency of experiencing certain feelings (Diener & Ryan, 2009). The statements are the following:

1. In most ways my life is close to my ideal.
2. The conditions of my life are excellent.
3. I am satisfied with my life.
4. So far I have gotten the important things I want in life.
5. If I could live my life over, I would change almost nothing.

After respondents have evaluated their SWB by judging each statement, the score has to be summed up to obtain the final degree of satisfaction. The final score is then categorized according to Diener (1985) in the following score ranges:

31-35	Extremely satisfied
26-30	Satisfied
21-25	Slightly satisfied
20	Neutral
15-19	Slightly dissatisfied
10-14	Dissatisfied
5-9	Extremely dissatisfied

3.2.1.2 Sample selection

The method that the researcher chose to reach the sample of the study is purposive sampling. Since this method allows reaching participants in a non-probability but strategic approach, snowball sampling was implemented to recruit participants complying with the inclusion criteria to answer the research questions of the study (Bryman, 2012).

To generate a sampling frame, the researcher contacted the main organizations in the countries studied that were dedicated to treatment and support of BC. These organizations were selected due to their exclusivity in treating cancer and the assumption that their members would fulfill the characteristics needed to be able to participate. To contextualize these organizations, a short description of their work scope is provided below:

1. Amigas do Peito (Lisbon, Portugal): It's a humanitarian association located in Hospital Santa Maria that provides support to women diagnosed with BC and their families. The name 'Amigas do Peito' translates to 'Friends of the breast", which is a positive connotation showing support to women with BC illness. It was founded by the oncologist Dr. Emília Vieira in 2008 and it functions through a volunteering process run mainly by BC survivors (ADP, 2017).

2. Vencer e Viver (Lisbon, Portugal): It's a movement promoted and financed by Liga Portuguesa Contra o Cancro and was founded in Portugal in 1981 (LPCC, 2015). It was created in USA in 1953 by the initiative of a BC survivor named Teresa Lasser (LPCC, 2015). This organization is formed by BC survivors who volunteer to provide support and promotes the quality of life of other women that are going through this illness, and their friends and family (LPCC, 2015). The main idea is providing peer support as the help comes from someone that has been through the same illness and this gives the sense of being equals (LPCC, 2015).

3. Instituto Macrobiótico de Portugal: This institute was created in 1985 by Francisco and Eugénia Varatojo to promote knowledge as means to live a healthy life (Varatojo, 2013). Their main goal is to endorse natural and better lifestyles to promote general well-being.

4. Liga Contra el Cancer (San Pedro Sula, Honduras): It's a private non-profit organization founded in 1965 and it is in charge of providing services as education, prevention, detection and treatment of cancer illness (LCC, 2017). It was the first cancer detection clinic in the city of San Pedro Sula and was instituted by the support of a group of citizens that were concerned about the uncontrolled progress of this disease (LCC, 2017). Currently it is an alternative

option for the general population as it offers better services than the public health services and accommodates the economic needs of its users when possible.

5. Fundación Ortíz-Gurdian: As one of their goals in supporting health in Nicaragua, in 2003 this foundation developed a program for the fight against BC (OG, 2011). Their aim and commitment is to benefit women with limited economic resources that have been affected by BC (OG, 2011). Initially they started treating all sorts of cancer types. However, currently they focus more on BC (OG, 2011).

3.2.1.2.1 Selection criteria

Subject inclusion

- Female
- 21 years of age or older
- Histological diagnosis of breast cancer and/ or ovary cancer
- Country of residence: Honduras, Nicaragua or Portugal

3.2.1.2.2 Sampling strategies

During the sampling stage of this research, potential participants were contacted in different ways. At the first stage of the study, participants were invited to participate in various workshop sessions. To carry this out, multiple organizations from Portugal were contacted by the researcher through e-mail and by telephone call with the support of professors from ISCTE-IUL University. After exchanging communications and receiving an affirmative answer, some of these organizations scheduled a face-to-face interview to discuss the objectives of the project and the process of imparting the workshops. To reach the sample and recruit participants, the researcher combined different methods such as snowball and contacting individuals to play the role of resource people in Nicaragua and Honduras. These subjects were a key component of this research as it was through their physical presence in the different cancer organizations that the permission to apply the survey was granted and participants were invited to participate. Additionally, the researcher sampled a small group of women that had experienced cancer hoping that they would already be connected to a network of other women with cancer diagnosis criteria. As expected, this sampling technique led to the recruitment of more participants and more subjects responded the online survey. Another important tool used in this stage of recruitment was Facebook (FB). The questionnaire was shared in closed FB groups of women. It was assumed that statistically, these groups would have members fulfilling the inclusion criteria or at least family members and acquaintances with the necessary characteristics for participation. It should be acknowledged that reaching participants only through online surveys generates a biased sample since people with access to this tool are typically better educated, at the higher level of socioeconomic scale, young age and do not represent ethnic diversity (Couper, 2000).This would not depict the reality of countries such as Honduras and Nicaragua because they are poor countries and the general population has limited access to internet. To counteract this drawback, the resource people designated in each country by the researcher visited the organizations discussed above to reach participants with diverse sociodemographic characteristics and contextualize the research topic. An advantage of implementing the chosen sampling method is that participants could respond the questionnaire in the comfort of their homes and feel free to withdraw at any moment without feeling judged or having the idea of disappointing the researcher. Also, they could have the privacy to express themselves as they wished. When surveys are conducted face-to-face, participants may feel obliged to please the researcher and therefore answer it even though they have no desire. According to Bryman (2012), other benefits of conducting online surveys are low cost, faster way to respond, data accuracy and the fact that they can be designed with attractive and allusive formats. In this case, the selected format theme was colorful flowers that complemented the design of workshop invitations.

Gaining access to participants was also one of the main challenges for the qualitative stage of the researcher. Due to this, practical considerations were taken. Instead of programming several workshop sessions, the researcher took advantage of the invitation received by Amigas do Peito to lead their upcoming monthly workshop. The last Wednesday of every month, this organization offers a workshop for its members and they arrange multiple activities. Dr. Emília Vieira, the oncologist in charge of this organization was the person who granted permission for the researcher to conduct her research workshop. To invite participants, the information was shared in the FB page of Amigas do Peito and the researcher elaborated two invitation posts and a video. The number of participants expected was four or five as this is the common number of attendees per workshop in Amigas do Peito. Fortunately, seven participants showed up. The table below renders a short description of each participant. Names were changed to abide with the ethical principles of social research and respect their privacy.

Table 3.1 Characterization of workshop participants

Pseudo-name	Age	Country of origin	Occupation	Education level	Status	Cancer type	Cancer stage	Treatment	SWB
Carla	39	Portugal	Commercial shop	University	Single	BC	III	Chemotherapy	27
Andreia	73	Portugal	Housewife	4th grade	Married/ Cohabitation	BC	II	Mastectomy	27
Alda	62	Cape Verde	Nurse	University	Single	BC	II	Surgery Chemotherapy Radiotherapy	31
Sandra	53	Portugal	n/a	University	Married/ Cohabitation	BC	III	Surgery Chemotherapy Radiotherapy Mastectomy	35
Joaquina	45	Cape Verde	n/a	University	Cohabitation	BC	II	None	21
Lúcia	40	Cape Verde	Unemployed	University	Single	BC	II	None	13
Rute	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

3.2.1.3 Survey implementation

The quantitative portion of the research design was conducted through a survey. This tool intended to gather specific information pertinent to the research objectives. Since the research is done in English, the first draft of this questionnaire was developed in this language. Then it was translated to Spanish and Portuguese because these are the official languages of the countries selected for the study. The application of surveys entailed a variety of approaches. First, the pilot survey was applied face-to-face to seven BC diagnosed women who were patients of Dr. Vieira (Hospital Santa María). After the first two applications, the researcher realized that one question that related to positive and negative affect (Diener et al., 2010) was causing emotional turmoil to the interviewees and therefore she decided to eliminate it. It should be acknowledged that the online version was designed to avoid emotional sensitivities as medical facilities remind patients of their cancer experience and the feeling of vulnerability may be increased when they find themselves in front of a psychotherapist. However, these questionnaires became a tool that provided unexpected data such as the emotional hardship of answering the question previously mentioned. The online application of the survey was set to be through FB groups and the organization's official pages (Amigas do Peito and Instituto Macrobiótico de Portugal). Additionally, due to the chosen via to contact respondents, the response rates could not be anticipated. However, Bryman (2012) states that online surveys generate a higher non-response rate so it was expected that the number of participants was not going to be large given the time limitations.

The questionnaire was also designed to be sent through e-mail to people that the researcher was aware fulfilled the inclusion criteria or had a relative that did. The network successfully expanded and reached an acceptable number of participants. Lastly, a printed version of the questionnaire was self-responded by participants in the organizations reached. One of these organizations was Amigas do Peito, where the qualitative stage of the research also took place.

3.2.1.4 Participants

The participants taking part in this study are women with a histological diagnosis of BC, OC, or both at any given time of their lives. A total of 128 subjects participated in the study and their ages range between 26 and 87 years old. The mean age of these participants is 54. The majority of the sample, a 41% was residing in Portugal, 37% was from Nicaragua and 19% resided in Honduras. Out of the people who provided this information, 100 participants (75%) were diagnosed with BC, 21 (16%) with OC and a minority of 3 (2%) were affected by both types of cancer. The stage of the cancer of these women was mainly stage III (30%) and stage II (28%) respectively.

3.2.1.5 Data analysis

Descriptive statistics was the preferred method to manage and analyze the data collected through the questionnaires in this study. After designing and applying the survey, each question and possible answer was coded to convert this data into computer readable information. Then, coded information was inserted to SPSS software (version 25) to allow statistical analysis. The license to use this software was granted by the University of Gothenburg. After the initial descriptive analysis, inferential analysis were also performed, namely Analysis of Variance to test the effect of a set of variables over SWB.

3.2.2 Workshop

The workshop took place in Amigas do Peito. The permission to conduct this activity was approved by the founder and director Dr. Emilia Vieira. She was in charge of setting the date and sharing the information with her patients. Participants were invited to come on April 18th and the duration was around 3 hours. It was imparted in Portuguese language. Despite the predicted challenges due to language barriers because the researchers native language is Spanish, both parties could understand each other with no major communication issues.

For this portion of the research, thematic content analysis was applied to address the data that emerged through participant observation. This assessment tool allowed some themes to be salient and therefore relevant to the understanding and assessment of the research questions.

3.2.2.1 Participant observation

An essential tool of this part of the study was the observations made by the researcher during the workshop. Following some principles of micro-ethnography, the researcher took a minimally participating observer stand (Bryman, 2012). Verbal and non-verbal communication was carefully observed when participants were answering the survey during the workshop and when the main activity was taking place. Throughout the workshop session, the process went down similarly. However, in this case, the researcher allowed participants to take the lead of conversational topics and let them know her availability for if they needed support intervention. Otherwise, her role was mainly explanatory. Since one of the main ideas of the workshop was promoting a social network and allowing this to empower women living with cancer, the need of a leading participant was crucial. For this matter, the organization contacted one of their members which was diagnosed with cancer many years ago and supports them with tailor skills. With her playing the role of the person that can be addressed for doubts and support regarding the sewing process, the researcher could focus more in observing group dynamics. This participant allowed answers and action to come from within the group rather than from the researcher.

During the activity, mental notes were taken to avoid making participants feel uncomfortable (Bryman, 2012) and to allow empathy and genuine presence from the researcher. Thereafter, when the workshop was concluded, the researcher wrote full field notes using photographs as additional source (Bryman, 2012). Verbal consent was asked to take pictures during the activity. Nonetheless, the researcher took only a few pictures to avoid making them feel self-conscious. Pictures were made available in the organization’s official FB page as volunteers also took pictures and shared them publicly.

3.3 Ethical considerations

Population-based studies are an extremely important asset for the development of public health knowledge (Beskow, Sandler, & Weinberger, 2006). For this reason and because of the involvement of people, any research in the field of social sciences must be ethically responsible. For the population of this research, special considerations were given to comply with oncological ethical principles. The values kept in mind by the researcher in this study are self-determination, agency-promotion and decision-making given that this project is intended to be developed as a tool of social support. One of the main goals of engaging participants in a productive activity is to be part of the solution of challenges faced by their own community. Therefore, if research shifts participant’s role from passive to active by promoting partnership positive outcomes are likely to be obtained.

According to Bryman (2012), there are five main ethical principles when conducting a research study. These principles were implemented in this research and are as follows: a) participants should suffer no harm, b) informed consent, c) confidentiality, d) deception and e) protection of collected data (Bryman, 2012).

Firstly, it was guaranteed that no physical or emotional harm was caused to participants (Bryman, 2012). Controlling all possibe outcomes of the subject's emotional response is no easy task. Cancer is a process that is touched by loss and grievance (Mittal, Purdy, & Ang, 1998). Loss of stability, social status, organ mutilation, self-esteem, and hope among others. Therefore, expecting participants to feel comfortable at all stages of the research may be unrealistic. When individuals that have been through similar experiences come together, it is likely stories and anecdotes will be shared as a form of expression or catharsis. This may result in something uncomfortable thus positive to ensue . Nonetheless, special care was given to the sensitivity of this research. The investigator attended participant's needs throughout the whole process of conducting the experiment as suggested by other researchers (Chiu et al., 2013) to avoid foreseen harm. To clarify, there is a distinction made between causing harm and doing wrong to participants (Capron, 1991). Stressed by Capron (1991), committing a wrong is less grievous than committing a harm. For the purspose of this research it was more likely to commit a wrong rather than a harm as there is no physical threat to participants. In this case, some questions of the survey had the potential to cause emotional commotion but were addressed by the researcher with the use of her therapeutic skills. It is argued that this is acceptable only if the benefits are greater than the risks taken (Capron, 1991) by collaborating in the investigation. Thus, it is necessary to obtain previous permission from participants before making them part of the research.

The written informed consent is a means of minimizing harm by disclosing all the relevant information so participants can be aware of their role when participating (Capron, 1991). Having the permission of participants allows the relationship between the researcher and participants to be clearer and defines the boundaries of their social interaction (Capron, 1991). The informed consent contains relevant disclosures such as purpose of the study, confidentiality, contact information, voluntary participation, potential benefits and potential risk. This document was elaborated in English, Spanish and Portuguese to guarantee all participants understand what their participation entailed and made them feel safe. The informed consent was provided in a printed form to the workshop participants. However, for subjects that were only participating through the online survey, a summary of its content was added.

People have their own standards of ethics and morality and therefore the interpretations of experiences are personal. To avoid misinterpretations, participants were informed of what the study comprises so they could delineate their own privacy and confidentiality boundaries. Just as physical pain is subjective and hard to quantify, suffering is also experiential (Mittal et al., 1998). The degree of harm or wrong can only be defined by the thresholds participants set of their own ethical standards (Mittal et al., 1998). The researcher promoted coping with their suffering (Mittal et al., 1998). Yet, to avoid biases and a conunterproductive relationship, the researcher limited herself to get overinvolved and allowed them to express freely with their peers. The misuse of information (Capron, 1991) was avoided following the protection principles of research ethics. The data and experiences gathered in the study are to be used anonimously and under the rules and regulations of Amigas do Peito (workshop), ISCTE-IUL University and supported by previous participant's permission.

Deception was another ethical principle avoided in this study. Participants were provided with the necessary information of the investigation and treated with honesty (Bryman, 2015). The purpose of their participation and the main objetives of the study were clarified and participant's had enough information to decide if they wanted to participate.

4 Findings and discussion

4.1 Textile art engagement as a tool to foster SWB

Two main sources of information were obtained in this phase of the study and will be explored in this section backed up with relevant excerpts taken from the researcher's field notes and reflections. First of all, data that already existed and belonged to participants was shared within the group. Meaning, by participating in this activity, this information was made available for the researcher to gather but was not affected by participation. Examples of this type of information are their experiences with illness along with their sources of support, emotions experienced through the illness process and the multiple challenges they have faced as a consequence of cancer. Secondly, the impact of being engaged in the workshop activity could be obtained through participant observation. For instance, the researcher could reach out for their emotions and behaviors during the workshop, their ability to relate to one another and how they bonded, the way that their creativity and productivity was put into practice and their skills in networking and supporting their peers.

The women who participated in this stage of the research were contacted through Amigas do Peito. With their support, potential participants were selected given the relevance of the activity and their need of a post-surgical bra or willingness to support women in need. The total number of participants was 7 and their ages ranged from 39 to 73 years old. All of them had a histological diagnosis of BC and the cancer stage of the majority (4 participants) was II. Two of the participants had stage III cancer. Out of all participants, 3 women had received chemotherapy, 2 of them underwent radiotherapy, 2 participants had a mastectomy intervention and 2 other women were about to have surgery in the coming weeks. This information mentioned above was made available because 6 out of 7 participants filled the questionnaire. The different phases of treatment where each participant was at the time of the workshop allowed them to share their illness-related knowledge and experience to the ones that had recently received their diagnosis or were getting prepared for a surgical intervention.

4.1.1 Content of the workshop

The materials used for this workshop and their purposes are explained in the following Table 4.1.

Table 4.1 Workshop materials and objectives

Material	Objectives	
Welcome Kit	Questionnaire, informed consent and welcome letter	Obtain relevant information about participants, inform them about their involvement and make them feel well received.
	Fabric scissors, pen and pencil, cotton fabric, velcro, elastic, paper for molds and sewing kit (needles, thread and pins)	Elaborate the designing, cutting and sewing together of the bra.
	Completed bra	To have as an example for future personal assembled bras or if they currently needed one.
	Notepad and post-its	To take notes, mark each mold and encourage participants to exchange contact information.
Twine string 50ft long	Used to conduct the icebreaker.	
PowerPoint	Contained instructions and pictures of each step of the process. Served as visual support for participants and for the researcher.	
Video	Aimed to give warm invitation to the workshop and gave participants an idea of what the activity was about. The music and visual content was designed to sensitize and promote awareness to cancer illness.	
Online invitation	2 different images to be posted on FB so potential participants could know about the activity. It contained information regarding date, time, location and purpose of the workshop.	

The first stage of the workshop started at 13h. The researcher prepared the welcome kits and arranged materials to be used and the setting where it took place. The first participant who arrived was the woman who was invited as support assistance due to her tailor skills, willingness to help and because she also fulfilled the inclusion criteria. The researcher explained the assembling process of the bra and they had a conversation that fostered rapport between them. Three other participants joined the workshop on-time but they were requested to kindly make themselves comfortable and wait for the other participants.

The first activity planned was an icebreaker. The main objective was to work in getting to know each other, realize that they can have things in common and create a string attached web as a metaphor of how a support network can be intertwined. This icebreaker is called “Me too.” One of the participants has to start by getting a spool of string and tell the group something about herself (SAM, 2011). If another participant considers what was said applies to her, she takes the string after saying “Me too”. If more than one of the members of the group relates to what was said, the string also passes to them and consequently a web begins to form (SAM, 2011). The last person getting the spool of string then has to share something about her and the process continues similarly. In the end, participants count the number of strings they have in their hands and then provide that same number of people/organizations they consider to be their main source of support. This last part was adapted to introduce the idea of network support and make them aware that their support system can change and expand at any moment.

After this activity, the researcher provided the welcome kit and did a short presentation of the thesis project. She also showed them the initial invitation video (for those who had not seen it) to introduce them to the topic. By this time, the rest of participants showed up and after being greeted they joined the group. Subsequently, the researcher proceeded to open up the PowerPoint and then the core activity took place. The drawing of patterns, cutting, and sewing of the bra took approximately 2 hours and a half. During the workshop, coffee and cookies were provided. This spontaneously took place and was arranged by volunteers who are women that have also been through BC. This allowed the main structure of the activity to be directed by them as a group. One by one they left at their own different pace. Some left before than others depending on their availability of time. For this reason, there was no official closure but the researcher showed gratitude and appreciation to each one of them individually for their participation.

One goal of this phase of the research was promoting active participation in a social support setting, which in this case, was formed only by women living with BC and no other histological cancer diagnosis. To allow this, the activity that was chosen was elaborating post-surgical bras to bring participants together and simultaneously make them realize they could impact the life of other women living under similar circumstances by providing their time and support. The invitation to the workshop specified that the final product would be donated to women in economic hardship and in need of a post-surgical bra. The original idea was also building compression arm-sleeves and post-surgical bras. However, given the time limitation, the only garment that was elaborated in this workshop was the bra. To have a better understanding of the medical supplies, the following pictures show the final version of them both (Figure 1).

Figure 1 Assembled models of garments

Post-surgical bra

Compression arm-sleeve

Specific practical activities such as drawing, cutting and producing the patterns of a basic model of the bra were directed through oral instructions and supported by a PowerPoint. This presentation was created with Portuguese instructions and pictures of every step of the process as a visual aid. Participants were encouraged to generate an environment where they could freely relate to one another and choose spontaneous conversation topics. They were able to decide their own working and participation pace as no particular outcome was expected from them. In other words, they were able to work at their own time distribution and engagement promoting an environment of peace, laughter, empathy and productivity. As designed, the workshop fostered a secure and comfortable setting for the seven participants and lingering volunteers. The maximum number of participants hoped for was eight because the researcher had enough material for this number of target participants. However, there was a risk of receiving more women because even though stated in the invitation that participation required signing up, some members sometimes just show up for activities without previous announcement. If this were to happen, the researcher had planned to develop a group work rather than creating an individual bra per participant. The total number of participants chosen was motivated by Bryman's (2012) principles of having small groups to allow close interactions between researcher-group and participants-participants as peers themselves. Additionally, the setting where the workshop was conducted is designed to comfortably accommodate no more than 8 people seated and with a space to work on the table. Another reason for the sample size related to the ability of the researcher to remember their behaviors, attitudes and take field notes after the workshop. Thus, during the activity she was involved in explanation and clarification processes, and being present and available for the group.

4.1.2 Experiences with illness

Through the icebreaker activity, which as mentioned before aimed allowing participants to get to know each other, find the commonalities and provide information about their own support systems, it could be observed that in line with other researches, social relationships are of the utmost importance when facing cancer. The need of support was one of the salient themes that emerged during the workshop conversations and activities. According to Reynolds and Lim (2006), this is one of the areas affected when cancer strikes and it represents a threat to the SWB of patients. It is commonly recognized that there is a special bond between women that have been touched by cancer and they feel the need of supporting their peers (Reynolds & Lim, 2007a). This was revealed when carrying out this activity as some participants decided to engage in the project because they wanted to donate their work and support other women in need. One of the participants even asked for information so she could gather volunteers in Portugal to send these garments abroad to other countries lacking economic capital to obtain them. Reynolds (2002) stresses that textile arts are used in oncology as a means of transcending the illness experience. Through the participant's attitudes and comments about their wishes of engaging in this activity to impact the lives of other women, it was suggested they wanted their experience to go beyond illness. They could transcend the fact that they are living with cancer and transform it by taking something positive out of it. Supported by Reynold's (2002) findings, these women also showed their connection to a larger world that did not allow them to be self-absorbed in their own struggles. Instead, they took a step forward to put their work at the service of women they had not even met, thus wished to support: "Participants considered that helping other women made them feel happy and responsible human beings because some people do not have the opportunity to access elementary medical treatment" (fieldwork note). Engaging in activities during leisure time as volunteer facilitates the fulfillment of basic need such as developing competence, autonomy and relatedness (Mojza et al., 2011; Perruzza & Kinsella, 2010). This was emphasized by what was shared during the workshop. The project Knitted Knockers that was previously explained in the literature review has accomplished its main goal which is supporting BC women by providing them with a knitted breast implant ("Knitted Knockers," n.d.). Nonetheless, another goal they have is to connect volunteers and create a support network for women impacted by BC. Since all the participants of the workshop were members of Amigas do Peito, they shared a common ground and expressed that when it comes to the BC community, things work like in a sisterhood. Being able to produce a post-surgical bra with a group of women under similar circumstances and give it as a gift to a fellow peer highlights another restorative aspect of art involvement. According to Reynolds and Prior (2006, 2003), art-making allows women affected by cancer to enjoy social contact and feel proud of sharing with someone something they created by themselves. Another participant conveyed that she had been a member of Amigas do Peito since the early beginnings because she was first diagnosed by the doctor and founder many years ago. Being part of this organization for so long made her feel committed to them and to all the women touched by cancer. In her reflections she shared that: "Being in the organization's facilities and talking about the hardships of cancer reminded her to be grateful with life for being alive. Somehow she also felt that she owed something to all the members of the organization; especially, to those that were just beginning the devastating journey of cancer" (fieldwork note).

Another research conducted to promote the participation of cancer patients in research have put forward the importance of reciprocity between individuals living with cancer (Chiu et al., 2013).

They also refer to the power dynamics between researchers and participants, but in this sense, it is important to highlight how their support to peers brings about valuable first-hand experience as a contribution to other women confronting similar challenges (Chiu et al., 2013). This also gives a voice to these women and promotes a sense of control and power (Chiu et al., 2013). Having a support network and being able to extend it could only bring benefits to their lives. When participants shared who their main sources of support were, it could be observed that through affirmative gestures such as smiles and nods they were relating their experiences to their peer's experiences. Moreover, this provided grounds for camaraderie that fostered genuine and fast rapport and empathy among the group. Supported by an intervention clinical trial conducted by Kushlev et al. (2017), the societal role of supporting and being supported by others fosters SWB. If SWB can be raised through social participation and other social roles, an intervention strategy that gathers women going through similar experiences and having common goals can be a powerful tool to satisfy social needs of participation, affiliation, relatedness and belonging as found in this clinical trial (Kushlev et al., 2017). This also goes in line with the notion that having high levels of happiness benefits various life domains such as health and longevity (Kushlev et al., 2017) which in this case is crucial for individuals going through treatment processes that affect their physical and psychological health directly.

When the workshop had begun and participants were already immersed in the creative process of elaborating the patterns and molds for the bra, it was witnessed they were feeling comfortable with one another and enjoying the activity. This allowed diverse conversation topics to emerge. One topic that was touching but empowering related to the physical changes they went through when receiving chemotherapy. One could assert that chemotherapy's side-effects such as vomiting, nausea or lack of energy would be of great impact and therefore a point of discussion. However, many of the participants mentioned losing their hair was a crucial point in their cancer process. One participant stressed this was a subject she never shared with family members to spare them her emotional burden because she rather portrayed herself as a strong woman and not like a vulnerable cancer survivor: "[…] losing her hair was the hardest thing she went through. She said that she went to the beauty salon to shave her head before starting chemotherapy because she didn't want to see how her hair fell out on its own. She went with her spouse, children, other family members and also friends came along. The most appalling moment for her in her whole illness was coming out to see the group after the emotionally difficult transition of becoming bald. She said everyone cried and automatically formed a group hug around her. This shared moment was an emotional toll that was difficult to forget as it marked the beginning of the process of living a life with cancer" (fieldwork note).

Similar to some findings related to art therapy engagement and the increase of SWB (Reynolds & Lim, 2007b), another salient theme that emerged from this workshop relates to the need of cancer patients to preserve a social identity were they are seen as 'capable'. This includes sparing family members their worries and concerns about their own well-being. Women going through cancer want to have a social identity that is not related to illness (Reynolds & Lim, 2007b). Being bald is like a societal focal point that says: 'I am a cancer patient and I am currently undergoing chemotherapy'. Another participant shared her experience about losing her hair an precisely not wanting people to know about it because she felt embarrassed others would know she was going through chemotherapy: "[…] she didn't want people to know because they would behave differently and see her weak and vulnerable. One day she was in the bathroom at her workplace putting on her wig and one of her colleagues came in. Accidentally her colleague saw that she was bald an immediately came closer and gave her a hug. Since that day, her coworkers didn’t let her use a wig. They said that it was uncomfortable, hot and not good for her. This participant says that this is the nicest thing they ever did for her. After that episode, she felt free and could embrace the illness experience” (fieldwork note). A completely opposing experience was expressed by another participant that was originally from Cape Verde. This woman is a nurse and it could be inferred that working all her life with ill people struggling through life allowed her to have a different perspective of losing her hair: “[…] she didn’t think losing her hair was important. Until the present day, currently undergoing medical treatment, she doesn’t care about her looks and therefore she has never worn a wig. She feels comfortable with her bald head and she embraces it as a token paid in exchange of having the privilege of being alive” (fieldwork note). These contrasting responses can also be related to the level of SWB (obtained through the questionnaire) each of the participants have as this last participant scored 31 points of SWB which is “extremely satisfied” and the other 2 participants scored in the “satisfied” range. Being extremely satisfied with one’s well-being relates to self-esteem, autonomy and confidence. These findings support the importance of fostering SWB for a population that encounters innumerable challenges affecting their life satisfaction and this as a consequence their ability to cope with illness and life changes that come in hand.

Some participants also shared their challenges in adapting to a new life. According to them, they had to abandon some day to day activities they used to fulfill before receiving medical treatment. Reynolds (2002) argue textile arts come about as a valuable tool to integrate all the aspects of life that change after illness. Their findings go in line with what was mentioned by participants in the workshop. During the activity women mentioned they had to keep themselves busy to fill out their days. Some of them were on sick leave and unemployed; and being engaged in diverse activities allowed them to avoid feeling an “empty present”. In their research, Reynolds (2002) gathered reflections from their participants and found out that the role of textile arts in their lives could transform their suffering into a life with satisfaction. These participants who were living in the shadow of cancer could represent their pain through art and a new positive-self emerged as more reflective, creative and stronger individuals (Reynolds, 2002).

4.1.3 Behavior and attitudes as empowering tool

Consistent with Reynolds and Prior (2006) who found out that art work promotes intense concentration and full involvement (flow) associated with the increase of SWB it was observed that when drawing, cutting and assembling the fabric patterns of the bra, participants were fully focused and immersed in the activity. This kind of stimulation promotes confidence, self-control, autonomy, and nurtures the process of discovering oneself as the task unfolds (Reynolds & Prior, 2006). Additionally, researchers have argued that art-therapy is efficient to promote emotional expression (Puig, 2004). One of the participants that had been diagnosed more than 30 years ago shared her thoughts and emotions regarding her illness. After expressing her feelings she had an insightful moment where she realized she was talking about things she had not voiced in a long time and this made her feel relieved: “When she started telling her illness story, she described herself as a strong woman that has overcome difficult challenges in life; but she also mentioned that talking about all this, made her remember episodes of her life and feelings she had not shared before” (fieldwork note). This is asserted as a positive outcome of the workshop due to the relationship between emotional expression or catharsis and the increase in the quality of life of BC patients (Puig, 2004; Reynolds, 2002). The fact that she mentions feeling relieved suggests that there was a decrease of negative emotional burden that had been repressed. Puig (2004), points out that participation in art therapy allows women to process and express feelings in a positive way. In this case, sharing her experience with other women going through cancer was valuable as concerns and fears could be discussed among participants making them feel peer support and relatedness; but also for her own self-expression in a non-invasive way. Montazeri et al (2001) claim that participation in cancer support groups has an impact on the prevalence of psychological morbidity such as anxiety and depression which is common in women affected by BC. Even though this workshop cannot be considered as a support group per se, it has the potential for similar future implications. Supported on the findings of Montazeri and colleagues (Montazeri et al., 2001), participant's perceived benefits are relevant when it comes to support groups. In their study, BC patients considered their overall psychological well-being had improved in the course of one year of participation (Montazeri et al., 2001). Based on the data collected in this dissertation, being part of the activity was helpful for participants to get to know more women in similar life situations and occupied them through a fun activity such as arts and crafts: "They would recall other times where they were together or discussed about their current illness situations. This space is like a safe place for all of these women. They come and enjoy leisure time by learning diverse things related and un-related to cancer. It is also a space to connect with women in similar situations and realize that they are not alone. As they find support in this organization they can realize that many things can be done as a team, as a community. Becoming part of a this community can make women feel supported in the battle of cancer" (fieldwork note).

This project was successful in promoting individual strengths and allowing participants realize the skills they have and the ones they can develop. Moreover, this was an opportunity for them to be challenged and focus their time and attention into something productive. One of the participants expressed that she had never tried sewing or anything related to it. She was playful and enjoying herself while learning. This participant asked for support in several occasions and it was observed that she was interested in mastering the skills to carry out the activity successfully.

Another interesting finding was spotting how individuals would stop their own task and motivate or help out a peer. Believing in their potential allows them to regain their self-determination and agency as they were producing something they were familiar with and needed for their healing process. Even some volunteers from Amigas do Peito remained in the workshop to offer support to participants. This was unexpected, however rewarding to observe how the activity also had a positive impact on these volunteers: "An important fact to take from this phase of the study was observing how close the community from Amigas do Peito is. Volunteers that assisted the workshop, which are also BC survivors were collaborating at all times; not only with the logistics of the activity but also honoring participants with their presence, support and interventions so that the environment could be familiar, motivational and integrated" (fieldwork note).

After illness, it is common for women to adapt their lives and reprioritize important things in life (Reynolds & Prior, 2006). Relationships and participating in different activities are given more attention to after receiving a cancer diagnosis (Reynolds & Prior, 2006). This was established during the workshop. Participants showed willingness to carry out the whole process of producing the post-surgical bra for them but emphasized the social relationships with their colleagues by providing the support they thought was needed. This was witnessed through sharing a story that would empower someone, explaining how to do something when they saw a peer was having difficulties and also by giving positive feed-back related to the work of the other participants. “Every one that was present was bringing something to the atmosphere. While some provided expertise in the illness, others brought humor, support, motivation, tailoring skills among others. It was pleasant to observe how easily they became familiar and shared intimate experiences feeling comfortable while doing so. It was rewarding for the researcher to see that even though these participants have encountered adversity, most of the conversations had positive connotations and this fostered an enjoyable environment” (fieldwork note).

Consistent with the psychological needs theories and the bottom-up approach of SWB which suggest that leisure is an important life domain (Kuykendall et al., 2015), recreational activities influence the individual’s well-being. During the workshop, participants expressed that they enjoyed the activity. This also could be pointed out through their behaviors because most of the time they were laughing while sharing experiences or jokes. The environment was filled with positive attitudes and it somehow provided them a break to detach from their current worries and hardships.

The dynamics that emerged between the researcher and the participants were empowering for these women. As mentioned before, when researching on samples that are in nature disempowered due to the process of cancer diagnosis and treatment, research should add up something to them. In this case, the goal was to promote leadership and for problem-solving to come from within the group. One of the participants had expert skills on tailoring. This allowed the researcher to take a step back and limit herself to deliver basic instructions and support upon request. Participants need to gain a sense of control and power (Chiu et al., 2013). By promoting an environment where they owned the activity and where they could reach out to a peer for expert support, rather than to the researcher makes them regain this sense of being in control of their own lives. When going through cancer, diagnosis and treatment, these women live their lives depending on others: medical staff and caregivers among others. This is the main reason why they should be given their voices back and motivate them to contribute to other women through their knowledge and experience. They need to know that they are the ones that have the power as opposed to the researcher. Reciprocity and mutual benefit should be endorsed (Chiu et al., 2013), however, the most important thing is for them to reconstitute their sense of self through active involvement. Meaningful creative occupations such as the one carried out in the workshop can contribute to the health of BC patients by increasing the levels of well-being (Reynolds & Prior, 2003). In other words, if this was implemented as an intervention strategy that could be done frequently, these women would have a space to embrace their illness through the creative expression of fears, doubts, and their feelings among others. A social support network can also be developed as with time all these women could become closer and nurture each other with their expertise in confronting the multiple challenges that cancer can bring.

Given that living with cancer comes with many challenges and struggles, such as the emotional burden mentioned previously ranging from fear to feelings of embarrassment, shame, sadness, among others, it is acknowledged that sharing their experiences is courageous and therefore most valued in this research. For this reason the results obtained highlight the importance of institutional network support for this population. It was evidenced that this has a great positive impact in their lives and should therefore be promoted.

4.2 Survey results

4.2.1 Socio-demographic domain

The total number of participants in this study is 128. Out of this sample, 53 were residing in Portugal at the time of the survey, 25 in Honduras and 48 in Nicaragua. The last 2 participants were currently living elsewhere even though they were originally from one of these countries. For this reason, they are not considered in the main results.

Researchers argue there are cross-cultural variations in the predictors of SWB (Oishi, Diener, Lucas, et al., 1999). To understand these variations, a descriptive analysis of the data obtained will be presented in this section of the dissertation so that it can be further related to SWB and explore the factors that have an impact on it. Some of the external predictors of SWB are education, financial satisfaction through income and marital status (Oishi, Diener, Lucas, et al., 1999). Other studies also support this notion agreeing that income and employment are relevant predictors of SWB, but add culture as a factor of great impact as well (Diener & Ryan, 2009). In this sample, the vast majority of women are highly educated. In Portugal, 36% of participants have a bachelor's degree and 17% is in master or a doctoral degree level. In Nicaragua, 40% of the sample has achieved bachelor level and 23% had done a master/doctorate degree. Honduras presents that 38% of its participants are at a bachelor level. However, 33% of its participants have a 6th grade basic education as compared to a 4% in the other two countries. This can be contrasted with the results obtained regarding the percentage of the sample in Honduras who are housewives (44%) as compared to the significantly lower percentages in Portugal (4%) and Nicaragua (6%). In Portugal and Nicaragua, most of the participant's occupations fall into the 'professional's' category according to the International Standard Classification of Occupations (Michalos, 2014) with a 38% and a 57% respectively. Honduras, distinctively, shows that the majority of its participants belong to the 'services and sales workers' group of this classification even though a 33% of the sample is professional. This study reached in majority the upper level of these three societies as 38% of the total sample was 'professional', 24% belonged to 'services and sales workers', 11% were under the 'technicians and associates' group and less than 1% of the sample was grouped into 'clerical support workers' and 'plant and machine operators'.

Given that the mean age of each participating country is similar with Portugal with 55 years of age and Honduras and Nicaragua 53, it is interesting that a 25% of the sample in Portugal is retired and only 8% in Honduras and 15% in Nicaragua. However, this may be explained by the divergent work policies of each country. For instance, when judging their opinions about the sick leave policy of their workplaces, almost 80% of participants from Portugal were satisfied, 50 % in Honduras and only a 16% of participants in Nicaragua expressed satisfaction regarding sick leave related policies. The Portuguese sample showed 8% of dissatisfaction with the sick leave policies of their work while Honduras and Nicaragua 25% and 45% respectively.

Table 4.2 Characterization of the sample

Themes	**Categories**	**Portugal**	**Nicaragua**	**Honduras**
Education	Basic	24.5%	41.7%	25%
	Secondary	20.8%	20.8%	12.5%
	Bachelor	35.8%	37.5%	39.6%
	Master/doctoral	17%	0%	22.9%
	Other	1.9%	0%	0%
	Total	100%	100%	100%
Occupation	Managers	0%	0%	0%
	Professionals	38.3%	33.3%	56.8%
	Technicians and associate professionals	14.9%	16.7%	6.8%
	Clerical support workers	2.1%	0%	0%
	Services and sales workers	17%	38.9%	36.4%
	Craft and related trade workers	2.1%	0%	0%
	Plant machine operators and assemblers	2.1%	11.1%	0%
	Retired	14.9%	0%	0%
	Unemployed	8.5%	0%	0%
	Total	100%	100%	100%
Marital Status	Single	11.8%	40%	23.4%
	Married/cohabitation	66.7%	48%	36.2%
	Divorced/ separated	9.8%	4%	25.5%
	Widow	11.8%	8%	10.6%
	Relationship with no cohabitation	0%	0%	4.3%
	Total	100%	100%	100%
Family Composition	One person household	13.2%	8.0%	10.6%
	Couple with children	43.4%	32%	25.5%
	Couple with no children	17%	8%	4.3%
	Adult with children	7.5%	12%	8.5%
	Multi-generations	1.9%	20%	6.4%
	Extended family with kinship	15.1%	20%	38.3%
	Extended household no kinship	1.9%	0%	6.4%
	Total	100%	100%	100%

4.2.2 Health domain and medical treatment

One of the cross-cultural variations in the predictors of SWB is related to financial satisfaction (Oishi, Diener, Lucas, et al., 1999). In poorer countries, economic factors have more variance in the levels of SWB as compared to wealthy nations (Oishi, Diener, Lucas, et al., 1999). For this reason, it is important to do a comparison between the hardship in affording medical treatment in each of the participating countries and the type of medical facility they attended. Given that Portugal is one of the European countries with an effective public health system (Böhm et al., 2013) it is not surprising that 87% of the sample underwent their medical treatment in a public facility and the vast majority (70%) had no economic challenges affording it. In poor LA countries such as Honduras and Nicaragua the public health system is broken and lacks basic needs; therefore, these samples received their medical treatment and interventions mainly in semi-private (71% in Honduras) and private (62% in Nicaragua). One could assume that this could be explained by the high social level of the sample that was reached. However, when it came to answering if they had any hardships in affording cancer treatment, 74-76% of the LA sample referred that they did. It is probable that even though opting for private and semi-private medical treatment, when the public health system had little to offer, patients are left with no other options.

Supported by the literature, a predictor of SWB is human adaptation and coping to multiple life conditions (Diener & Ryan, 2009). Receiving a cancer diagnosis comes with challenges; but with time, women learn how to live with it and therefore the time since diagnosis or the cancer stage may be factor that affects the overall SWB and therefore included in this descriptive section. Portugal and Honduras render similar findings where most of the sample had stage III cancer (40%) and 33% -35% had stage II at the moment. Dissimilarly, 42% of the participating women from Nicaragua had stage I cancer and 27% for both stages II and III cancer. In Honduras, 71% of the sample was diagnosed 1-6 months before the inquiry. In Portugal and Nicaragua, however, most of participants were diagnosed more than 48 months ago and the percentage ranged from 49 to 58 and 17%-23% were diagnosed in a time interval of 1 to 6 months prior the study.

The access to medical garments can also be relevant to count as a variation of SWB. In this study, since the production of the post-surgical bra was part of workshop activity, it was important to confirm the need of it. In this same way, the compression arm-sleeves are also a medical supply needed by women that have been through mastectomy or similar surgeries (Williams & Williams, 1999). According to the findings gathered through the survey, chemotherapy is the most common treatment for the sample in Honduras and Nicaragua with 79% and 74 % respectively. Radiotherapy was applied in these two countries for a 58% of participants in Honduras and 36% in Nicaragua. In Portugal, 75% of the sample underwent surgery, 62% radiotherapy and 60% chemotherapy. Out of the global sample, 39% of them had a mastectomy. This percentage matches the need of the post-surgical bra that was referred by 42% of the women who participated in the study. The treatment percentages go in line with literature that mentions chemotherapy, radiotherapy and surgery are the most common interventions for cancer illness (Schiff & Ben-Arye, 2011).

Table 4.3 Type of medical treatment or intervention

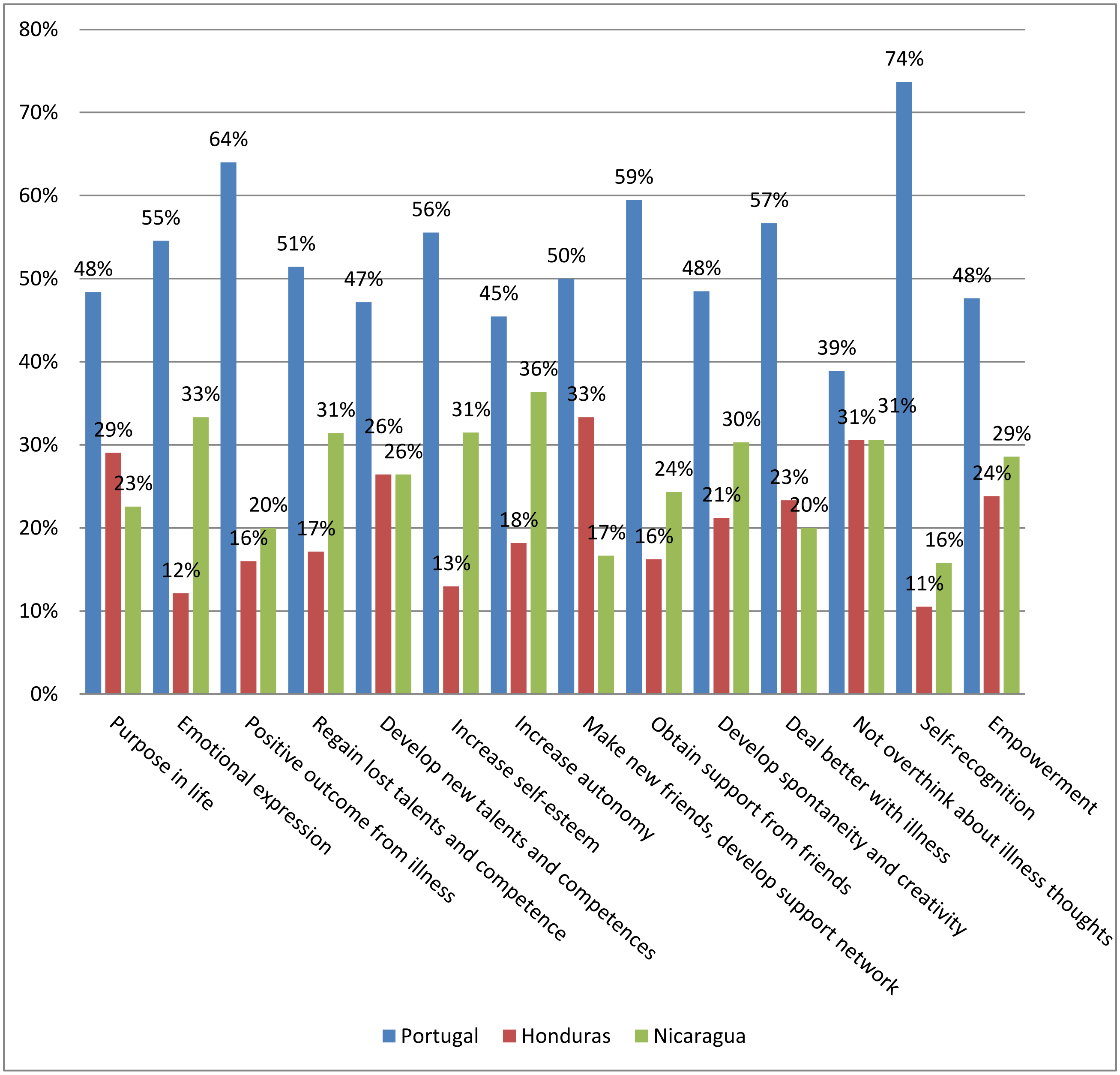
Country (out of 100)	Treatment				
	Surgery	**Chemotherapy**	**Radiotherapy**	**Mastectomy**	**Hysterectomy**
Portugal	75%	59.60%	61.50%	44.20%	9.60%
Honduras	58.30%	78.30%	54.20%	18.20%	20.80%
Nicaragua	43.50%	74.90%	35.60%	51.10%	4.40%

When participants expressed their opinion regarding the price of the post-surgical bra it could be observed that 70% of the participants in Portugal needed this garment considered it to be expensive. Similarly, in Honduras (80%) and Nicaragua (56%) the majority shared the same opinion. In these last countries, 20% of the participating women received the bra for free. In other words, for the sample in Honduras, either they considered it to be expensive or it was given by someone else. Thus, everyone that was buying it expressed that the price of the post-surgical bra was high. For the compression arm-sleeves, which were less needed than the bra, Portugal and Honduras depicted similar findings where around 65% of the women considered it to be expensive as contrasted with a 37% in Nicaragua. It must be acknowledged that Nicaragua was the only country where some participants (30%) got it for free mainly from hospitals and commercial shops. It can only be assumed that it was bought by someone else and in these facilities and gave it as a gift because commercial shops and hospitals normally would not give it for free and these two where the places where most of them got it from.

4.2.3 Leisure engagement

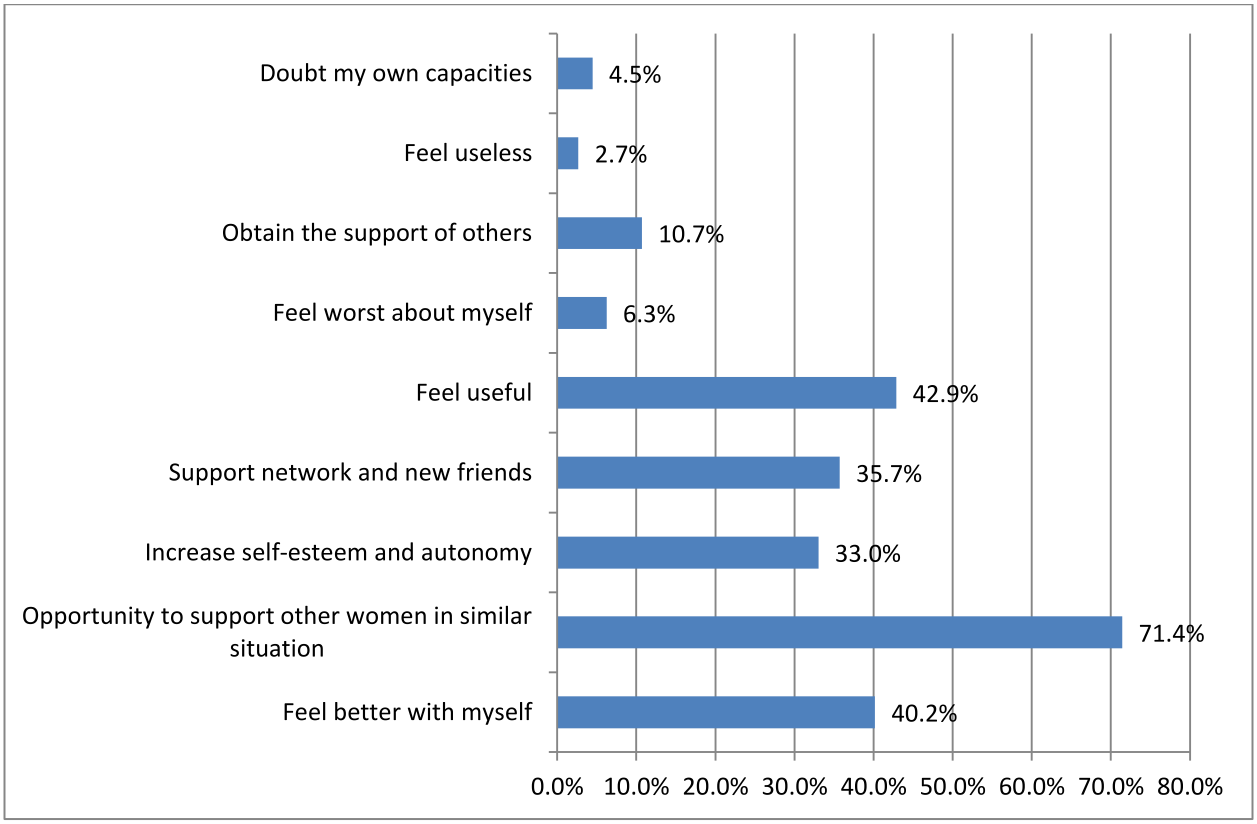
Many factors impacting the SWB of women that have gone through BC/OC can intersect with leisure activity involvement. For instance, interpersonal relationships can be promoted though these types of engagement or participants can be motivated to feel productive and creative. These two domains mentioned before are described in literature as responsible for some variation observed in SWB (Diener et al., 2003; Diener & Ryan, 2009; Diener & Seligman, 2002). According to the findings obtained in this dissertation, out of the total sample, 64% were currently involved in a leisure activity and 63% had been engaged at some points in their lives. The three most common leisure activities that participants were currently involved are reading/writing, sports and textile arts in order of level of engagement. All three countries participating in this research had reading/ writing as their first option. Portugal had textile arts as second option with a 42 % of the sample currently carrying out this activity, Nicaragua mentioned sports (39%) as second most common leisure activity and Honduras textile arts and sports in equal shares to a 27%. On the other hand, when inquiring about the level of interest on multiple activities, regardless of their present involvement different results were obtained. All women shared textile arts as the leisure activity they were most interested in with the following percentages counting answers from the categories “quite some interest” and “lot of interest” which are 6 and 7 levels of interest on a 7 point Likert scale: Portugal with 74% compared to an 84% in Honduras and 47% in Nicaragua.

Figure 2 Benefits of engaging in volunteering leisure activity



The vast majority of participants (86%) considered that being engaged in leisure activities can only bring benefits to their lives. Some of the benefits mentioned were developing new talents and a support network, increasing self-esteem and avoid overthinking about the illness. These were the benefits most chosen. However, regaining existing talents, promoting creativity and spontaneity, and dealing better with the illness were some other benefits of leisure activity engagement that were also salient in the findings. When participants were inquired about the consequences they considered leisure engagement may bring, 71.4% reported the opportunity to help other women in a similar situation, almost 43% of the sample stated that it would make them feel useful and 40% mentioned they would feel better with themselves. Supported by these findings, most of participants consider leisure engagement has a positive effect in their lives as low percentages were reported for negative consequences such as 'feel useless' (2.7%), 'doubt my own capacities' (4.5%) or 'feel worst about myself'(6.3%).

Figure 3 Consequences of engaging in a leisure activity



When asking participants if they would be disposed to participate in a workshop where they would assemble post-surgical bras to donate to women with BC lacking economic resources to obtain it, the majority of the sample responded they would participate. Almost 80% of participants in Portugal and Nicaragua were willing to contribute with their time and energy while 92% of women in Honduras wanted to engage in this activity if ever invited. According to the data that emerged from the inquiry, the benefits that could be obtained by participating in this volunteer activity were various. However, the most common ones were 'having the opportunity to help other women in similar a situation' and 'feeling better with myself'. These two benefits were chosen by all participants from Honduras and Nicaragua. In Portugal it was chosen to a 28% and 77% respectively. The third most popular impact of being involved in a workshop according to the participant's views was 'feeling useful'. This goes in line with oncological literature that highlights the need of women to support their peers in need (Mojza et al., 2011; Perruzza & Kinsella, 2010), feel that they can be productive (Diener et al., 2003.) and transcend their illness by helping others (Reynolds & Lim, 2007a). All these results support one of the purposes of this study which is gathering information regarding the viability of implementing an intervention strategy to increase the SWB of BC/OC patients through textile arts as a tool. Through these findings the interest of women in this activity is highlighted along with the fact that they are currently involved in textile arts and willing to participate in an activity that can benefit other women affected by cancer.

4.2.4 Support sources for women living with BC/OC

Given that generating a support system through a group-based activity is of relevance in this research, it was necessary to explore the main sources of support per country according to the participant's perspective. Social relationships are considered an important factor fostering higher levels of SWB (Diener & Ryan, 2009). In the general results, community (78%), siblings (73%), therapists (68%) and friends (68%) were the most important sources of support for women living with cancer. When a comparison was made among the three participating countries, it could be observed that all of them had different supports. To obtain these percentages, results in the 6 and 7 level of the Likert scale (ranges from 'not important' to 'very important') were added up to obtain a total level of importance. In Portugal, 80% of participants stated that community was their main support. Following community, this country mentioned that organizations in charge of supporting cancer patients played an important role in their support systems as 78% of the sample chose it. The third most important source of support in Portugal was friends. This last result is consistent with the findings depicted by the sample in Honduras and Nicaragua. In Nicaragua, friends were the main source of support obtaining 66% and in Honduras friends were ranked as third (65%). For Portugal, children as a support source had no relevance. Nonetheless, 78% of participants in Honduras considered they were a crucial source of support during illness, and 57% of Nicaraguans shared this view. Lastly, it should be mentioned that siblings were considered the main source of support with a 79% for participants coming from Honduras.

4.2.5 Subjective well-being

To explore the SWB among the participating countries, a cross-tabulation was applied. It was found that there are indeed some differences. However, it should be noted that Portugal had 47 participants who responded to all 5 questions of the SWB scale, Honduras had 19 participants and 32 were residents from Nicaragua. Out of a 1 to 7 Likert scale (1= extremely dissatisfied, 7= extremely satisfied) Portugal obtained a mean of 4.8, Honduras 5.0 and Nicaragua 3.2 (Figure 4). In the sample from Portugal, 11 participants where 'slightly satisfied' with their SBW, 11 were 'satisfied', 8 were 'extremely satisfied' and no one was 'extremely dissatisfied'. In the case of Honduras, most of the respondents were either 'satisfied' (6 participants) or 'extremely satisfied' (4 participants). The highest percentage obtained in Honduras was a 33% of the sample being 'satisfied' followed by a 22% of 'extremely satisfied' with their SWB. Similar to Portugal, in the Honduran sample no one answered in the dissatisfaction level of the scale ('slightly dissatisfied', 'dissatisfied' or 'extremely dissatisfied'). Nicaragua provided different results. In this sample, the majority of respondents (35%) are 'extremely dissatisfied'. Only 19% of the sample was 'satisfied' and 9% 'extremely satisfied' (Figure 5).

Lastly, a statistically significant relation was also found between the country of origin and the SWB (f(2)=8,419, p=0,000). Portuguese women present higher levels of SWB (4.8) (followed by Honduras (5) and by Nicaragua (3.2).

Figure 4 SWB mean per country

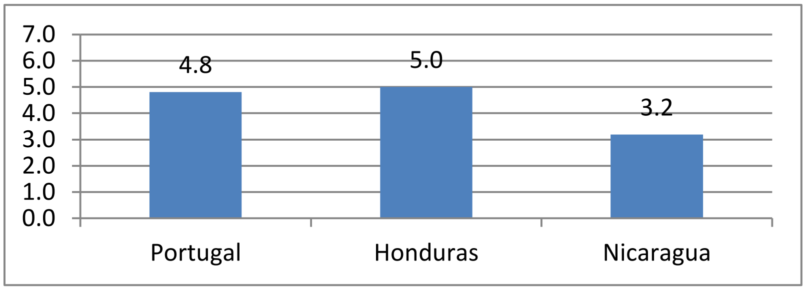
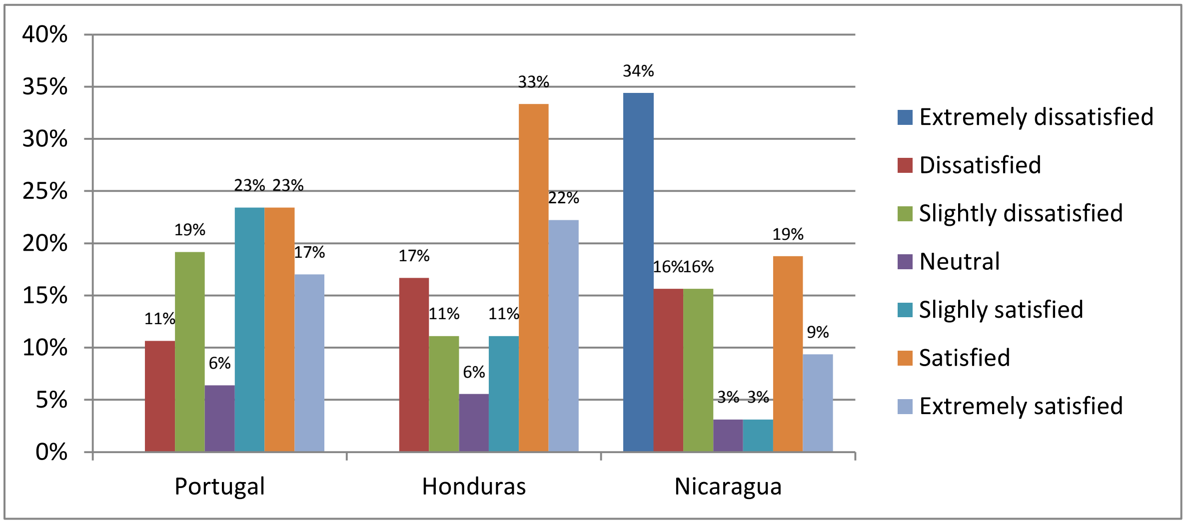


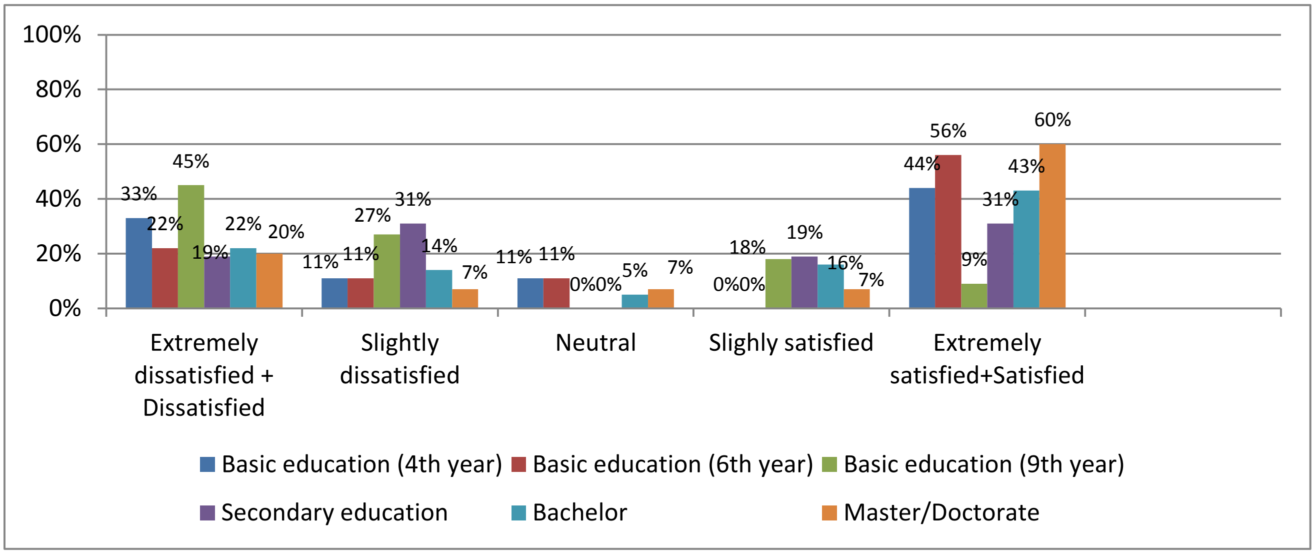
Figure 5 SWB and Country



When relating SWB and education, it could be noted that there are differences in the sample among the level of education and the level of SWB, although these were not found to be statistically significant. Education has been considered a factor that has a positive effect in the overall SWB of individuals (Leung et al., 2011). When merging the ‘extremely satisfied’ and ‘satisfied’ categories of SWB, 60% of master/doctoral participants fell into this group along with a 43% of bachelors. Differing with the notion that higher education relates to higher SWB, individuals with a basic education of 6 and 4 years only were also in this category with a 56%

and 44% respectively. However, women with a basic education of 9 years were 'extremely dissatisfied' or 'dissatisfied' with their SWB as a 45% of this sample was allocated in this category. Participants with a secondary education were satisfied with their SWB as a 31% fell into the 'extremely satisfied + satisfied' group and 19% of these women were either 'dissatisfied' or 'extremely dissatisfied'. It can be observed next (Figure 6).

Figure 6 Education and SWB levels



As described previously, most of the sample was allocated either in 'professional' or 'services and sales workers" category of professions according to the ISCO division of occupations (Michalos, 2014). Participants under 'professionals' were mainly 'satisfied' (32%) and 'extremely satisfied' (15%) with their SWB. Adding these two categories altogether, 32% of 'technicians and associate professionals' and 37% of 'service and sales workers' were satisfied with their SWB. However, it should be noted that the only professional category that obtained the highest percentage of dissatisfaction was 'service and sales workers' as 19% of this sample was 'extremely dissatisfied' and 26% 'dissatisfied'. Lastly, 50% of participants that were unemployed at the time of the survey rated their SWB under the 'slightly dissatisfied' level. This goes in line with studies that stress that the work domain can have an impact in the levels of SWB of women living with cancer as it can be affected through economic hardship (Hewitt et al., 2004).

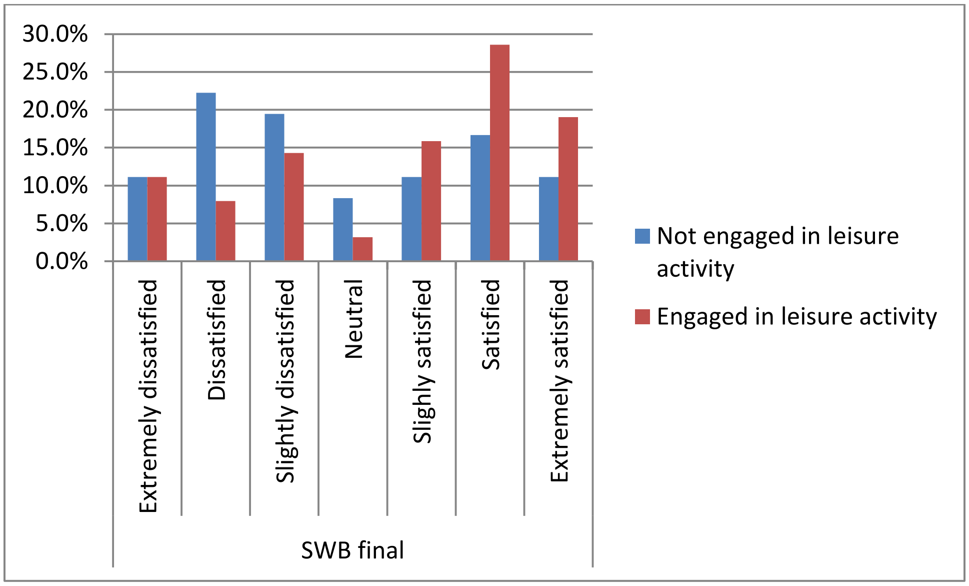
As with education, the differences reported in the sample were not found to be statistically significant.

Table 4.4 Occupations and SWB

	SWB final							Total
	Extremely dissatisfied	Dissatisfied	Slightly dissatisfied	Neutral	Slightly satisfied	Satisfied	Extremely satisfied	
Managers	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Professionals	14.7%	2.9%	20.6%	2.9%	11.8%	32.4%	14.7%	100.0%
Technicians and associate professionals	0.0%	18.2%	0.0%	9.1%	36.4%	18.2%	18.2%	100.0%
Services and sales workers	18.5%	25.9%	11.1%	0.0%	7.4%	22.2%	14.8%	100.0%
Plant and machine operators and assemblers	0.0%	0.0%	0.0%	0.0%	33.3%	33.3%	33.3%	100.0%
Retired	0.0%	0.0%	50.0%	16.7%	16.7%	16.7%	0.0%	100.0%
Unemployed	0.0%	25.0%	25.0%	0.0%	0.0%	25.0%	25.0%	100.0%

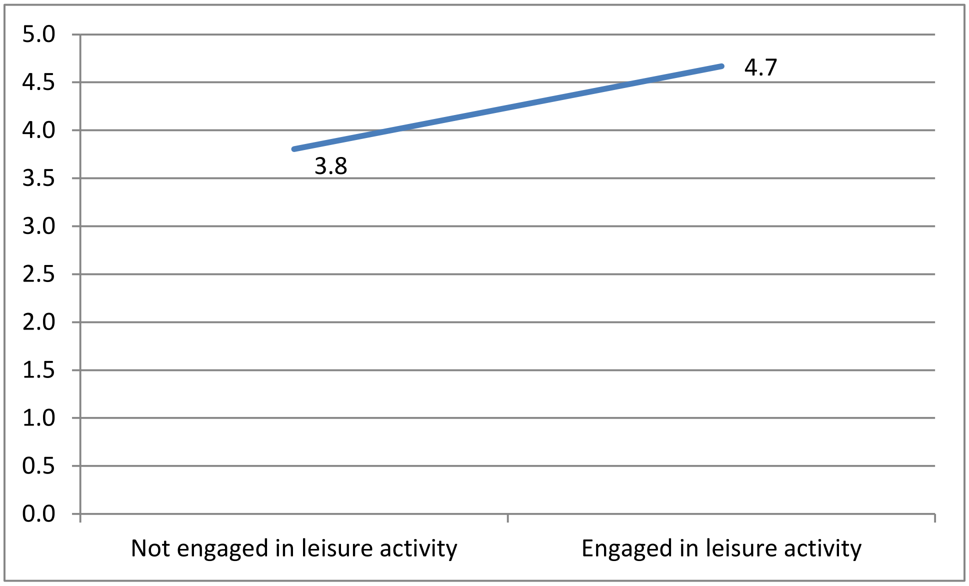
Relating leisure activities and SWB is of great importance to this research. Based on the results obtained, it could be observed that women that are currently enrolled in a leisure activity were allocated in higher levels of the SWB scale when compared to the participants that were not engaged in any kind of leisure activity at the time of the inquiry. When contrasting participants that were not involved in leisure activities, 17% of them were ‘satisfied’ with their well-being while 29% of the ones involved in activities fell into this category. Most ‘extremely satisfied’ participants were also engaged in leisure activities presenting a percentage of 19 as compared to an 11% of the sample that was not participating in these types of activities. When analyzing the levels of dissatisfaction of participant’s SWB, in two of the three categories women that engaged themselves into any kind of leisure activity obtained higher levels of SWB. The only exception was in the ‘extremely satisfied’ level where both , the ones answering “yes” and “no” when asked if they were enrolled in leisure activities, were represented by an 11%. This could be observed in the following figure:

Figure 7 Leisure activity engagement and levels of SWB



According to the results obtained in this dissertation, there were no statistically significant relationships found between SWB and the type of cancer (BC, OC, BC+OC,) or the stage of cancer (I-IV) at the time of the survey. However, supported by the results described above and other statistical tests run, there is a statistically significant relationship between leisure-engagement and increasing levels of SWB (f(1) 4.207, P= 0.043). Meaning, there is a statistically significant difference between being engaged and not being engaged in a leisure activity with respect to the levels of SWB. It was hypothesized that being engaged in a leisure activity impacts the SWB of individuals. As leisure engagement increases, SWB increases as well.

Figure 8 Leisure activity engagement and SWB



Additionally, it should be noted that there were no also statistically significant data found when combining leisure activities with all the different variables included in the sources of support these women had. However, when combining the support of organizations or associations specialized for cancer with leisure activities and SWB, statistically significant data emerged (f(11)= 2.995, P= 0.025). This sustains the important role of being engaged in associations and simultaneously being engaged in leisure activities. Women that felt they were more supported by associations had greater SWB than the ones that rated this type of support lower.

The data obtained also depicted a statistically significant relationship between SWB and economic hardship. Meaning, economic burden has a negative impact in the SWB of women affected by cancer (f(1)=18,063, p=0,000).

5 Conclusions

This aim of this dissertation was to explore the impact of leisure engagement in the SWB of women living with BC/OC. By generating a setting where women could gather together with peers confronting similar illness experiences it was expected to promote social support and contribute in alleviating some of the challenges encountered as a consequence of cancer. It is known that cancer is an illness that carries unmeasurable suffering. Not only to the person living with it but to their friends and family. Some of these challenges are developing physical and emotional symptoms such as anxiety, depression (Reynolds, 2002), salient negative emotions that can cause isolation (Devins et al., 2015), and low self-esteem due to organ mutilation (Williams & Williams, 1999) among others. Given the fact that BC is one of the main causes of death worldwide (WHO, 2017) and that it affects the quality of the individuals who suffer from it, it is unacceptable that a research gap still exists in terms of alternative intervention strategies to palliate its negative effects by increasing their SWB. High levels of SWB have been related to better health outcomes (Diener et al., 2017). This supports the notion that if strategies were developed to increase the overall well-being of BC/OC patients, they could have a better quality of life and this as a consequence could promote health benefits.

The main findings of this dissertation provide grounds to correlate SWB with leisure and to social support; specifically to associations or organizations in charge of providing support to the oncological community. Statistically significant associations were found where being engaged in a leisure activity and being close to one of these associations predicts an increase in the overall SWB of BC/OC patients. This supports the notion argued by some researchers referring that the quality of life or the well-being of individuals goes beyond economic factors commonly measured in official reports (Diener et al., 2015). Additionally, there were statistically significant differences among the SWB of the participating countries and level of SWB. These findings also depicted economic hardship in affording medical treatment causes a detriment in in SWB.

The data obtained through this mixed methods study provides information that can be implicated in the policy-making of public health systems as more academic research can be conducted in the near future. Moreover, since there is a lack of literature in “creative occupations” and oncology, this could be a motivation to implement an intervention strategy to support BC/OC survivors. A participatory research should be furthermore explored where patient’s own advocacy and self-determination can be improved by including them in the problem-solving process of challenges faced by their own community. In this case, it could be inviting them to participate in a voluntary project that produces a medical garment (post-surgical bras and compression arm-sleeves) that a high percentage of the BC community women need for their treatment and is sometimes unaffordable. Another implication of this study related to gender. BC is an illness that commonly affects women. Providing tools of empowerment to them is crucial to maintain their active roles in society, families or even in the labour market by enhancing work policies.

It should be acknowledged that during the process of conducting the study, the researcher encountered many challenges and limitations that were however overcome by the different dynamics taking place. First of all, being close to the reality of cancer and having previous family experiences with this illness allowed the researcher to normalize stories shared by participants and listen actively without over-reacting and ending up in a counterproductive relationship. An asset to conduct this research was based on the previous skills the researcher had and that were acquired throughout her background studies and work experience. During the time working as a psychotherapist she developed the necessary qualifications to guide and support people when disclosing topics that may cause emotional commotion. It was challenging to listen to participant's stories without previous knowledge of their history because the researcher could not know if they could confront their emotional turmoil by their own means. However, some participants referred that they appreciated the opportunity of having someone to talk to.

Gaining access to the organizations was one of the main challenges encountered at the first stage of the research. This factor was more complicated than expected and therefore reaching participants was problematic. Given that there is a time constraint and innumerable bureaucratic processes to follow to have organizations grant permissions, the researcher had to readapt the methodology to successfully gather the necessary data to answer to the research questions. To achieve this, an internet-based survey was developed and workshop sessions were limited to one instead of eight. Relying on an internet-based tool may have limited the sample as participants are normally more educated and with more economic resources than those who have no access to internet. In the different countries where the research was conducted, especially Honduras and Nicaragua, due to the shortage of economic resources, some people have limited or no internet access. For this, sometimes individuals lack computer skills; especially at elderly ages. Also, when answering online surveys, valuable qualitative data was lost as opposed to face-to-face applications where the researcher could make observations in terms of verbal and non-verbal communication.

Since the research was done in Spanish and Portuguese, the elaboration of a questionnaire in English and translating it to the other languages was time consuming as it was not planned and stemmed from the need to overcome the obstacles that encountered in the process of conducting the initial methodology strategy. Time was also a challenge when conducting the questionnaires face-to-face at the hospital because only 15 minutes were provided per participant. Also, one can assume participants were an over researched population as before filling out this questionnaire they had participated in nutrition inquiry and they could have been tired already.

When questions where first drafted, the researcher did not account that inquiring their positive and negative affect experiences during their cancer treatment would be as hard as it was for them to express. The question that related to it was removed leaving the study with less information, however, complying with the ethical principles that should be central in social research. Some questions were also difficult to understand for people with underprivileged situations; especially comprehending the difference between the five questions of the SWB Scale (Diener, 1985). Some of these participants had basic education and therefore the researcher had to rely on the interviewing skills of resource people in the two LA countries. Relying on them also made the process longer as the researcher had to depend on their own time pace. During face-to-face administrations of the questionnaire, the researcher could observe that some participants make mistakes when answering and this could have altered online results. For instance, sometimes they would verbally respond in a way and accidentally mark it contrariwise in the Likert scale.

Another difficulty that came across was the language barrier. Even though the researcher was able to communicate successfully with participants, the first encounters with organizations to explain the project and request for permissions was problematic.

Additionally, it should be acknowledged that SWB may have been influenced by the setting of where the survey took place as some responded in the facilities that remind them of their own treatment and all the hardships this brought to their lives. This could have altered their current moods and perceptions at the time of answering the SWB scale. The psychometric tool used to assess SWB, even though largely expert driven has its limitations because there is not an ample body of evidence available with LA population. It has been argued that these tools fail to capture real understandings from illness experience specifically and they exclude the experiential knowledge of patients (Chiu et al., 2013).

Some results cannot be generalized without further exploring cultural differences and similarities in the structure of SWB (Jovanović, 2015). In this case, given the size of the sample and scope of the study, generalization is only possible in a limited amount of data.

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Appendices

Appendix 1: Questionnaire English version

QUESTIONNAIRE

The purpose of this survey is to compare the psychological well-being of women living with breast and/or ovary cancer in different Latin-American countries and Portugal. Also, we want to know if engaging in a creative leisure activity has a positive effect in the well-being of breast cancer patients and if it has the potential to build a support network for them. This way, a creative intervention (artwork) strategy can be further explored and put into practice to help participants cope with their cancer illness and at the same time benefit other cancer patients by donating them the final product.

Thank you for taking the time to participate. We know that your time is valuable and we appreciate your contribution. It should only take 10 minutes to complete this questionnaire. All of your responses will be kept confidential and will only be used for academic purposes.

A. SOCIO-DEMOGRAPHY

Age:

Country of residence:

Highest level of education completed:

1st cycle of basic education (4th year)
2nd cycle of basic education (6th year)
3rd cycle of basic education (9th year)
Secondary education (11th or 12th year)
Bachelor's / Bachelor's
MBA / Master’s Degree/ Doctorate
Other (please specify)

Occupation:

Marital status:

Single In a relationship (but not leaving together)

Married / civil partnership

Divorced/separated

Widow

Do you have children? Yes No

If yes

Please, indicate their age:

Child 1:	Child 4:	Child 7:
Child 2:	Child 5:	Child 8:
Child 3:	Child 6:	

Are they economically dependent on you? Yes No

B. WORK DOMAIN

Work status:

Employee or self-employed

Employee or self-employed on sick leave

Employee or self-employee on other type of leave

Unemployed (less than 12 months)

Unemployed (more than 12 months)

Full-time homemaker (fulfilling domestic tasks)

Retired

Student

Other

Have you taken sick leave from work since you were diagnosed with cancer?

Yes No

If yes, please, give an estimate of the time you have been in sick leave: ______

How do you feel about the sick leave policy of your work place?

Very Satisfied	Dissatisfied
Satisfied	Very dissatisfied
I am not sure	

Have you experienced financial hardship to afford your medical treatment or access medical supplies? Yes No

Has your work situation changed due to health-related issues? Yes No

If yes, please describe how:

C. MEDICAL INFORMATION

Cancer type: Breast cancer Ovary cancer

Current stage: Stage I Stage II Stage III Stage IV

How much time ago did you find out you have breast and/or ovary cancer? (Month/year)
__/____

What type of treatment have you received for your cancer?

Surgery
Chemotherapy
Radiotherapy
Mastectomy (breast removal)
Hysterectomy (uterus and/or ovary removal)

In which medical facility do you receive or received your treatment? Please provide the name: ____

Public Semi-private Private

D. MEDICAL SUPPLIES

Have you needed post-surgical bras for your treatment? Yes No

If yes, how did you acquire them?

Number of Bras → **Providers** ↓	0	1	2	3	4	5	6	7	8
Public services									
Non-Profit Organization									
Hospital									
Commercial shops									
Friends/relatives									
Others									

If yes, how was the experience of finding and getting your post-surgical bras?

Very easy Easy Very difficult
Fairly easy Difficult

In your opinion, the price of the post-surgical bras is:

Free Fair Very expensive
Cheap Expensive

Have you needed compression arm-sleeves for the swelling of your arm as part of your treatment? Yes No

If yes, how did you acquire it (them)?

Number of compression arm-sleeves → **Providers** ↓	0	1	2	3	4	5	6	7	8
Public services									
Non-Profit Organization									
Hospital									
Commercial shops									
Friends/relatives									
Others									

If yes, how was the experience of finding your compression arm-sleeves?

Very easy
Fairly easy
Easy
Difficult
Very difficult

In your opinion, the price of the post-surgical bras is:

Free
Cheap
Fair
Expensive
Very expensive

Which situation best describes your current household:

One person household
Several persons without kinship relation
Couple without children
Couple with children
Single-parent
Extended household / 3 generations
Multiple nucleuses household

E. <u>LEISURE DOMAIN</u>

Do you have any hobbies? Yes No

If yes, please indicate:

Sports
Arts and crafts
Painting/coloring/drawing
Textile arts (quilting, sewing/ crocheting)
Dancing/singing/ playing an instrument
Sculpting
Reading/ writing
Photography

Have you had any health-related difficulties to pursue your hobbies? Yes No

Have you ever had any experience with a creative leisure activity such as sports, arts and crafts, sewing, painting, crocheting, drawing, singing, dancing among others?

Yes No

If no, please indicate why not:

Not available
Too expensive
I do not know what this is
I do not have time to engage
No one offered me
I am not interested

Other: If other, please specify:

If yes, did you enjoy it? Yes No

If you had the chance to participate in a creative leisure activity, what would be more appealing or fun for you? Rate from 1 to 5 your interest in each of the following options: being 1 (least interested) and 5 (most interested)

Sports
Arts and crafts
Painting/coloring/drawing
Textile arts (quilting, sewing/ crocheting)
Dancing/singing/ playing an instrument
Sculpting
Reading/ writing
Photography

What kind of effect do you think creative leisure activity can have on you? Negative
Positive
Both positive and negative
No effect

Which benefits do you think you can get from participating in a creative leisure activity?

Purpose in life
Emotional expression and relief
Finding a meaning to cancer illness(being able to get something positive out of it)
Regaining talents and skills
Developing new talents and skills
Self-esteem
Autonomy
Social network
Social support
Develop spontaneity and creativity

Cope with illness
Help me let go of cancer-related thoughts
Self-exploration
Empowerment
None

Which negative effects do you think you can get from participating in a creative leisure activity?

Frustration
Activation of negative thoughts
Tension and anxiety
Confusion
Discomfort
Sadness
Fear
Energy drainage

F. SOCIAL SUPPORT DOMAIN

If you were invited to participate in a creative leisure workshop to design and produce simple post-surgical-bras and compression arm sleeves for women who have been through cancer and lack economic resources, would you be willing to volunteer?

Yes No

What impact (s) do you think this might have in your life?

Feel better with myself
Support others
Self-esteem/autonomy
Gain support network
Feel lonely
Feeling of being useful
Feel worse with myself

Lose support network

Being supported by others

Feeling of being useless

Doubt about yourself

Please rate from 1 to 7 each of the following categories in terms of being your source of support during your illness? 1 (least important source of support) and 7 (most important source of support)

Partner

Children

Parents

Siblings

Friends / neighbors

Medical staff

Community

I have no support

Cancer patients' network

Therapist (psychiatrist/Psychologist)

Other: If other, please mention:

Do you think being part of a community group can provide support in your life?

Yes No

Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

☐ 7 - Strongly agree

☐ 6 - Agree

☐ 5 - Slightly agree

☐ 4 - Neither agree nor disagree
☐ 3 - Slightly disagree
☐ 2 - Disagree
☐ 1 - Strongly disagree

____ In most ways my life is close to my ideal.
____ The conditions of my life are excellent.
____ I am satisfied with my life.
____ So far I have gotten the important things I want in life.
____ If I could live my life over, I would change almost nothing.

Thank you for participating in this survey and for your willingness in sharing your valuable life experiences with us. We hope that the findings of this study will benefit women living with cancer in their process of healing and coping with this illness. Thank you!

Appendix 2: Questionnaire Portuguese version

MFAMILY Erasmus Mundus UNIVERSITY OF GOTHENBURG University of Stavanger MAKERERE UNIVERSITY

QUESTIONÁRIO

O objectivo do estudo “Actividades de lazer productivas nas mulheres com cancro da mama, ovários e útero: uma estratégia de intervenção alternativa para melhorar o bem-estar subjectivo” é comparar o bem-estar das mulheres com cancro na América Latina e em Portugal. Pretende-se analisar se a participação em actividades criativas e recreativas tem um efeito positivo no bem-estar destas pacientes e se permite o desenvolvimento de uma rede de apoio durante o tratamento. Com base nos resultados do estudo, será desenvolvido um projecto de intervenção social que permita apoiar as mulheres no seu processo de recuperação e, simultaneamente, ajudar outras mulheres de contextos socioeconómicos desfavorecidos. Mais concretamente, serão promovidos workshops artísticos de desenho e criação de soutiens pós-cirurgicos e de mangas de compressão, que serão depois doados a mulheres sem acesso grátis a estes acessórios.

Muito agradecemos a sua disponibilidade para participar. Sabemos que o seu tempo é valioso e valorizamos muito o seu contributo. O preenchimento do questionário demora, em média, 10 minutos. Todas as respostas são anónimas e confidenciais, e a informação recolhida no questionário terá um fim meramente académico, seguindo as normas de ética e protecção de dados do ISCTE-IUL e do Mestrado Europeu em Trabalho Social com Famílias e Crianças.

Instruções gerais: Por favor, marque com uma cruz ou circule as opções que vão de acordo com a sua resposta. Nos espaços em branco agradecemos que preencha com a informaçao necessária.

A. Caracterização Geral

1. Idade: ____________

2. País de residência: _____________________________

3. Nível de escolaridade:

1º ciclo do ensino básico (4º ano)		Ensino secundário (12º ano)	
2º ciclo do ensino básico (6º ano)		Ensino superior / licenciatura	
3º ciclo do ensino básico (9º ano)		Ensino superior / mestrado / doutoramento	

Outro:____

4. Profissão: ____

5. Estado civil:

Solteira	
Casada / União de facto	
Divorciada / Separada	
Viúva	
Numa relação (sem co-residência)	

6. Tem filhos?

Sim	
Não (passe para a questão 7)	

6.1. Por favor, indique as suas idades:

Filho/a 1:
Filho/a 2:
Filho/a 3:
Filho/a 4:
Filho/a 5:
Filho/a 6:
Filho/a 7:
Filho/a 8:

6.2. Algum deles depende economicamente de si?

Sim	
Não	

7. Indique, por favor, qual é a composição do seu agregado familiar:

Uma pessoa / vive só	
Casal com filhos	
Casal sem filhos	
Um adulto e uma/várias criança/s com relação de parentesco	
Casal com filhos e pais (3 gerações)	
Várias pessoas com relação de parentesco	
Várias pessoas sem relação de parentesco	
Outro	

B. Trabalho

8. Situação profissional:

Trabalhadora por conta de outrem		Desempregada (mais de 12 meses)	
Trabalhadora por conta própria		Doméstica	
Ausente do trabalho por baixa médica		Reformada	
Ausente do trabalho por outro tipo de licença		Estudante	
Desempregada (menos de 12 meses)		Outro	

9. Teve algum período de baixa médica desde que foi diagnosticada com cancro?

Sim Não

9.1. Se sim, indique por quanto tempo, aproximadamente, esteve de baixa: ____________

10. Como avalia a posição da sua empresa/organização em relação à necessidade de os trabalhadores recorrerem a baixa médica?

1	2	3	4	5
Muito desadequada	Desadequada	Nem adequada, nem desadequada	Adequada	Muito adequada

11. A sua situação profissional sofreu alterações devido ao seu estado de saúde?

Sim Não

11.1 Se sim, descreva brevemente como:

____

____

12. Sentiu/Sente dificuldades financeiras para suportar o seu tratamento médico, medicamentos ou acessórios médicos?

Sim	
Não	

C. Informações médicas:

13. Tipo de cancro:

Mama		Ovário/Útero	

14. Estádio de desenvolvimento:

Estádio I		Estádio II		Estádio III		Estádio IV	

15. Quando lhe foi diagnosticado cancro? (Mês/Ano) ______/______

16. Que tipo de tratamento/s recebeu até agora?

Cirurgia		Mastectomia	
Quimioterapia		Histerectomia	
Radioterapia		Outro	

17. Em que centro/s médico/s recebeu tratamentos: (Indique o nome)

____

____

18. O centro/s médico/s onde recebeu tratamento era:

Público		Semi-Privado		Privado	

D. Acessórios médicos

19. Precisou de soutien pós-cirurgico?

Sim Não (passe para a questão 20)

19.1 Se sim, como o adquiriu?

Número de soutiens → **Provedores** ↓	0	1	2	3	4	5	6	7	8
Serviços públicos									
Associações/organizações não governamentais									
Hospital									
Lojas									
Empréstimos/dádivas de amigas/conhecidas									
Outros									

19.2 Foi fácil ou difícil encontrar soutiens pós-cirurgicos?

1	2	3	4	5

Muito difícil	Difícil	Nem fácil, nem difícil	Fácil	Muito fácil

19.3 No seu caso, e segundo a sua opinião, o preço dos soutiens pós-cirurgicos foi:

1	2	3	4	5
Grátis	Barato	Adequado	Caro	Muito caro

20. Precisou de mangas de compressão como parte do seu tratamento?

Sim Não (passe para a questão 21)

20.1 Se sim, como os adquiriu?

Número de mangas de compressão → **Provedores** ↓	0	1	2	3	4	5	6	7	8
Serviços públicos									
Associações/organizações não governamentais									
Hospital									
Lojas									
Empréstimos/dádivas de amigas/ conhecidas									
Outros									

20.2 Foi fácil ou difícil encontrar mangas de compressão?

1	2	3	4	5
Muito difícil	Difícil	Nem fácil, nem difícil	Fácil	Muito fácil

20.3 No seu caso, e segundo a sua opinião, o preço das mangas de compressão foi:

1	2	3	4	5
Grátis	Barato	Adequado	Caro	Muito caro

E. Lazer

21. Tem alguma actividade de tempos livres? Sim Não (passe para a questão 22)

21.1 Indique quais marcando com uma cruz:

Desporto		Artes têxteis (costurar, tricotar, bordar)	
Artes plásticas		Ler/ Escrever	
Desenho / Pintura		Fotografia	
Dançar / Cantar/ Tocar um instrumento		Outras	

22. Tem ou teve alguma dificuldade para desenvolver a/s sua/s actividades de tempos livres devido ao seu estado de saúde? Sim Não

23. Alguma vez teve uma actividade de tempos livres (desporto, artes plásticas, artes têxteis, dança, escrita, etc)? Sim Não

23.1. Se não, indique por quê:

Indisponibilidade financeira		Falta de interesse		Falta de oferta	
Indisponibilida de tempo		Desconhecimento		Outro motivo. Qual?	

23.2. Se sim, gostou da actividade? Sim Não

24. Se tivesse oportunidade de participar numa actividade de tempos livres criativa, em qual das seguintes teria mais interesse?

	1 Nenhum interesse	**2 Pouco interesse**	**3 Algum interesse**	**4 Muito interesse**	**5 Bastante interesse**
Desporto					
Artes plásticas					
Desenho / Pintura					
Dançar / Cantar/ Tocar um instrumento					
Artes têxteis (costurar, tricotar, bordar)					
Ler / Escrever					
Fotografia					
Outras					

25. Que tipo de efeito acha que as actividades de tempo livre têm em si?

Negativo		Positivo		Positivo e negativo		Nem positivo, nem negativo.	

26. Que benefícios pensa que pode ter por desenvolver uma actividade de tempos livres?

Encontrar sentido para a vida		Obter apoio de amigos/ colegas	
Exprimir emoções		Desenvolver espontaneidade e a criatividade	
Retirar algo positivo do seu estado de saúde		Lidar melhor com o seu estado de saúde	
Recuperar talentos e competências		Não pensar no seu estado de saúde	
Desenvolver novos talentos e competências		Auto-conhecimento	
Aumentar a auto-estima		Empoderamento	
Aumentar a autonomia		Nenhum dos indicados	
Fazer novas amizades / Desenvolver uma rede de apoio		Outro: Qual?	

27. Que efeitos negativos pensa que pode ter por desenvolver uma actividade de tempos livres?

Frustração		Desconforto	
Activação de pensamentos negativos		Tristeza	
Tensão e ansiedade		Medo	
Confusão		Gasto de energia	

Outro:____

F. Redes de apoio

28. Se fosse convidada a participar numa actividade de tempos livres para desenhar e produzir soutiens pós-cirurgicos e mangas de compressão para ajudar mulheres com dificuldades financeiras com cancro, aceitaria participar como voluntária?

Sim	
Não	

29. Que impacto acha que esta actividade teria na sua vida?

Sentir-me-ia melhor comigo mesma		Perderia a minha rede de amizade e apoio	
Teria a possibilidade de ajudar outras mulheres na mesma situação		Teria o apoio de outras pessoas	
Aumentaria a minha auto-estima e autonomia		Sentir-me-ia inútil	

Desenvolveria uma rede de amizade e apoio		Teria dúvidas das minhas capacidades	
Sentir-me-ia útil		Sentir-me-ia sozinha	
Sentir-me-ia pior comigo mesma		Outro:	

30. Por favor, indique numa escala de 1 a 7, em que 1 é pouco importante e 7 é muito importante, quais foram as suas principais fontes de apoio durante a sua doença.

	1 Nada importante	**2**	**3**	**4**	**5**	**6**	**7 Bastante importante**
Cônjuge / Companheiro/a							
Filhos/as							
Pais							
Irmãos							
Amigos							
Médicos /enfermeiros auxiliares							
Comunidade							
Associações de apoio a pacientes com cancro							
Psicólogo/ Terapeuta							

Outro: quem?____

31. Por favor, indique em que medida concorda ou discorda das seguintes afirmações.

	1 Discordo totalmente	**2 Discordo**	**3 Discordo um pouco**	**4 Não concordo nem discordo**	**5 Concordo um pouco**	**6 Concordo**	**7 Concordo totalmente**
De um modo geral, a minha vida está próxima do meu ideal							
As minhas condições de vida são excelentes							
Estou satisfeita com a minha vida							
Até agora, consegui as coisas importantes que queria na vida							
Se pudesse viver a minha vida novamente, não mudaria quase nada.							

Agradecemos a sua participação neste estudo e a partilha da sua experiência de vida. Esperamos que os resultados deste estudo possam ajudar outras mulheres com cancro na sua recuperação. Obrigado!

Para mais informações sobre o estudo, por favor, contacte: ISCTE- Escola de Sociologia e Políticas Públicas Tel. (+351) 210 464 015, Emilia Chamorro

Caso pretenda ser contactada para participar noutras fase desta investigação, deixe o seu contacto: ____

Appendix 3: Questionnaire Spanish version

CUESTIONARIO

El objetivo del estudio **“Actividad recreativa para mujeres viviendo con cáncer de mama y/u ovario: Estrategia de intervención alternativa para incrementar el bienestar general”** es comparar el bienestar psicológico de las mujeres que viven con cáncer de mama y / o cáncer de ovario en diferentes países de América Latina y Portugal. También, se pretende investigar si participar en una actividad recreativa tiene un efecto positivo en el bienestar de éstas mujeres y potencial para generar una red de apoyo para ellas. Con esta información, se podrá explorar a futuro la creación de una intervención creativa de tiempo libre y ponerla en práctica con mujeres que han sido diagnosticadas con cáncer de mama y / o cáncer de ovario. Esta intervención se desarrolla como estrategia de afrontamiento del cáncer como enfermedad y al mismo tiempo busca beneficiar a mujeres de bajos recursos con cáncer, ya que el producto final será donado a ellas.

Agradecemos mucho su disponibilidad para participar. Sabemos que su tiempo es valioso y por eso valoramos su contribución. El tiempo de demora para responder todo el cuestionario es de aproximadamente 10 minutos. Todas las respuestas serán mantenidas anónimas y confidenciales. La información recogida en este cuestionario tendrá un fin académico únicamente y se seguirán las normas de ética de protección de datos de la universidad ISCTE-IUL y de la Maestría Europea en Trabajo Social con Familias y Niños.

Instrucciones generales. Por favor, marque con una cruz o circule las opciones que van de acuerdo a su respuesta. Agradecemos rellene los espacios en blanco con la información requerida.

A. Caracterización general

1. Edad: ____________

2. País de residencia: _____________________________

3. Nivel de escolaridad:

1er ciclo de enseñanza básica (4 años)		Enseñanza secundaria (11-12 años)	
2ndo ciclo de enseñanza básica (6 años)		Enseñanza superior / licenciatura	
3er ciclo de enseñanza básica (9 años)		Enseñanza superior / maestría / doctorado	

Otro:____

4. Profesión: ____

5. Estado civil:

Soltera	
Casada / Unión libre	
Divorciada / Separada	
Viuda	
En una relación (sin cohabitar)	

6. ¿Tiene hijos?

Si	
No (pase a la pregunta 7)	

6.1. Por favor, indique las edades:

Hijo/a 1:

Hijo/a 2:

Hijo/a 3:

Hijo/a 4:

Hijo/a 5:

Hijo/a 6:

Hijo/a 7:

Hijo/a 8:

6.2. ¿Alguno de ellos depende económicamente de usted?

Si	
No	

7. Por favor, indique cuál de las siguientes opciones describe su composición familiar:

Una persona / vive sola	
Pareja con hijos	
Pareja sin hijos	
Un adulto y uno o más niños con relación de parentesco	
Pareja con hijos y padres (3 generaciones)	
Varias personas con relación de parentesco	
Varias personas sin relación de parentesco	

Otro	

B. Trabajo

8. Situación profesional:

Empleada (por otros)		Desempleada (más de 12 meses)	
Empleada por cuenta propia		Ama de Casa	
Ausente de trabajo por licencia de incapacidad laboral		Retirada/ jubilada/ pensionada	
Ausente de trabajo por otro tipo de licencia laboral		Estudiante	
Desempleada (menos de 12 meses)		Otro	

9. ¿Ha tomado licencia de incapacidad laboral por enfermedad desde que le diagnosticaron cáncer? Sí No

9.1. En caso afirmativo, por favor, proporcione un estimado del tiempo que ha estado en incapacidad laboral: ____________

10. ¿Cómo evalúa la política de licencia de incapacidad laboral por enfermedad de su trabajo?

1	2	3	4	5
Muy insatisfecha	Insatisfecha	Ni satisfecha, ni insatisfecha	Satisfecha	Muy satisfecha

11. ¿Ha cambiado su situación de trabajo debido a problemas relacionados con su salud?

Sí No

11.1 En caso afirmativo, describa brevemente cómo:

____

____

12. ¿Ha tenido/tiene dificultades financieras para pagar su tratamiento médico, medicamentos u obtener los suministros médicos necesarios?

Sí	
No	

C. Información médica:

13. Tipo de cáncer:

Mama		Ovario/Útero	

14. Estadio actual de cáncer:

Estadio I		Estadio II		Estadio III		Estadio IV	

15. ¿Cuándo fue diagnosticada con cáncer de mama y / u ovario?? (Mes/año) __/____

16. ¿Qué tipo de tratamiento o intervención ha recibido para su enfermedad?

Cirurgía		Mastectomía	
Quimioterapia		Histerectomía	
Radioterapia		Otro	

17. ¿En qué centro médico recibe o recibió su tratamiento? Por favor indique el nombre:

____

____

18. El centro médico donde recibió/recibe tratamiento es:

Público		Semi-Privado		Privado	

D. Accesorios médicos

19. ¿Ha necesitado sujetadores (brasieres) postquirúrgicos para su tratamiento?

Sí No (pase a la pregunta 20)

19.1 En caso afirmativo, indique cómo los consiguió:

Número de sostenes → **Proveedores** ↓	0	1	2	3	4	5	6	7	8
Servicios públicos									
Asociaciones/organizaciones no gubernamentales									
Hospital									
Tiendas comerciales									
Prestadas/regalo de amigas/conocidos									
Otros									

19.2 ¿Cómo fue su experiencia en encontrar sostenes/brasieres postquirúrgicos?

1	2	3	4	5
Muy difícil	Difícil	Ni fácil, ni difícil	Fácil	Muy fácil

19.3 En su caso, y según su opinión, el precio de los sujetadores post-quirúrgicos fue:

1	2	3	4	5
Gratis	Barato	Adecuado	Caro	Muy caro

20. ¿Ha necesitado usar mangas de compresión para la inflamación de su brazo como parte de su tratamiento? Si No (pase a la pregunta 21)

20.1 En caso afirmativo, indique cómo los consiguió:

Número de mangas de compresión → **Proveedores** ↓	0	1	2	3	4	5	6	7	8
Servicios públicos									
Asociaciones/organizaciones no gubernamentales									
Hospital									
Tiendas comerciales									
Prestadas/regalo de amigas/conocidos									
Otros									

20.2 ¿Cómo fue su experiencia en encontrar las mangas de compresión?

1	2	3	4	5
Muy difícil	Difícil	Ni fácil, ni difícil	Fácil	Muy fácil

20.3 En su caso, y según su opinión, el precio de las mangas de compresión fue:

1	2	3	4	5
Gratis	Barato	Adecuado	Caro	Muy caro

E. Tiempo libre

21. ¿Tiene alguna actividad recreativa de tiempo libre? Sí No (pase a la pregunta 22)

21.1 Indique cuáles marcando con una cruz:

Deporte		Artes textiles (costurar, crochet, bordar)	
Artes plásticas		Leer/ Escribir	

Diseño/ Pintura		Fotografía	
Bailar / Cantar/ Tocar un instrumento		Otras	

22. ¿Ha tenido alguna dificultad relacionada con su salud que le impide la realización de su (s) pasatiempo(s) o actividad (es) de tiempo libre? Sí No

23. ¿Alguna vez ha estado involucrada en alguna actividad recreativa de tiempo libre (deporte, artes plásticas, artes textiles, baile, escritura, entre otros)? Sí No

23.1. En caso negativo, indique por qué no:

Indisponibilidad financeira		Falta de interés		Falta de oferta	
Indisponibilidad de tiempo		Desconocimiento		Otro motivo. Cual?	

23.2. En caso afirmativo, ¿Disfrutó de la actividad? Sí No

24. Si tuviera la oportunidad de participar en una actividad creativa de tiempo libre, ¿Cuáles de éstas le causarían más interés? Indique el nivel de interés:

	1 Ningun interés	**2 Poco interés**	**3 Algun interés**	**4 Mucho interés**	**5 Bastante interés**
Deporte					
Artes plásticas					
Diseño / Pintura					
Bailar / Cantar/ Tocar un instrumento					
Artes textiles (costurar, hacer crochet, bordar)					
Leer / Escribir					
Fotografia					
Otras					

25. ¿Qué tipo de efecto podría tener su participación en una actividad creativa de tiempo libre?

Positivo		Negativo		Positivo y negativo		Ni positivo, ni negativo	

26. ¿Qué beneficios piensa usted que podría obtener al participar en una actividad creativa de tiempo libre?

Encontrar un propósito de vida		Obtener apoyo de amigos/colegas	
Expresión emocional		Desarrollar espontaneidad y creatividad	
Encontrarle un significado a la enfermedad		Hacer frente a la enfermedad	
Recuperar talentos y competencias		Distraer pensamientos relacionados con la salud	
Desarrollar nuevos talentos y habilidades		Autoexploración/ autoconocimiento	
Mejorar autoestima		Empoderamiento	
Aumentar autonomía		Ninguno	
Hacer nuevas amistades / Crear una red social		Otro: Cuál?	

27. ¿Qué consecuencias negativas piensa usted que podría obtener al participar en una actividad creativa de tiempo libre?

Frustración		Incomodidad	
Activación de pensamientos negativos		Tristeza	
Tensión y ansiedad		Miedo	
Confusión		Gasto de energía	

Otro:____

F. Redes de apoyo

28. Si la invitaran a participar en un taller como actividad creativa de tiempo libre para diseñar y producir sostenes post-quirúrgicos simples y mangas de compresión para mujeres que han pasado por cáncer y carecen de recursos económicos, ¿estaría dispuesta a ofrecerse como voluntaria? Sí No

29. ¿Qué impacto cree que esto podría tener en su vida?

Sentirme mejor conmigo misma		Perdería mi red de apoyo entre compañeras	
Tener la oportunidad de ayudar a otras mujeres en mi misma situación		Tener el apoyo de otras personas	
Aumentar mi autoestima y autonomía		Sentirme inútil	
Desarrollar una red de apoyo entre compañeras		Dudaría de mis capacidades	
Sentirme útil		Me sentiría sola	
Sentirme peor conmigo misma		Otro:	

30. Por favor, indique en una escala de 1 a 7, en donde 1 es poco importante y 7 es muy importante, cuáles fueron sus principales fuentes de apoyo/soporte durante su enfermedad.

	1 Nada importante	**2**	**3**	**4**	**5**	**6**	**7 Muy importante**
Conyuge / Compañero/a							
Hijos /as							
Padres							
Hermanos							
Amigos							
Médicos /enfermeros							
Comunidad							
Asociaciones de apoyo a pacientes con cáncer							
Psicólogo/ Terapeuta							

Otro: ¿Quién?____

31. Por favor, indique en qué medida está de acuerdo o en desacuerdo con las siguientes afirmaciones.

	1 Desacuerdo totalmente	**2 Desacuer-do**	**3 Desacuerdo un poco**	**4 Ni de acuerdo, ni desacuerdo**	**5 Acuerdo un poco**	**6 De acuerdo**	**7 De acuerdo totalmente**
De un modo general, mi vida está cerca de mi ideal.							
Mis							

condiciones de vida son excelentes.							
Estoy satisfecha con mi vida.							
Hasta ahora, conseguí las cosas importantes que quería en mi vida.							
Si pudiera vivir mi vida nuevamente, no cambiaría casi nada.							

Gracias por participar en esta encuesta y por su disposición a compartir sus valiosas experiencias de vida con nosotros. Esperamos que los hallazgos de este estudio beneficien a mujeres viviendo con cáncer en su proceso de sanación y afrontamiento de esta enfermedad. ¡Muchas gracias!

Para más información sobre este estudio, por favor, contacte: Universidad ISCTE- Escuela de Sociiología y Políticas Públicas (Lisboa, Portugal) Tel. (+351) 210 464 015, Emilia Chamorro

En caso que desee ser contactada para participar en otras fases de esta investigación, agradeceríamos que dejara su contacto:

____

Appendix 4: Workshop invitation and pictures

WORKSHOP

sutia afeto

18 de Abril

SUTIÃS E MANGAS DE COMPRESSÃO PÓS-CIRÚRGICAS

INSCRIÇÕES ABERTAS

ESTE WORKSHOP É GRATUITO E AS VAGAS SÃO LIMITADAS.

sutia.afeto@gmail.com

Figure 9 Amigas do Peito members engaged in textile art work

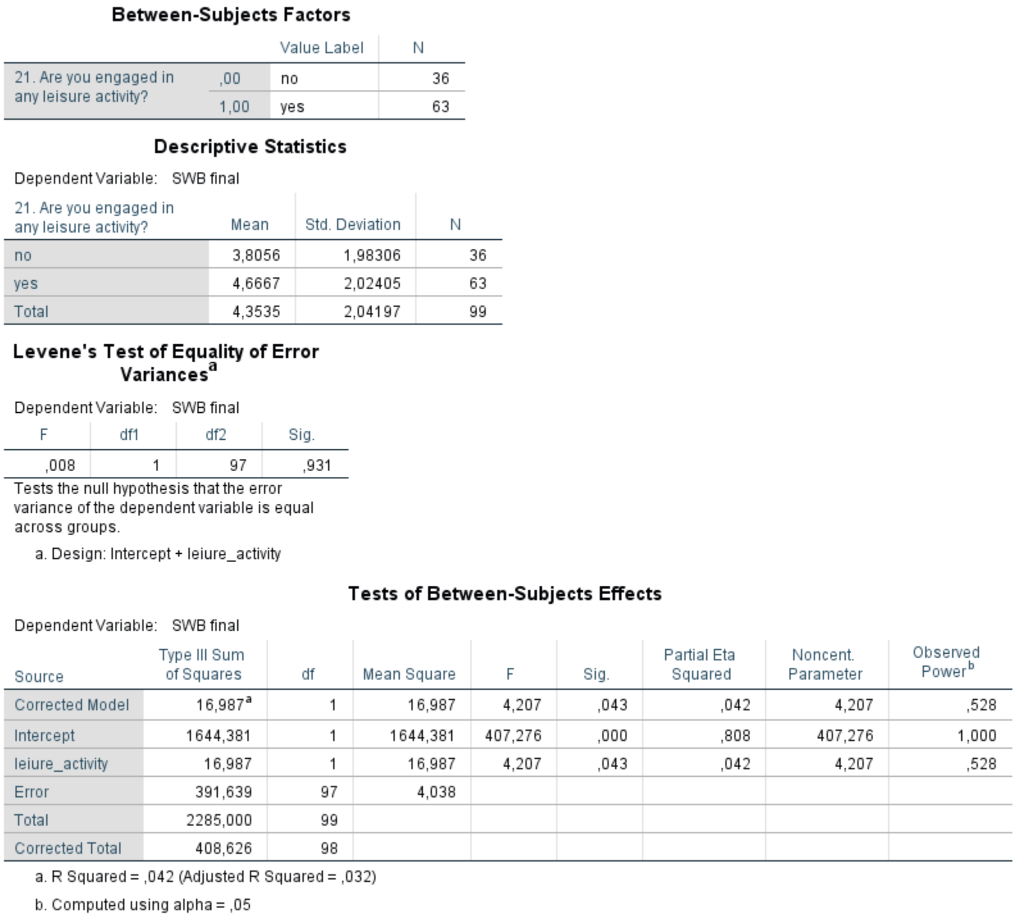
Figure 10 Post-surgical bra under progress

Figure 11 Interaction with participant

Figure 12 Participants involved in leisure activity

Appendix 5: Analysis of Variance[1]

1. SWB and Leisure activities



Between-Subjects Factors

		Value Label	N
21. Are you engaged in any leisure activity?	,00	no	36
	1,00	yes	63

Descriptive Statistics

Dependent Variable: SWB final

21. Are you engaged in any leisure activity?	Mean	Std. Deviation	N
no	3,8056	1,98306	36
yes	4,6667	2,02405	63
Total	4,3535	2,04197	99

Levene's Test of Equality of Error Variances[a]

Dependent Variable: SWB final

F	df1	df2	Sig.
,008	1	97	,931

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + leiure_activity

Tests of Between-Subjects Effects

Dependent Variable: SWB final

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	16,987[a]	1	16,987	4,207	,043	,042	4,207	,528
Intercept	1644,381	1	1644,381	407,276	,000	,808	407,276	1,000
leiure_activity	16,987	1	16,987	4,207	,043	,042	4,207	,528
Error	391,639	97	4,038					
Total	2285,000	99						
Corrected Total	408,626	98						

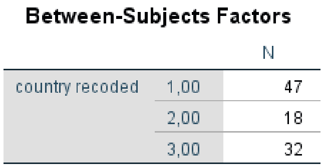
a. R Squared = ,042 (Adjusted R Squared = ,032)

b. Computed using alpha = ,05

---

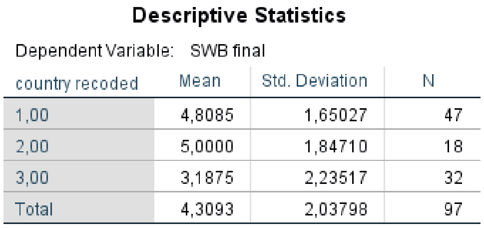
[1] For all the ANOVA procedures, Central Limit Theorem was assumed when testing normality assumptions.

2. SWB and country



Between-Subjects Factors

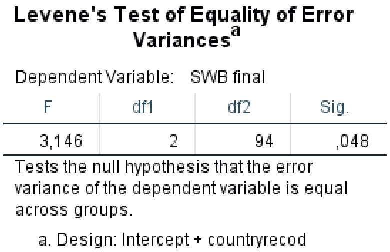
		N
country recoded	1,00	47
	2,00	18
	3,00	32



Descriptive Statistics

Dependent Variable: SWB final

country recoded	Mean	Std. Deviation	N
1,00	4,8085	1,65027	47
2,00	5,0000	1,84710	18
3,00	3,1875	2,23517	32
Total	4,3093	2,03798	97



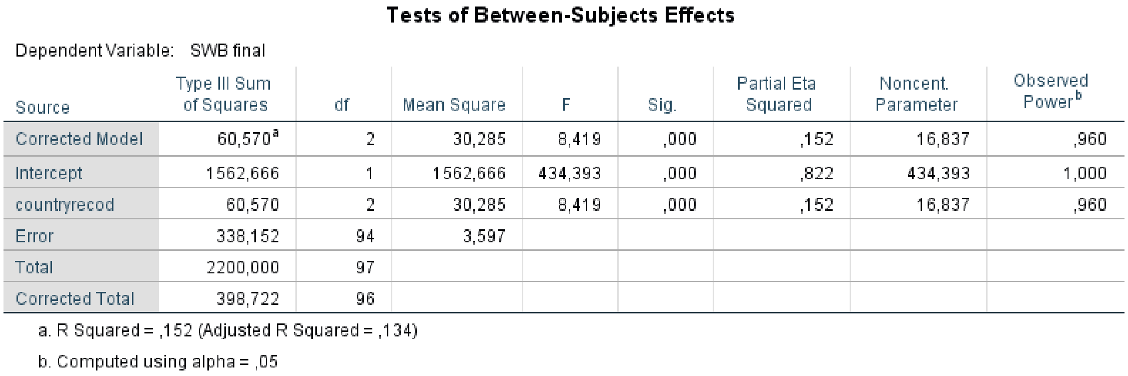
Levene's Test of Equality of Error Variances[a]

Dependent Variable: SWB final

F	df1	df2	Sig.
3,146	2	94	,048

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + countryrecod



Tests of Between-Subjects Effects

Dependent Variable: SWB final

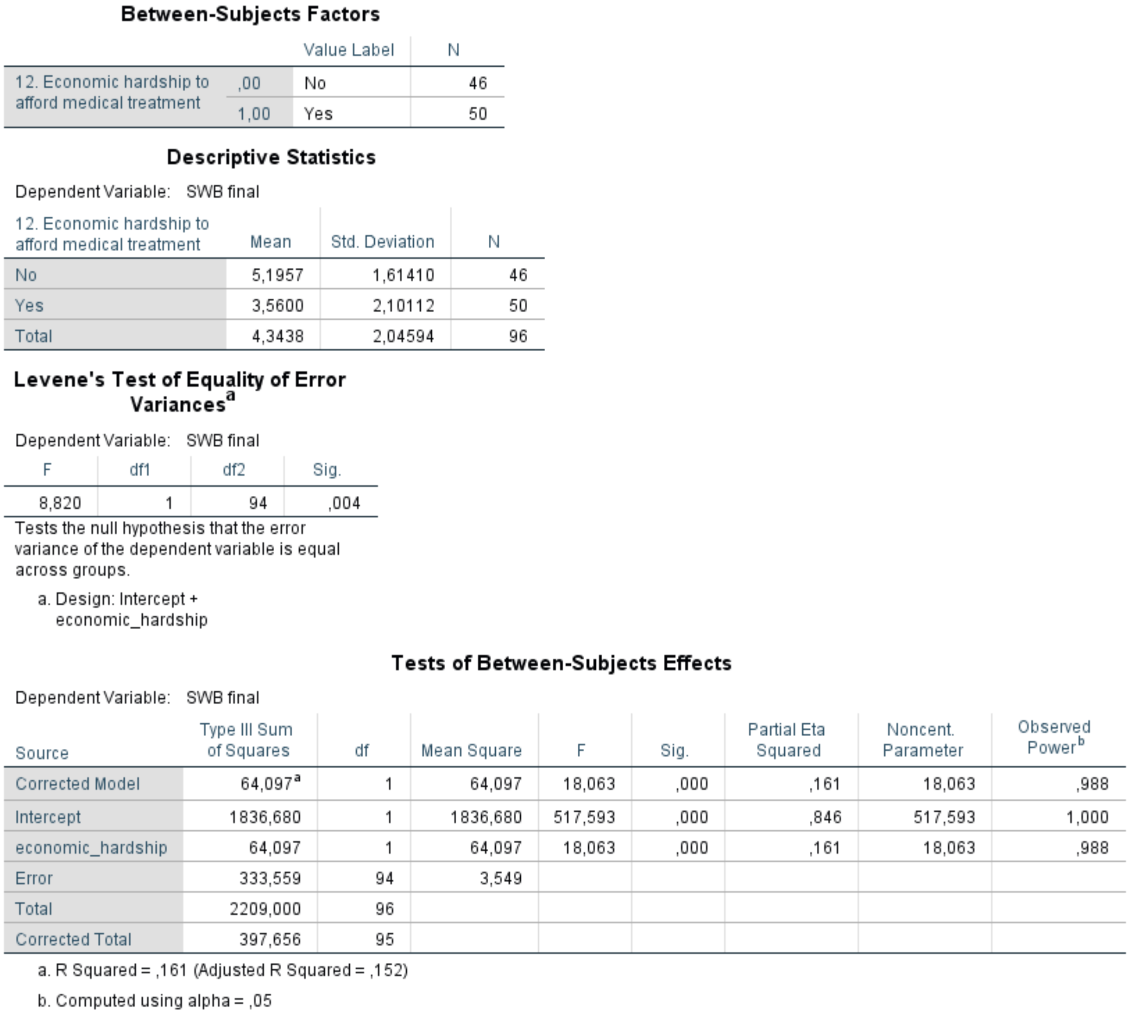
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	60,570[a]	2	30,285	8,419	,000	,152	16,837	,960
Intercept	1562,666	1	1562,666	434,393	,000	,822	434,393	1,000
countryrecod	60,570	2	30,285	8,419	,000	,152	16,837	,960
Error	338,152	94	3,597					
Total	2200,000	97						
Corrected Total	398,722	96						

a. R Squared = ,152 (Adjusted R Squared = ,134)

b. Computed using alpha = ,05

Note: Levene’s test results show the inexistence of homoscedastic. However, given the relatively balanced distribution of the subgroups, this assumption was violated.

3. SWB and Economic hardship



Between-Subjects Factors

		Value Label	N
12. Economic hardship to afford medical treatment	,00	No	46
	1,00	Yes	50

Descriptive Statistics

Dependent Variable: SWB final

12. Economic hardship to afford medical treatment	Mean	Std. Deviation	N
No	5,1957	1,61410	46
Yes	3,5600	2,10112	50
Total	4,3438	2,04594	96

Levene's Test of Equality of Error Variances[a]

Dependent Variable: SWB final

F	df1	df2	Sig.
8,820	1	94	,004

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + economic_hardship

Tests of Between-Subjects Effects

Dependent Variable: SWB final

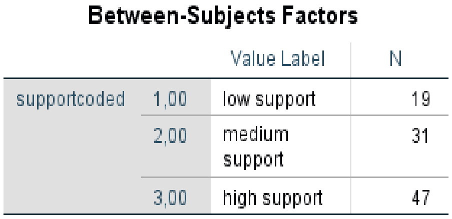
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	64,097[a]	1	64,097	18,063	,000	,161	18,063	,988
Intercept	1836,680	1	1836,680	517,593	,000	,846	517,593	1,000
economic_hardship	64,097	1	64,097	18,063	,000	,161	18,063	,988
Error	333,559	94	3,549					
Total	2209,000	96						
Corrected Total	397,656	95						

a. R Squared = ,161 (Adjusted R Squared = ,152)

b. Computed using alpha = ,05

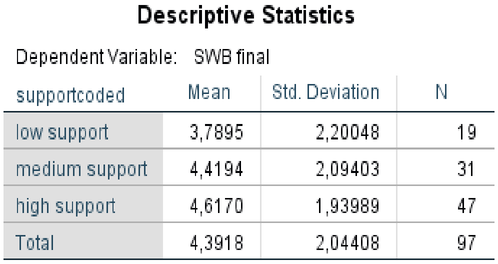
Note: Levene’s test results show the inexistence of homoscedastic. However, given the relatively balanced distribution of the subgroups, this assumption was violated.

4. SWB and Support (total)



Between-Subjects Factors

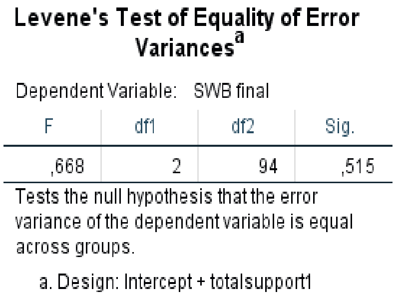
		Value Label	N
supportcoded	1,00	low support	19
	2,00	medium support	31
	3,00	high support	47



Descriptive Statistics

Dependent Variable: SWB final

supportcoded	Mean	Std. Deviation	N
low support	3,7895	2,20048	19
medium support	4,4194	2,09403	31
high support	4,6170	1,93989	47
Total	4,3918	2,04408	97



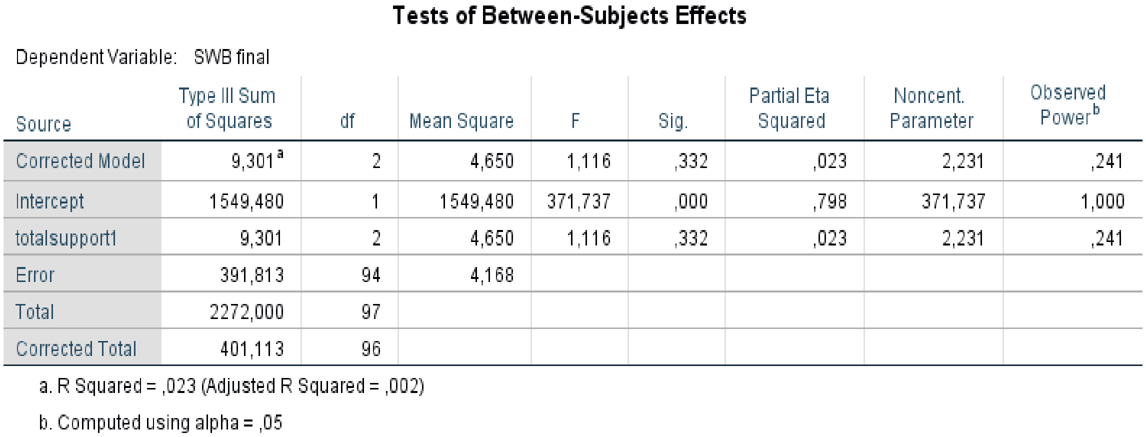
Levene's Test of Equality of Error Variances[a]

Dependent Variable: SWB final

F	df1	df2	Sig.
,668	2	94	,515

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + totalsupport1



Tests of Between-Subjects Effects

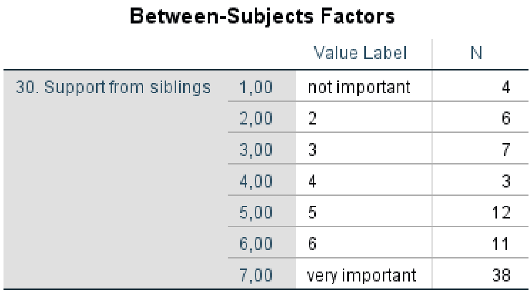
Dependent Variable: SWB final

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	9,301[a]	2	4,650	1,116	,332	,023	2,231	,241
Intercept	1549,480	1	1549,480	371,737	,000	,798	371,737	1,000
totalsupport1	9,301	2	4,650	1,116	,332	,023	2,231	,241
Error	391,813	94	4,168					
Total	2272,000	97						
Corrected Total	401,113	96						

a. R Squared = ,023 (Adjusted R Squared = ,002)

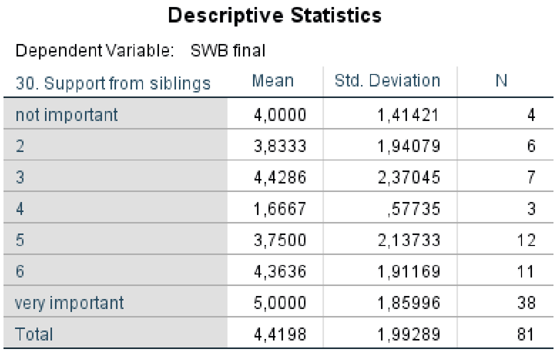
b. Computed using alpha = ,05

5. SWB and support (siblings)



Between-Subjects Factors

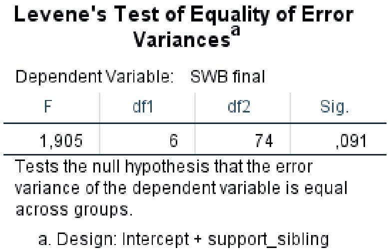
		Value Label	N
30. Support from siblings	1,00	not important	4
	2,00	2	6
	3,00	3	7
	4,00	4	3
	5,00	5	12
	6,00	6	11
	7,00	very important	38



Descriptive Statistics

Dependent Variable: SWB final

30. Support from siblings	Mean	Std. Deviation	N
not important	4,0000	1,41421	4
2	3,8333	1,94079	6
3	4,4286	2,37045	7
4	1,6667	,57735	3
5	3,7500	2,13733	12
6	4,3636	1,91169	11
very important	5,0000	1,85996	38
Total	4,4198	1,99289	81



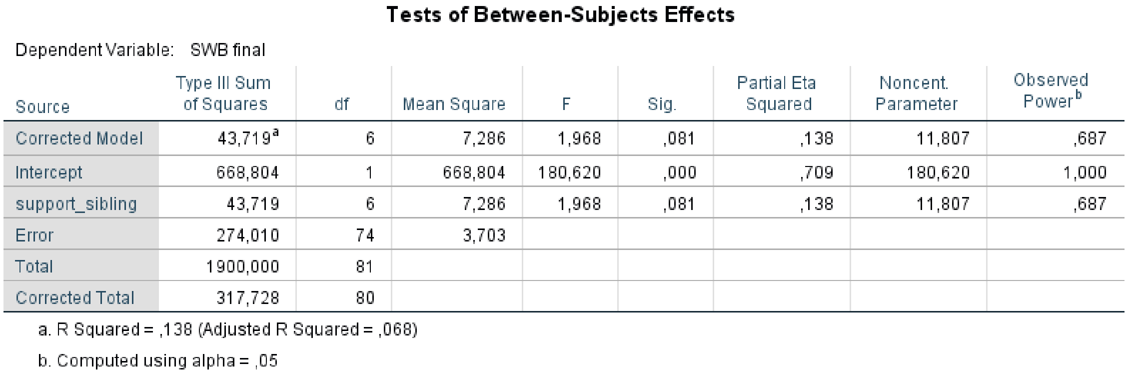
Levene's Test of Equality of Error Variances[a]

Dependent Variable: SWB final

F	df1	df2	Sig.
1,905	6	74	,091

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + support_sibling



Tests of Between-Subjects Effects

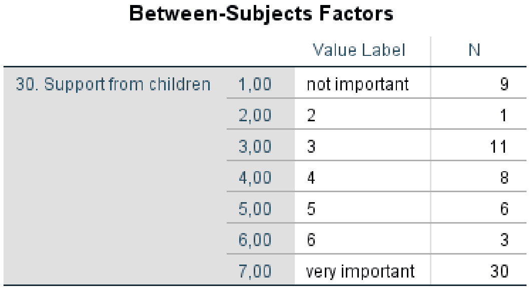
Dependent Variable: SWB final

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	43,719[a]	6	7,286	1,968	,081	,138	11,807	,687
Intercept	668,804	1	668,804	180,620	,000	,709	180,620	1,000
support_sibling	43,719	6	7,286	1,968	,081	,138	11,807	,687
Error	274,010	74	3,703					
Total	1900,000	81						
Corrected Total	317,728	80						

a. R Squared = ,138 (Adjusted R Squared = ,068)

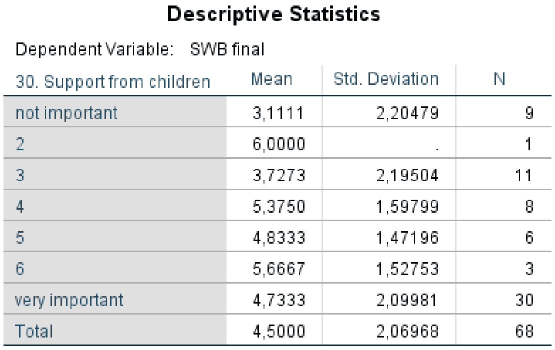
b. Computed using alpha = ,05

6. SWB and support (children)



Between-Subjects Factors

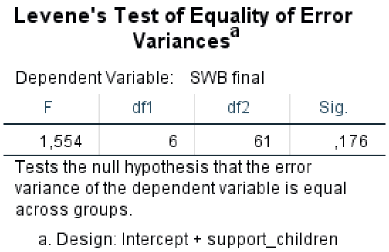
		Value Label	N
30. Support from children	1,00	not important	9
	2,00	2	1
	3,00	3	11
	4,00	4	8
	5,00	5	6
	6,00	6	3
	7,00	very important	30



Descriptive Statistics

Dependent Variable: SWB final

30. Support from children	Mean	Std. Deviation	N
not important	3,1111	2,20479	9
2	6,0000	.	1
3	3,7273	2,19504	11
4	5,3750	1,59799	8
5	4,8333	1,47196	6
6	5,6667	1,52753	3
very important	4,7333	2,09981	30
Total	4,5000	2,06968	68



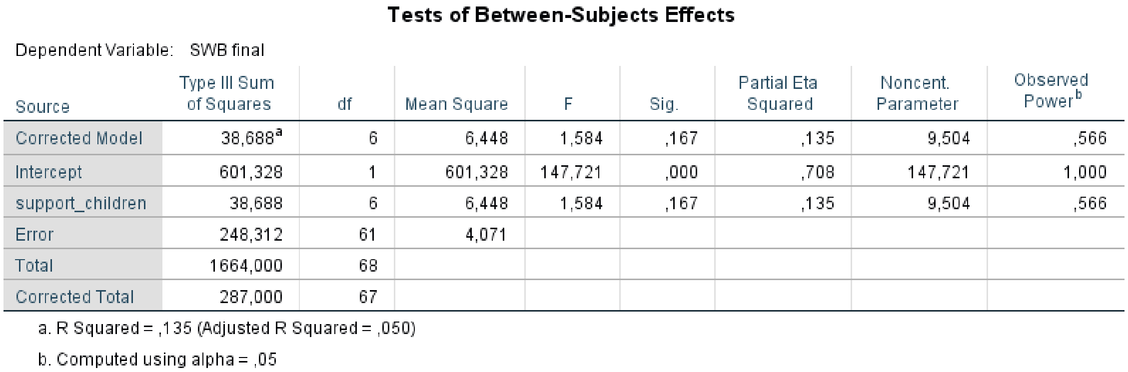
Levene's Test of Equality of Error Variances[a]

Dependent Variable: SWB final

F	df1	df2	Sig.
1,554	6	61	,176

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + support_children



Tests of Between-Subjects Effects

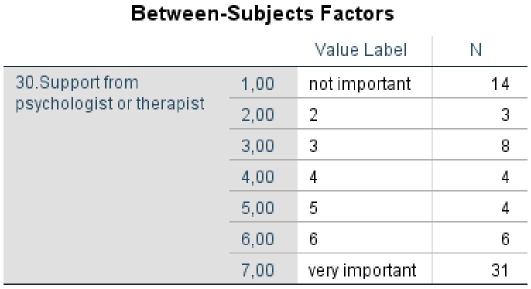
Dependent Variable: SWB final

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	38,688[a]	6	6,448	1,584	,167	,135	9,504	,566
Intercept	601,328	1	601,328	147,721	,000	,708	147,721	1,000
support_children	38,688	6	6,448	1,584	,167	,135	9,504	,566
Error	248,312	61	4,071					
Total	1664,000	68						
Corrected Total	287,000	67						

a. R Squared = ,135 (Adjusted R Squared = ,050)

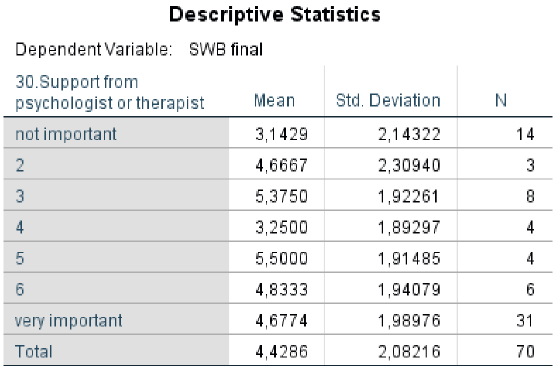
b. Computed using alpha = ,05

7. SWB and support (therapist)



Between-Subjects Factors

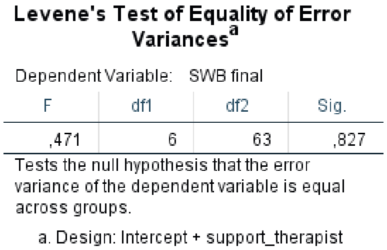
		Value Label	N
30.Support from psychologist or therapist	1,00	not important	14
	2,00	2	3
	3,00	3	8
	4,00	4	4
	5,00	5	4
	6,00	6	6
	7,00	very important	31



Descriptive Statistics

Dependent Variable: SWB final

30.Support from psychologist or therapist	Mean	Std. Deviation	N
not important	3,1429	2,14322	14
2	4,6667	2,30940	3
3	5,3750	1,92261	8
4	3,2500	1,89297	4
5	5,5000	1,91485	4
6	4,8333	1,94079	6
very important	4,6774	1,98976	31
Total	4,4286	2,08216	70



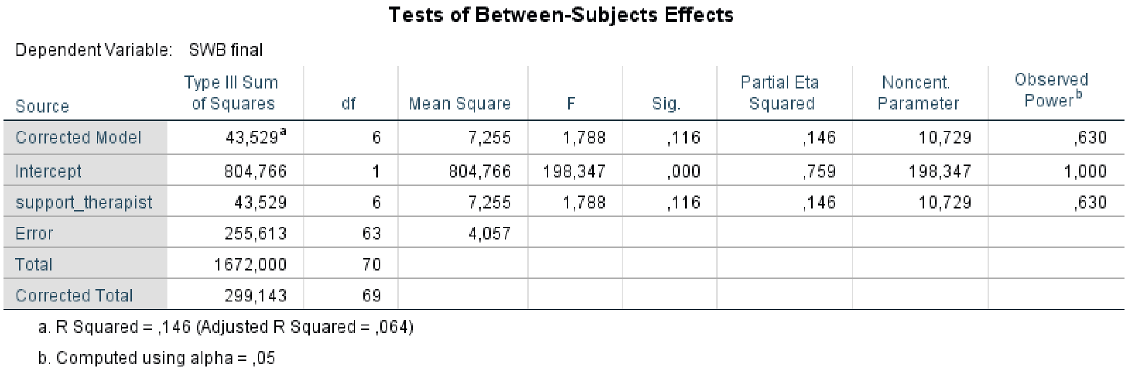
Levene's Test of Equality of Error Variances[a]

Dependent Variable: SWB final

F	df1	df2	Sig.
,471	6	63	,827

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + support_therapist



Tests of Between-Subjects Effects

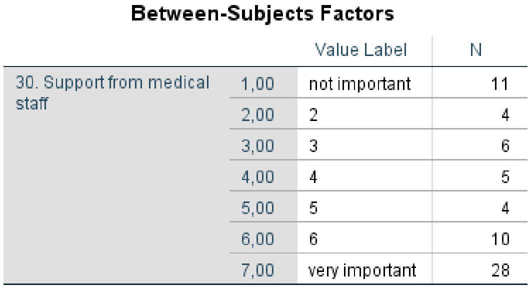
Dependent Variable: SWB final

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	43,529[a]	6	7,255	1,788	,116	,146	10,729	,630
Intercept	804,766	1	804,766	198,347	,000	,759	198,347	1,000
support_therapist	43,529	6	7,255	1,788	,116	,146	10,729	,630
Error	255,613	63	4,057					
Total	1672,000	70						
Corrected Total	299,143	69						

a. R Squared = ,146 (Adjusted R Squared = ,064)

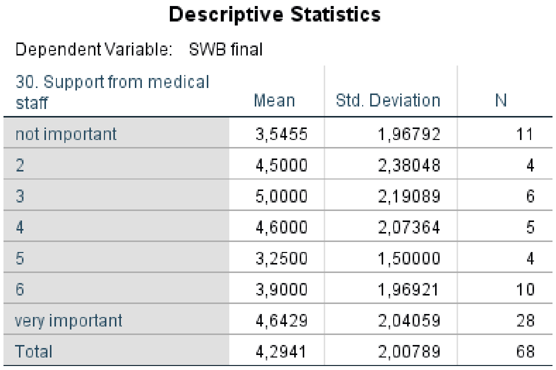
b. Computed using alpha = ,05

8. SWB and support (medical staff)



Between-Subjects Factors

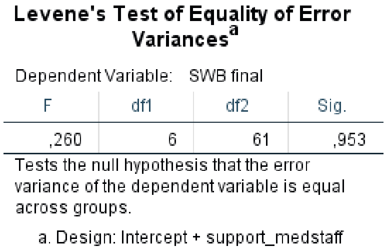
		Value Label	N
30. Support from medical staff	1,00	not important	11
	2,00	2	4
	3,00	3	6
	4,00	4	5
	5,00	5	4
	6,00	6	10
	7,00	very important	28



Descriptive Statistics

Dependent Variable: SWB final

30. Support from medical staff	Mean	Std. Deviation	N
not important	3,5455	1,96792	11
2	4,5000	2,38048	4
3	5,0000	2,19089	6
4	4,6000	2,07364	5
5	3,2500	1,50000	4
6	3,9000	1,96921	10
very important	4,6429	2,04059	28
Total	4,2941	2,00789	68



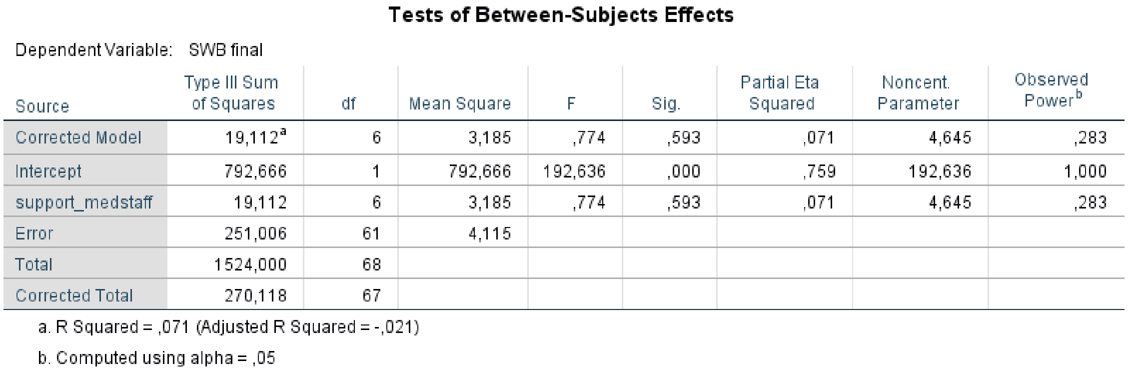
Levene's Test of Equality of Error Variances[a]

Dependent Variable: SWB final

F	df1	df2	Sig.
,260	6	61	,953

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + support_medstaff



Tests of Between-Subjects Effects

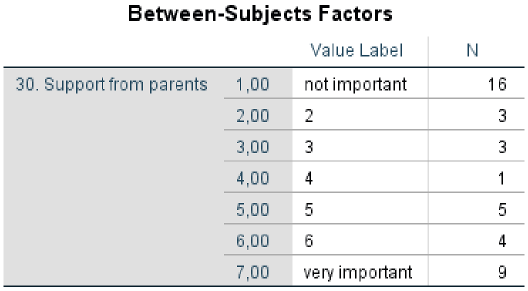
Dependent Variable: SWB final

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	19,112[a]	6	3,185	,774	,593	,071	4,645	,283
Intercept	792,666	1	792,666	192,636	,000	,759	192,636	1,000
support_medstaff	19,112	6	3,185	,774	,593	,071	4,645	,283
Error	251,006	61	4,115					
Total	1524,000	68						
Corrected Total	270,118	67						

a. R Squared = ,071 (Adjusted R Squared = -,021)

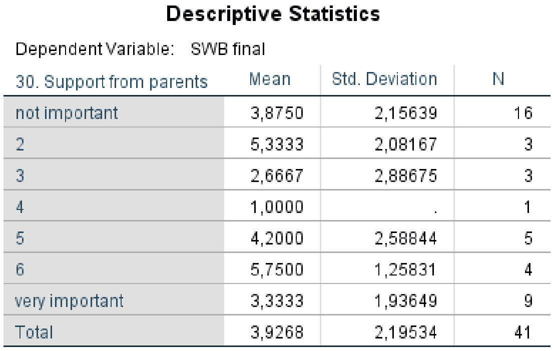
b. Computed using alpha = ,05

9. SWB and support (parents)



Between-Subjects Factors

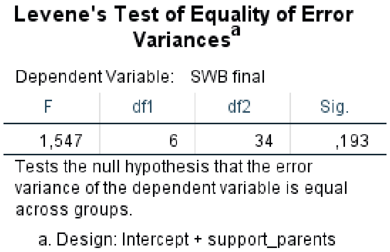
		Value Label	N
30. Support from parents	1,00	not important	16
	2,00	2	3
	3,00	3	3
	4,00	4	1
	5,00	5	5
	6,00	6	4
	7,00	very important	9



Descriptive Statistics

Dependent Variable: SWB final

30. Support from parents	Mean	Std. Deviation	N
not important	3,8750	2,15639	16
2	5,3333	2,08167	3
3	2,6667	2,88675	3
4	1,0000	.	1
5	4,2000	2,58844	5
6	5,7500	1,25831	4
very important	3,3333	1,93649	9
Total	3,9268	2,19534	41



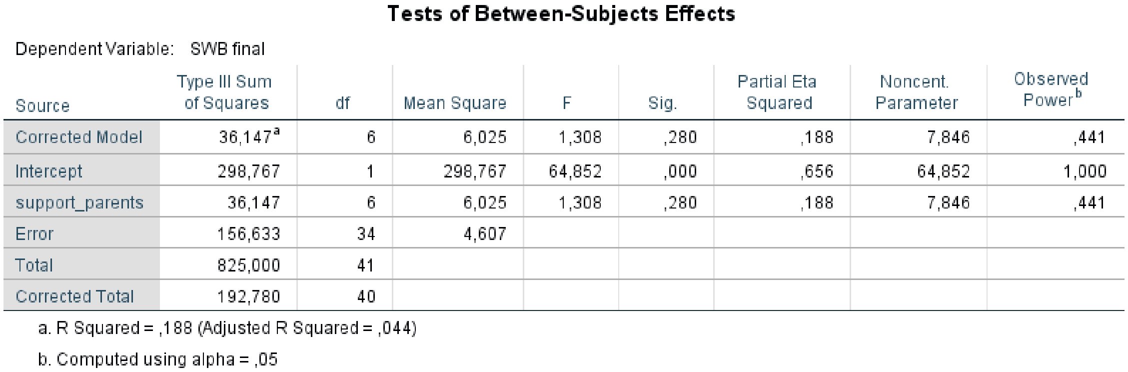
Levene's Test of Equality of Error Variances[a]

Dependent Variable: SWB final

F	df1	df2	Sig.
1,547	6	34	,193

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + support_parents



Tests of Between-Subjects Effects

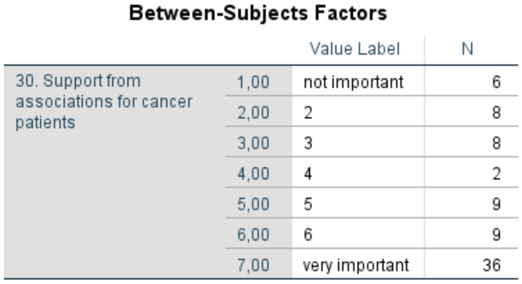
Dependent Variable: SWB final

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	36,147[a]	6	6,025	1,308	,280	,188	7,846	,441
Intercept	298,767	1	298,767	64,852	,000	,656	64,852	1,000
support_parents	36,147	6	6,025	1,308	,280	,188	7,846	,441
Error	156,633	34	4,607					
Total	825,000	41						
Corrected Total	192,780	40						

a. R Squared = ,188 (Adjusted R Squared = ,044)

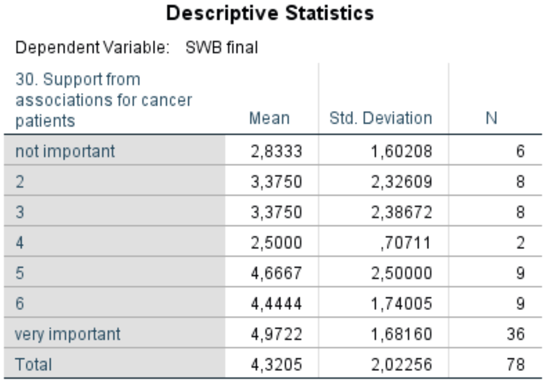
b. Computed using alpha = ,05

10. SWB and support (associations)



Between-Subjects Factors

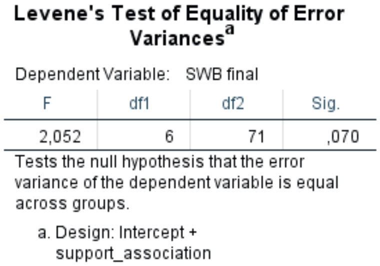
		Value Label	N
30. Support from associations for cancer patients	1,00	not important	6
	2,00	2	8
	3,00	3	8
	4,00	4	2
	5,00	5	9
	6,00	6	9
	7,00	very important	36



Descriptive Statistics

Dependent Variable: SWB final

30. Support from associations for cancer patients	Mean	Std. Deviation	N
not important	2,8333	1,60208	6
2	3,3750	2,32609	8
3	3,3750	2,38672	8
4	2,5000	,70711	2
5	4,6667	2,50000	9
6	4,4444	1,74005	9
very important	4,9722	1,68160	36
Total	4,3205	2,02256	78



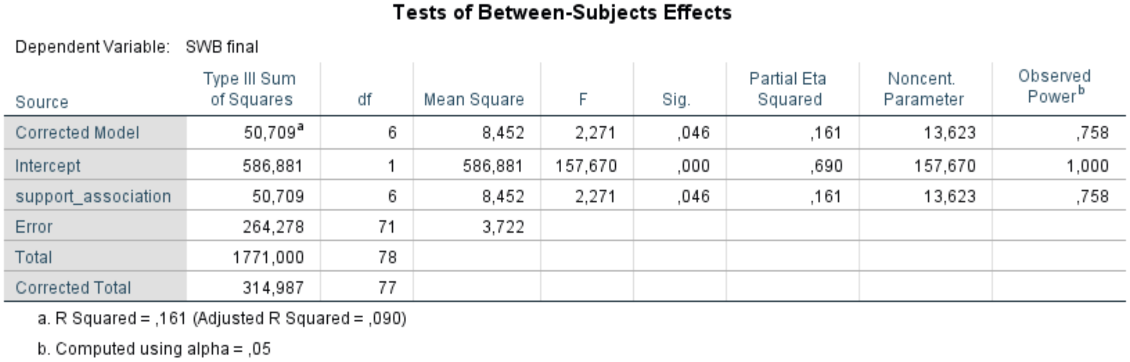
Levene's Test of Equality of Error Variances[a]

Dependent Variable: SWB final

F	df1	df2	Sig.
2,052	6	71	,070

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + support_association



Tests of Between-Subjects Effects

Dependent Variable: SWB final

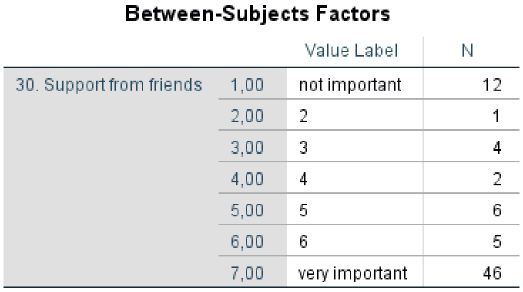
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	50,709[a]	6	8,452	2,271	,046	,161	13,623	,758
Intercept	586,881	1	586,881	157,670	,000	,690	157,670	1,000
support_association	50,709	6	8,452	2,271	,046	,161	13,623	,758
Error	264,278	71	3,722					
Total	1771,000	78						
Corrected Total	314,987	77						

a. R Squared = ,161 (Adjusted R Squared = ,090)

b. Computed using alpha = ,05

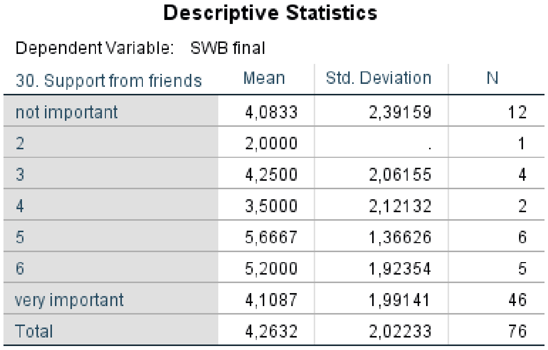
Note: Levene's test results show the inexistence of homoscedastic. However, given the relatively balanced distribution of the subgroups, this assumption was violated.

11. SWB and support (friends)



Between-Subjects Factors

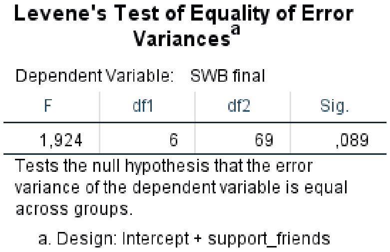
		Value Label	N
30. Support from friends	1,00	not important	12
	2,00	2	1
	3,00	3	4
	4,00	4	2
	5,00	5	6
	6,00	6	5
	7,00	very important	46



Descriptive Statistics

Dependent Variable: SWB final

30. Support from friends	Mean	Std. Deviation	N
not important	4,0833	2,39159	12
2	2,0000	.	1
3	4,2500	2,06155	4
4	3,5000	2,12132	2
5	5,6667	1,36626	6
6	5,2000	1,92354	5
very important	4,1087	1,99141	46
Total	4,2632	2,02233	76



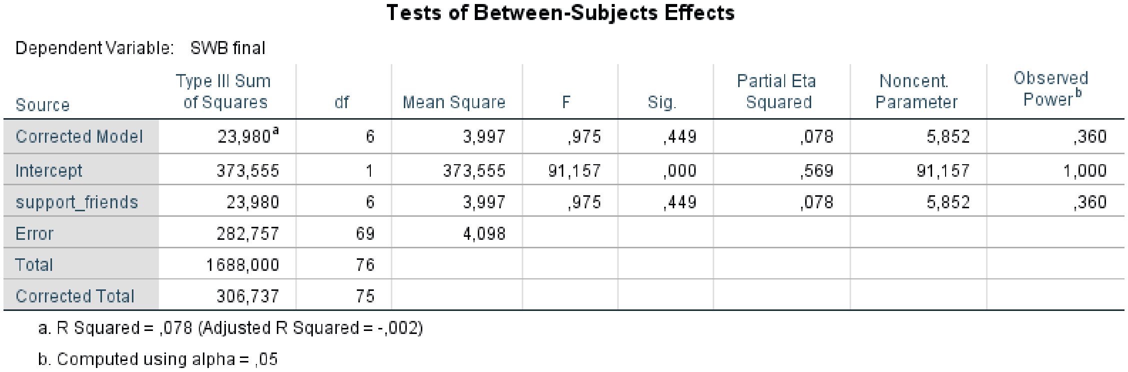
Levene's Test of Equality of Error Variances[a]

Dependent Variable: SWB final

F	df1	df2	Sig.
1,924	6	69	,089

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + support_friends



Tests of Between-Subjects Effects

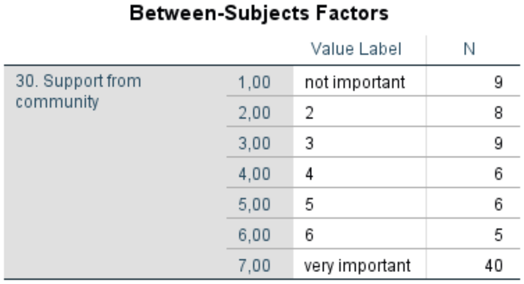
Dependent Variable: SWB final

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	23,980[a]	6	3,997	,975	,449	,078	5,852	,360
Intercept	373,555	1	373,555	91,157	,000	,569	91,157	1,000
support_friends	23,980	6	3,997	,975	,449	,078	5,852	,360
Error	282,757	69	4,098					
Total	1688,000	76						
Corrected Total	306,737	75						

a. R Squared = ,078 (Adjusted R Squared = -,002)

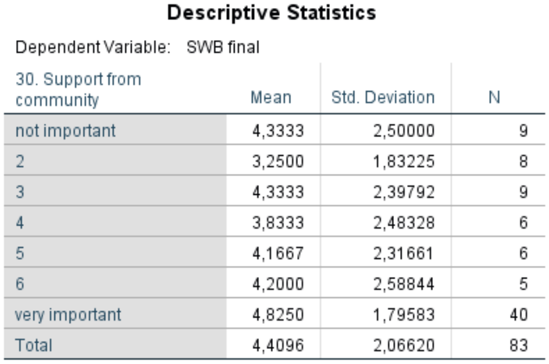
b. Computed using alpha = ,05

12. SWB and support (community)



Between-Subjects Factors

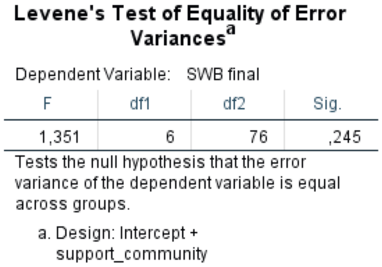
		Value Label	N
30. Support from community	1,00	not important	9
	2,00	2	8
	3,00	3	9
	4,00	4	6
	5,00	5	6
	6,00	6	5
	7,00	very important	40



Descriptive Statistics

Dependent Variable: SWB final

30. Support from community	Mean	Std. Deviation	N
not important	4,3333	2,50000	9
2	3,2500	1,83225	8
3	4,3333	2,39792	9
4	3,8333	2,48328	6
5	4,1667	2,31661	6
6	4,2000	2,58844	5
very important	4,8250	1,79583	40
Total	4,4096	2,06620	83



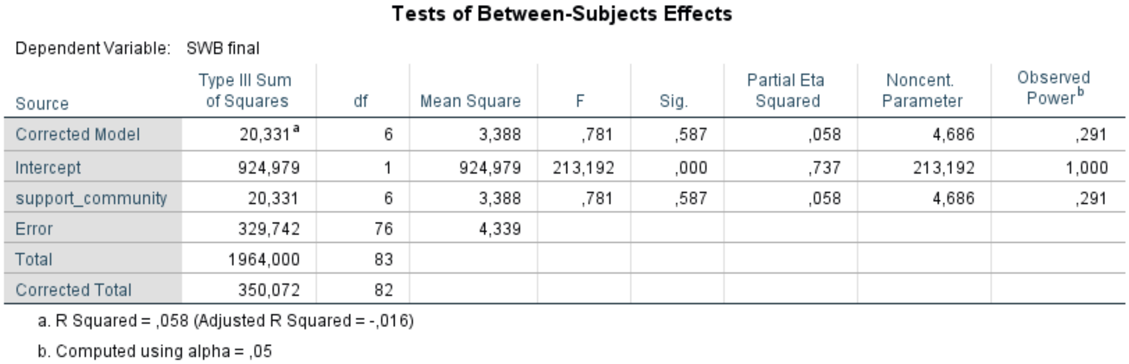
Levene's Test of Equality of Error Variances[a]

Dependent Variable: SWB final

F	df1	df2	Sig.
1,351	6	76	,245

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + support_community



Tests of Between-Subjects Effects

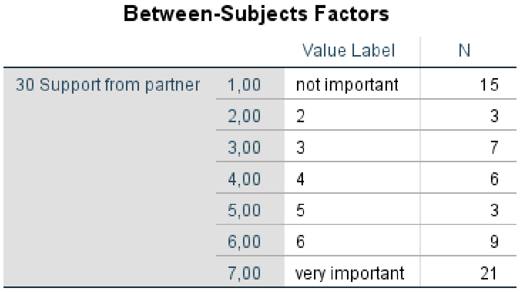
Dependent Variable: SWB final

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	20,331[a]	6	3,388	,781	,587	,058	4,686	,291
Intercept	924,979	1	924,979	213,192	,000	,737	213,192	1,000
support_community	20,331	6	3,388	,781	,587	,058	4,686	,291
Error	329,742	76	4,339					
Total	1964,000	83						
Corrected Total	350,072	82						

a. R Squared = ,058 (Adjusted R Squared = -,016)

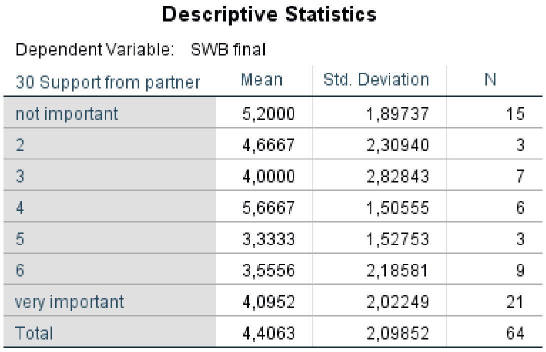
b. Computed using alpha = ,05

13. SWB and support (partner)



Between-Subjects Factors

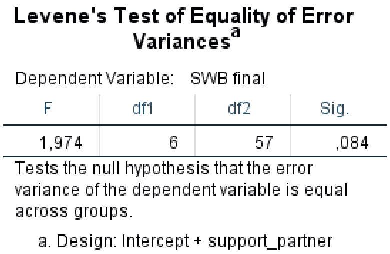
		Value Label	N
30 Support from partner	1,00	not important	15
	2,00	2	3
	3,00	3	7
	4,00	4	6
	5,00	5	3
	6,00	6	9
	7,00	very important	21



Descriptive Statistics

Dependent Variable: SWB final

30 Support from partner	Mean	Std. Deviation	N
not important	5,2000	1,89737	15
2	4,6667	2,30940	3
3	4,0000	2,82843	7
4	5,6667	1,50555	6
5	3,3333	1,52753	3
6	3,5556	2,18581	9
very important	4,0952	2,02249	21
Total	4,4063	2,09852	64



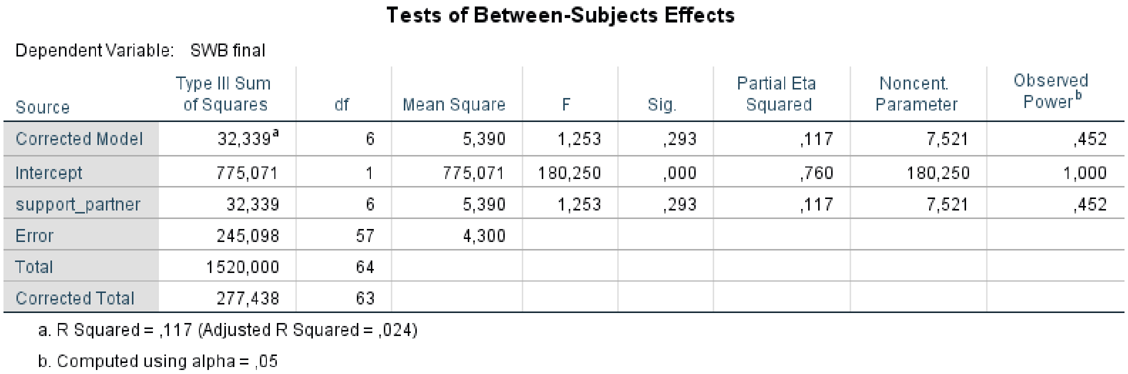
Levene's Test of Equality of Error Variances[a]

Dependent Variable: SWB final

F	df1	df2	Sig.
1,974	6	57	,084

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + support_partner



Tests of Between-Subjects Effects

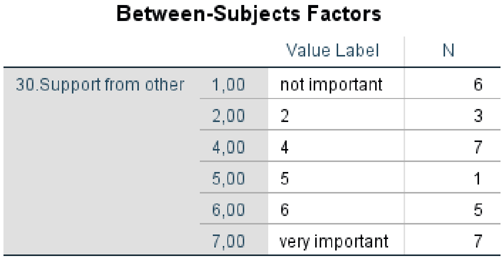
Dependent Variable: SWB final

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	32,339[a]	6	5,390	1,253	,293	,117	7,521	,452
Intercept	775,071	1	775,071	180,250	,000	,760	180,250	1,000
support_partner	32,339	6	5,390	1,253	,293	,117	7,521	,452
Error	245,098	57	4,300					
Total	1520,000	64						
Corrected Total	277,438	63						

a. R Squared = ,117 (Adjusted R Squared = ,024)

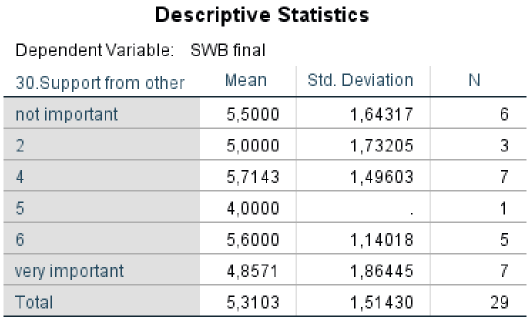
b. Computed using alpha = ,05

14. SWB and support (other)



Between-Subjects Factors

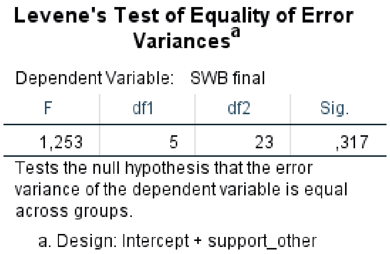
		Value Label	N
30.Support from other	1,00	not important	6
	2,00	2	3
	4,00	4	7
	5,00	5	1
	6,00	6	5
	7,00	very important	7



Descriptive Statistics

Dependent Variable: SWB final

30.Support from other	Mean	Std. Deviation	N
not important	5,5000	1,64317	6
2	5,0000	1,73205	3
4	5,7143	1,49603	7
5	4,0000	.	1
6	5,6000	1,14018	5
very important	4,8571	1,86445	7
Total	5,3103	1,51430	29



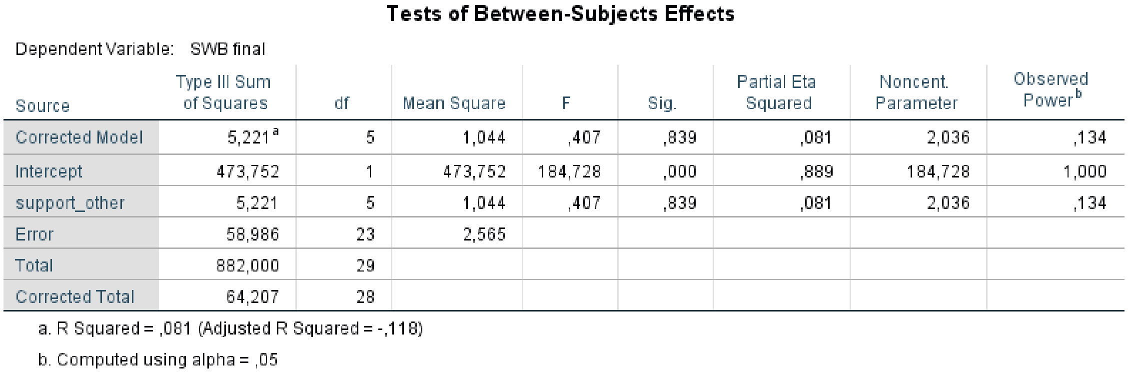
Levene's Test of Equality of Error Variances[a]

Dependent Variable: SWB final

F	df1	df2	Sig.
1,253	5	23	,317

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + support_other



Tests of Between-Subjects Effects

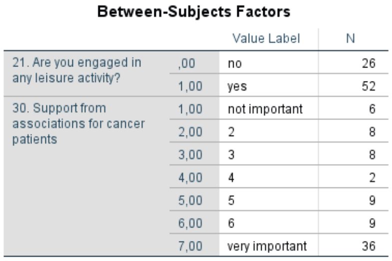
Dependent Variable: SWB final

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	5,221[a]	5	1,044	,407	,839	,081	2,036	,134
Intercept	473,752	1	473,752	184,728	,000	,889	184,728	1,000
support_other	5,221	5	1,044	,407	,839	,081	2,036	,134
Error	58,986	23	2,565					
Total	882,000	29						
Corrected Total	64,207	28						

a. R Squared = ,081 (Adjusted R Squared = -,118)

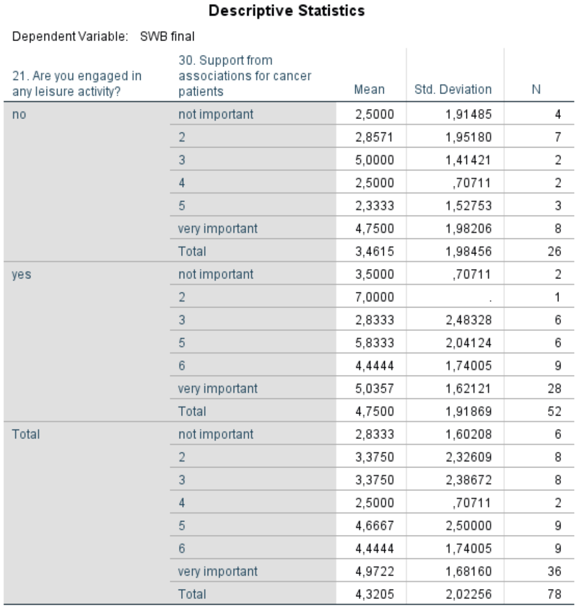
b. Computed using alpha = ,05

15. SWB, suuport (association), leisure – combined effect



Between-Subjects Factors

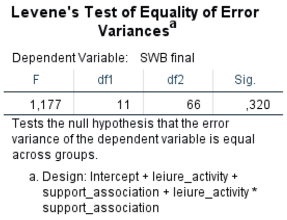
		Value Label	N
21. Are you engaged in any leisure activity?	,00	no	26
	1,00	yes	52
30. Support from associations for cancer patients	1,00	not important	6
	2,00	2	8
	3,00	3	8
	4,00	4	2
	5,00	5	9
	6,00	6	9
	7,00	very important	36



Descriptive Statistics

Dependent Variable: SWB final

21. Are you engaged in any leisure activity?	30. Support from associations for cancer patients	Mean	Std. Deviation	N
no	not important	2,5000	1,91485	4
	2	2,8571	1,95180	7
	3	5,0000	1,41421	2
	4	2,5000	,70711	2
	5	2,3333	1,52753	3
	very important	4,7500	1,98206	8
	Total	3,4615	1,98456	26
yes	not important	3,5000	,70711	2
	2	7,0000	.	1
	3	2,8333	2,48328	6
	5	5,8333	2,04124	6
	6	4,4444	1,74005	9
	very important	5,0357	1,62121	28
	Total	4,7500	1,91869	52
Total	not important	2,8333	1,60208	6
	2	3,3750	2,32609	8
	3	3,3750	2,38672	8
	4	2,5000	,70711	2
	5	4,6667	2,50000	9
	6	4,4444	1,74005	9
	very important	4,9722	1,68160	36
	Total	4,3205	2,02256	78



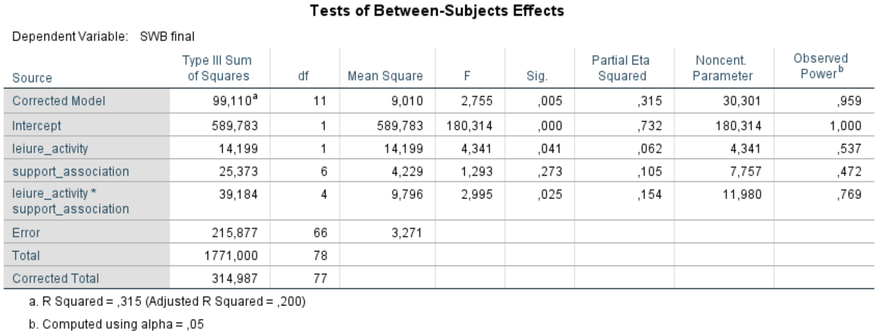
Levene's Test of Equality of Error Variances[a]

Dependent Variable: SWB final

F	df1	df2	Sig.
1,177	11	66	,320

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + leiure_activity + support_association + leiure_activity * support_association



Tests of Between-Subjects Effects

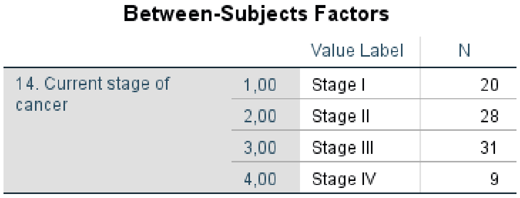
Dependent Variable: SWB final

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	99,110[a]	11	9,010	2,755	,005	,315	30,301	,959
Intercept	589,783	1	589,783	180,314	,000	,732	180,314	1,000
leiure_activity	14,199	1	14,199	4,341	,041	,062	4,341	,537
support_association	25,373	6	4,229	1,293	,273	,105	7,757	,472
leiure_activity * support_association	39,184	4	9,796	2,995	,025	,154	11,980	,769
Error	215,877	66	3,271					
Total	1771,000	78						
Corrected Total	314,987	77						

a. R Squared = ,315 (Adjusted R Squared = ,200)

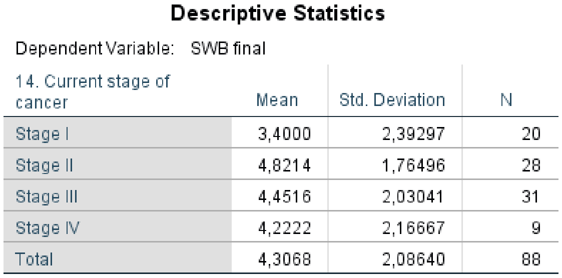
b. Computed using alpha = ,05

16. SWB and cancer stage



Between-Subjects Factors

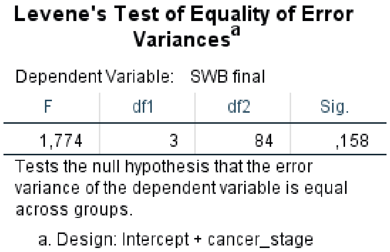
		Value Label	N
14. Current stage of cancer	1,00	Stage I	20
	2,00	Stage II	28
	3,00	Stage III	31
	4,00	Stage IV	9



Descriptive Statistics

Dependent Variable: SWB final

14. Current stage of cancer	Mean	Std. Deviation	N
Stage I	3,4000	2,39297	20
Stage II	4,8214	1,76496	28
Stage III	4,4516	2,03041	31
Stage IV	4,2222	2,16667	9
Total	4,3068	2,08640	88



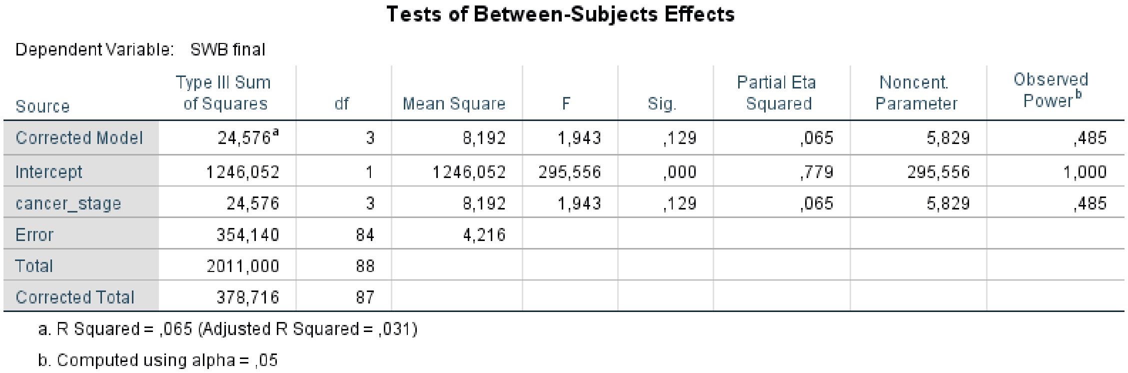
Levene's Test of Equality of Error Variances[a]

Dependent Variable: SWB final

F	df1	df2	Sig.
1,774	3	84	,158

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + cancer_stage



Tests of Between-Subjects Effects

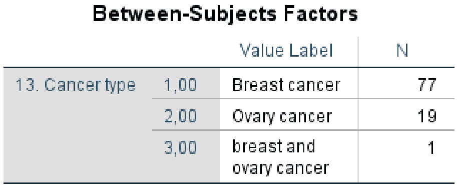
Dependent Variable: SWB final

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	24,576[a]	3	8,192	1,943	,129	,065	5,829	,485
Intercept	1246,052	1	1246,052	295,556	,000	,779	295,556	1,000
cancer_stage	24,576	3	8,192	1,943	,129	,065	5,829	,485
Error	354,140	84	4,216					
Total	2011,000	88						
Corrected Total	378,716	87						

a. R Squared = ,065 (Adjusted R Squared = ,031)

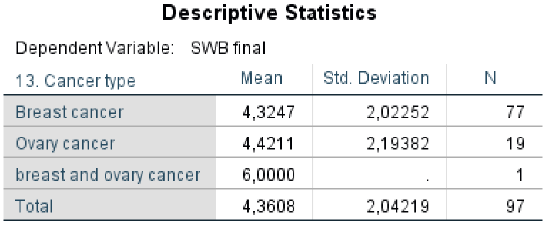
b. Computed using alpha = ,05

17. SWB and cancer type



Between-Subjects Factors

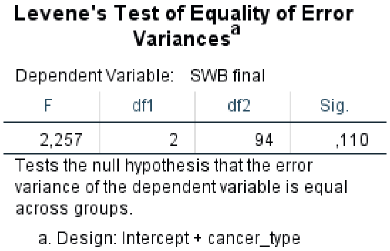
		Value Label	N
13. Cancer type	1,00	Breast cancer	77
	2,00	Ovary cancer	19
	3,00	breast and ovary cancer	1



Descriptive Statistics

Dependent Variable: SWB final

13. Cancer type	Mean	Std. Deviation	N
Breast cancer	4,3247	2,02252	77
Ovary cancer	4,4211	2,19382	19
breast and ovary cancer	6,0000	.	1
Total	4,3608	2,04219	97



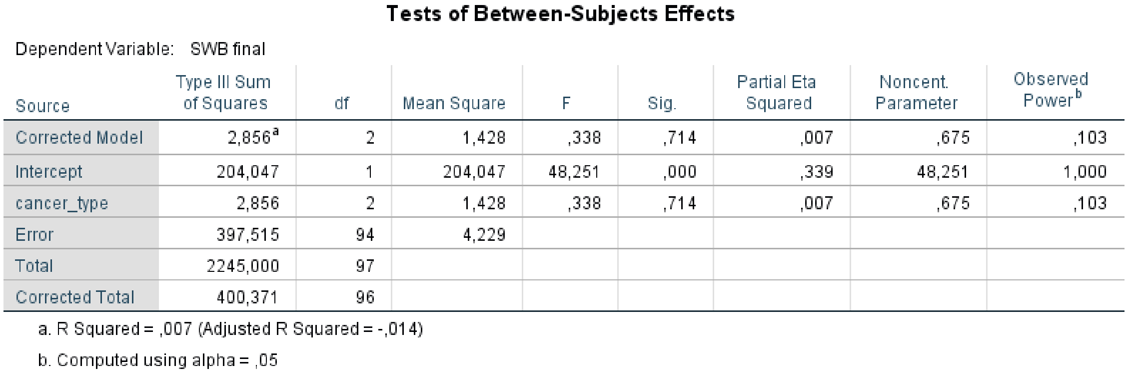
Levene's Test of Equality of Error Variances[a]

Dependent Variable: SWB final

F	df1	df2	Sig.
2,257	2	94	,110

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + cancer_type



Tests of Between-Subjects Effects

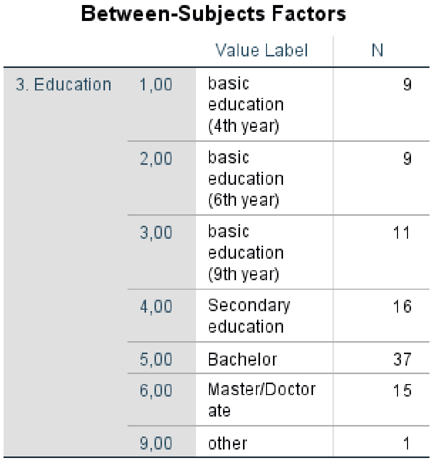
Dependent Variable: SWB final

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	2,856[a]	2	1,428	,338	,714	,007	,675	,103
Intercept	204,047	1	204,047	48,251	,000	,339	48,251	1,000
cancer_type	2,856	2	1,428	,338	,714	,007	,675	,103
Error	397,515	94	4,229					
Total	2245,000	97						
Corrected Total	400,371	96						

a. R Squared = ,007 (Adjusted R Squared = -,014)

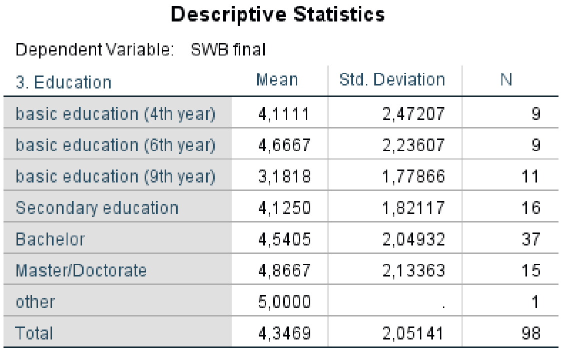
b. Computed using alpha = ,05

18. SWB and Education



Between-Subjects Factors

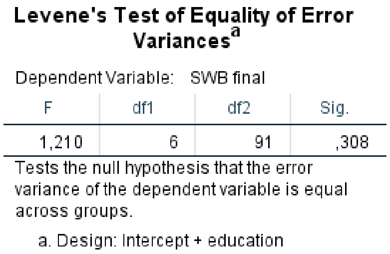
		Value Label	N
3. Education	1,00	basic education (4th year)	9
	2,00	basic education (6th year)	9
	3,00	basic education (9th year)	11
	4,00	Secondary education	16
	5,00	Bachelor	37
	6,00	Master/Doctorate	15
	9,00	other	1



Descriptive Statistics

Dependent Variable: SWB final

3. Education	Mean	Std. Deviation	N
basic education (4th year)	4,1111	2,47207	9
basic education (6th year)	4,6667	2,23607	9
basic education (9th year)	3,1818	1,77866	11
Secondary education	4,1250	1,82117	16
Bachelor	4,5405	2,04932	37
Master/Doctorate	4,8667	2,13363	15
other	5,0000	.	1
Total	4,3469	2,05141	98



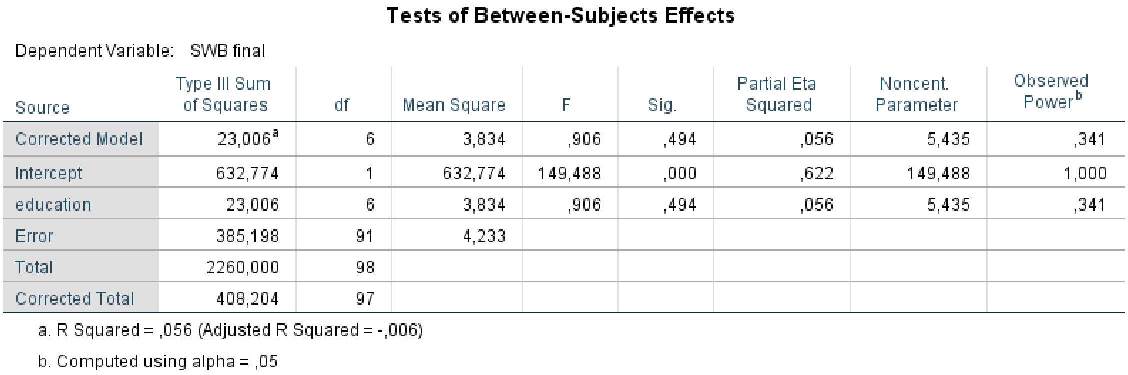
Levene's Test of Equality of Error Variances[a]

Dependent Variable: SWB final

F	df1	df2	Sig.
1,210	6	91	,308

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + education



Tests of Between-Subjects Effects

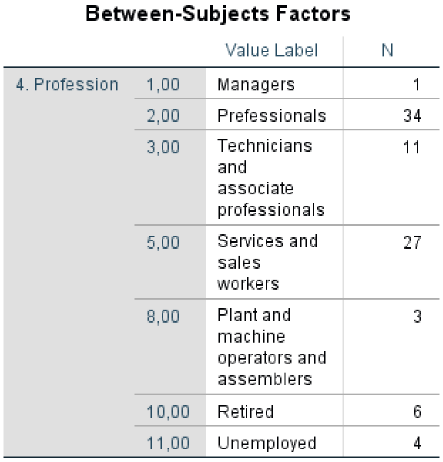
Dependent Variable: SWB final

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	23,006[a]	6	3,834	,906	,494	,056	5,435	,341
Intercept	632,774	1	632,774	149,488	,000	,622	149,488	1,000
education	23,006	6	3,834	,906	,494	,056	5,435	,341
Error	385,198	91	4,233					
Total	2260,000	98						
Corrected Total	408,204	97						

a. R Squared = ,056 (Adjusted R Squared = -,006)

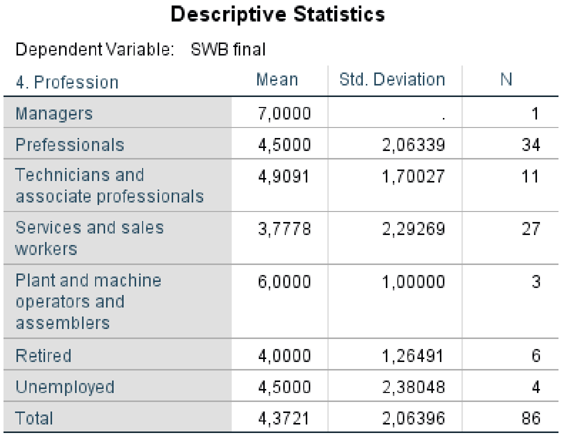
b. Computed using alpha = ,05

19. SWB and Occupation



Between-Subjects Factors

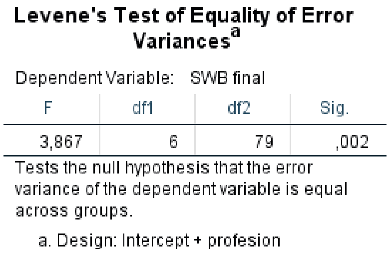
		Value Label	N
4. Profession	1,00	Managers	1
	2,00	Prefessionals	34
	3,00	Technicians and associate professionals	11
	5,00	Services and sales workers	27
	8,00	Plant and machine operators and assemblers	3
	10,00	Retired	6
	11,00	Unemployed	4



Descriptive Statistics

Dependent Variable: SWB final

4. Profession	Mean	Std. Deviation	N
Managers	7,0000	.	1
Prefessionals	4,5000	2,06339	34
Technicians and associate professionals	4,9091	1,70027	11
Services and sales workers	3,7778	2,29269	27
Plant and machine operators and assemblers	6,0000	1,00000	3
Retired	4,0000	1,26491	6
Unemployed	4,5000	2,38048	4
Total	4,3721	2,06396	86



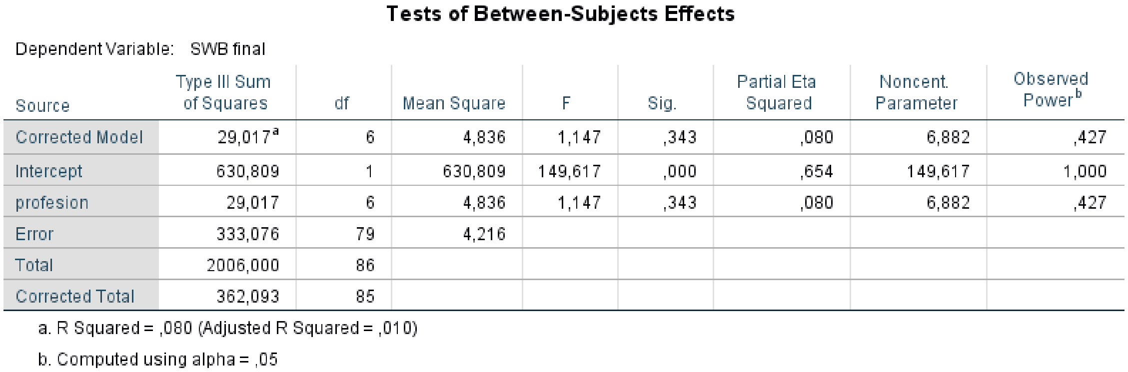
Levene's Test of Equality of Error Variances[a]

Dependent Variable: SWB final

F	df1	df2	Sig.
3,867	6	79	,002

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + profesion



Tests of Between-Subjects Effects

Dependent Variable: SWB final

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	29,017[a]	6	4,836	1,147	,343	,080	6,882	,427
Intercept	630,809	1	630,809	149,617	,000	,654	149,617	1,000
profesion	29,017	6	4,836	1,147	,343	,080	6,882	,427
Error	333,076	79	4,216					
Total	2006,000	86						
Corrected Total	362,093	85						

a. R Squared = ,080 (Adjusted R Squared = ,010)

b. Computed using alpha = ,05