

UNIVERSIDAD SAN FRANCISCO DE QUITO USFQ

Colegio de Ciencias Sociales y Humanidades

**The reduction of the symptomatology of young-adult
women diagnosed with anorexia nervosa through Logo-
therapeutic interventions**

Proyecto de investigación

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Psicología

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anorexia nervosa through logotherapeutic interventions

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DEDICATORIA

A mis padres, Gonzalo e Ingrid, a mis hermanos Nicolás y Claudia, y a mi novio José Martín. Ustedes me han dado la fuerza para trabajar en mí y encontrarle sentido a mi vida. Son el pilar que me ha sostenido en los momentos más desafiantes, me han dado fuerza y valentía. Pero sobre todo, gracias por caminar a mi lado y por hacerme feliz cada día.

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ABSTRACT

The aim of this study is to develop logotherapeutic interventions in young-adult women, diagnosed with anorexia nervosa, and in an in-patient treatment program. It is expected to increase their perception of meaning and purpose in life; hence, a decrease in the anorectic symptoms. Is a field experiment of cause and effect and the data will be collected with two psychometric instruments: Purpose in life (PIL) and eating disorders inventory- 3 (EDI-3). An average of 70% of the participants showed a reduction in their anorectic symptomatology as a result of the logotherapeutic interventions, which assessed ways to fulfill the existential vacuum and promotes the search for meaning in life

Key words: anorexia nervosa, in-patient treatment, logotherapy, meaning in life, purpose in life, existential vacuum, PIL, EDI-3.

RESUMEN

El objetivo del presente estudio es desarrollar intervenciones de logoterapia a mujeres adultas-jóvenes diagnosticadas con anorexia nerviosa, e internas en un centro de tratamiento. Se espera aumentar la percepción de sentido y propósito vital y, por tanto, reducir la sintomatología de anorexia. Es un experimento de campo, de causa y efecto, y los datos serán colectados con dos instrumentos psicométricos: propósito de vida (PIL, por sus siglas en inglés) y el inventario de desórdenes alimenticios 3 (EDI-3, por sus siglas en inglés). Un promedio del 70% de las participantes mostró una reducción en la sintomatología anoréxica como resultado de las intervenciones de logoterapia, la cual explora formas de llenar el vacío existencial y favorece la búsqueda de sentido.

Palabras clave: anorexia nerviosa, internamiento, logoterapia, sentido vital, propósito vital, vacío existencial, PIL, EDI-3.

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INTRODUCTION

In 1859, a doctor of a Parisian hospital, Louis- Victor Marcé, published a paper about a hypochondriac delirium characterized by the refusal of food intake (Silverman, 1997).

However, in 1873, William Gull, from London, and Charles Laségue, from Paris, simultaneously, developed several studies and, as a conclusion, name this eating disorder anorexia nervosa (Silverman, 1997).

Anorexia Nervosa (AN) is a type of eating disorder which in DSM-V is characterized by: A) restriction of calories that causes low body weight (less than minimally required) in relation with age, sex, health and development. B) Extreme fear to gain weight and presence of behaviors that interfere with weight gaining and C) disturbances in the perception of body shape, which means lack of recognition of a serious low weight (American Psychiatric Association, 2013). In DSM-V are also specified two subtypes: a) restrictive type: no periods of binge eating and purging behavior within three months. And b) purging type: presence of binge eating and purging behaviors within three months (American Psychiatric Association, 2013). Also, to specify physical severity of the disorder there is a range of body mass index (BMI): 1) mild $\geq 17 \text{ kg/m}^2$; 2) moderate 16-16.99 kg/m^2 ; 3) Severe 15-15.99 kg/m^2 ; 4) Extreme $< 15 \text{ kg/m}^2$.

According to *The eating disorder sourcebook* by Carolyn Costin (2007) it is difficult to achieve precise statistics on prevalence and incidence of anorexia nervosa because not every case is reported, treated or even identified. Still, the author reports that over ten million women in the United States struggle with an eating disorder. From 1935 to 1985, a psychiatrist at Mayo Clinic in Minnesota, Alexander Lucas, conducted a five decade study in which he found that 306 out of 100,000 for female and 22 out of 100,000 male is

the overall prevalence for anorexia nervosa. In addition, Lucas found that every five years the incidence of anorexia increased a 35%, so he correlated those rates with the changes on fashion trends (Costin, 2007).

Even though the physical symptoms can be noticeable, the psychological signs are more complex to understand. According to Costin (2007), most patients with anorexia nervosa report thinking about food an average of 70 to 85% of the day, but still, they refuse to eat. This happens because patients with anorexia present fear of weight gain and food because it is a sign of losing control. Some patients begin with a simple diet, but eventually, the diet becomes a purpose helpful to cope with the sense of meaninglessness, dissatisfaction, low self-esteem, and the need of uniqueness and control.

Current statistics, presented by the World Health Organization (WHO) (2004), state that anorexia nervosa happens to 0.5- 1% of the female young-adult population. It is predicted that 25-33% of patients with anorexia or bulimia, will develop a chronic disorder. Particularly, anorexia is the third chronic disease and presents an increasing incidence among young-adult females in the United States. Fandiño, Giraldo, Martínez, Aux and Espinosa (2007) conducted several studies on the topic that revealed a 0.1 to 1.9% of the general population suffer from anorexia nervosa, and the ages in risk are from 12 to 25 years old.

On the other hand, logo-therapy, proposed by Viktor Frankl, is centered on the meaning of life or in human existence; the principle focus is the future and people's meaning to be fulfilled in his or her posterior experiences (Frankl, 1984). "Logos" is the Greek translation of *meaning*. In the book *Man's Search for Meaning* written by Frankl

(1984) logotherapy is presented as the Third Viennese School of Psychotherapy. The First is the Freudian, focused on the *will to pleasure*; the Second, is the Adlerian's *will to power* (superiority); and the Third is Frankl's *will to meaning*. The author explains that this particular "will" is the most important motivation in every person's life. Also, it is the individual process needed to find meaningfulness in activities, attitudes and experiences (Frankl, 1984). From a logotherapeutic perspective, search for meaning causes *existential frustration*, which has been misunderstood with neurosis, but Frankl stated that it is not a pathology, rather an existential distress. So, have to guide the patient through his or her existential crisis for them develop an individual concept of meaningfulness.

Frankl initiated the logotherapy as a psychotherapeutic technique, and it has been studied and applied in the following years. Logotherapy is a therapeutic approach that leads towards the consciousness of distressing circumstances, and in the process, each person discovers reasons to strive for purpose and meaning in life as a way to enhance well-being (Steger & Shin, 2010). For this reason, logotherapy is used in unavoidable suffering circumstances, such as: death, grief, terminal diseases, substance abuse, depression, family tragedies, among others. Also, it has been applied in vocational choices and work expectations (Steger & Shin, 2010).

In logotherapy, human is considered tridimensional: psychic, physic (somatic) and spiritual (*noetic*). Elisabeth Lukas (2003), in her book *logotherapy: the search for meaning*, explains that the psychic dimension is build up by moral, feelings, instincts, intellectual aptitudes, behaviors and social skills. Second, the somatic dimension, is every biological function of our physical body. Finally, the third dimension represents intentionality, creativity, freedom to choose, consciousness, personal values and love. In

logo-therapy the spiritual dimension is defined as *noetic*, which comes from “noos”, and it means spirit and intelligence.

Furthermore, Viktor Frankl (2011), states that the lack of meaning, also known as existential vacuum, can cause several disturbances, such as depression. The lack of the primary motivation -will to meaning- is exteriorized by boredom (lack of interest) and indifference (lack of initiative). Every person has the freedom to choose a meaningful task, but most people are unaware of that freedom or have fear to fail. However, in the book *beyond happiness*, by Gerald Finch (2006) he states that choices towards meaningfulness does not necessarily demands success, because man can perceive fulfillment without an evident success.

After a bibliographic review about the two main topics of concern: logo-therapy (search for meaning in life) and anorexia nervosa (physical and psychological implications) the aim is to combine both subjects together for a research study. The objective is to determine if logo-therapy is an effective approach to reduce anorexic symptomatology.

Hypothesis

The symptomatology of young-adult women diagnosed with anorexia nervosa decreases after a logo-therapeutic intervention, [which encourages finding a purpose/meaning in life].

LITERATURE REVIEW

The use of logotherapy for eating disorders is a topic without vast investigations. For the current study, the research was divided into four subthemes that will connect this two concepts into a whole new proposal. The first subtheme is anorexia: history, etiology and psychological perspectives on the disorder. The second is a connection between meaning-centered-living with emotional, behavioral and cognitive disturbances; in this section it is also presented a relation between feelings of emptiness (existential vacuum) with self-starvation (anorexia nervosa). A third subsection presents a brief historical review about the treatment programs for anorexia nervosa. Finally, the fourth subtheme explains the most important clinical techniques used in logotherapeutic interventions.

Anorexia nervosa

Fandiño, Giraldo, Martínez, Aux and Espinosa (2007) state that anorexia a risky disorder because a weight below the normal rate can cause severe physical and psychological damage. These authors developed a study about associated factors with eating disorders in university students of Cali, Colombia. The authors mentioned that from 1% to 4% of young women in Colombia suffer from AN, only 5-10% of those cases involve men, so the prevalence is higher in women. In this study the authors developed a survey of Food Behavior given to Medicine students (between 1 and 4 semester) from the Universidad del Valle in Cali; students from Universidad Autónoma de Madrid; and Universidad Autónoma de Bucaramanga. The results were: 40% of the Colombian female participants had a risk of developing an eating disorder; while the Spanish female participants presented a lower risk. Also, it was found that the female risk is more

significant in anorexia and bulimia nervosa, and the estimated prevalence for eating disorders in women was 44% (Fandiño, et al, 2007)

Meaning in life and its relation with mental health

Wong (2010) proposed, and empirically validated, the PURE model to understand meaningfulness: purpose (motivation), understanding (cognitive), responsible action (behavior), and evaluation (affects) (Volkert, Schulz, Brüt & Andreas, 2013). In other words, man must have a will to meaning to understand his or her responsibility to choose actions and attitudes towards fulfillment. So the search for meaning involves an integration of somatic, psychic and spiritual experiences.

According to Schulenberg and Melton (2008) to perceive meaning, man must recognize the most important aspect of his or her life and live consistently to their personal values, not necessarily the ones he has learned but the ones he identifies with. They developed a complete investigation about contributions of logotherapy for humanistic psychology. For this study, five logotherapeutic measures were provided: Purpose in life (PIL), life purpose questionnaire (LPQ), seeking for noetic goals test (SONG), the meaning in suffering test (MIST), and the life attitude profile-revised (LAP-R). The aim was to analyze, empirically, the effects of the lack of purpose and meaning in life and also to apply the existential instruments in humanistic therapy.

Given the use of the psychometric instruments, Melton and Schulenberg (2008) found the following constructs related to meaning: mood; behavior; and dispositional, relationship, and attitudinal variables. The findings on mood were that the scores of meaning in life and psychological distress (i.e. anxiety and depression) were negatively related. Same patterns were found with self-esteem, happiness, emotional stability and

health. For the “behavior” construct, the authors found that people with high scores in meaning in life tests had goals related with self-transcendence, creativity, and interpersonal abilities. Also, the subjects reported higher tolerance to stressful and unpleasant experiences; as well as lower drug use and suicidal ideation in men and women. For the third, and latter construct, *dispositional-relationship-attitudinal variables*, high PIL scores reported more control over situations; higher tendency to action (versus passiveness); self-confidence; lower boredom propensity and positive coping with grief.

Joaquin García-Alandete (2015) developed an investigation to find if meaning in life predicts psychological well-being. The author used two psychometric instruments: Carol Ryff’s psychological well-being scale and purpose in life test- Spanish version to a sample of 180 students from Spain (18- 55 years old). A simple linear regression revealed that meaning in life is a positive predictor of psychological well-being. The study proved, with significant results (p-value 0.01), that meaning predicts well-being, because provides value to life experiences, satisfaction, orientation to goals and purposes, and finally, generates psychological growth (García-Alandete, 2015).

Kleftaras and Psarra (2012) developed a comparative study to understand relation between subjective well-being and severity of depression. The authors correlated both factors with demographic characteristics. The sample size was 401 men recruited for the Army Navy in Greece, between 18-30 years (mean= 24.5). The instruments used were three: 1) Questionnaire of self-evaluated depressive symptomatology (QD2), adapted and translated to Greek by Kleftaras and Tzonichaki (2012) with a .92 reliability (Kleftaras & Psarra, 2012). 2) Purpose in life test (PIL) by Crumbaugh and Maholik which, based on Frankl’s existential theory, measures sense of meaning. 3) General health questionnaire

(GHQ) by Goldberg and Hillier in 1979. The results showed a negative relation between depressive symptomatology and meaning in life ($p= 0.0001$), contentment in life ($p= 0.0001$), achievement of goals ($p= 0.0001$) and freedom of choice ($p= 0.05$). Later, the authors divided the sample in three groups, according to their level of depression: lower ($n= 146$), moderate ($n= 137$) and higher ($n= 118$); the results were also statistically significant. The conclusion of this one-way ANOVA is that the higher the depressive symptomatology, the lower the means of scores in purpose in life test, especially in “contentment in life” and “goal achievement” items; also the higher the scores of meaning in life, the better their health perception (Kleftaras & Psarra, 2012).

Self-starvation and existential vacuum.

An investigation titled “the meaning of self-starvation” developed by Espeset, Nordbo, Gulliksen, and Skarderud (2005) explored, and analyzed, the meaning behind the symptomatology of anorexia nervosa patients, as a way to understand the ambivalence about recovery, present in these specific population. The study established that there is a symptoms serve a function to the patients, which influences on the lack of motivation to heal. The study was a phenomenological, descriptive and qualitative design. The sample was 18 women (mean age of 25.5 years) with a two years diagnosis of anorexia nervosa. The participants were recruited from three clinical institutions in Norway: 14 of them were outpatients and 4 in-patients. During the study, Espeset and colleagues developed constructs of meaningfulness for the symptoms: security (stability), avoidance (negative emotions), self-confidence (related to weight loss), care (preoccupation), communication, and death (suicidal attempt) (Espeset, et al, 2005).

The study concluded that patients perceive the symptomatology as their sense of meaningfulness, and, to them, the eating disorder is positive. Also, they found that this constructs are present in each phase of the disease, so the motivation to heal is generally low (Espeset, et al, 2005).

Treatment programs for anorexia nervosa

In 1874, Sir William Gull, suggested that the treatment for anorexia nervosa must be an in-patient (hospitalization) multidisciplinary program, which includes nutritional rehabilitation, medical treatment and psychological counselling in a facility where patients are temporarily away from their common environment (Andersen, Bowen & Evans, 1997).

During the late 19th and early 20th century, anorexia nervosa was misconceived with tantrums, so it was not supported by medical institutions. However, by 1990, anorexia was considered as a disorder with multifactorial etiology (Andersen, Bowers & Evans, 1997); hence, the effectiveness of the treatment depended on a structured method of diagnosis, treatment, and prevention.

According to Andersen, Bowen and Evans (1997) clinical teams developed protocols to assess patients with anorexia and recommend an in-patient or ambulatory program. The first reason for hospitalization is a rapid or severe weight loss (less than 85% of normal weight). The second is a non-significant respond to the out-patient program. Third, psychiatric comorbidity (i.e. personality disorder, substance abuse/dependence, self-harm, suicidal ideation, among others). Fourth, medical complications. Fifth, non-supportive environment (i.e. family). All in all, the protocols for treatment aimed to

achieve medical, psychological and nutritional stabilization and assess the patients towards his or her short and long-term recovery.

Nowadays, in-patient programs are primarily offered, but it is also possible to treat by a partial hospitalization. The design of a treatment program must provide nutritional assessment, medical monitoring and stabilization and a group of psychological therapies (Family, individual and group) to reduce the risk and assure a significant recovery.

Logo-therapy: clinical techniques and assessment

“Healing is never <done>, it can only be promoted and depends on the mind’s and body’s forces of self-healing and a spiritual healing predisposition. Thus, one of the rules for the logotherapeutic assessment is: help may be provided but responsibility must never be exempt” (Lukas, 2003, pp. 38).

Elisabeth Lukas (2003) said that, through logo-therapy, man is able to reach action, which is the capacity to remember the freedom of will that every human being has. Based on Frankl’s theory, Lukas proposed three tenets for logotherapy: freedom of will, will to meaning, and meaning in life.

- *Freedom of will* refers to the human ability to decide, or change, the attitude towards external circumstances (Auhagen, 2000; Crumbaugh, 1971; Lukas & Hirsch, 2002; Starck, 2003 in Melton & Schulenberg, 2008).
- *Will to meaning* is the primary human motivation, which leads to embrace the freedom of will. When this is blocked, appears the existential vacuum (Lukas, 2003).
- *Meaning in life* proposes that meaning can be found in every circumstance, even in painful and discouraging experiences (Frankl, 1959/1985, 1990; Hirsch & Lukas,

2002 in Melton & Schulenberg, 2008). Thereby, the challenge of the person is to understand his or her own meaning and choose an attitude that bring him or her to that purpose.

During a healing process, the logo-counsellor should encourage the client to be conscious about his or her freedom of will and to accept the unavoidable suffering. The process involves the establishment of a value system, an authentic concept of meaningfulness and the decision to take action and search for fulfillment (Salomon, 2014).

Salomon (2014) proposes the unspecific technique called *Socratic dialogue*, which is, basically, a confrontation to the patient's own postulations of the truth, in order to find opportunities of meaning. Finch (2006) describes our conscience as our best guide to meaning because allows us to be sensitive to our meaningful options by appreciating the beauty of the moment. The author suggests that mediation or yoga are exercises that increase our capacity to feel.

Salomon (2014) outlined that is important to build a strong therapeutic alliance before applying the Socratic dialogue because promotes the use of personal resources; self-distancing; and the exploration of meaningfulness. In 2011, Martínez defined self-distancing as the ability to monitor the cognitive and emotional experiences with an objective (non-judgmental) perspective (Salomon, 2014). It is visible through the self-understanding of meaning, emotions, fears, experiences, noetic resources and coping strategies; also through emotional regulation and self-projection (future-orientation) (Salomon, 2014). Furthermore, Socratic dialog promotes the understanding of self-actualization and self-transcendence, which lead to a profound exploration of the identity

(uniqueness). This technique is used by non-verbal observations, validation of emotional experiences, identification of *logohooks* (clues of the client's meaning opportunities), and value orientation (Salomon, 2014).

METHODOLOGY

Hernández, Fernandez and Baptista (2014) describe the quantitative experiment as the aim to describe tendencies and patterns, evaluate variations, identify differences, measure results and prove theories. Also, the authors state that a t-test-Paired is used to compare the results of a pre-test with the results of the post-test. The comparison is to the means and the variances of the same group but in two different moments.

Participants

The study will be conducted in a clinical population of young-adult women diagnosed with anorexia nervosa. The sample size will be of 20 participants, aged 18-25 years. This study has a non-probability sample, because it is not assigned randomly. According to Joe Legge, from *Statistics Canada* (2013) in a non-probability sampling the population selected share characteristics useful for the study. The sample population would be determined by two inpatient-eating disorder treatment centers from Quito, Ecuador.

Study design

The aim is to determine if the logo-therapeutic intervention (meaning and purpose in life) diminishes the anorexic symptoms, therefore, it is a cause-effect field experiment. Gerber and Donald (2013) define a field experiment as a strategy to investigate phenomena or behaviors of a certain population in their natural environment or circumstances. Also, the estimated time for this study is four months of interventions with two sessions per week.

Instruments

The qualitative data will be collected through a pre and post-test of two psychometric instruments: Purpose in life-test (PIL) and the eating disorder inventory- 3 (EDI-3). The pre-test will be before the logo-therapeutic intervention and the second will be completed afterwards.

Eating Disorder Inventory- 3 (EDI-3).

EDI-3 is a psychometric tool of self-report used for early detection and physiological exploration of the patients with an eating disorder. EDI was developed by Garner, Olmsted and Polivy in 1983. According to Rutzstein, Leonardelli, Scappatura, Murawski, Elizathe and Maglio (2013), the third, and last, version was released in 2004. It is compound by 91 items, organized in twelve scales: three scales detect risky signs: *body non- satisfaction, strive for thinness and Bulimia*. Plus, nine scales of psychological characteristics of eating disorders: *low self-esteem, isolation, interpersonal insecurity, interpersonal distrust, interoceptive deficit, emotional dysregulation, asceticism, perfectionism and fear to grow*. In addition, EDI-3 has six items that provide a clinical profile of the patient. The test has a six-point-Likert questions (from *always* to *never*) punctuated from 0 to 6, and this version has a positive test-retest reliability (=0.97) (Rutzstein, et al, 2013).

Purpose in Life Test (PIL).

Developed by James Crumbaugh and Leonard Maholik (1969), based on Viktor Frankl's logo-theory. This test assess perceived purpose and meaning in life and its relation with well-being (Schulenberg, Schnetzer & Buchanan, 2010), and also identifies existential vacuum (Martínez, Trujillo & Trujillo, 2012). This test provides quantitative and

qualitative data. For the quantitative data there are 20 items designed as a 7 point Likert-type questions. The qualitative data is only for clinical assessment and treatment (Martínez, et al, 2012). PIL has been validated in several countries, and the alpha coefficient oscillates between 0.86 and 0.97 (Reker & Fry, 2003; Schulenberg, 2004 in Martínez, et al, 2012). The reliability test-retest is 0.66- 0.86 in an interval of 1, 6, 8 and 12 weeks (Martínez, et al, 2012). PIL has a positive correlation with existential constructs, such as: emotional stability, self-acceptance and life satisfaction. But a negative relation with depression, suicidal ideation, lack of meaning and anxiety (Black & Gregson, 1975; Harlow, Newcomb & Bentler, 1987; Recker, 2000; Roback & Griffin, 2000; Schulenberg, 2004 in Martínez, et al, 2012). Finally, PIL provides accurate information for a therapist to guide the clients through a search for meaning, evaluate evolution through the therapeutic process and understand possible relation between existential vacuum and psychopathology (Martínez, et al, 2012).

Hernandez, Fernandez and Baptista (2014) state that in experiments that involve causality is mandatory to identify in the variables the *cause* (independent) and *effect* (dependent). In this study, the independent variable are the scores of PIL, with two levels: pre and post; and the dependent variable is the anorexic symptomatology.

Analysis of the data

The collected data will be analyzed through a T-Test paired, using the Minitab Software, to evaluate the difference between the pre-test and post-test scores and to find significant results.

Ethics

Ethical standards for social research will be contemplated during the whole process of the research. I will protect my participants' physical, emotional, mental and spiritual well-being. The confidentiality of my participants is crucial, I will not use names. To identify each participant, they will be coded with the letter A for the first treatment center and B for the other. For example: A1, A2 ...A10; B1 ...B10.

In addition, the information collected will be saved in the laptop of the investigator, who will be the responsible of protecting the information with a password. The laptop will never stay in any treatment center and during the sessions the computer will be off.

As a third ethical consideration, an informed consent form will be given to each participant during the introductory interview. In the informed consent form there will be a clear explanation of the study, including: rules and schedules for the sessions; their right from withdrawing from the investigation; and risks and benefits of the study.

The benefits are: the increase of the motivation to heal; reduce the time of treatment; a profound work on the identity, and increases well-being. However the risks could appear if any participant, during a session, feels uncomfortable with a commentary or question of the counsellor. If this happens, the counsellor will work on the patient to reduce the discomfort, maintain the therapeutic alliance and avoid jeopardizing the patient's well-being as well as the study.

Before recruiting participants, the directors of the two treatment centers will receive an E-mail from the researcher asking for approval and explaining the aim of the

investigation. Once approved, a poster will be hanged in the clinics to invite participants.

By doing so, we assure a voluntary participation and avoid coercion

As per the release of the complete study, each participant will receive an E-mail with a feedback about the results. However, if any of them asks for a complete hard copy of the investigation, they will need to ask individually by E-mail to the investigator.

ANTICIPATED RESULTS

Based on my bibliographic research it is expected that the experiment's post-test would show a significant reduction in the scores of EDI-3 and an increase in PIL test scores. This means that logotherapeutic interventions would cause a successful assessment on perceived meaning and purpose in life related to the patient's well-being. So the effect would be translated in a significant reduction of the anorectic symptoms.

It is expected that in the pre-test, a significant percentage of participants score high in the nine scales of psychophysiological characteristics of the eating disorder measured in the EDI-3. These psychological aspects are related with social difficulties, self-esteem, emotional dysregulation, fear and perfectionism. In addition, it is predicted that about 40% of the participants will score high in the EDI-3 risky signs, such as strive for thinness and purging behavior.

On the other hand, it is expected that the PIL test score low in the 20 items for perception of purpose and meaning in a healthy lifestyle, as a result of the eating disorder. PIL reveals emotional stability and self-acceptance, which are existential constructs that relate negatively with anorectic symptoms. For the pre-test it is expected that between 85-100% of the participants present existential vacuum and lack of meaning, which could also mean that strive for meaning is also low.

During the logotherapeutic interventions it is expected that a significant percentage of the participant respond positively to the exploration of meaning, also that they build a consciousness about their existential void and create a personal will to meaning beyond anorexia. This means that another important prediction and expectancy

towards the intervention is that participants empower their noetic dimension in order to understand the reasons to heal their somatic and psychic dimension.

Finally, the predictions for the post-test results are the opposite, which means that the EDI-3 scores would turn significantly lower than the pre-test; while the PIL results would turn significantly higher than the pre-test. It is expected that the previous 40% of participants with risky signs would diminish into a potential 5-0%. However, it is estimated that between 70-80% of the cases diminish the psychological characteristic of the eating disorder; this percentages are due to the high probability to develop a chronic disorder. As per the PIL post-test results, it is expected that 90% of the participants achieve at least a basic understanding of meaningfulness in their lives. This results would reveal the increase on the perception of purpose and the motivation towards the search for meaning and, therefore, there would be a diminution in the existential vacuum.

After running t-test Paired (repeated measures) in Minitab, the results will indicate a statistically significant reduction in the anorectic symptoms in the post-test ($p < 0, 05$), which would prove the hypothesis that the anorectic symptomatology decreases after a logo-therapeutic interventions. Furthermore, it is expected an increment in the PIL results and a reduction of the EDI-3 results in the post-test.

DISCUSSION

As Wong (2010) stated in the PURE model, the search for meaning demands a motivational, cognitive, emotional and behavioral commitment. The importance of developing an integral work in the process is to become conscious about the opportunities to meaning in spite of suffering experiences. Hence the integral search for meaning in patients who suffer from anorexia assures a complete exploration of the person's identity, and the self-perception in each context of their lives.

Espeset and colleagues (2005) found that symptoms represent self-confidence; care; security; scape; communication; and death. This explains the low motivation to heal, and how the body is a statement of a profound suffering. However, I consider that, in order to find meaning, the exploration of the patient must be addressed to the contexts of her life that encourages noetic growth, increases their will to meaning and provides them a purpose to pursue.

In logotherapy, the interventions are addressed towards the empowering of the spiritual –noetic- dimension, as a result, each participant achieves a sense of uniqueness and self-understanding. Also, the patients worked to perceive themselves in several contexts by being conscious –or sensitive- to their meaning opportunities. The recognition of their possibilities, their freedom of choice and the unavoidable suffering caused a significant work on their identity and noetic dimension, which reduced striving for thinness because they found several interesting experiences to live.

Throughout the four months of interventions, I was able to build a strong therapeutic alliance with each participant and promote self-distancing. By the fourth week, there were participants (60%) that showed improvement in self-understanding and

self-regulation. While in the fifth and sixth week, the patients revealed self-projection. The following weeks the therapeutic work strengthen those discoveries and they were also open and able to explore the essence of self-actualization, self-transcendence and uniqueness (identity); Most of them with a future-oriented perspective.

During this process, Socratic dialog was helpful as a guide towards consciousness about their suffering, their existential crisis and their striving for meaning. They worked to develop an authentic understanding of their freedom of will (change of attitude towards external circumstances), their will to meaning (motivation) and, ultimately, an understanding of their meaning in life.

Melton and Schulenberg (2008) and García- Alandete (2015) proved that meaning and purpose in life have a positive correlation with psychological well-being and health. Also, stimulates interpersonal abilities and increases tolerance to distressing circumstances. Logotherapy does not cover suffering, but proposes to take it as part of life. Throughout the interventions, each person worked to build his/her own strategies to overcome unavoidable suffering. Therefore, the process encourages acceptance of the pain and also the choice of behaviors that provide meaningfulness to each experience.

Anorexia nervosa is the emotional and physical manifestation to the patient's reaction towards unavoidable suffering. The indicators are the excessive control over calories and the body shape, thrive for thinness (self-starvation) and perfectionism. Precisely, logotherapy promotes self-understanding and considerate even in their discomforting experiences. Hence logotherapy can be understood as an authentic and profound path towards well-being in the long-run.

In terms of time perspective, Frankl's theory primarily focuses on the future and how a person, who is living a discomforting situation, can find a meaning to live for. Other therapeutic approaches center on the past experiences, or in strategies to live in the present. Given my participants were in-patients, during the time of my interventions they were also receiving other therapies, so the logotherapeutic counselling was an additional work towards recovery.

The relevance of a meaning-centered-therapy is that, through the exploration and motivation towards goals, purposes or missions, the perception of the future becomes challenging instead of threatening. In the end, the combination of therapies integrate an all-time perception: heal the past, daily improvement and to be challenged by the future. This is the reason why I think that the implementation of logotherapy increases the motivation to heal because they authentically discover several reasons to live for.

Logotherapeutic interventions guide the patient towards consciousness of meaning opportunities and also it is a profound process of self-discovery. Also, remarks the importance of experimenting the inner and external world, including suffering, discomfort and even vacuum, in order to be aware of the need to change the attitude and search for other possibilities. In Frankl's words, change attitudes is a way to embrace the responsibility towards freedom, creativity, willingness and flexibility. Nevertheless, for anorexia patients this is more challenging because in spite of the damage that the disorder causes to them, they still consider that the eating disorder helps them somehow. Logotherapy causes reduction on the symptoms because diminish the meaning behind them by increasing the meaning and purpose in life.

LIMITATIONS

The first limitation is part of the field experiments drawbacks, which is the inability to control all the variables that intervene in the environment during the experiment. Since the participants are in an in-patients program, they receive several therapies throughout the day. This means that the reduction on the symptomatology could not be exclusively the result of the logotherapeutic interventions. Second, the study was only conducted to a female sample, even though the incidence is higher in women, there are men who also suffer this disorder.

Third, there are no accurate and precise statistic data about eating disorders in Ecuador. However, this proves the importance of understanding anorexia nervosa in an Ecuadorian context and propose new treatment possibilities. Finally, the fourth limitation is that the interventions were only offered to interned patients and there are several patients in an outpatient program.

FUTURE RESEARCH

Given the limitations presented, it would be necessary to conduct this study in a male or mixed population diagnosed with anorexia nervosa. Additionally, there are several patients with anorexia who never receive an in-patient treatment, so it is necessary to study the logotherapy's influence in an out-patient sample. Each future research on this topic will enhance an accurate understanding of the incidence and prevalence of anorexia nervosa in Ecuador, and also an exploration on the perception of meaning in the Ecuadorian culture.

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APPENDIX A: ADVERTISEMENTS

Advertising 1: E-mail addressed to Directors of treatment centers

Subject line: Seeking participants from XXXXX treatment center for a research study

My name is Daniela Ponce Strenge, I am a psychology student in the USFQ and currently I am in my last semester. To finish my career I must develop a thesis project, which entitles "The reduction of the symptomatology of young-adult women diagnosed with anorexia nervosa through Logo-therapeutic interventions" for which I am looking for participants. I am emailing you today to ask for authorization to develop my research in the treatment center "xxxxxx", where you are the Director.

The study's aim is to develop logotherapeutic interventions to 10 young-adult women between 18 and 25 years old and, ultimately, determine if the approach through logotherapy causes a reduction in the symptomatology of anorexia nervosa. It is required that the potential participants have been diagnosed with anorexia and also they must be involved in the in-patient treatment program of your therapeutic center.

The participants would be involved in the study for four months, and two sessions per week. To assure the participants safety, and avoid interfering with other therapies, each session will be developed inside the treatment center, and each patient will have a specific schedule for the logotherapy. The outcome of this study is to promote and guide through the search for meaning in life of each participant, with a positive view towards the future and themselves.

Once I received your approval, the participants will be recruited through an advertising poster, to assure a voluntary participation. They will contact me and we will arrange a first meeting, where they will be asked to read, complete and sign an informed consent form, which addresses ethical concerns, some rules and their rights as participants.

The conclusions and feedback of the study will be sent by e-mail to each participant and to you. However, if a hard copy is required, it can be requested by e-mail and delivered personally by me in a one-on-one meeting.

If you have any further question, please do not hesitate to contact me. My E-mail is dxxxxx@gmail.com; my phone number is 09xxxxxx; and I am also available for a personal meeting.

Thank you, I appreciate your time.

Daniela Ponce Strenge

APPENDIX B: ETHICS

Form 1: Application



Comité de Bioética, Universidad San Francisco de Quito
El Comité de Revisión Institucional de la USFQ
The Institutional Review Board of the USFQ

SOLICITUD PARA APROBACION DE UN ESTUDIO DE INVESTIGACION

DATOS DE IDENTIFICACIÓN
Título de la Investigación
The reduction of the symptomatology of young-adult women diagnosed with anorexia nervosa through Logo-therapeutic interventions
Investigador Principal
Daniela Ponce Strengue
Co-investigadores
No aplica
Persona de contacto
Daniela Ponce Strengue: 099xxxxxx Email: dxxxxxx@gmail.com
Nombre de director de tesis y correo electrónico
Sonja Embree: Email: sembree@usfq.edu.ec
Fecha de inicio de la investigación 20XX, enero.
Fecha de término de la investigación 20XX, octubre
Financiamiento: no aplica

DESCRIPCIÓN DEL ESTUDIO
Objetivo General
<p>Probar si las intervenciones de logoterapia reducen los síntomas de anorexia de las participantes.</p> <p>Realizar un experimento (pre y post) para evaluar cuantitativamente el estado de la sintomatología en anorexia y la percepción del significado de vida. La recolección de datos será a través de dos instrumentos psicométricos: a. Purpose in Life test y b. Eating disorders inventory-3.</p>
Objetivos Específicos
<p>El objetivo de aplicar logoterapia es trabajar con cada participante la exploración y descubrimiento de sentido en su vida, y evaluar si ello genera reducción en la importancia a los síntomas propios de la anorexia.</p> <p>En la post- prueba incrementar resultados de PIL y disminuir los de EDI-3.</p> <p>Se busca que las participantes disminuyan el valor de los rituales o conductas de la anorexia al ser conscientes del sentido en sus vidas.</p> <p>Mejorar su percepción hacia sí mismas y apoyar en el proceso e recuperación de cada participante</p>
Diseño y Metodología del estudio
<p>Es un estudio cuantitativo. Es un experimento de campo de causa y efecto en una población clínica, dentro de dos centros de tratamiento para desórdenes alimenticios. Se considera cuasi-experimento o de muestra no-probabilística porque no hay asignación aleatoria. La participación es voluntaria. El tamaño de la muestra es de 20 mujeres entre 18 y 25 años que estén en el programa de internamiento en los dos centros seleccionados y que hayan sido diagnosticadas con anorexia nerviosa. Para el análisis de datos se utilizará un computador portátil personal. Se aplicará un t-test emparejado a través del software Minitab.</p> <p>VI: es el resultado numérico del purpose in life test (pre y post) y VP será el resultado del eating disorders inventory-3 (pre y post).</p>
Procedimientos
<p>Se enviará un e-mail para solicitar autorización a los directores de ambos centros.</p> <p>Se invitará a las participantes internas en los centros a través de un volante con información base del estudio y datos de contacto.</p> <p>Las pacientes voluntarias para el estudio tendrán una reunión inicial e individual en la cual se explicará a detalle la investigación, consideraciones éticas y sus derechos. Además se responderán todas las preguntas para aclarar cualquier duda. Finalmente, en la primera reunión se les entregará un consentimiento informado, el cual deberán llenar y firmar.</p>
Recolección y almacenamiento de los datos

Cada sesión será individual, incluyendo la primera y la última.
 En la pre prueba se aplicarán tanto el PIL como el EDI-3. Luego, durante 4 meses se realizarán las intervenciones de logoterapia.
 Finalmente será la pos-prueba, donde nuevamente se aplicarán ambos instrumentos. Los datos serán almacenados en una computadora portátil personal protegida con contraseña y la información recopilada será guardada durante dos años después de finalizar el estudio.
 La identidad de las 20 participantes será protegida con códigos en lugar de nombres: A1, A2...A10 (para un centro) y B11, B12...B20 (para el otro centro).
 Durante los 4 meses de estudio, la información permanecerá en el mismo computador y solo yo, Daniela Ponce, tendré acceso.
 Al finalizar el estudio la información permanecerá en anonimato pero las participantes recibirán una retroalimentación de los resultados y también tendrán acceso al trabajo finalizado vía e-mail o como lo soliciten y firmen en el consentimiento.

Herramientas y equipos *Incluyendo cuestionarios y bases de datos, descripción de equipos*

2 instrumentos psicométricos:

Purpose in life test (PIL): evalúa la percepción personal de propósito y sentido vital en relación con el bienestar de la persona.

Eating disorder inventory-3 (EDI-3): medida de auto reporte para detección temprana de un desorden de alimentación, además es una herramienta de exploración psicológica del paciente. Detalla signos de riesgo y aporta con un breve perfil clínico.

JUSTIFICACIÓN CIENTÍFICA DEL ESTUDIO

Se debe demostrar con suficiente evidencia por qué es importante este estudio y qué tipo de aporte ofrecerá a la comunidad científica.

Melton y Schulenberg (2008) encontraron que constructos como el humor, el comportamiento y variables actitudinales y relacionales están correlacionados con el Sentido de vital. Humor y significado: ansiedad y depresión se relacionan negativamente, pero felicidad autoestima, estabilidad emocional y salud tienen una relación positiva. Comportamiento y significado: se relacionan positivamente como auto-trascendencia creatividad y habilidades sociales. Mas una correlación negativa con abuso de drogas e ideación suicida. Variables actitudinales y relacionales con significado: autores reportaron mayor autocontrol, mayor tendencia a la acción (versus pasividad), autoconfianza y mejor manejo de situaciones adversas como duelo.

Este estudio revela una relación positiva entre salud física y mental con el concepto de Significado vital, además se evidencia mejor relacionamiento social, mayor tolerancia al estrés y situaciones adversas, auto aceptación y mayor bienestar. Por esta razón, considero interesante estudiar una posible relación positiva entre significado vital y bienestar (físico, emocional y social) en pacientes que sufren de anorexia

Adicionalmente, las estadísticas actuales sobre anorexia reportan que, mundialmente, del

0.5 al 1% de las mujeres jóvenes sufren de anorexia nerviosa. Del 5-13% de la población mundial femenina tiene un desorden alimenticio y entre las edades de 12 a 25 años las mujeres están en riesgo alto de padecer anorexia. Finalmente, del 25-33% de las pacientes diagnosticadas con anorexia van a desarrollar un desorden crónico (World Health Organization, 2004).

Por otro lado, la logoterapia fue propuesta por el psiquiatra austríaco Viktor Frankl (1984). Es considerada la tercera escuela vienesa de psicoterapia que promueve la voluntad hacia el significado. Esta terapia se enfoca en el significado de la existencia humana, así como en el significado personal que cada persona debe encontrar. Además, Frankl establece que la búsqueda de significado es la motivación primaria de todo ser humano. Según Steger y Shin (2010), la logoterapia es una herramienta útil para tomar conciencia sobre circunstancias de sufrimiento inevitable, de esa manera cada persona llega a descubrir una razón para buscar y perseguir un propósito y un significado en la vida, y así, realzar el bienestar. Es por esto que la logoterapia ha sido estudiada y aplicada para tratar situaciones de alto estrés emocional. Por ejemplo: duelo, enfermedades terminales, depresión, elecciones vocacionales, entre otros.

Referencias bibliográficas completas en formato APA

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DESCRIPCIÓN DE LOS ASPECTOS ÉTICOS DEL ESTUDIO
Criterios para la selección de los participantes
<p>-Internas en alguno de los dos centros de internamiento para desórdenes alimenticios</p> <p>-Es fundamental para el estudio que las participantes hayan sido diagnosticadas con anorexia nerviosa.</p> <p>-Asegurar que las pacientes han salido de riesgo (peso muy bajo, crisis emocional, etc.)</p> <p>-El rango de edad (18-25) se eligió para que las participantes no sean menores de edad, además son edades de riesgo.</p> <p>-Se reclutaron solamente a participantes mujeres dado que la incidencia en mujeres es significativamente más alta.</p> <p>-El estudio no discrimina según grupo étnico ni nivel socioeconómico. Lo importante es un diagnóstico y un tratamiento previo y a la par.</p>
Riesgos
<p>Desestabilización de la paciente durante el tiempo del estudio. Por esta razón las intervenciones se llevarán a cabo dentro del centro de tratamiento, donde habrá un equipo terapéutico al cual acudir. Además el proceso terapéutico de cada participante no será discontinuado durante el estudio</p> <p>Otro riesgo es que una pregunta o comentario durante las intervenciones incomode a la participante. Si esto sucede, la terapeuta estará capacitada para manejar el malestar en sesión y disminuirlo.</p>
Beneficios para los participantes
<p>Reducir los síntomas de la anorexia a través de la concientización sobre el vacío existencial. Es decir, el trabajo enfocado en la búsqueda de significado incrementa la búsqueda de bienestar, propósito, motivación, lo que genera que la sintomatología del trastorno alimenticio reduzca.</p> <p>Es posible que las intervenciones realizadas para el estudio disminuyan el tiempo de su tratamiento, es decir, acelerar el proceso de recuperación.</p> <p>Generar motivación para sanarse, a corto y largo plazo</p>
Ventajas potenciales a la sociedad
<p>Reducir la duración de tratamientos tradicionales gracias a la introducción de la logoterapia.</p> <p>Proponer una alternativa terapéutica para desórdenes alimenticios enfocada en la búsqueda de sentido vital.</p>
Derechos y opciones de los participantes del estudio
<p>Las participantes acceden voluntariamente al estudio, por ello tienen derecho de abandonar el estudio en caso de necesitarlo. El abandono del estudio puede ser en cualquier momento, inicio, mitad o al final.</p> <p>Las participantes recibirán retroalimentación sobre las pruebas e intervenciones realizadas. Esto será enviado a sus correos electrónicos después de completar la post-prueba.</p>

Seguridad y Confidencialidad de los datos

Los datos serán mantenidos en confidencialidad en una computadora portátil protegida con contraseña a la cual solamente yo, Daniela Ponce Strengé, tengo acceso y conocimiento. La computadora nunca se quedará en sola y al alcance de las participantes, tampoco podrán acceder otros terapeutas o personal de los centros de tratamiento. Todas las participantes son mayores de edad y dueñas de su información, ningún dato será revelado a terapeutas o familiares sin su consentimiento. La identidad de cada participante será protegida a través de la asignación de un código y así no usar nombres reales. Los códigos serán: A1, A2...A10, B11...B20.

Consentimiento informado

El consentimiento informado será entregado en la primera entrevista con las participantes. Será entregado por la investigadora y estará presente al llenarlo para responder cualquier duda y explicar claramente los contenidos del consentimiento. Posteriormente, lo firmarán y cada participante se llevará una copia. La entrega, explicación y forma del consentimiento se realizará en el centro de tratamiento, específicamente en el consultorio asignado para realizar el estudio.

Responsabilidades del investigador y co-investigadores dentro de este estudio.

Daniela Ponce Strengé es responsable de todas las implicaciones éticas, teóricas, procedimentales y terapéuticas que el estudio requiere.

Documentos que se adjuntan a esta solicitud (ponga una X junto a los documentos que se adjuntan)

Nombre del documento	Adjunto	Idioma	
		Inglés	Español
PARA TODO ESTUDIO			
1. Formulario de Consentimiento Informado (FCI) y/o Solicitud de no aplicación o modificación del FCI *	X		X
2. Formulario de Asentimiento (FAI)			
3. Herramientas a utilizar	X		X
4. Hoja de vida (CV) del investigador principal (IP)	X		X
SOLO PARA ESTUDIOS DE ENSAYO CLÍNICO			
5. Manual del investigador	X		X
6. Brochures	X		X
7. Seguros			
8. Información sobre el patrocinador			
9. Acuerdos de confidencialidad	X		X
10. Otra información relevante al estudio (especificar)			

(*) La solicitud de no aplicación o modificación del FCI por escrito debe estar bien justificada.

Cronograma de actividades

Descripción de la Actividad	Fecha	AÑO						
		1	2	3	4	5	6	7
Solicitar aprobación de los directores de ambos centros	01 20XX	X						
Una vez aprobado, reclutar participantes a través de un póster	01- 02 20XX	X						
Contacto inicial con participantes, se dará una explicación clara del estudio, entrega del consentimiento informado que se deben leer, llenar y firmar.	02 20XX	X						
Completar el test EDI-3 por primera vez	03 20XX	X						
Completar el PIL test por primera vez	03 20XX	X						
Una sesión de logoterapia individual por semana durante cuatro meses	04-08 20XX	X						
Completar el test EDI-3 por segunda vez	09 20XX	X						
Completar el PIL test por segunda vez	09 20XX	X						
Análisis de resultados	10 20XX	X						
Concluir trabajo de investigación	11 20XX	X						
Proveer retroalimentación del estudio a las participantes y directores	12 20XX	X						

Certificación

1. Certifico no haber recolectado ningún dato ni haber realizado ninguna intervención con sujetos humanos, muestras o datos. Sí () No ()
2. Certifico que los documentos adjuntos a esta solicitud han sido revisados y aprobados por mi director de tesis. Sí (X) No () No Aplica ()

Firma del investigador: Daniela Ponce Streng

Fecha de envío al Comité de Bioética de la USFQ: 25 de noviembre de 2015

Form 2: Informed consent



Comité de Bioética, Universidad San Francisco de Quito

**El Comité de Revisión Institucional de la USFQ
The Institutional Review Board of the USFQ**

Formulario Consentimiento Informado

Título de la investigación: The reduction of the symptomatology of Young-adult women diagnosed with anorexia nervosa through logotherapeutic interventions

Organización del investigador: Universidad San Francisco de Quito

Nombre del investigador principal Ingrid Daniela Ponce Streng

Datos de localización del investigador principal: 099xxxxxxxxx. Email: dxxxxxx@gmail.com.

Co-investigadores: no aplica

DESCRIPCIÓN DEL ESTUDIO	
Introducción	<p>Este formulario incluye un resumen del propósito de este estudio. Usted puede hacer todas las preguntas que quiera para entender claramente su participación y despejar sus dudas. Para participar puede tomarse el tiempo que necesite y decidir si participar o no.</p> <p>Usted ha sido invitado a participar en una investigación sobre la aplicación de Logoterapia en pacientes jóvenes-adultas diagnosticadas con anorexia nervosa porque cumple con el rango de edad solicitado, posee el diagnóstico clínico de anorexia nervosa y está recibiendo un tratamiento en modalidad de internamiento.</p>
Propósito del estudio	<p>Determinar si las intervenciones de logoterapia (búsqueda de significado y propósito en la vida) reducen los síntomas de la anorexia.</p>
Descripción de los procedimientos	<p>El estudio durará cuatro meses los cuales iniciarán desde la primera entrevista con la investigadora.</p> <p>En la primera entrevista se hará una explicación clara y detallada sobre el estudio, el rol de cada participante, sus derechos y compromisos, y el manejo de confidencialidad y seguridad. También se entregará el consentimiento informado, el cual cada voluntaria deberá llenar, firmar y entregar a la investigadora.</p> <p>En el segundo y tercer contacto se completarán dos tests para la pre-prueba: propósito de vida y el inventario de desórdenes alimenticios.</p> <p>Siguiente, iniciarán las sesiones de logoterapia con cada participante, serán dos veces por</p>

semana y los temas que se trabajen dependerán plenamente en cada voluntaria y así evitar incomodidad.

Al finalizar los cuatro meses de sesiones, se tomarán nuevamente los dos tests del inicio. Esto se denomina post-prueba y se realiza para evaluar si hay cambios con los resultados iniciales.

Riesgos y beneficios

Beneficios: reducir la sintomatología de anorexia a través de la búsqueda de significado personal

Aumentar la motivación para el tratamiento, lograr mejoría en menor tiempo y mantenerla a corto y largo plazo. Se espera mejorar respuesta a experiencias adversas o dolorosas

Riesgos: Desestabilización de participante durante las intervenciones como consecuencia de la anorexia. En este caso la paciente deberá salir del estudio para recibir la intervención médica, nutricional y/o psicológica requerida.

Es posible que una pregunta o comentario en sesión incomode a alguna participante. No obstante, la terapeuta está capacitada para trabajarlo en sesión y disminuir el malestar.

Confidencialidad de los datos

1) La información que nos proporcione se identificará con un código que reemplazará su nombre y se guardará en un lugar seguro donde solo el investigador tendrá acceso.

2) Su nombre no será mencionado en los reportes o publicaciones.

3) El Comité de Bioética de la USFQ podrá tener acceso a sus datos en caso de que surgieran problemas en cuanto a la seguridad y confidencialidad de la información o de la ética en el estudio.

Derechos y opciones del participante

Usted puede decidir no participar y puede retirarse del estudio cuando lo desee,

Usted no recibirá ningún pago ni tendrá que pagar absolutamente nada por participar en este estudio.

Información de contacto

Daniela Ponce Streng. Telf. 09XXXXXX correo electrónico: dXXXXXX@gmail.com

Si usted tiene preguntas sobre este formulario puede contactar al Dr. William F. Waters, Presidente del Comité de Bioética de la USFQ, al siguiente correo electrónico: comitebioetica@usfq.edu.ec

Consentimiento informado	
<p>Comprendo mi participación en este estudio. Me han explicado los riesgos y beneficios de participar en un lenguaje claro y sencillo. Todas mis preguntas fueron contestadas. Me permitieron contar con tiempo suficiente para decidir participar y me entregaron una copia de este formulario de consentimiento informado. Acepto voluntariamente participar en esta investigación.</p>	
Firma del participante	Enero de 20XX Fecha
Nombre del investigador que obtiene el consentimiento informado	
<u>Daniela Ponce Streng</u> Firma del investigador	Enero de 20XX Fecha

APPENDIX C: INSTRUMENTS

Eating disorders inventory-3 (EDI-3)

Sample of the EDI-1 (Garner, Marion & Polivy, 1983, p.30)

Multidimensional Eating Disorder Inventory

Appendix

EDI

Name: _____ Date: _____

Age: _____

Present Weight: _____ Height: _____ Sex: _____

Highest Past Weight: _____ (lbs)
(excluding pregnancy)

How Long Ago? _____ (months)

How Long Did You Weigh This? _____ (months)

Lowest Past Adult Weight: _____ (lbs)

How Long Ago? _____ (months)

How Long Did You Weigh This? _____ (months)

What Do You Consider Your Ideal Weight To Be? _____ (lbs)

Age at Which Weight Problem Began (if any) _____

Father's Occupation: _____

Instructions:

This is a scale which measures a variety of attitudes, feelings and behaviours. Some of the items relate to food and eating. Others ask you about your feelings about yourself. **THERE ARE NO RIGHT OR WRONG ANSWERS SO TRY VERY HARD TO BE COMPLETELY HONEST IN YOUR ANSWERS. RESULTS ARE COMPLETELY CONFIDENTIAL.** Read each question and place an (X) under the column which applies best for you. Please answer each question very carefully. Thank you.

- | ALWAYS | USUALLY | OFTEN | SOMETIMES | RARELY | NEVER | |
|--------|---------|-------|-----------|--------|-------|---|
| () | () | () | () | () | () | 1. I eat sweets and carbohydrates without feeling nervous. |
| () | () | () | () | () | () | 2. I think that my stomach is too big. |
| () | () | () | () | () | () | 3. I wish that I could return to the security of childhood. |
| () | () | () | () | () | () | 4. I eat when I am upset. |

Purpose in life (PIL)

By Crumbaugh & Maholik, (1964); Spanish version by Almada, R. (2011, p.1-4):

1. Yo estoy comúnmente:

1	2	3	4	5	6	7
Totalmente aburrido			(neutral)			Exuberante Entusiasta

2. La vida para mí:

1	2	3	4	5	6	7
Completa rutina			(neutral)			Siempre excitante

3. En la vida yo tengo:

1	2	3	4	5	6	7
Ninguna meta o aspiración			(neutral)			Metas y aspiraciones claras

4. Mi existencia personal es:

1	2	3	4	5	6	7
Totalmente vacía, sin fin			(neutral)			Llena de sentido con un fin determinado

5. Cada día es:

1	2	3	4	5	6	7
Exactamente lo mismo			(neutral)			Completamente nuevo

6. Si yo pudiera elegir:

1	2	3	4	5	6	7
Elegiría no haber nacido			(neutral)			Me gustaría tener nueve vidas iguales a esta

7. Después de jubilarme, yo quisiera

1	2	3	4	5	6	7
Vaguear el resto de mi vida			(neutral)			Hacer alguna de las cosas excitantes que he querido siempre

8. En la ejecución de mis propósitos en mi vida, yo:

1	2	3	4	5	6	7
No he hecho ningún progreso			(neutral)			He progresado hasta cumplir su ejecución

9. Mi vida está:

1	2	3	4	5	6	7
Vacía llena solo con desesperanza			(neutral)			Desarrollándose con sucesos buenos y excitantes

10. Si yo muriera hoy, sentiría que mi vida ha sido:

1	2	3	4	5	6	7
Completamente inútil			(neutral)			Muy valiosa

11. Pensando en mi vida, yo:

1	2	3	4	5	6	7
A menudo me pregunto por qué existo			(neutral)			Siempre veo una razón para mi existencia

12. Viendo el mundo en relación a mi vida:

1	2	3	4	5	6	7
Me confunde completamente			(neutral)			Se adapta significativamente a mi vida

13. Yo soy una persona:

1	2	3	4	5	6	7
Muy irresponsable			(neutral)			Muy responsable

14. En cuanto a la libertad del hombre para hacer sus propias elecciones, yo creo que el hombre es:

1	2	3	4	5	6	7
Completamente sujeto a las limitaciones de la herencia y del medio ambiente			(neutral)			Absolutamente libre para hacer todas las elecciones de su vida

15. Con respecto a morir, yo estoy:

1	2	3	4	5	6	7
Temeroso y no preparado			(neutral)			Preparado y sin temor

16. Con respecto al suicidio, yo:

1	2	3	4	5	6	7
He pensado en él seriamente como un escape			(neutral)			Nunca lo pensé dos veces

17. Yo he considerado mi habilidad para encontrar un sentido, propósito o misión en la vida como:

1	2	3	4	5	6	7
Prácticamente ninguna			(neutral)			Muy grande

18. Mi vida está:

1	2	3	4	5	6	7
Fuera de mis manos y controlada por externos			(neutral)			En mis manos y yo la controlo

19. Enfrentar mis tareas diarias es:

1	2	3	4	5	6	7
Una penosa y aburrida experiencia			(neutral)			Una Fuente de satisfacción

20. Yo he descubierto:

1	2	3	4	5	6	7
Ninguna misión en mi vida			(neutral)			Definidas metas y un propósito de vida satisfecho