AMERICAN UNIVERSITY OF BEIRUT

# PREDICTORS OF DISORDERED EATING PATTERNS AMONG SELF-IDENTIFIED GAY AND BISEXUAL MEN IN LEBANON

by
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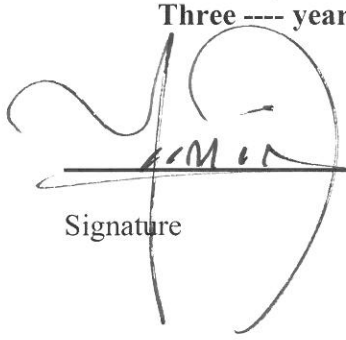

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# AN ABSTRACT OF THE THESIS OF

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As an oppressed population, lesbian, gay, and bisexual individuals have shown to be significantly more likely to experience an increased risk for mental disorders. Disordered eating patterns in specific have shown to be greatly prevalent among gay and bisexual men in comparison to heterosexual men, and this finding has shown to be consistent in the literature. In contrast, findings regarding the prevalence of disordered eating patterns among lesbian and bisexual women have shown to be mixed suggesting that sexual orientation acts as a greater risk factor for disordered eating among men than women. Mounting literature in the West has examined the factors that contribute to and those that protect against the development of disordered eating patterns among gay and bisexual men. With no literature exploring disordered eating patterns among sexual minority men in Lebanon and the Middle East as a whole, this study aimed at examining and understanding the predictors of disordered eating patterns among Lebanese self-identified gay and bisexual men. With the exception of positive minority identity, shame-proneness, and guilt-proneness, we selected predictors that have been theoretically linked to disordered eating patterns among gay and bisexual men in the literature. These variables included self-objectification, body dissatisfaction, and a sense of connectedness to the LGB community. One hundred forty-seven self-identified gay and bisexual Lebanese male adults were surveyed for the present study. A hierarchical multiple regression analysis controlling for age, sexual orientation, education, socioeconomic status, and religious affiliation identified self-objectification and shame-proneness as significant predictors of disordered eating patterns. The findings emphasize the clinical implications of targeting these factors when tackling and providing interventions that address disordered eating symptomatology among the gay and bisexual male population in Lebanon.

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# CHAPTER I

# INTRODUCTION

## A. Homosexuality Within the Lebanese Context

Before the year of 1973, homosexuality was classified as a mental disorder in the Diagnostic and Statistical Manual of Mental Disorders (DSM). In the revised version of the third edition of the DSM, homosexuality was removed as a result of advocates supporting the notion that the external and internal stressors that lesbian, gay, and bisexual (LGB) individuals experience due to their stigmatized sexual orientations rather than homosexuality per se are what result in these individuals' inability to function. As a result, western cultures have displayed greater awareness of and acceptance towards homosexuality and thus a positive shift in attitudes towards non-heterosexual orientations (Savin-Williams, 2008).

Middle Eastern cultures, on the other hand, continue to treat homosexuality as a pathological, sinful, and unnatural orientation (Mccormick, 2006; Moussawi, 2008). As a result, there is minimal information regarding the lives, experiences, and wellbeing of LGB individuals in such cultures (Wagner et al., 2013). In Lebanon, homosexuality is regarded as a crime where Article 534 of the Lebanese legal system states that "any sexual intercourse contrary to the order of nature is punishable by up to one year in prison" (Human Rights Watch, 2013). Despite the fact that homosexuality and same-sex intercourse were not specifically identified as practices contrary to the order of nature within the code, LGB individuals continue to be persecuted and thus legally punished

for their sexuality in Lebanon. LGB individuals in Lebanon thus experience high incidents of discrimination, harassment, and violence and find it hard to report such incidents in fear of being imprisoned for their unaccepted, pathologized sexual orientations (Murdock, 2011). As a result, LGB individuals continue to live in fear in countries such as Lebanon due to the absence of laws that support and thus protect them in addition to the Lebanese authority's use of the abovementioned vaguely worded law to prosecute them.

However, in contrast to other Middle Eastern cultures, there is a noticeable increase in the number of individuals that identified with their homosexual orientations rather than concealing it by claiming to be of the socially accepted heterosexual orientation (Mccormick, 2006). This is due to the positive shift in attitudes towards homosexuality that has been seen by the Lebanese themselves. A number of nongovernmental organizations, such as Helem, MOSAIC, and Marsa, have advocated for the rights of LGB individuals in Lebanon by normalizing their nonconforming sexual orientations and working on raising awareness of HIV testing as well as providing affordable and anonymous HIV testing services. Furthermore, numerous incidents in favour of the rights of LGB individuals have taken place in the Lebanese courts. In 2007, Judge Mounir Suleiman disputed that homosexuality was, as Article 534 states, "contrary to the order of nature" and halted an investigation that was being made of two gay men who were arrested under Article 534 (Benoist, 2014). Judge Suleiman stated that the social mores of the time are what cause homosexuality to be seen as unnatural resulting in the broad and vague wording of the code to apply to and

thus allow for the prosecution of LGB individuals. In 2011, a Lebanese judge in Batroun negated the application of Article 534 on homosexuals. In 2014, Judge Naji Al-Dahdah threw out a prosecution against a Lebanese transgender female for having, as reported, "unnatural sexual intercourse" with a man (Benoist, 2014). Recently, in 2017, Judge Rabih Maalouf argued against the legal basis of the arrest of a man for carrying out same-sex sexual intercourse. He referred to homosexuality as a personal choice rather than a criminal offence. He relied on Article 183, a penal code that protects freedom of expression and that states that "an act undertaken in exercise of a right without abuse shall not be regarded as an offence", to support his claim. According to Judge Maalouf, homosexuality is a personal choice that one makes without harming others. He added that same-sex sexual intercourse is consented by both participants, and thus in accordance with article 183, there is no crime in such a case since no harm is being done. In addition, both the Lebanese Psychiatric Society (LPS) as well as the Lebanese Psychological Association (LPA) declassified homosexuality as a mental disorder in 2013 and stated that it does not need to be treated (Kerbage, 2014a; 2014b). According to members of the LPS, "homosexuality in itself does not cause any defect in judgment, stability, reliability, or social and professional abilities." The LPS discredited conversion therapy, a therapeutic approach that aims at converting homosexual and bisexual men and women to heterosexual individuals, for its lack of scientific grounding and urged mental health professionals to "rely only on science" when working with non-heterosexual individuals. Lebanon has thus shown to be the first Arab country to make such declarations as well as reduce the stigma associated with homosexuality.

Despite the noticeable and reported positive shift in attitudes towards homosexuality, Lebanese individuals continue to display a discriminative approach and lack of acceptance towards non-heterosexual orientations. Nasr and Zeidan (2015) surveyed 1,200 randomly selected Lebanese individuals regarding their beliefs and attitudes towards the LGBT community. The mean age of the participants was 37.28 and ranged from 18 to 64 with the majority being 25 to 34 years of age. The participants were from Beirut, Mount Lebanon, Bekaa, the north as well as the south of Lebanon. The findings revealed that 64.6% of the sample felt that homosexuals should not be accepted into society and that 75.9% of the sample disagreed that it would be beneficial for society to recognize homosexuality as normal. Additionally, 81.2% of the sample reported believing that homosexuality was abnormal and unnatural with 79.5% of the sample disagreeing with the claim that it is a natural expression of sexuality. Furthermore, 66.3% of the sample reported perceiving homosexuals as a threat to society, and 72% of the sample reported a strong opposition towards having meeting places for homosexuals. 82.2% of the sample reported viewing homosexuals as a threat to the traditional family with 85.1% of the sample reporting that homosexuality is endangering the institution of the family. 60.7% of the respondents reported that they disagreed with the decision of the LPS of removing homosexuality from its list of disorders with 79% of the respondents believing that homosexuality is a hormonal illness and that homosexuals should receive psychological or hormonal treatment. The results also revealed that a majority of the sample had the tendency to avoid homosexuals as much as possible with slightly more than half of the sample claiming

that they would feel nervous if an individual who appeared as homosexual was next to them in public. As such, homosexuals continue to be marginalized in Lebanon regardless of the growing movements that have been made in order to relieve them of any form of discrimination and ensure that they receive their human and legal rights.

**B. Mental Health Among the LGB Population**

Mounting research has shown that there exist differences in the prevalence of mental health issues between LGB and heterosexual individuals. Numerous studies on mental health morbidity among LGB individuals have shown that LGB individuals are more likely to experience excess risk for mental disorders including major depression, anxiety disorders, and panic disorders as well as suicidal ideations, attempts, and completions in comparison to heterosexual individuals (Cochran & Mays, 2009; Cochran, Sullivan, & Mays, 2003; Frisell, Lichtenstein, Rahman, & Langstrom, 2010; Ghorayeb & Dalgalarrondo 2010; Gilman et al., 2001; Kuyper & Fokkema, 2011; Sandfort, de Graaf, Bijl, & Schnabel, 2001). For example, Cochran and Mays (2000a; 2000b) found that in the United States, men with same-sex sexual partners reported higher rates of panic attacks, affective disorders, and symptoms of depression than men with opposite-sex sexual partners. Alcohol and drug dependency were more prevalent among lesbian and bisexual women in comparison to their heterosexual peers. Furthermore, homosexual men and women were likely to have comorbidities of substance use disorders, mood disorders, and anxiety disorders, have an early age of onset of the aforementioned disorders, and seek psychotherapy, mental health services,

or psychiatric medication to a significantly greater extent than heterosexual individuals (Cochran & Mays 2000a; 2000b; Ghorayeb & Dalgalarrondo, 2010; Gilman et al., 2001). The study also found that men with same-sex sexual partners were five times more likely than those with opposite-sex sexual partners to have attempted suicide (Ghorayeb & Dalgalarrondo, 2010).

Cochran, Sullivan, and Mays (2003) found that gay and bisexual Californian men reported higher rates of major depression, panic disorder, and psychological distress than heterosexual Californian men whereas lesbian and bisexual Californian women displayed greater symptoms of generalized anxiety disorder than heterosexual Californian women. On the other hand, Frisell, Lichtenstein, Rahman, and Langstrom (2010) found that both Swedish men and women with same-sex sexual partners showed to be at greater risk for the development of generalized anxiety disorder as well as depression than those with opposite-sex sexual partners. Additionally, Swedish men with same-sex sexual partners reported higher rates of eating disorders in comparison to those with opposite-sex sexual partners.

Interestingly, there were mixed findings regarding the differences in the prevalence of eating disorder symptomatology between LGB and heterosexual individuals (Cella, Iannaccone, Asclone, & Cotrufo, 2010; Feldman & Meyer, 2007; Mathews, Ewald, & Zulig, 2004). A number of studies found no differences in eating disorder symptoms between lesbian, bisexual, and heterosexual women (Cella et al., 2010; Feldman & Meyer, 2007; Frisell et al., 2010; Mathews et al., 2004) suggesting that lesbian and bisexual women are not immune to the societal body image

expectations set for women (Feldman & Meyer, 2007). Other studies found significant differences in eating disorder symptoms among lesbian, bisexual, and heterosexual women with lesbian and bisexual women reporting significantly greater eating disorder symptoms than heterosexual women (Hadland, Austin, Goodnew, & Calzo, 2014; Shearer et al., 2015). The findings regarding the prevalence of disordered eating among homosexual and bisexual men have shown to be consistent in the literature with gay and bisexual men displaying greater disordered eating patterns in comparison to heterosexual men (Cella et al., 2010; Feldman & Meyer, 2007; Hadland et al., 2014; Mathews et al., 2004; Shearer et al., 2015; Russell & Keel, 2001; Williamson & Hartley, 1998; Yager et al., 1988). These findings thus suggest that the predictors of eating disorder symptomatology differ for sexual minority men than women or that the same predictors might play out differently among gay and bisexual men than lesbian and bisexual women. The present study therefore focused on exploring the predictors of disordered eating patterns among men that identify as gay and bisexual to understand the risk factors of and protective factors against the disruptive feelings, attitudes, and behaviours towards eating that the population under study has continuously been found to engage in as per the literature. Furthermore, with the prevalence of disordered eating among sexual minority men being exclusively studied within the West, the present studied aimed at examining self-identified gay and bisexual men within Lebanon due to the lack of literature pertaining to the topic under study within the Middle East.

Before delving into the literature, it is important to note that the terms gay and homosexual have been used interchangeably in the literature. However, after extensive

research, the term gay showed to be the most widely used term to address individuals who are romantically attracted to, sexually attracted to, or sexually active with individuals of the same gender in the literature. Moreover, the Committee on Lesbian and Gay Concerns (CLGC) published a document titled "CLGC Nomenclature Guidelines for Psychologists" that reported that lesbian and gay are the preferred terms to homosexual when referring to specific individuals or groups because the term homosexual perpetuates negative stereotypes due to its associations with pathology and criminality in history (Committee on Lesbian and Gay Concerns, 1991). As such, the term gay was used throughout this paper to address the population under study.

# CHAPTER II

# LITERATURE REVIEW

## A. Disordered Eating Patterns

According to the DSM-5, feeding and eating disorders include pica disorder, rumination disorder, avoidant/restrictive food intake disorder, anorexia nervosa, bulimia nervosa, and binge-eating disorder. None of the mentioned disorders, with the exception of pica, can be assigned in the presence of any other feeding and eating disorder since they differ significantly in terms of clinical course, outcome, and treatment needs (American Psychiatric Association, 2013). All six disorders have common psychological and behavioural features referred to as disordered eating patterns (Mintz & O'Halloran, 2000).

Disordered eating patterns are considered to be identifiers or symptoms characteristic of eating disorders (Garner, Olmsted, Bohr, & Garfinkel, 1982). They are characterized by persistent disturbances in eating or eating-related behaviours that result in an alteration in the consumption or absorption of food and thus a major impairment in one's physical health or psychosocial functioning (American Psychiatric Association, 2013). They are not characteristic of any specific eating disorder. Instead, they represent undifferentiated eating disorders and are thus symptoms that are common among the six abovementioned feeding and eating disorders. They include one's feelings, attitudes, and behaviours that are related to food and eating (Mintz & O'Halloran, 2000) and thus act as risk factors for the development of a full-blown eating disorder. Screening for

disordered eating patterns can thus aid in identifying individuals that may be at risk of developing a full-blown eating disorder (McBride, McManus, Thompson, Palmer, & Brugha, 2013). It is therefore essential to identify disordered eating patterns as a first step in screening for and eventually diagnosing a specific eating disorder.

Disordered eating patterns have been associated with a variety of serious psychological consequences (Crow, 2005). For example, disordered eating symptoms have shown to be associated with impairments in role functioning within multiple domains including family, work, personal life, and social life (Hudson, Hiripi, Pope, & Kessler, 2007). Moreover, disordered eating attitudes have shown to be related to an increase in negative affect in addition to a decrease in interpersonal competence, quality of life, and general satisfaction (Niemeier, 2003). Thus, disordered eating patterns can result in an impairment in functioning in multiple domains including but not limited to those pertaining to social, interpersonal, and daily functioning.

**B. Disordered Eating Patterns Among Gay and Bisexual Men**

As mentioned earlier, the findings that gay and bisexual men in comparison to heterosexual men are more vulnerable to developing disordered eating symptoms and eventually full blown eating disorders have shown to be consistent in the literature (Cella et al., 2010; Feldman & Meyer, 2007; Hadland et al., 2014; Mathews et al., 2004; Shearer et al., 2015; Russell & Keel, 2001; Williamson & Hartley; 1998; Yager et al., 1988). For example, Yager et al. (1988) found that gay and bisexual male students at the University of California, Los Angeles (UCLA) highly reported past or present problems

of binge eating, the use of diuretics, feeling terrified of being fat, and feeling fat despite other's perceptions in comparison to heterosexual men. Furthermore, Williamson and Hartley (1998) found that British men that identified as gay scored significantly greater on all of the eating disturbances measures and were more likely to develop pathological eating attitudes than those that identified as heterosexual.

Russell and Keel (2001) assessed the relationship between possessing a gay identity and eating pathology as well as psychological distress in general. Gay men reported greater disordered eating behaviors even when controlling for general psychological distress that was determined by factors including discomfort with one's sexual orientation, depression, and self-esteem. The results suggest that homosexuality in men acts as a specific risk factor for disordered eating rather than a general risk factor for psychological distress. Similarly, Cella, Iannaccone, Asclone, and Cotrufo (2010) found that in Southern Italy, gay men were more likely to engage in disordered eating behaviours and have negative attitudes towards eating and their bodies than their heterosexual peers.

In addition to gay men, Shearer et al. (2015) examined disordered eating symptoms among bisexual adolescent and young adult men. Both gay and bisexual men showed to have significantly greater disordered eating symptoms in comparison to heterosexual men suggesting that in addition to homosexuality, bisexuality acts as a risk factor for the development of disordered eating symptoms among men. Furthermore, Mathews-Ewald, Zulig, and Ward (2004) examined the prevalence of clinically diagnosed eating disorders that were identified as anorxia and bulimia nervosa as well

as disordered eating behaviours among LGB individuals in comparison to heterosexual men and women. According to the results, only gay and bisexual men were likely to report either a clinical diagnosis of one of the abovementioned eating disorders or carrying out disordered eating behaviours to a significantly greater extent than heterosexual men. These findings were also evident in Feldman and Meyer's (2007) study that examined the prevalence of full syndrome eating disorders and subclinical eating disorders among gay and bisexual men in New York City. Lifetime full-syndrome bulimia and any subclinical eating disorder showed to be more prevalent among gay and bisexual men than heterosexual men.

Moreover, Hadland, Austin, Goodenow, and Calzo (2014) examined the differences in the perception of weight-status as well as the prevalence of disordered eating patterns among adolescents that identified as LGB, self-identified heterosexual adolescents with same-sex partners, and exclusively heterosexual adolescents. Adolescents that identified as LGB and those that self-identified as heterosexual but have same-sex partners were categorized as sexual minority. Disordered eating patterns were measured through items that assessed unhealthy weight control behaviours including fasting, vomiting, and consuming laxatives as well as diet pills, powders, or liquids. Self-perceived weight status was measured through the comparison of the participants' Body Mass Indices (BMI's) with the participants' own perception of their weight. The results revealed that sexual minority adolescent men were more likely than exclusively heterosexual adolescent men to perceive themselves as overweight despite their BMI indicating their weight status as healthy or underweight.

A theory explaining the high prevalence of disruptive eating patterns among gay and bisexual men is the increased pressure of maintaining a thin physique in order to attract male partners (Epel, Spanakos, Kasl-Godley, & Brownell, 1996; Russell & Keel, 2001). Similar to heterosexual women, gay and bisexual men aim to attract men and thus experience the stress of attaining the thin body ideal that is socially believed to be of interest to men (Feldman & Meyer, 2007). Gay and bisexual men thus internalize the thin body ideal and integrate it into their sense of self. Their belief that their external appearance is what will allow them to attain a male partner overshadows their feelings of self-worth and becomes a significant aspect that defines who they are. Furthermore, appearance has been shown to be of importance within the gay male community (Atkins, 1998; Bronski, 1997; Grogan, 1999; Williamson, 2000). Gay and bisexual men are accepted as part of the gay male community if their external appearance meets a certain criteria. This criteria, as prescribed by the gay male community, goes in line with the thin body ideal that society has prescribed for heterosexual women. The criteria also incorporate a muscular physique that is attained through strict and thus abnormal eating habits. As such, in order to attain acceptance from and become part of their minority group, gay and bisexual men strive to achieve the outer bodily appearance that is highly regarded by the gay male community and thus resort to rigid eating patterns (Davids & Green, 2011).

Another theory explaining the association between disruptive eating patterns and sexuality among men is the increased feminine gender role identification experienced by gay and bisexual men (Murnen & Smolak, 1997; Russell & Keel, 2001).

Gay and bisexual men have been shown to identify with the female gender to a greater extent than the male gender. As such, gay and bisexual men are susceptible to similar factors that contribute to their act of engaging in disruptive eating habits as women. This explains the similar rates of eating disorder symptomatology among gay and bisexual men as well as heterosexual women. With that being said, in addition to examining predictors of disordered eating patterns that have been studied among gay and bisexual men in the literature, the present study explored the association between factors that have not been studied in relation to disordered eating patterns among gay and bisexual men but have been studied among heterosexual women.

### C. Predictors of Disordered Eating Patterns

A great deal of the literature has addressed and examined the predictors of disordered eating patterns among heterosexual women with the rationale that heterosexual women are the most vulnerable to developing disturbed eating attitudes and partaking in disruptive eating behaviours (Slevec & Tiggemann, 2011). With the evident high prevalence of disordered eating symptomatology among gay and bisexual men, a growing body of literature in the West has been dedicated to understanding the numerous factors that could be linked to sexual minority men's inclination towards developing disordered eating patterns. Despite the publication of books and articles regarding the lives and wellbeing of Lebanese LGB individuals (Wagner et al., 2013), researchers have neglected to study how disordered eating patterns play out among this population in Lebanon and the Middle East as a whole. Therefore, the aim of the current

study was to explore the predictors of disordered eating patterns among Lebanese self-identified gay and bisexual men. The following predictors were examined in this study: self-objectification, body dissatisfaction, shame-proneness, guilt-proneness, positive minority identity, and a sense of connectedness to the LGB community. These variables, with the exception of shame-proneness, guild-proneness, and positive minority identity, have been linked to disordered eating patterns among gay and bisexual men in the literature.

### *1. Self-Objectification*

The objectification theory suggested by Fredrickson (1997) posits that heterosexual women are vulnerable to viewing their bodies as sexual objects and thus believe that they are treated as a body or a collection of body parts rather than human beings. They perceive their existence to be for the sole purpose of being used by or pleasing men and hence identify themselves as mere instruments. As a result, heterosexual women are greatly influenced by the male prescribed societal and cultural views of what is considered to be the ideal body image due to their belief that their bodies and physical appearances solely define their sense of self. Such an ideal body image is considered to be unobtainable and thus impacts women's self-esteem, eating patterns, and their attitudes towards food and eating.

Mounting research has demonstrated that self-objectification acts as a risk factor for disordered eating patterns among women (Greenleaf & McGreer, 2006; Prichard & Tiggemann, 2005). For example, Greenleaf and McGreer (2006) found that

both physically active and sedentary women high on self-objectification reported greater disordered eating suggesting that self-objectification acts as a direct predictor of disruptive eating attitudes and behaviours among women. Prichard and Tiggemann (2005) investigated the corollaries of self-objectification among female aerobic instructors and participants in South Australia. The results showed that self-objectification was significantly linked to disordered eating symptomatology in addition to body dissatisfaction such that increases in self-objectification led to increases in both symptoms of eating disorders and levels of dissatisfaction towards one's body.

According to Feldman and Meyer (2007), the objectification theory provides an explanation for the high prevalence of disordered eating patterns among gay and bisexual men and can thus be applied to this population. Similar to heterosexual women and as mentioned previously, gay and bisexual men aim to attract men. Gay and bisexual men are thus subject to the pressures and demands that heterosexual women experience and may similarly view themselves as sexual objects, leading them to place greater emphasis on their bodily appearance and thereby self-objectify. This has shown to be evident in the literature. For example, Gettelman and Thompson (1993) assessed levels and stereotypical conceptions of body image disturbances among gay and heterosexual men in Florida and found that gay men showed to be more appearance-oriented than heterosexual men. Furthermore, Siever (1994) investigated beliefs pertaining to the significance of physical attractiveness among gay, lesbian, and heterosexual male and female students at the University of Washington (UW) and Seattle Central Community College (SCCC). The results confirmed the researcher's

hypothesis that gay men and heterosexual women display the strongest beliefs pertaining to the significance of their own physical attractiveness in comparison to lesbian women and heterosexual men. In a study directly assessing self-objectification, Martins, Tiggermann, and Kirkbride (2007) found that in South Australia, gay men scored higher on measures of self-objectification than heterosexual men. Similarly, Kozak, Frankenhauser, and Roberts (2009) found that gay men self-objectified and objectified others to a significantly greater extent than heterosexual men.

Similar to heterosexual women, self-objectification has been found to act as a risk factor of disruptive eating patterns among sexual minority men (Martins, Tiggermann, & Kirkbride, 2007; Serpa, 2004; Serpa & Garbanati, 2003; Wiseman & Moradi, 2010). In a pilot study, Serpa and Garbanati (2003) found that self-objectification predicted a drive for thinness and bulimic attitudes and behaviours among a sample of gay men. Moreover, Serpa (2004) and Wiseman and Moradi (2010) found that self-objectification positively predicted eating disorder symptomatology among both gay and bisexual men. In an experimental study, Martins et al. (2007) examined the effect of self-objectification on eating behaviours among a sample of 57 gay and 68 heterosexual men in South Australia. The researchers manipulated the salience of self-objectification by inducing a self-objectifying condition. The participants were randomly assigned to either one of two conditions: wearing a speedo (high self-objectification inducing situation) or wearing a sweater (low self-objectification inducing situation) in front of a mirror. In both conditions, participants were presented with snacks to eat. The findings showed that only gay men reported

restricted eating in the speedo condition in comparison to the sweater condition. The heterosexual male participants showed no differences in terms of restricted eating in either of the two conditions.

In conclusion, gay and bisexual men have been shown to place great emphasis on their physical appearance and thus self-objectify to a similar extent as heterosexual women. This has been explained as resulting from their vulnerability to the male prescribed ideal body image that is, in turn, due to their desire to attract men. As such, gay and bisexual men resort to disordered eating patterns as a means of achieving the male desired body image. Research has shown that an evident link exists between self-objectification and disordered eating patterns among gay and bisexual men such that greater self-objectification is associated with greater disordered eating patterns (Martins et al., 2007; Serpa, 2004; Serpa & Garbanati, 2003; Wiseman & Moradi, 2010). With no literature addressing this association among gay and bisexual men in Lebanon and the Middle East as a population in specific, the present study investigated the relationship between self-objectification and disordered eating patterns among Lebanese self-identified gay and bisexual men.

### *2. Body Dissatisfaction*

Body dissatisfaction is characterized by one's subjective and negative evaluations of his or her own physical appearance and bodily features including figure, weight, stomach, and hips (Stice & Shaw, 2002). Prevalence rates of body dissatisfaction have been shown to be significantly higher among women than men

(Calzo et al., 2012; Fallon, Harris, & Johnson, 2014; Frederick, Jafary, Gruys, & Daniels, 2012; Neumark-Sztainer, Paxton, Hannan, Haines, & Story, 2006; Rodin et al., 1984; Tantleff-Dunn, Barnes, & Larose, 2011). As mentioned, gay and bisexual men share similar concerns as heterosexual women in terms of their bodily appearances. Thus similar to heterosexual women and in contrast to heterosexual men, gay and bisexual men report a heightened dissatisfaction and negative attributions towards their bodies (Peplau et al., 2008).

Russell and Keel (2001) found gay men to report significantly greater dissatisfaction towards their bodies than heterosexual men. Cella et al. (2010) found that gay men and heterosexual women did not differ significantly in terms of the level of body dissatisfaction they experienced. However, both gay men and heterosexual women scored significantly higher than heterosexual men on measures of body dissatisfaction. Due to the minimal literature addressing bisexual individuals, Davids and Green (2011) examined levels of body dissatisfaction among a sample of gay, bisexual, and heterosexual men across the United States. The results showed that bisexual men did not differ significantly from gay men in terms of body dissatisfaction but that both bisexual and gay men reported significantly greater negative attributions towards their bodies in comparison to heterosexual men.

Conceptualizations of eating disorders including the DSM criteria required for the diagnosis of an eating disorder make reference to body dissatisfaction (Polivy & Herman, 2002). Body dissatisfaction has thus been included as one of the eight subscales of the Eating Disorder Inventory (EDI), a self-report questionnaire that is

widely used in research and clinical settings to assess for the presence of eating disorders. It is therefore evident that body dissatisfaction is associated with eating disorder symptomatology as well as subclinical eating problems. This link has been supported in the literature, especially among women (Attie & Brooks-Gunn, 1989; Johnson & Wardle, 2005; Polivy & Herman, 2002). For example, in a longitudinal study, Attie and Brooks-Gunn (1989) examined the development of eating problems as a function of body image perception among a sample of middle-school girls in New York City at two time intervals that were two years apart. At both times, eating problems were found to be associated with negative body attributions. Furthermore, Johnson and Wardle (2005) examined whether emotional eating, binge eating, and abnormal attitudes to eating and weight were associated with the variables of dietary restraint and body dissatisfaction among a sample of 1,177 female adolescents in the North West of England and found body dissatisfaction to be the only variable to predict all three forms of disruptive eating patterns in comparison to dietary restraint.

Body dissatisfaction has also been shown to predict disordered eating patterns among gay and bisexual men (Williamson & Hartley, 1998; Yean et al., 2013; Hospers & Jansen, 2005). For example, Williamson and Hartley (1998) examined eating disturbances and body dissatisfaction among gay and heterosexual men in Britain and found that the gay male participants scored greater on all measures of eating disturbances and displayed greater dissatisfaction towards their bodies in comparison to the heterosexual male participants. There showed to be a significant positive correlation between body dissatisfaction and eating disturbances among the gay male sample

suggesting that greater body dissatisfaction predicts greater eating disturbances. The relationship between body dissatisfaction and eating disturbances did not show to be significant among the heterosexual male sample. Similarly, Yean et al. (2013) found a strong positive association between body shape dissatisfaction and disordered eating among a gay male sample from universities and their surrounding areas in the mid-Atlantic United States. Furthermore, Hosper and Jansen (2005) examined the role of gender role orientation, peer pressure, self-esteem, and body dissatisfaction in relation to disordered eating symptoms among a sample of Dutch gay men and found body dissatisfaction to be the dominant predictor of disordered eating symptoms in comparison to the three other investigated factors.

In conclusion, gay and bisexual men have been shown to display significantly high levels of dissatisfaction towards their bodies. Body dissatisfaction has emerged as a direct predictor of disordered eating patterns among the male sexual minority population, and this is evident in the growing Western literature (Williamson & Hartley, 1998; Yean et al., 2013; Hospers & Jansen, 2005). Due to the lack of literature and understudying of gay and bisexual men in Lebanon, the current study investigated the link between body dissatisfaction and disordered eating patterns among Lebanese self-identified gay and bisexual men with the rationale that the two variables will be positively associated with one another.

### *3. Shame and Guilt-Proneness*

Shame and guilt are two emotions that have been characterized as self-conscious, moral, secondary to or derived from primary emotions such as fear and anger, and social in the literature (Tangney, Stuewig, Malouf, & Youman, 2013). The varying characteristics of these two emotions suggest that both shame and guilt have rich and various functions among human beings. Both terms have been used interchangeably and have thus been confused as synonymous. However, Helen Block Lewis (1971) emphasized the distinction between the two emotions. According to Lewis (1971), the difference lies in whether individuals place emphasis on themselves or their behaviours in response to failures or wrongdoings. When the focus is on the self, the individual is experiencing feelings of shame. When the focus is on the committed behaviour, the individual is experiencing feelings of guilt. These two situations thus give rise to different emotional experiences within the individual (Lewis, 1971).

Empirical research ranging from qualitative case studies (Lewis, 1971; Lindsay-Hartz, 1984; Lindsay-Hartz, de Rivera & Mascolo, 1995) to quantitative ratings of shame and guilt (Ferguson, Stegge & Damhuis, 1991; Tangney, 1993; Tangney, Miller, Flicker, & Barlow, 1996; Tracy and Robins, 2006; Wallbott & Scherer, 1995; Wicker, Payne & Morgan, 1983) has provided evidence for the self versus behaviour difference that exists between shame and guilt. For example, Tracy and Robins (2006) relied on both experimental and correlational methods to examine the antecedents of shame and guilt and found that internal, stable, and uncontrollable attributions for failures (i.e., depressive attributions) were highly associated with feelings of shame whereas internal, unstable, controllable attributions for failures (i.e.,

behaviours) were highly associated with feelings of guilt. Such studies have highlighted the distinctive emotional experiences that exist between shame and guilt and have shown that the emotions that develop as a result of shame and guilt significantly differ along cognitive, affective, and motivational dimensions.

a. Shame-Proneness

The word shame is derived from a variety of European words that literally translate to "to cover, to veil, to hide" (Wurmser, 1981). The literal meaning of the word is consistent with individual responses associated with shame including feeling exposed, avoiding eye contact, and wanting to hide or withdraw (Hartling, Rosen, Walker, & Jordan, 2004). The experience of shame presumes a watchful eye by a real or imagined audience. Shame-proneness has been defined from a self-evaluative perspective and has been described in the literature as an evaluative experience of the entire self rather than of one's behavior, a failure of being, a global sense of deficiency, or a failure to achieve one's ideas (Lewis, 1971). According to Tangney, Stuewig, Malouf, and Youman (2013), shame-proneness involves responses that are maladaptive, avoidant, and concealing resulting from stable, global, and negative attributions regarding the self.

Empirical research has found an evident link between shame-proneness and disruptions in mental health. Shame-proneness has been shown to be associated with low self-esteem, depression, and feelings of unworthiness and ambivalence (Kim, Thibodeau, & Jorgensen, 2011; Tanaka, Yagi, Komiya, Mifune, & Ohtsubo, 2015; Ward, 2014). For example, Ward (2014) examined the relationship between shame,

guilt, self-esteem, and social connectedness among Irish adults. The results showed high levels of shame to be associated with subsequent decreases in both self-esteem and social connectedness. Furthermore, a meta-analysis including a total subject pool of 22,411 participants examined 108 studies on the associations of shame-proneness with depression (Kim et al., 2011). Shame showed to have a significantly strong, positive association with depressive symptoms, such that greater proneness to shame predicted an elevation in depressive symptoms.

One of the emotional symptoms that individuals with eating disorders experience is excessive shame. Research has found shame-proneness to be associated with symptoms characteristic of eating disorders, mainly among women (Cesare et al., 2016; Hayaki, Friedman, & Brownell, 2002; Sanftner, Barlow, Marschall, & Tangney, 1995; Troop, Allan, Serpell, & Treasure, 2008). Sanftner, Barlow, Marschall, and Tangney (1995) found shame to be positively associated with eating disorder symptomatology among a sample of undergraduate women at a large east coast university suggesting that women who are highly prone to shame are vulnerable to developing eating disorder symptoms. Hayaki, Friedman, and Brownell (2002) found a significant positive relationship between shame and bulimia among female patients in the United States suggesting that higher levels of shame predicted higher levels of bulimic symptoms. Furthermore, Troop et al. (2008) found external shame in specific to predict greater levels of anorexic symptoms and internal shame to predict bulimic symptoms among a sample of women with a history of eating disorders in London. Moreover, Cesare et al. (2016) found that shame-proneness was significantly and

positively associated with the psychological components of eating disorders among female adults in Italy. In addition to women, Doran and Lewis (2012) found shame to be positively linked to eating disturbances among a diverse sample of men, the majority of whom were from Northern Ireland.

According to Jordan (2004), shame disempowers and isolates marginalized individuals, especially those that identify as LGB. Shaming allows heterosexuals to maintain power over LGB individuals and results in LGB individuals developing negative attributions regarding themselves and thus feelings of inadequacy. The literature has shown that shame predicts poor mental health among LGB individuals (Bybee, Sullivan, Zielonka, & Moes, 2009; Mereish & Poteat, 2015). For example, Bybee, Sullivan, Zielonka, and Moes (2009) found chronic shame to be associated with higher levels of depression among gay men in comparison to heterosexual men in the United States. Furthermore, Mereish and Poteat (2015) found that shame positively predicted anxiety, physical distress, and loneliness in addition to depression among LGB individuals in the United States.

There is no literature addressing the relationship between shame-proneness and disordered eating among gay and bisexual men as a population in specific. However, shame-proneness has emerged as a predictor of disordered eating among women. Gay and bisexual men have been shown to be vulnerable to similar risk factors of disordered eating as those that have been shown to affect women (e.g., self-objectification, body dissatisfaction). The current study thus explored shame-proneness as a predictor of disordered eating patterns among gay and bisexual men in Lebanon with the assumption

that shame-proneness will similarly act as a risk factor for the development of disordered eating patterns.

b. Guilt-Proneness

According to Tangney et al. (2013), guilt-proneness is the extent to which one negatively evaluates his or her own behaviours or failure to act in certain situations. The individual focuses mainly on the behaviour as well as the consequences of the behaviour rather than the self and ruminates over the undesired behaviour. Feelings of regret and the pain of remorse come hand in hand with the ruminations. The individual eventually begins to wish he or she had behaved differently or could magically undo what had been done. There is an element of self-relevance when one experiences feelings of guilt since the individual tends to develop a sense of responsibility for the outcome of the action or inaction. However, according to Tangney et al. (2013), the individual's sense of identity and feelings of self-worth remain intact during experiences of guilt.

Research has also found an association between guilt-proneness and mental health issues (Frank, 1991; Harder, Cutler, & Rockart, 1992; Roos, Hodges, & Salmivalli, 2014). For example, Frank (1991) found high levels of guilt to be related to depression among female undergraduate students at Harvard University. Furthermore, Harder, Cutler, and Rockart (1992) found that in addition to depression, guilt positively correlated with somatization, obsessive-compulsive symptoms, interpersonal sensitivity, anxiety, hostility, phobic anxiety, paranoid ideations, and psychoticism among a sample

of male and female undergraduate students in the United States. In a short-term longitudinal study, Roos, Hodges, and Salmivalli (2014) examined the relationship between guilt-proneness and reported prosocial behaviours and aggression among 395 Finnish early adolescent boys and girls and found guilt-proneness to simultaneously predict greater aggressive and lower prosocial behaviour.

Unlike shame-proneness, guilt-proneness has been shown to have a protective function (Tangney et al., 2013), particularly against the development of maladaptive and disruptive behaviours (Dearing, Stuewig, & Tangney, 2005; Kendall, Reinsmith, & Tangney, 2002). For example, a longitudinal study addressing the relationship between shame as well as guilt proneness and substance use among a student sample found that high levels of shame-proneness during the fifth grade predicted the use of heroin, uppers, and hallucinogens at the age of 18 (Kendall et al., 2002). On the other hand, those that reported high levels of guilt-proneness during the fifth grade were less likely to engage in the use of the same drugs at the age of 18. Furthermore, Dearing, Stuewig, and Tangney (2005) found shame-proneness to be positively associated with alcohol and drug abuse problems but guilt-proneness to be negatively associated with such problems.

As disordered eating patterns include a behavioural component, guilt-proneness' protective function is predicted to play out against the development of eating disorder symptomatology. This rationale is evident in the minimal research that has been done to address the relationship between guilt-proneness and eating disorder symptomatology (Bybee, Zigler, Berliner, & Merisca, 1996; Hunziker, 2005; Sanftner,

Barlow, Marschall, & Tangey, 1995). For example, Sanftner, Barlow, Marschall, and Tangey (1995) found that guilt-proneness was negatively associated with eating disorder symptoms among undergraduate women. This finding was also evident in Bybee, Zigler, Berliner, and Merisca's (1996) study that found greater proneness to guilt to predict less symptoms of eating disorders among a female sample. In contrast to these findings, Hunziker (2005) found guilt-proneness to not be related to eating disorder symptoms among female students at Midwestern University in Illinois. However, greater levels of guilt-proneness predicted lower levels of eating disorder symptoms among the male student sample.

There is little literature that has examined guilt-proneness among minority individuals. One study investigated the interrelations between guilt-proneness and problematic substance (i.e., alcohol and drug) use among LGB individuals in New York City (Hequembourg & Dearing, 2013). The results showed guilt-proneness to be negatively associated with problematic substance use, such that greater guilt-proneness predicted lower substance use. The findings suggest that guilt-proneness also plays a protective role against the development of disorderly behaviours among LGB individuals. However, further research is needed to arrive at such a conclusion.

Similar to shame-proneness, guilt-proneness has not been studied in relation to disruptive eating among the sexual minority population. With the literature suggesting that the predictors of disordered eating patterns among women function similarly on the development of disordered eating patterns among gay and bisexual men, guilt-proneness

was predicted to act as a protective agent against the development of disordered eating patterns among gay and bisexual men in a similar fashion as it does among women.

### *4. Positive Minority Identity*

Reynolds and Hanjorgiris (2000) posit that in order to adapt to the stresses pertaining to the stigma associated with possessing a sexuality that deviates from the societal expectations of a sexual identity, LGB individuals rely on two forms of coping resources: personal-level coping resources and group-level coping resources. A personal-level coping resource includes working on developing an identity as a member of an oppressed group. A group-level coping resource includes an affiliation or sense of connection with the larger collective LGB community. Both coping methods have shown to play a vital role in assisting LGB individuals adapt to the stigmatization they experience (Balsam & Mohr, 2007).

Theorists have begun to recognize what it means for minority individuals to achieve and eventually integrate a minority identity into their sense of self (Fassinger & Miller, 1996; Umaña-Taylor et al., 2004). Phinney (1990, p. 502-503) described the process of discovering and eventually developing an understanding of an individual's ethnic identity as "an often intense process of immersion in one's own culture through activities such as reading, talking to people, going to ethnic museums, and participating actively in cultural events." Those who have not closely examined their ethnic identity should make "efforts to learn more about [their] background and [develop] a clear understanding of the role of ethnicity for [themselves]" (Phinney, 1992, p. 116).

Likewise, stage model theorists of LGB identity development propose that individuals begin to explore what it means to be lesbian, gay, or bisexual once they develop an awareness of their same-sex attractions (Cass, 1979; Coleman, 1981; 1982; Rotheram-Borus & Langabeer, 2001). This results in these individuals' act of integrating what it means to be non-heterosexual into their global sense of self and thus the development of a sexual minority identity. The development of a positive minority identity is considered to be an important personal-level coping resource that helps LGB individuals adapt to the stigmatization that they are continuously subjected to by their heterosexual peers. The stigma may have a larger, detrimental impact on the health and well-being of LGB individuals if minority identity is considered to be secondary rather than prominent to their self-definition (Meyer, 2003). Developing a minority identity can strengthen LGB individuals allowing them to cope with and thus ameliorate the stress that accompanies the stigma associated to them.

a. Dimensions of Sexual Minority Identity

According to Mohr and Fassinger (2011), there are eight dimensions that comprise sexual minority identity. The first dimension is *acceptance concerns*, and it refers to the extent to which LGB individuals are aware of and sensitive to society's negative appraisals of their sexual orientations and same-sex attractions in addition to the degree to which they experience anxious expectations of rejection because of their unaccepted sexual identity (de Oliveira, Lopes, Gonçalves, & Nogueira, 2011). The second dimension is *concealment motivation*, and it refers to the degree to which LGB

individuals prefer to remain discreet in terms of both their sexual orientation as well as their same-sex romantic relationships (Bregman, Malik, Page, Makynen, & Lindahl, 2013). Concealment motivation also pertains to the degree to which LGB individuals fear that they lack the ability to control the disclosure of their sexual identity as well as their relationships with those who are of the same gender. The third dimension is *identity uncertainty*, and it refers to the extent to which LGB individuals experience confusion regarding their sexuality and thus find it difficult and relatively challenging to make sense of and adjust to their same-sex attractions as a result of society's highly stigmatizing approach towards and act of marginalizing them (Troiden, 1993). The fourth dimension is *internalized homonegativity*, and it refers to the extent to which LGB individuals possess internalized negative beliefs concerning their sexuality and same-sex attractions that deviate from the societal norms and expectations (Kimmel, 2005; Meyer, 2003).

The fifth dimension is *difficult process*, and it refers to the extent to which the process of developing a sexual orientation that deviates from the socially accepted sexual identity is considered to be uncomfortable and challenging for LGB individuals (Bregman et al., 2013). This dimension focuses on the level of harshness and lengthiness of the process of admitting to one's self or to others that he or she identifies his or her sexual orientation as non-heterosexual. The sixth dimension is *identity superiority*, and it refers to LGB individuals' feelings of supremacy towards and belittlement of heterosexual individuals (Balsam & Mohr, 2007). Through identity superiority, LGB individuals attempt at displaying a deep commitment towards their

oppressed and marginalized community by rejecting the pervasive cultural values and beliefs imposed by the heterosexual population (McCarn & Fassinger, 1996). The seventh dimension is *identity affirmation*, and it refers to the extent to which LGB individuals associate positive thoughts, feelings, and emotions with their sexual orientation and belongingness to the LGB community (Mohr & Kendra, 2011). The eighth and final dimension is *identity centrality*, and it refers to the extent to which a characteristic relevant to an individual's identity is considered to be central to his or her overall identity (Mohr & Kendra, 2011). For those that identify as LGB, identity centrality refers to the degree to which their sexual orientation is considered to be a central component to their overall identity.

Of the eight dimensions, *acceptance concerns*, *concealment motivation*, *identity uncertainty*, *internalized homonegativity*, *difficult process*, and *identity superiority* have been shown to have negative connotations and thus to predict negative minority identity among LGB individuals (Mohr & Fassinger, 2000). As such, these dimensions have been shown to negatively correlate with markers of wellbeing among LGB individuals, such that LGB individuals that score highly on each of the six dimensions are likely to report poorer psychological wellbeing (Amadio, 2006; Barbra, 2002; Cabaj, 2000; Cole, 2006; Grossman, D'Augelli, & O'Connell, 2002; Lewis, Derlega, Griffin, & Krowinski, 2003; Pinel, 1999; Rosario, Hunter, Maguen, Gwadz, & Smith, 2001; Rosser, Bockting, Ross, Miner, & Coleman, 2008; Whitman & Nadal, 2015).

*Identity affirmation* and *identity centrality*, on the contrary, have been shown to have positive connotations and thus indicate the extent to which positive minority identity has been achieved among LGB individuals (Ghavami, Fingerhut, Peplau, Grant, & Wittig, 2011; Mohr & Kendra, 2011). Both constructs have been linked to better wellbeing among minority individuals with greater levels of identity affirmation and identity centrality predicting enhanced psychological wellbeing (Fredrick, 2015; Riggle, Whitman, Olson, Rostosky, & Strong, 2008; Umaña-Taylor, 2003). With that said, for the purposes of this study, *identity affirmation* and *identity centrality* will be the dimensions of sexual minority identity that will be focused on due to their measurement of the desired variable, which is positive minority identity.

b. Positive Minority Identity and Mental Health Among LGB Individuals

Research has shown that an increase in commitment towards one's LGB identity and incorporation of that identity into one's sense of self are highly linked to greater psychological adjustment among LGB individuals (Frable, Wortman, & Joseph, 1997; Ghavami et al., 2011; Kertzner, Meyer, Frost, and Stirratt, 2009; Reyst, 2001; Rosario et al., 2001). For example, Frable, Wortman, and Joseph (1997) examined the relationship between positive identity and self-perception factors including self-esteem, wellbeing, and psychological distress among a sample of 825 gay and bisexual men in Chicago. The results revealed that gay and bisexual men with a more positive gay identity reported higher self-esteem, enhanced well-being, and lower psychological distress. Reyst (2001) assessed the link between gay cultural identity and life

satisfaction as well as depression among a sample of 541 gay and lesbian participants in the United States and found that higher scores on gay cultural identity were significantly correlated with greater life satisfaction and lesser depressive symptoms.

Similarly, Rosario, Hunter, Maguen, Gwadz, and Smith (2001) explored the link between attitudes towards one's own sexuality and psychological functioning among LGB individuals recruited from gay-focused community-based and college organizations in New York City and found that LGB individuals with positive attitudes towards homosexuality and feelings of comfort towards their non-heterosexual orientations were likely to have high self-esteem and lower levels of anxiety and depression. Furthermore, Kertzner, Meyer, Frost, and Stirratt (2009) found that positive sexual identity valence was associated with greater social and psychological wellbeing among a sample of LGB individuals in New York City. Additionally, Ghavami, Fingerhut, Peplau, Grant and Wittig (2011) examined the association between identity achievement as well as identity affirmation and psychological wellbeing among a sample of gay and lesbian individuals across the United States and found that greater levels of both identity achievement and identity affirmation predicted greater satisfaction with life, higher self-esteem, fewer depressive symptoms, and less anxiety.

There is no literature addressing the relationship between the development of a positive minority identity and disordered eating patterns. As mentioned, the development of a positive minority identity has shown to have a protective effect against the development of psychological distress among LGB individuals, such that positive minority identity predicts greater psychological wellbeing and lower mental

health concerns. This study thus explored positive minority identity as a predictor of disordered eating patterns among self-identified gay and bisexual men in Lebanon with the assumption that positive minority identity will act as a protective agent against disordered eating patterns.

### *5. Sense of Connectedness to the LGB Community*

A sense of connectedness to one's community, a group level coping resource, is defined as the convergence of one's wish to be a part of a larger collective group, one's need to establish a well-defined relationship as well as an emotional connection with the members of the larger collective group, and one's desire to satisfy his or her individual needs while, at the same time, receiving praise or being rewarded through his or her collective affiliation (Frost & Meyer, 2012). A sense of connectedness to one's community differs greatly from community participation. While community connectedness leans towards a more cognitive and affective construct, community participation refers to one's active stance towards the community to which he or she believes he or she belongs (Ashmore, Deaux, & McLaughlin-Volpe, 2004). Such an active stance can be achieved through behavioural participation within the community. Within this study, the cognitive/affective definition of community connectedness will be used.

#### a. Components of a Sense of Connectedness to the LGB Community

A sense of connectedness to the LGB community is explained according to four concepts that comprise the widely used measure of the level of connectedness that one has with the LGB community. The first concept is the level of closeness that an LGB individual has towards the LGB community (Frost & Meyer, 2012). This concept refers to the degree to which sexual minority individuals feel as though they belong to and have a bond with the LGB community within their country. The second concept is the extent to which an LGB individual has a positive connection with the LGB community (Frost & Meyer, 2012) and thus refers to the extent to which sexual minority individuals consider their participation within the LGB community as a positive aspect within their lives. It also includes the degree to which non-heterosexual individuals have pride in the LGB community they consider themselves to be affiliated with. The third concept is the extent to which an LGB individual views the LGB community as rewarding (Frost & Meyer, 2012). An LGB individual's belief that it is important for him or her to be politically active within the LGB community is what defines this concept of connectedness to the LGB community. This concept also refers to the degree to which sexual minority individuals believe that problems faced by the LGB community can be solved through the unity of its members. Such a contribution requires that each individual feel that any of the problems faced by the larger, collective LGB community are also his or her own problems. The fourth and final concept is the level of closeness that an LGB individual has with other members of the LGB community that are of the same gender (Herek & Glunt, 1995). This concept focuses on

the degree to which same-sex members of the LGB community are capable of relating to and thus developing a positive bond with one another.

b. Sense of Connectedness to the LGB Community and Mental Health Among LGB Individuals

Unlike the development of a positive minority identity, community connectedness is considered to be a group-level coping resource (Meyer, 2003). According to Balsam and Mohr (2007), identifying and thus having a sense of connection with the LGB community relieves LGB individuals of the stresses that accompany the stigmatization, victimization, social isolation, and rejection that they experience due to their surrounding's lack of acceptance towards them. Through community connectedness, sexual minority individuals are able to compare themselves to and relate with other sexual minority individuals rather than their heterosexual peers from a social standpoint (Pettigrew, 1967). Furthermore, the LGB community provides its members with the essential resources and the needed social support that, in turn, act as buffers against the negative impact of the discrimination that LGB individuals experience (Balsam & Mohr, 2007). Russell and Richards (2003) found that a greater degree of affiliation with a sexual minority community is considered to be a significant resilience factor against the societal discrimination imposed upon the LGB population for LGB adults. LGB individuals' access to non-stigmatizing environments as well as positive social regard from members with similar sexual orientations increases their positive self-appraisal (Meyer 2003). Thus, a subjective sense of connectedness to a

sexual minority community may help reduce the pressures that accompany the societal stigma against non-heterosexual individuals

Research findings have supported the protective function of LGB individuals' sense of connectedness to the LGB community against psychological distress (Detrie & Lease, 2007; Kertzner, Meyer, Frost, & Stirratt, 2009). For example, Detrie and Lease (2007) studied the relationship between psychological functioning and a number of factors including connectedness to one's social world, perceived social support, collective self-esteem, and age among LGB individuals across the United States. Connectedness to one's social world was defined as the degree to which one considers him or herself as interpersonally close to his or her social community (Lee & Robbins, 1995). The results showed that a sense of connectedness to one's social world was strongly related to psychological wellbeing especially among the older LGB participants. Furthermore, Kertzner, Meyer, Frost, and Stirratt (2009) found that a greater sense of connectedness to the LGB community was associated with not only greater psychological wellbeing but also greater social wellbeing among LGB adults in New York City. Additionally, amongst the Lebanese LGB population, Michli (2016) found a sense of belonging to the LGB community to not only be a protective factor against but to also be the strongest predictor of internalized homonegativity. The findings suggest that an internal sense of belongingness to one's community as well as one's perception of the degree to which he or she fits within his or her social circle is considered to be vital for LGB individuals to be able to function and remain psychologically sound within a society in which the predominant heterosexism causes

minority individuals to feel oppressed, unwanted, and separate from their surroundings (Detrie & Lease, 2007).

There is little research that has examined the relationship between a sense of connectedness to the LGB community and disordered eating patterns. From the studies that have been implemented, the findings have shown to be inconsistent in the literature. A number of studies found gay community involvement to be associated with lower levels of disordered eating patterns suggesting that a sense of connectedness to the LGB community acts as a protective factor against the development of disordered eating feelings, attitudes, and behaviours (Feldman & Meyer, 2007; Williamson & Spence, 2001). For example, Williamson and Spence (2001) found gay community involvement to be a significant predictor of lower eating disturbances among a sample of 202 gay men in the north-west of Britain. Moreover, gay men who reported feeling alienated from the gay community scored significantly higher on measures of eating disorder symptoms. Additionally, Feldman and Meyer (2007) found a sense of connectedness to the LGB community to be related to fewer eating problems among both gay and bisexual men in New York City.

However, there is considerable literature suggesting that LGB communities have adopted the norms of attractiveness that highlight the significance of being thin and youthful (Bronski, 1997; Williamson, 2000). This is especially evident within the gay male community whose members, due to the community's ascribed thin and erotocised ideal body image, have developed an exaggerated concern regarding body image (Atkins, 1998; Grogan, 1999). According to Kilney (1998, p. 329),

> "In queer male communities, we massively over-invest (all senses, from financial to psychoanalytic) in bodies. Physicality accumulates myths, and the body is used as a guarantee, indicator, and proof of image, style, esteem, sexual competency, attractiveness, peer acceptance, fidelity, relationship survival, role, and identity. This is the body made to the fullest, self-evident: evidence of myself."

In a more recent study, Davids and Green (2011) found increased gay community involvement to predict high levels of eating disorder symptomatology among gay as well as bisexual men across the United States. The researchers explain that the gay culture directs appearance-related messages towards its gay and bisexual members. Thus, in order to achieve and eventually maintain a sense of connectedness to and feeling of belongingness within their community, gay and bisexual men internalize these messages and succumb to the pressures of achieving the bodily appearance that is highly desired within the gay community.

# CHAPTER III

# AIMS AND HYPOTHESES

## A. Aims

Predictors of disordered eating patterns have been extensively studied among females with the rationale that women are the most vulnerable to developing disruptive feelings, attitudes, and behaviours towards eating. As such, multiple predictors have been identified as risk factors for and protective factors against the development of disordered eating patterns among women. A great deal of the literature has provided evidence for the high prevalence of disordered eating patterns among gay and bisexual men in comparison to heterosexual men. It is therefore important to understand the risk factors for and protective factors against the development of disordered eating among such an understudied population. Despite the growing body of literature, the factors that have been studied in relation to disordered eating patterns among gay and bisexual men continue to be scarce. Thus, the present study aimed at investigating the associations of the predictors of shame-proneness and guilt-proneness with disordered eating patterns among gay and bisexual men in Lebanon due to the absence of the literature addressing these links among sexual minority men as a population in specific. Moreover, with no literature addressing the relation between positive minority identity and disordered eating patterns, the study explored the extent to which positive minority identity predicts disordered eating patterns among self-identified gay and bisexual men in Lebanon.

Furthermore, numerous Western studies on LGB individuals have contributed to the growing literature regarding the factors associated with the development of disordered eating among gay and bisexual men. However, no research has addressed this topic among sexual minority men in Lebanon or the Middle East. Thus, the present study aimed at exploring and examining the predictors of disordered eating patterns among self-identified gay and bisexual men in Lebanon. The study examined predictors, namely self-objectification, body dissatisfaction, and a sense of connectedness to the LGB community, that have previously been studied in relation to disordered eating patterns among gay and bisexual men.

**B. Hypotheses**

The six following hypotheses were generated to address the aims of the study:

Self-objectification has been shown to predict greater disordered eating patterns among gay and bisexual men (Martins et al., 2007; Serpa, 2004; Serpa & Garbanati, 2003; Wiseman & Moradi, 2010).

Hypothesis 1: Self-objectification will positively predict disordered eating patterns among Lebanese self-identified gay and bisexual men.

Body dissatisfaction was found to be a significant and the strongest predictor of higher rates of disordered eating patterns among gay and bisexual men (Hosper & Jansen, 2005; Williamson & Hartley, 1998; Yean et al., 2013).

Hypothesis 2: Body dissatisfaction will positively predict disordered eating patterns among Lebanese self-identified gay and bisexual men.

Shame-proneness was found to predict greater levels of disordered eating patterns (Cesare et al., 2016; Hayaki et al., 2002; Sanftner et al., 1995; Troop et al., 2008).

Hypothesis 3: Shame-proneness will positively predict disordered eating patterns among Lebanese self-identified gay and bisexual men.

Guilt-proneness was found to predict lower rates of disordered eating patterns (Bybee, Zigler, Berliner, & Merisca, 1996; Hunziker, 2005; Sanftner et al., 1995).

Hypothesis 4: Guilt-proneness will negatively predict disordered eating patterns among Lebanese self-identified gay and bisexual men.

**C. Exploratory Hypotheses**

Research has shown that an LGB individual's increase in commitment towards his or her LGB identity and incorporation of that identity into his or her sense of self are highly linked to greater psychological adjustment among LGB individuals (Morris, 1997; Rosario et al., 2001; Schrimshaw, and Hunter, 2011).

Exploratory Hypothesis 1: Positive minority identity will emerge as a predictive factor of disordered eating patterns among Lebanese self-identified gay and bisexual men.

There were mixed findings in the literature regarding the effect a sense of connectedness to the LGB community has on disordered eating patterns among gay and bisexual men (Davids & Green, 2011; Feldman & Meyer, 2007; Williamson & Spence, 2001).

Exploratory Hypothesis 2: A sense of connectedness to the LGB community will emerge as a predictive factor of disordered eating patterns among Lebanese self-identified gay and bisexual men.

# CHAPTER IV

# METHODOLOGY

## A. Research Design

The current study employed a cross-sectional design with self-objectification, body dissatisfaction, shame-proneness, guilt-proneness, positive minority identity, and a sense of connectedness to the LGB community as predictors and disordered eating patterns as the outcome variable. Demographics including age, sexual orientation, education level, socioeconomic status, and religious affiliation were controlled for. Seven questionnaires, namely the Eating Attitudes Test-26 (EAT-26), a modified version of the Self-Objectification Questionnaire (SOQ), a modified version of the Male Body Dissatisfaction Scale (MBDS), the Internalized Shame Scale (ISS), the Guilt Inventory (GI), the Identity Affirmation and Identity Centrality subscales of the Lesbian, Gay, and Bisexual Identity Scale (LGBIS), and an adapted version of the Connectedness to the LGBT Community Scale, were administered to participants (refer to Appendices M through BB). Participants were also asked to fill out a socio-demographics questionnaire requesting the following information: age, gender at birth, sexual orientation, education level, religious affiliation, and nationality (refer to Appendices K and L). All of the instruments were originally in English and were translated to Arabic and back-translated to provide participants with the option of choosing to fill out the survey in either English or Arabic. The questionnaires were counterbalanced whereby participants were randomly provided with either one of two

surveys. The first survey presented the EAT-26 right after the demographics questionnaire, and the second survey presented the EAT-26 at the end. The estimated time to complete the battery of survey questions was no more than 20-30 minutes.

## B. Scales and Instruments

### *1. Demographics*

The demographics questionnaire included questions regarding age, gender at birth, nationality, education level, socioeconomic status, religious affiliation, and sexual orientation.

### *2. Disordered Eating Patterns*

The Eating Attitudes Test-26 (EAT-26) was used to measure disordered eating patterns (Garner et al., 1982). This scale is a 26-item standardized instrument used to measure symptoms characteristic of eating disorders as well as attitudes, feelings, and behaviours pertaining to eating. The measure includes three subscales that involve items rated on a Likert scale ranging from a score of 1 (always) to a score of 6 (never). The three subscales that the items assess are *Dieting* (items 1, 6, 7, 10, 11, 12, 14, 16, 17, 22, 23, 24, and 25; e.g., "I am aware of the calorie content of foods that I eat."), *Bulimia and Food Preoccupation* (items 3, 4, 9, 18, 21, and 26; e.g., "I feel that food controls my life."), and *Oral Control* (items 2, 5, 8, 13, 19, and 20; e.g., "I find myself preoccupied with food."). A score of 20 or above on the EAT-26 is indicative of disordered eating patterns. Research has shown the EAT-26 to have high internal

consistency with a Cronbach's α ranging from .83 to .90 (Garner et al., 1982). In the current study, the EAT-26 demonstrated very good reliability with a Cronbach's alpha of .89.

***3. Self-Objectification***

A modified version of the Self-Objectification Questionnaire (SOQ) (Noll & Fredrickson, 1998) was used to assess self-objectification. The original scale includes 10 items that measure an appearance-based subscale (items 3, 5, 6, 8, and 10; e.g., "When considering your physical self-concept, what rank do you assign to *physical attractiveness*?") and a competence-based subscale (items 1, 2, 4, 7, and 8; e.g., "When considering your physical self-concept, what rank do you assign to *strength*?"). The original scale asks participants to rank from a score of 0 (least impact) to a score of 9 (greatest impact) a list of body attributes according to how important each of the attributes is considered to be to their physical self-concept. The same rank cannot be assigned to more than one item. The modified version of the SOQ listed the body attributes and asked participants to express using a Likert scale ranging from a score of 1 (not at all) to a score of 5 (extremely) the extent to which they were concerned about these attributes when thinking about their bodies. Sample items included "When thinking about your body, to what extent are you concerned with health" rather than "When considering your physical self-concept, what rank do you assign to *health*?" and "When thinking about your body, to what extent are you concerned with sex appeal" rather than "When considering your self-concept, what rank do you assign to *sex*

*appeal*?" Since the study targeted a male population, examples of bodily features mentioned in the original scale were changed to those that were more relevant to men. For example, "chest, waist, and hips" were changed to "chest and shoulders."

Traditional internal consistency estimates of the SOQ could not be calculated due to the ordinal nature of the original scale (Vanleeuwen & Mandabach, 2002). Reliability has been determined through the correlation between the sum of the scores of the appearance-based items and the sum of the scores of the competence-based items (Hill & Fischer, 2008). Good reliability is determined if there is a negative correlation between the two subscales. Colagero and Jost (2011) found a strong negative correlation between the appearance-based and competence-based subscales (r = -.88). Similarly, Hill and Fischer (2008) found the SOQ to have good internal consistency (r = -.81). Noll (1996) found that scores on the SOQ positively correlated with scores on the Appearance Anxiety Questionnaire (r = .52, $p < .01$) demonstrating that the SOQ has good construct validity. The SOQ demonstrated very good reliability in the current study with a Cronbach's alpha of .84.

***4. Body Dissatisfaction***

A modified version of the Male Body Dissatisfaction Scale (MBDS) was used to assess body dissatisfaction (Ochner, Gray, & Brickner, 2009). The original scale is a 25-item measure with items rated on a Likert scale ranging from a score of 1 (always or strongly agree depending on the item) to a score of 5 (never or strongly disagree depending on the item). The scale also includes an additional rating component that

requires participants to rate how important each item is to them using a Likert scale ranging from a score of 1 (no importance to you) to a score of 10 (great importance). The modified version of the MBDS only asked participants to rate the items using the abovementioned 5-point Likert scale. Sample items include "The shape of my body is one of my assets" and "I am hesitant to take my shirt off in public because people will look at my body." The sum of the scores assigned for each of the 25 items is calculated. Higher scores are indicative of greater body dissatisfaction. The MBDS has been shown to have high internal consistency with a Cronbach's $\alpha$ of .92 and high test-retest reliability with a Cronbach's $\alpha$ of .95 (Ochner et al., 2009). The MBDS demonstrated excellent reliability in the present study with a Cronbach's alpha value of .90.

***5. Shame-Proneness***

The Internalized Shame Scale (ISS) was used to assess levels of shame-proneness (Cook, 1987). This scale is a 30-item measure with items rated on a 4-point Likert scale that describes how frequently each item is experienced and ranges from a score of 0 (never) to a score of 4 (almost always). The scale includes two subscales, one of which measures *Internalized Shame* (items 1, 2, 3, 5, 6, 7, 8, 10, 11, 12, 13, 15, 16, 17, 19, 20, 22, 23, 24, 25, 26, 27, 29, and 30; e.g., "Compared to other people, I feel like I somehow never measure up.") and the other measures *Self-esteem* (items 4, 9, 14, 18, 21, and 28; e.g., "All in all, I am inclined to feel that I am a success."). A total score of 50 or above is indicative of high shame-proneness. Research has shown the ISS to have high internal consistency among a sample of 159 adult and undergraduate males and

females with a Cronbach's α ranging from .90 to .97 (Rybak & Brown's, 1996). The ISS has also been shown to have high internal consistency (α = .89 to .95) and high test-retest reliability over a 14-week period (α = .88 to .96) among a sample of 184 undergraduate male and female participants (del Rosario & White, 2006). The ISS demonstrated excellent reliability in the current study with a Cronbach's alpha value of .93.

***5. Guilt-Proneness***

The Guilt Inventory (GI) was used to assess levels of guilt-proneness (Kugler & Jones, 1992). This scale is a 45-item measure that includes three subscales with items rated on a 5-point Likert scale ranging from a score of 1 (very untrue of me or strongly disagree) to a score of 5 (very true of me or strongly agree). The three subscales are *State Guilt* (items 4, 16, 17, 19, 30, 33, 36, 37, 43, and 45; e.g., "I would give anything if, somehow, I could go back and rectify some things I have recently done wrong."), *Trait Guilt* (items 2, 5, 6, 8, 9, 10, 12, 14, 20, 21, 23, and 26; e.g., "If I could do certain things over again, a great burden would be lifted from my shoulders."), and *Moral Standards* (items 1, 3, 7, 11, 13, 15, 18, 22, 24, 25, 28, 32, 38, 39, and 42; e.g., "I would rather die than commit a serious act of wrongdoing."). Greater scores on the GI indicate greater guilt-proneness. Research has shown the GI to have good internal consistency with a Cronbach's α ranging from .81 to .89 (Kugler & Jones, 1992). The GI demonstrated very good reliability in the present study with a Cronbach's alpha value of .88.

***6. Positive Minority Identity***

The Lesbian, Gay, and Bisexual Identity Scale (LGBIS) is a 27-item scale used to assess the different dimensions of sexual minority identity (Mohr & Kendra, 2011). The measure includes eight subscales that involve items rated on a 6-point Likert scale ranging from a score of 1 (disagree strongly) to a score of 6 (agree strongly). The eight subscales that the items assess are *Acceptance Concerns* (items 5, 9, and 16; e.g., "I often wonder whether others judge me for my sexual orientation."), *Concealment Motivation* (items 1, 4, and 19; e.g., "I keep careful control over who knows about my same-sex romantic relationships."), *Identity Uncertainty* (items 3, 8, 14, and 22; e.g., "I keep changing my mind about my sexual orientation."), *Internalized Homonegativity* (items 2, 20, and 27; e.g., "I believe it is unfair that I am attracted to people of the same sex."), *Difficult Process* (items 12, 17, and 23; e.g., "Admitting to myself that I'm an LGB person has been a very painful process."), *Identity Superiority* (items 7, 10, and 18; e.g., "I look down on heterosexuals."), *Identity Affirmation* (items 6, 13, and 26; e.g., "I am proud to be LGB."), and *Identity Centrality* (items 11, 15, 21, 24, and 25; e.g., "To understand who I am as a person, you have to know that I'm LGB."). Each of the dimensions is scored by calculating the average of the scores of the items relevant to each subscale. For example, to score Identity Centrality, the average of the scores of items 11, 15, 21, 24, and 25 is calculated. The LGBIS has shown to have good internal consistency with a Cronbach's $\alpha$ ranging from .76 to .89 and good test-retest reliability over a 6-week period ($\alpha$ = .72 to .94) (Mohr & Kendra, 2011).

For the purposes of this study, the two subscales of *Identity Affirmation* and *Identity Centrality f*rom the LGBIS were used to assess positive minority identity (Mohr & Kendra, 2011). As mentioned, both Identity Affirmation and Identity Centrality have been shown to have a positive impact on the psychological wellbeing of LGB individuals and thus to indicate the extent to which positive sexual minority identity has been achieved among LGB individuals (Mohr & Kendra, 2011). The two dimensions have been shown to be highly and positively related to one another (Mohr & Kendra, 2011). In order to measure positive minority identity, the average of the items of the dimensions of *Identity Affirmation* and *Identity Centrality* was computed. The dimensions of *Identity Affirmation* and *Identity Centrality* have been shown to have good internal consistency with a Cronbach's $\alpha$ of .89 and .86 respectively (Mohr & Kendra, 2011). The 6-week test-retest reliability of both *Identity Affirmation* and *Identity Centrality* has been shown to be good ($\alpha$ = .91 and .80 respectively) (Mohr & Kendra, 2011). The reliability of the *Identity Affirmation* subscale of the LGBIS showed to be very good in the present study with a Cronbach's alpha value of .88. Furthermore, the *Identity Centrality* subscale of the LGBIS demonstrated good reliability in this study with a Cronbach's alpha value of .75. The reliability of both subscales together showed to be good in the present study with a Cronbach's alpha value of .78.

### *7. Sense of Connectedness to the LGB Community*

An adapted version of the Connectedness to the LGBT Community Scale (Frost & Meyer, 2012) was used to assess one's sense of connectedness to the LGB

community. This scale is an 8-item measure that is used to assess the latent construct of one's level of connectedness towards the LGBT community. The original Connectedness to the LGBT Community Scale addressed one's sense of connectedness to the LGBT community in New York City. For the purposes of this study, the scale was adapted to address one's sense of connectedness to the LGBT community in Lebanon. For example, the item "Participating in NYC's LGBT community is a positive thing for you" was changed to "Participating in Lebanon's LGBT community is a positive thing for you." The scale includes four subscales that involve items rated on a 4-point Likert scale ranging from a score of 1 (agree strongly) to a score of 4 (disagree strongly). The four subscales that the items assess are the extent to which the participants feel close towards the LGBT community (items 1 and 3; e.g., "You feel a bond with the LGBT community."), the extent to which the participants' connections towards the LGBT community are positive in nature (items 2 and 4; e.g., "You are proud of Lebanon's LGBT community."), the extent to which the participants believe their connections towards the LGBT community are rewarding and have problem-solving potential (items 5, 6, and 7; e.g., "You really feel that any problems faced by Lebanon's LGBT community are also your own problems."), and the extent to which the participants feel close to members of the LGBT community that are of the same gender (item 8; "You feel a bond with other members of the LGBT community with the same gender as yours."). Higher scores are indicative of greater feelings of connectedness towards the LGB community. The scale has shown to have good internal consistency with a Cronbach's $\alpha = .81$ (Frost & Meyer, 2012). The Connectedness to

the LGBT Community Scale demonstrated very good reliability in the present study with a Cronbach's alpha value of .85.

**C. Statistical Analyses**

First, the study employed an exploratory factor analysis on the *Identity Affirmation* and *Identity Centrality* subscales of the Lesbian, Gay, and Bisexual Identity Scale (LGBIS) to see if they will emerge as two separate factors among a Lebanese sample.

Second, the study relied on a hierarchical multiple regression analysis whereby demographics were entered into the first block of predictors, and self-objectification, body dissatisfaction, shame-proneness, guilt-proneness, positive minority identity, and a sense of connectedness to the LGB community were entered into the second block of predictors. Disordered eating patterns was the outcome variable.

**D. Participants**

To be included in the study, participants had to be Lebanese individuals who were of male gender, identified as either gay or bisexual, and were 18 years of age or older. The final sample retained for the analysis was 147. This sample was above the minimum number required for a regression analysis based on Tabachnick and Fidell's (2012) recommendation of $N \geq 50 + 8m$ and $N \geq 104 + m$, where m is the number of predictor variables (the present study has 12 predictors as explained in the results section of the paper), but lower than the minimum number required for a reliable factor

analysis based on Tabachnick and Fidell's (2012) recommendation of 300 participants. Participants who were not Lebanese, were of female gender, did not identify as gay or bisexual, were below the age of 18, and identified as transgender were excluded from the study. Moreover, transgender men who identified as gay or bisexual were excluded from the study as they have been shown to experience stressors that affect gay and bisexual men differently.

The sample consisted of 88.4% gay men and 11.6% bisexual men with 78.9% of the sample between the ages of 18-29 years and 21.1% of the sample between the ages of 30-49 years. 1.4% of the sample had a level of education that was lower than high school, 2.0% of the sample reported reaching high school as their highest level of education, 39.5% of the sample reported undergraduate as their highest level of education, 44.2% of the sample reported graduate/masters as their highest level of education, and 10.2% of the sample reported postgraduate/Ph.D. as their highest level of education. The largest group was 29.3% of the sample who reported having a monthly income of more than $5000, 19.7% of the sample reported having a monthly income of $3001-$5000, 12.2% of the sample reported having a monthly income of $2001-$3000, 13.6% of the sample reported having a monthly income of $1501-$2000, 12.9% of the sample reported having a monthly income of $1001-$1500, 8.8% of the sample reported having a monthly income of $501-$1000, and 1.4% of the sample reported having a monthly income of less than $200. 51.7% of the sample reported themselves as religiously affiliated, 23.1% of the sample reported as being atheist, and 21.1% of the

sample reported as being agnostic. Overall, the sample consisted mostly of youthful, educated participants with a high socioeconomic background.

Table 1
*Demographics*

| Variable | n | % |
|---|---|---|
| Age | | |
| 18-29 years | 116 | 78.9 |
| 30-49 years | 31 | 21.1 |
| Sexual Orientation | | |
| Gay | 130 | 88.4 |
| Bisexual | 17 | 11.6 |
| Education | | |
| Lower than high school | 2 | 1.4 |
| High school | 7 | 4.8 |
| Undergraduate | 58 | 39.5 |
| Graduate/Masters | 65 | 44.2 |
| Postgraduate/Ph.D. | 15 | 10.2 |
| Socioeconomic Status | | |
| Less than $200 | 2 | 1.4 |
| $201-$500 | 3 | 2.0 |
| $501-$1000 | 13 | 8.8 |
| $1001-$1500 | 19 | 12.9 |
| $1501-$2000 | 20 | 13.6 |
| $2001-$3000 | 18 | 12.2 |
| $3001-$5000 | 29 | 19.7 |
| More than $5000 | 43 | 29.3 |
| Religious Affiliation | | |
| Religiously Affiliated | 76 | 51.7 |
| Atheist | 34 | 23.1 |
| Agnostic | 31 | 21.1 |

**E. Procedure**

Two methods of recruitment were relied on for data collection within the main study. The first recruitment method was snowball sampling as it is the most recommended recruitment method for a population that is hard to find (Christensen, Johnson, & Turner, 2011). Snowball sampling was used in most of the studies on LGB

individuals. Michli (2016) relied on snowball sampling as one of three methods to recruit men and women with experiences of emotional and/or sexual desires towards others from the same sex in Lebanon. This method showed to be effective as the attained sample pool consisted of 366 participants. Participants eligible to partake in the study were given the option of inviting other individuals who meet the inclusion criteria for the study to participate.

The second recruitment method was contacting NGOs that advocate for the rights and health of LGB individuals in Lebanon. These NGOs included MOSAIC, Proud Lebanon, the Lebanese Medical Association for Sexual Health (LebMASH), and Marsa Sexual Health Centre. The NGOs were asked to advertise the study on their social media pages as well as through emails that they could send to their volunteers, members, and staff (refer to Appendices E and F). The NGOs also advertised the study through flyers that they hung in their centers (refer to Appendices E and F).

Those eligible to participate in the study were asked to fill out either an online survey via LimeSurvey or a paper-based survey in English or Arabic depending on their preference. Those who wished to fill out the online survey were provided with a link that directed them to a page that asked whether they prefered the survey to be in English or Arabic. After that, the participants were directed to the consent form that was presented in their preferred language (refer to Appendices A and B). The consent form explained the nature, purpose, procedure, potential risks, benefits, and inclusion and exclusion criteria of the study. The participants were ensured anonymity and confidentiality of the results and were informed that their participation in the study was

completely voluntary. At the conclusion of the consent form, participants were provided with the contact information of social services and centers that work with LGB individuals in Lebanon if they felt the need to seek mental health care. Upon approving to the terms and conditions of the study, the participants were directed to the demographics questionnaire (refer to Appendices K and L). The online survey was designed in a way to identify eligible and non-eligible participants after the demographics questionnaire is filled out. Those not eligible to participate in the study were directed to a page consisting of the debriefing form that disclosed the elements of the study in detail (refer to Appendices G and H). These participants were not exposed to the survey questions and were excluded from the study. Those eligible to participate in the study were directed to the battery of survey questions (refer to Appendices M through BB). After completing the survey, the participants were directed to the debriefing form page. At the conclusion of the debriefing form, the participants whether eligible to participate or not were once again be provided with the contact information of social services and centers that work with LGB individuals in Lebanon. At the end of the survey, the participants who met the inclusion criteria were directed to a different page that asked as to whether they wished to be entered into a draw to win a gift voucher worth $250 from Virgin Megastore. This page was not in any way linked to the survey, and the participants were informed of this. If the participants wished to enter the draw, they were provided with information regarding the draw (refer to Appendices I and J) as well as an individualized code that LimeSurvey generated for each participant. The codes were in no way linked to the responses the participants provided in the

survey. The researcher had access to the codes in order to randomly select the winning participant but was not able to link them to their respective participant. The page also provided the participants with a link to a website on which the winning code was eventually reported on a specified date along with the contact information of the co-investigator. The winning participant was responsible for contacting the co-investigator in order to retrieve the gift voucher. An overall of 141 participants chose to fill out and completed the online survey.

Those who wished to fill out a paper-based survey were given the contact information of the co-investigator who, once contacted, met with the participants in a location that was convenient for them. Upon meeting with the co-investigator, the participants were provided with a printed version of the consent form in their preferred language (refer to Appendices C and D). The consent form mentioned the inclusion and exclusion criteria of the study under the "Explanation of Procedures" section. This was read aloud and emphasized upon by the co-investigator. Those who did not meet the inclusion criteria were thanked for their willingness to participate and were debriefed about the study as well as provided with the contact information of social services and centers that work with LGB individuals in Lebanon. Those who met the inclusion criteria were asked to read the consent form and choose the "I accept to participate in this study" option if they agreed to take part in the study. The participants who agreed to take part in the study were provided with a copy of the consent form and the original one was collected by the co-investigator. An envelope including the battery of survey questions in the participants' preferred language were then handed to the participants.

Once they completed the survey, the survey was placed in an envelope with other completed questionnaires. The participants were then provided with a debriefing form explaining the study in detail in addition to a handout containing contact information of social services and centers that work with LGB individuals in Lebanon. At the end of the survey, the co-investigator asked the participants as to whether they wished to enter a draw to win a gift voucher worth $250 from Virgin Megastore. If the participants wished to enter the draw, they were given another form in which they were provided with information regarding the draw (refer to Appendices I and J). The participants were then asked to randomly pick a sheet of paper containing a code that was in no way linked to the responses provided in the survey from a jar filled with similar sheets. The researcher had a list of the codes written down on a separate sheet prior to distributing the codes to participants in order to randomly select the winning participant and was therefore not be able to link the codes to the responses of their respective participants. The form also provided the participants with the link to the abovementioned website on which the winning code was eventually reported on a specified date along with the contact information of the co-investigator whom the winning participant was responsible to contact in order to retrieve the gift voucher. An overall of 6 participants requested to fill out and completed the paper-based survey.

The codes of the eligible participants were eventually placed in a randomizer that randomly selected the code of the winning participant. The website reported the winning code on the specified date along with the contact information of the co-investogator who the winning participant was responsible to contact in order to retrieve

the voucher. Once this was done, all of the codes provided including that of the winning participant were deleted.

**F. Pilot Study**

Prior to the main study, a pilot study was conducted on a small sample of Lebanese gay and bisexual male participants ($N$ = 10) through the method of convenience sampling. A number of the workers at the assisting NGOs met the inclusion criteria and volunteered to participate in the study. As such, these individuals were asked to take part in the pilot study. The pilot study was carried out in order to test the adequacy and cultural sensitivity of both the English and Arabic versions of the instruments that were used in the survey within the main study. The pilot study helped provide a better estimate of the time it takes to complete the questionnaires. The participants of the pilot study underwent the same procedures as those of the main study. They were asked to read the consent form and provided consent prior to completing the survey. They were provided with the option of entering the draw to win the gift voucher and were thus provided with a random code. No modifications were made as the scales were determined to be clear and culturally relevant. The only change the participants requested was that the likert scales of all the measures be consistent. Furthermore, it took the participants approximately 20 minutes to complete the survey as predicted.

# CHAPTER V

# RESULTS

## A. Preliminary Analyses

Before the main data analysis, a preliminary analysis was conducted where the abovementioned variables were examined to check for misentered data, missing values, and univariate as well as multivariate outliers in addition to the assumptions of normality and homogeneity of variance.

### *1. Misentered Data*

The data collected via LimeSurvey was exported directly onto SPSS and that collected via paper-based surveys was manually entered into the SPSS dataset. By producing the frequency table, the minimum and the maximum of each variable was checked to make sure that all values fell into the appropriate range and that the data was entered correctly. In the study's dataset, the values for all the variables were entered correctly, and the check for incorrectly misentered data was completed.

### *2. Missing Value Analysis*

A total number of 147 participants was originally recruited. A missing value analysis was conducted to examine the percentage of missing values. The results obtained show that all items had less than 5% missing values. The data was found to be missing at random since Little's MCAR test showed to be nonsignificant, $\chi 2(5465) =$

4990.46, $p = 1.00$, *ns*. This information combined with the fact that less than 5% of the data is missing suggests that the missing values will not pose a problem, and thus no imputations of the data were required.

**B. Factor Analysis**

A factor analysis using a principle components analysis (PCA) was conducted on the Lesbian, Gay, and Bisexual Identity Scale (LGBIS), which consists of items that examine the dimensions of sexual minority identity. For the purposes of the present study, a factor analysis was conducted on the items that are assumed to measure two of the eight dimensions that the scale is used to measure. These dimensions are *Identity Affirmation* and *Identity Centrality*.

Prior to carrying out the factor analysis, the assumptions of sample size, multicollinearity, and singularity as well as the factorability of the correlation matrices were examined.

***1. Sample Size***

The current sample size of N = 147 is below the recommended 300 sample size threshold. Therefore, our sample is inadequate for conducting a factor analysis. However, due to the discrimination that the sample experiences in a conservative culture such as Lebanon, it was hard to obtain the recommended sample size. Nevertheless, the factor structure of the two dimensions of the LGBIS under study were examined.

### *2. Multicollinearity and Singularity*

To check for issues of multicollinearity and singularity, the determinant obtained was .015. This value is greater than .00001 indicating that there is no multicollinearity among the variables. Furthermore, after inspecting the correlation matrix, it was found that the items "Being an LGB person is a very important aspect of my life" and "I believe being an LGB is an important part of me," $r = .80$, $p < .05$, were highly correlated and the assumption of multicollinearity was violated. However, PCA is robust to issues of multicollinearity and singularity. Therefore, these items do not pose a problem (Tabachnick & Fidell, 2012).

### *3. Factorability of the Correlation Matrices*

The Kaiser-Meyer-Olkin (KMO) measure, which tests for the factorability of the data, was equal to .77. This value exceeds the recommended value of .6 and is good according to Field (2009). This means that for this dataset, a factor analysis would be appropriate as the data is factorable.

### *4. Measure of Sampling Adequacy*

The Measure of Sampling Adequacy identifies if the specific items of the dataset should be included in the analysis. This is tested by looking at the anti-image correlation matrix in the output of the analysis. Based on the diagonal of values in the

matrix, the values showed to be well above .50 indicating that none of the variables needed exclusion from the analysis.

### *5. Barlet's Test of Sphericity*

Bartlett's Test of Sphericity tests the null hypothesis that states that the correlation in a correlation matrix is zero. For these data, Bartlett's Test of Sphericity showed to be significant, $\chi^2(28) = 592.33$, $p < .05$. This indicates that the correlations within the R-matrix are sufficiently different from zero. Therefore, a factor analysis is considered to be appropriate for this dataset.

### *6. Principle Components Analysis (PCA)*

A factor analysis using PCA was conducted on the 8 items of the *Identity Affirmation* and *Identity Centrality* subscales of the LGBIS scale. Since the purpose of this analysis was to explore the factors in this scale, the number of factors was analyzed through eigenvalues. An oblique rotation (direct oblimin) was used because the dimensions were assumed to be correlated with one another. The analysis revealed the presence of two components with eigenvalues exceeding 1. These factors in combination explained a total of 67.39% of the variance. Furthermore, after inspecting the scree plot, we observed two inflection points, which indicates the possibility of having two factors (refer to Figure 1, Appendix CC).

According to the item clustering that was observed in the rotated pattern matrix (refer to Table 2), the items "My sexual orientation is a central part of my identity," "To

understand who I am as a person, you have to know that I'm LGB," "Being an LGB person is a very important aspect of my life," "I believe being LGB is an important part of me," and "My sexual orientation is a significant part of who I am" that loaded on factor 1 measured the dimension of *Identity Centrality* in the original scale. Thus, factor 1 represents the dimension of *Identity Centrality*. The items "I am proud to be LGB," "I am glad to be an LGB person," and "I'm proud to be part of the LGB community" that loaded on factor 2 measured the dimension of *Identity Affirmation* in the original scale. Thus, factor 2 represents the dimension of *Identity Affirmation*.

Table 2
*Pattern Matrix*

| | Component | |
|---|---|---|
| | 1 | 2 |
| I am glad to be an LGB person. | | .87 |
| I'm proud to be part of the LGB community. | | .85 |
| I am proud to be LGB. | | .90 |
| My sexual orientation is an insignificant part of who I am. | -.45 | |
| My sexual orientation is a central part of my identity. | .81 | |
| To understand who I am as a person, you have to know that I'm LGB. | .81 | |
| Being an LGB person is a very important aspect of my life. | .77 | |
| I believe being an LGB is an important part of me. | .70 | |

In sum, the scale measuring the dimensions of LGB identity seems to have the two underlying dimensions of *Identity Centrality* and *Identity Affirmation* in this

sample. This is compatible with the *Identity Centrality* and *Identity Affirmation* dimensions that the scale is supposed to measure. Thus, the scale does truly reflect the two of the eight dimensions mentioned above in the sample under study.

**C. Reliability Analysis**

A reliability analysis for the two dimensions of *Identity Affirmation* and *Identity Centrality* of the LGBIS scale was assessed after the item "My sexual orientation is an insignificant part of who I am" was reverse coded. The measure of internal consistency was analyzed for each factor. Factor 1 which measures the dimension of *Identity Centrality* showed to have an adequate reliability with a Cronbach's alpha of .75 (refer to Table 3), and factor 2 which measures the dimension of *Identity Affirmation* showed to have a high reliability with a Cronbach's alpha of .88 (refer to Table 3). The values were above the recommended criterion of .7 indicating that the scale displays good internal consistency.

Furthermore, reliability analyses were conducted for the rest of the scales after the appropriate items of the Male Body Dissatisfaction Scale and Guilt Inventory were reverse coded. All the scales showed to have high internal consistencies since their Cronbach's alpha values were above .7 (refer to Table 3).

Table 3
*Reliability of the Scales and Subscales: Cronbach's alpha*

| Scales and Subscales | Cronbach's alpha | N of items |
|---|---|---|
| Lesbian, Gay, and Bisexual Identity Scale (*Identity Affirmation)* | .88 | 3 |
| Lesbian, Gay, and Bisexual Identity Scale (*Identity Centrality)* | .75 | 5 |

| | | |
|---|---|---|
| Lesbian, Gay, and Bisexual Identity Scale (*Identity Affirmation + Identity Centrality)* | .78 | 8 |
| Eating Attitudes Test-26 | .89 | 26 |
| Self-Objectification Questionnaire | .84 | 10 |
| Male Body Dissatisfaction Scale | .90 | 25 |
| Internalized Shame Scale | .93 | 30 |
| Guilt Inventory | .88 | 45 |
| Connectedness to the LGBT Community Scale | .85 | 8 |

**D. Univariate and Multivariate Outliers**

Univariate outliers were checked by converting all variables into z-scores. Any z-score with a value above an absolute value of 3.29 was considered a univariate outlier. In a produced frequencies table, it was found that the variables of disordered eating patterns, self-objectification, and guilt-proneness had cases 57 (response ID 226), 24 (response ID 119), and 2 (response ID 54) as univariate outliers respectively. The outliers were kept in the analysis unless the cases also turned out to be multivariate outliers.

Multivariate outliers were assessed through the Mahalanobis distance. Prior to the main regression analysis, the variable of religious affiliation was recoded into two dummy variables with Atheist as the reference group. As such, the overall number of variables that was to be entered into the regression analysis was 12. With degrees of freedom equal to 12, any case greater than $\chi^2(12) = 32.91$, $p < 0.001$ would be a multivariate outlier according to the Chi square ($\chi^2$) table in Tabachnick and Fidel (2012). No cases exceeded the prescribed chi square value, and thus no multivariate outliers were found in the dataset. With none of the cases being both univariate and multivariate outliers, all cases were retained for the analyses.

**E. Influential Cases**

To find influential cases, the Cook's distance and standardized DFBetas of all the variables were examined. All the cases had a Cook's distance and standardized DFbeta values that were below 1 indicating that there are no influential cases in the dataset.

**F. Outliers in the Solution**

To examine the presence of outliers in the solution, the casewise diagnostic table was inspected and showed that case 63 (response ID 251) was an outlier in the solution since it had a standardized residual value of 3.65, which is above the absolute value of 3.29. However, since this case did not show to be influential case and because in a large sample size it is expected to obtain at least one outlier that is not well predicted by the regression model (Tabachnick & Fidel, 2012), the case was retained for the analyses.

**G. Assumption of Normality**

Normality of the variables was tested through the examination of the z-scores of skewness. A z-skew value of ±3.29 was used as the marker for significant skewness and violation of normality. None of the scores on the variables of self-objectification, body dissatisfaction, shame-proneness, guilt-proneness, positive minority identity, and sense of connectedness to the LGB community showed to have a z-skewness greater

than +3.29 or less than -3.29 indicating that they are not significantly different from a normal distribution. However, the scores on the variable of disordered eating patterns had a z-skewness of 5.58 indicating that the scores are significantly and positively skewed. This suggests that the scores are significantly different from a normal distribution and that the assumption of normality was violated for the dependent variable.

Since the scale measuring disordered eating patterns is meaningful, the scores obtained were not transformed. The regression analysis was run using the bootstrapping method because it is a robust method against violations of normality and thus allows us to generalize the results from our sample to the general population (Field, 2009).

**H. Scale Descriptives**

In order to create a total score for the scale measuring disordered eating patterns, a value of 3 was assigned to responses of "Always," a value of 2 was assigned to responses of "Usually," and a value of 1 was assigned to responses of "Often" for items 1 through 25. A value of 1 was assigned to responses of "Sometimes," a value of 2 was assigned to responses of "Rarely," and a value of 3 was assigned to responses of "Never" for item 26. The total score was obtained by summing the items after recoding each of the abovementioned items as per the recommendations of the original scale (Garner et al., 1982). Furthermore, in order to calculate the total score for the scale measuring self-objectification, the sum of the scores obtained on the competence based items (items 1, 2, 4, 7, and 9) was subtracted from the sum of the scores obtained on the

appearance based items (items 3, 5, 6, 8, and 10) as per the recommendations of the original scale (Noll & Fredrickson, 1998). Moreover, the total score for the scale measuring body dissatisfaction was obtained by summing the scores obtained on all of the items as per the recommendations of the original scale (Ochner et al., 2009). Additionally, the total score for the scale measuring shame-proneness was calculated by summing the scores obtained on the items measuring internalized shame (items 1, 2, 3, 5, 6, 7, 8, 10, 11, 12, 13, 15, 16, 17, 19, 20, 22, 23, 24, 25, 26, 27, 29, and 30) as per the recommendations of the original scale (Cook, 1987). The total score for the scale measuring guilt-proneness and that for the scale measuring sense of connectedness to the LGB community were obtained by averging the scores obtained on the items of each of the scales as per the recommendations of each of the original scales (Frost & Meyer, 2012; Kugler & Jones, 1992). Finally, to measure positive minority identity, the average of the scores obtained on the items that measure the dimensions of *Identity Affirmation* and *Identity Centrality* was calculated as per the recommendations of the original scales (Mohr & Kendra, 2011).

The calculated mean for the dependent variable of disordered eating patterns ($M$ = 14.99, $SD$ = 12.64) showed to be below the cutoff score of 20 suggesting that, on average, the participants within the obtained sample experienced low levels of disordered eating patterns. Furthermore, the calculated mean for the variable of self-objectification ($M$ = .33, $SD$ = 3.48) showed to be well below the midpoint 1 indicating that, on average, the participants within the obtained sample reported low levels of self-objectification. The mean of the score obtained for the scale measuring body

dissatisfaction (*M* = 88.10, *SD* = 14.67) showed to be slightly below the midpoint of 89 suggesting that, on average, the recruited participants were relatively not dissatisfied about their bodies. Additionally, the mean score obtained for the scale measuring shame-proneness (*M* = 45.97, *SD* = 25.01) was well below the cutoff score of 50 suggesting that the sample had low levels of shame-proneness. In contrast, the mean score obtained for the scale measuring guilt-proneness (*M* = 3.10, *SD* = .39) was above the midpoint of 2.95 indicating that the participants of the sample obtained were highly prone towards experiencing feelings of guilt. Furthermore, the mean of the scores obtained on the scale measuring positive minority identity (*M* = 8.78, *SD* = 1.84) was well above the midpoint of 7.5 suggesting that the sample had a highly positive perspective pertaining to their sexual minority identity. Finally, the mean of the scores obtained on the scale measuring sense of connectedness to the LGB community (*M* = 2.78, *SD* = .63) was slightly above the midpoint of 2.5 indicating that the sample obtained experienced high levels of a sense of connectedness to the LGB community in Lebanon.

Refer to Table 4 for the descriptive statistics of the variables under study.

Table 4
*Scale Descriptives*

| | N | Min. | Max. | Mean | SD |
|---|---|---|---|---|---|
| Disordered Eating Patterns | 147 | 0 | 58 | 14.99 | 12.64 |
| Self-Objectification | 147 | -10 | 12 | .33 | 3.48 |
| Body Dissatisfaction | 146 | 57 | 121 | 88.10 | 14.67 |
| Shame-proneness | 146 | 1 | 93 | 45.97 | 25.01 |
| Guilt-proneness | 145 | 1.67 | 4.22 | 3.10 | .39 |
| Positive Minority Identity | 146 | 3.00 | 12.00 | 8.78 | 1.84 |
| Sense of Connectedness to the LGB Community | 146 | 1.00 | 4.00 | 2.78 | .63 |
| Valid (N) listwise | 145 | | | | |

**I. Correlation Matrix**

The correlations between the predictor variables of self-objectification, body dissatisfaction, shame-proneness, guilt-proneness, positive minority identity as well as sense of connectedness to the LGB community and the dependent variable were tested through a Spearman's rho coefficient using a two-tailed test because the assumption of normality for the variable of disordered eating patterns was violated (refer to Table 5).

The variables of self-objectification, body dissatisfaction, shame-proneness, and guilt-proneness showed significant, positive correlations with the outcome variable of disordered eating patterns. The largest correlation was between shame-proneness and disordered eating patterns where the two variables significantly, positively correlated with one another ($rs = .46$, $p < .01$, medium-large effect size). This suggests that as one has a stronger proneness to experiencing shame, the more likely he is to carry out disordered eating patterns. Self-objectification, body dissatisfaction, and guilt-proneness also had a significant, positive relationship with the outcome variable with guilt-proneness showing the strongest correlation amongst the three variables ($rs = .40$, $p < .01$, medium-large effect size) indicating that as one has a greater proneness to experiencing guilt, the more likely he is to carry out disordered eating patterns. The third highest correlation was between body dissatisfaction and the outcome variable ($rs = .36$, $p < .01$, medium effect size) indicating that an individual's increase in dissatisfaction towards his body is associated with greater disordered eating patterns. The lowest correlation was between self-objectification and the outcome variable ($rs =$

.30, $p$ <.01, medium effect size) suggesting that the greater the one objectifies himself, the more likely he is to experience disordered eating feelings, attitudes, and behaviours.

A noteworthy relationship was that between body dissatisfaction and sense of connectedness to the LGB community where the two variables showed to significantly and negatively correlate with one another ($rs$ = -.21, $p$ <.01, small-medium effect size). This suggests that a self-identified gay or bisexual man's low levels of dissatisfaction towards his body is likely to be associated with his high sense of connectedness to the LGB community. Furthermore, positive minority identity significantly and positively correlated with a sense of connectedness to the LGB community ($rs$ = .58, $p$ < .01, large effect size) suggesting that a self-identified gay or bisexual man's increase in his positive outlook towards his sexual minority status is likely to be linked to his high sense of connectedness to the LGB community.

Table 5
*Correlation Matrix*

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 1 Disordered Eating Patterns | - | .30** | .36** | .46** | .40** | -.07 | -.07 |
| 2 Self-Objectification | | - | .28** | .24** | .07 | .10 | .04 |
| 3 Body Dissatisfaction | | | - | .54** | .32** | -.15 | -.21** |
| 4 Shame-proneness | | | | - | .67** | -.09 | -.02 |
| 5 Guilt-proneness | | | | | - | -.10 | -.05 |
| 6 Positive Minority Identity | | | | | | - | .58** |
| 7 Sense of Connectedness to the LGB Community | | | | | | | - |

**$p$ < .01 (two-tailed).

**J. Main Analysis: Hierarchical Multiple Regression**

A hierarchical multiple regression was conducted to test hypotheses 1 through 6. The variable of religious affiliation was recoded into three categories: Religiously

Affiliated, Atheist, and Agnostic. Those that reported being affiliated with either of the religions of Christian Catholic, Christian Maronite, Christian Orthodox, Muslim Sunni, Muslim Shi'a, or Druze were recoded into the category of Religiously Affiliated. Those that reported as being either Atheist or Agnostic were not recoded into a different category. Since the nominal variables that are to be entered into the regression analysis are to be dichotomous, the variable of religious affiliation was further recoded into two dummy variables with atheist as the reference category since it denotes the belief in the lack of the existence of a God which is in contrast to the two other categories of religiously affiliated and agnostic. The category of religiously affiliated denotes the belief in the existence of a God whereas the category of agnostic refers to thoe who have entertained the proposition that there is a God but believe neither that it is true nor that it is false.

The control variables of age, sexual orientation, education, and socioeconomic status as well as the two dummy variables of religious affiliation were entered into the first block using the forced entry method, and the predictor variables of self-objectification, body dissatisfaction, shame-proneness, guilt-proneness, positive minority identity, and sense of connectedness to the LGB community were entered into the second block using the forced entry method as well. As mentioned previously, the regression analysis was run using the bootstrapping method based on 1000 bootstrap samples with 95% confidence intervals and with bias corrected and accelerated. Bootstrapping was used because it is a robust method against violations of normality

and thus allows us to generalize the results from our sample to the general population (Field, 2009).

The assumptions of multicollinearity, normality of residuals, homoscedasticity of the regression slope, and independence of errors were tested.

***1. Level of Measurement***

All the variables were scale variables except for sexual orientation and the two dummy variables of religious affiliation that were nominal.

***2. Ratio of Cases to the Independent Variables***

Tabachnick and Fidell (2012) recommend that for a medium sized relationship between the independent variable (IV) and dependent variable (DV) when conducting a multiple regression, the sample size must be larger or equal to 50 + 8m, where m is the number of IVs. Furthermore, when testing individual predictors, the sample size must be larger than 104 + m. Our sample was composed of 147 participants and had 12 predictors. Therefore, both conditions were met where 50 + 8(12) = 146 and 104 + 12 = 116.

***3. Multicollinearity***

To check for multicollinearity, two methods were utilized: checking the correlation matrix between predictors and the Variance Inflation Factor (VIF) values. In

the current study, all correlations between IVs were below .8, and all VIF values were below 10. Therefore, the assumption of multicollinearity was met.

***4. Normality of Residuals***

To test the assumption of normality of residuals for disordered eating patterns, its histogram was examined. Upon observation, the distribution was not significantly different from that of the normal bell-shaped curve. Therefore, this assumption was met (Figure 2, Appendix CC)

***5. Homoscedasticity of Regression Slope***

The residuals scatterplot (ZPRED vs. ZRESID) was examined to test the assumption of homoscedasticity. The assumption was met as the residuals were scattered evenly across all scores (Figure 3, Appendix CC).

***6. Independence of Errors***

In the current analysis, the Durbin-Watson value for disordered eating patterns was 2.29, which is close to the recommended value of 2 (Tabachnick & Fidell, 2012), indicating that the assumption of independence of errors was met.

***7. Hierarchical Multiple Regression***

A hierarchical multiple regression was used to examine the contribution of the predictor variables of self-objectification, body dissatisfaction, shame-proneness, guilt-

pronneess, positive minority identity, and sense of connectedness to the LGB community after controlling for the influence of age, sexual orientation, education, socioeconomic status, and religious affiliation. Age, sexual orientation, education, socioeconomic status, and the two dummy variables of religious affiliation were entered into the first block at Step 1 using the forced entry method and explained 8% of the variance in disordered eating patterns with none of the variables appearing as significant predictors of the outcome variable (refer to Tables 6 and 7). After entering self-objectification, body dissatisfaction, shame-proneness, guilt-proneness, positive minority identity, and sense of connectedness to the LGB community into the second block at Step 2 also using the forced entry method, the total variance explained by the model as a whole was 34%, $F(12, 132) = 5.56$, $p < .001$ (refer to Table 6). The variables of interest explained an additional 26% of the variance in disordered eating patterns after controlling for the demographic variables, $\Delta R^2 = .26$, $F$ change $(6, 132) = 8.54$, $p < .001$ (refer to Table 6). Self-objectification and shame-proneness appeared as significant predictors with shame-proneness having the largest association with disordered eating patterns ($\beta = .24$, $p < .05$) followed by self-objectification ($\beta = .20$, $p < .05$) and thus confirming hypotheses 1 and 3 only (refer to Table 7). Body dissatisfaction, guilt-proneness, positive minority identity, and sense of connectedness to the LGB community did not come out as significant predictors of disordered eating patterns, and thus hypotheses 2, 4, 5, and 6 were not supported.

Table 6
*R, $R^2$, Adjusted $R^2$, SE of the Estimate, and Change Statistics*

| | | | | | | Change Statistics | | | |
|---|---|---|---|---|---|---|---|---|---|
| Model | R | $R^2$ | Adjusted | SE of the | $R^2$ | F | df1 | df2 | Sig. F |

| | | | $R^2$ | Estimate | Change | Change | | | Change |
|---|---|---|---|---|---|---|---|---|---|
| 1 | .28 | .08 | .04 | 12.40 | .08 | 1.95 | 6 | 138 | .08 |
| 2 | .58 | .34 | .28 | 10.76 | .26 | 8.54 | 6 | 132 | .00 |

Table 7
*Regression Parameters*

| Model | | B | SE | Standardized Coefficients β | Sig. (2-tailed) |
|---|---|---|---|---|---|
| 1 | (Contrast) | 4.17 | 4.94 | | .40 |
| | Age | -5.45 | 2.72 | -.18 | .05 |
| | Sexual Orientation | 5.91 | 2.98 | .15 | .05 |
| | Education | 1.32 | 1.23 | .08 | .29 |
| | Socioeconomic Status | 1.17 | .59 | .17 | .05 |
| | Religiously Affiliated vs. Atheist | -1.03 | 2.48 | -.04 | .71 |
| | Agnostic vs. Atheist | -1.98 | 3.06 | -.06 | .54 |
| 2 | (Contrast) | -37.92 | 18.38 | | .04 |
| | Age | -.67 | 2.47 | -.02 | .79 |
| | Sexual Orientation | 1.80 | 2.78 | .05 | .51 |
| | Education | 2.33 | 1.33 | .15 | .08 |
| | Socioeconomic Status | 1.02 | .53 | .15 | .06 |
| | Religiously Affiliated vs. Atheist | -.38 | 2.31 | -.02 | .89 |
| | Agnostic vs. Atheist | -2.51 | 2.67 | -.08 | .36 |
| | Self-objectification | .75 | .27 | .20* | .01 |
| | Body Dissatisfaction | .09 | .08 | .10 | .26 |
| | Shame-proneness | .12 | .06 | .24* | .03 |
| | Guilt-proneness | 7.10 | 4.16 | .22 | .09 |
| | Positive Minority Identity | -.09 | .63 | -.01 | .89 |
| | Sense of Connectedness to the LGB Community | 1.10 | 2.07 | .06 | .61 |

*$p < .05$

# CHAPTER VI

# DISCUSSION

The current study examined the predictors of disordered eating patterns among a sample of self-identified gay and bisexual Lebanese men who are 18 years of age and above. Numerous disorders including depression, anxiety, and substance use disorders have shown to be highly prevalent among the LGB population (Cochran & Mays, 2009; Cochran et al., 2003; Frisell, Lichtenstein et al., 2010; Ghorayeb & Dalgalarrondo 2010; Gilman et al., 2001; Kuyper & Fokkema, 2011; Sandfort et al., 2001). However, gay and bisexual men showed to be more vulnerable to developing eating disorders in comparison to lesbian and bisexual women (Cella et al., & Cotrufo, 2010; Feldman & Meyer, 2007; Hadland et al., 2014; Mathews et al., 2004; Shearer et al., 2015; Russell & Keel, 2001; Williamson & Hartley, 1998; Yager et al., 1988). With no literature addressing disordered eating among this population, the aim of this study was thus to examine not only the risk factors but also the protective factors of disordered eating patterns among self-identified gay and bisexual men in Lebanon. With the exception of positive minority identity, shame-proneness, and guilt-proneness, we selected predictors that have been theoretically linked to disordered eating patterns among gay and bisexual men in the literature. These variables included self-objectification, body dissatisfaction, and a sense of connectedness to the LGB community.

The results of the study indicated that the predictor variables under study explained a significant proportion of the variance in disordered eating patterns within

the gay and bisexual Lebanese male community suggesting that the variables are relevant to the population under study. However, only the hypotheses concerning self-objectification and shame-proneness in relation to disordered eating were confirmed.

Consistent with our hypotheses, self-objectification and shame-proneness showed to be positively associated with disordered eating patterns at both the bivariate and multivariate levels with shame-proneness acting as the stronger predictor. The positive association between self-objectification and disordered eating among gay and bisexual men has been highly evidenced in the literature (Martins et al., 2007; Serpa, 2004; Serpa & Garbanati, 2003; Wiseman & Moradi, 2010). The majority of the literature links self-objectification to women's experiences of being sexually observed or, as per the literature, gazed by men (Calogero, 2004; Engeln-Maddox, Miller, & Doyle, 2011). Similarly, gay men are subject to not only being sexually objectified by other gay men but also being critically observed and thus objectified by heterosexual men for not abiding by the masculine norms (Engeln-Maddox et al., 2011). The latter is highly prevalent in a country such as Lebanon due to the heterosexual community's increasing lack of acceptance and marginalization towards gay and bisexual men. As such, non-heterosexual men are predicted to objectify themselves and place high emphasis on their appearance (Gettelman & Thompson, 1993; Siever, 1994; Martins et al., 2007; Kozak, Frankenhauser, & Roberts, 2009), especially in a stigmatizing culture such as Lebanon. This empirically supported hypothesis could aid in explaining the association between self-objectification and disordered eating among gay and bisexual men, and this link was found to be significant within the present study.

There is no literature addressing the link between shame-proneness and disordered eating among gay and bisexual men as a population. However, it has been shown that shame-proneness is highly linked to disordered eating among heterosexual women with shame-proneness acting as a risk factor for the development of eating disorders (Cesare et al., 2016; Hayaki et al., 2002; Sanftner et al., 1995; Troop et al., 2008). With the literature suggesting that the factors that induce negative feelings, attitudes, and behaviours towards eating among gay and bisexual men are similar to those that are linked to the development of disordered eating among heterosexual women, it was hypothesized that shame-proneness would correlate positively and predict disordered eating patterns among the sample under study. The findings confirmed this hypothesis. According to the literature, women's act of internalizing the societal demands for thinness and therefore partaking in disruptive eating could be the result of their attempt to combat their negative sense of self (Silberstein, Striegel-Moore, & Rodin, 1992). With the high stigma that LGB individuals experience in Lebanon, gay and bisexual men could be similarly attempting to battle their internalized shame pertaining to their sexual identity as a result of the rejection they are consistently exposed to by internalizing either societal or the gay community's demands for a more attractive external appearance. As such, disordered eating patterns could be exacerbated among gay and bisexual men as their proneness to experiencing shame increases in response to being ostracized. Kaufman (1992) explains the link between shame and disordered eating as one's act of displacing his or her negative affective experiences onto eating patterns. With the continuous rejection that the LGB community faces as a

result of their unaccepted sexuality in conservative cultures such as Lebanon, gay and bisexual men are likely to experience feelings of shame that are externalized. In an attempt at hiding such expressions, they may attempt at displacing these experiences onto negative eating behaviours instead as per Kaufman's (1992) theory.

Inconsistent with our hypotheses, body dissatisfaction and guilt-proneness did not come out as significant predictors of disordered eating in our model despite being significantly correlated with the outcome variable under study at the bivariate level. It could be that body dissatisfaction and guilt-proneness are related to disordered eating patterns among the sample under study as evidenced by their significant bivariate correlation but that the aforementioned variables of shame-proneness and self-objectification better accounted for the outcome variable within the final regression model. An explanation for this could be that the relationship between either one of the two variables with disordered eating patterns may have been mediated by the variables that came out as significant predictors. For example, feelings of dissatisfaction towards one's body could result in an increase in objectification towards oneself which, in turn, predicts disordered eating symptomatology. Furthermore, with guilt-proneness and shame-proneness positively and significantly correlating with one another, increased feelings of guilt towards their non-heterosexual acts could lead to feelings of shame towards themselves, which could, in turn, predict disruptive feelings, attitudes, and behaviours towards eating. Moreover, what is noteworthy is the positive relation between guilt-proneness and disordered eating patterns among the population under study at the bivariate level. This finding is inconsistent with what is mentioned in the

literature concerning the negative association between guilt-proneness and disordered eating patterns that has been studied among heterosexual women suggesting that guilt-proneness' protective function does not play out among Lebanese self-identified gay and bisexual men. It further refutes the findings of guilt-proneness as a protective factor against the development of disorderly behaviours among LGB individuals (Hequembourg & Dearing, 2013). This suggests that the negative connotation that has been assigned to guilt-proneness as a concept plays out among the Lebanese gay and bisexual male population's feelings, attitudes, and behaviours towards eating. Thus, within a conservative community such as Lebanon, the proneness towards feeling guilty concerning one's acts of engaging in same-sex behaviours could induce one to engage in disruptive eating patterns.

Furthermore, positive minority identity and a sense of connectedness to the LGB community neither predicted nor significantly correlated with disordered eating patterns as per the findings of the study. The protective role of developing a positive minority identity against mental health problems as evidenced in the literature did not show to play out on disordered eating among gay and bisexual men in Lebanon. Moreover, feeling a sense of connectedness to the LGB community showed to have no impact on Lebanese gay and bisexual men's disruptive feeding patterns. A possible explanation could be that developing a positive minority identity as well as a sense of belongingness to the LGB community do not play as strong a protective role in Lebanon given that we live in a society that in no way reinforces or supports either of the two factors. As such, the experiences associated with positively identifying with one's non-

heterosexual orientation as well as gaining a sense of connectedness to the LGB community are highly stigmatized within conservative culture such as Lebanon. It therefore becomes difficult for the two variables to play out their protective function against gay and bisexual men's disruptive eating patterns.

# CHAPTER VII

# LIMITATIONS AND CLINICAL IMPLICATIONS

## A. Limitations and Future Directions

The results of the present study need to be considered in light of a number of limitations. First, the sample was recruited through the method of snowball sampling as well as through the assistance of a number of NGOs that advocate for the rights of the LGBT community in Lebanon, which may have biased the sample. A great number of individuals may refrain from identifying as being a part of the LGBT community or from associating themselves with NGOs that advocate for the LGBT community in Lebanon due to the high stigma associated with such a community in Lebanon and the marginalization that such a community experiences within a conservative culture as that in Lebanon. As such, these individuals might have been underrepresented in the sample obtained for the present study. Thus, the sample is considered to be a sample of convenience. Furthermore, although the sample size is adequate in order to administer a multiple regression, the sample was not large enough for the administration of a factor analysis that was carried out on the subscales of the LGBIS. However, it is important to note that it is difficult to recruit participants that identify as gay or bisexual through the method of random sampling due to their minority status and the stigmatization that they experience in a country such as Lebanon (LeBeau & Jellison, 2009).

Second, studies on sexual minority individuals indicate that participants that agree to take part in research concerned with the LGBT community possess a more socially advantaged background (LeBeau & Jellison, 2009). These participants are

usually considered to be highly educated with a high socioeconomic background. The sample obtained for this study possesses the abovementioned characteristics causing the sample to be less representative of the majority of the gay and bisexual male community in Lebanon. Furthermore, the reliance on LimeSurvey as a method for collecting data could have restricted the sample to gay and bisexual men with a high educational and socioeconomic background. Those with lower levels of education and from a lower socioeconomic background might not have had the knowledge on how to or the resources in order to access the portal. The results of this study must thus be interpreted with caution. It is thus recommended that future studies focus on recruiting a larger, more diverse sample of Lebanese men that identify as gay or bisexual through random sampling in order for the results to be generalized amongst the greater population from which they were recruited. Considering the illegality of being part of the LGBT community in Lebanon, a method of recruitment that could guarantee a sample with a diverse background would be requesting access to the LGBT beneficiaries within the NGO's. This population usually consists of individuals that are characterized as being undereducated and coming from a lower socioeconomic background. The staff and volunteers at the NGO's rather than the researchers themselves could be asked to be in charge of approaching these individuals since they are highly trusted by them. The participants will be guaranteed anonymity and confidentiality of their responses to ensure that their identities will remain concealed.

Third, the gay and bisexual identities were not differentiated in the present study and were treated as a homogeneous group of individuals. Gay and bisexual

individuals experience the development of their sexuality differently and face challenges that are unique to the sexuality that they identify with. For example, both gay and bisexual men are exposed to lower tolerance from society due to society's belief that they are violating or going against the socially defined masculine gender roles (Moussawi, 2008). Bisexual individuals, on the other hand, face challenges in relation to their status as bisexual. For example, society's lack of belief in the existence of bisexuality as a sexual orientation can be a great pressure that bisexual individuals experience (Fox, 2006). It is therefore recommended that future studies examine disordered eating patterns and their predictors among each subgroup separately in order to obtain a clear understanding of the risk and protective factors of disordered eating among the gay and bisexual male community in Lebanon.

Finally, the cross-sectional design that the present study employed limits the conclusions that can be drawn in terms of causality. For example, the results of the study suggest that shame-proneness can predict disordered eating patterns and vice versa rather than conclude that shame-proneness causes the emergence of disordered eating patterns among gay and bisexual men in Lebanon. Another methodological limitation is the presence of the co-investigator when collecting data via paper-based surveys as this can result in an experimenter bias. Furthermore, the use of self-report measures in general can result in response biases.

**B. Clinical Implications**

To our knowledge, this is the first study investigating factors that predict disordered eating among Lebanese gay and bisexual men. In accordance with our model, shame-proneness and self-objectification showed to be the only predictors of disordered eating patterns among the population under study. The findings of this study are preliminary and thus require further research. However, they provide substantial evidence that suggest what the population under study might perceive as distressing and that might contribute to their disruptive feelings, attitudes, and behaviours towards eating. These findings can assist clinicians working with such a vulnerable population suffering from eating disorder symptomatology. Throughout their interventions, as clinicians address their patients' disordered eating symptoms, they can rely on mechanisms that aim to reduce gay and bisexual men's feelings of shame as well as the extent to which they objectify themselves rather than perceive themselves as human beings with high self-worth.

Furthermore, the results can assist NGOs that aim at addressing the mental health of the LGB population. When encountering gay and bisexual men that are prone to developing eating disorder symptoms, mental health professionals working at such organizations can focus on the factors of shame and self-objectification in order to reduce the risk of these individuals developing a full blown eating disorder. These NGOs can raise awareness about the implications that such factors have on the homosexual and bisexual male community in specific. Through these interventions, the shame these individuals have associated with being part of the stigmatized minority population can be targeted by normalizing their sexuality that is societally unaccepted

and shunned. Furthermore, lessening the importance of appearance within the male gay community can have an advantageous impact on gay and bisexual men's perceptions of themselves. Lessening their preoccupation with their outer appearance and placing greater emphasis on their internal self-worth will lessen the extent to which they objectify themselves and will, in turn, reduce their proneness towards developing or their currently present eating disorder symptomatology.

Treatment intervention programs addressing eating disorders in Lebanon are highly minimal. To our knowledge, the Treatment and Outreach Programme for Eating Disorders (TOP-ED) at the American University of Beirut Medical Center (AUBMC) is the only programme that offers services for individuals suffering from or prone to the development of eating disorders. The program is dedicated to warranting that specialized care, on an individual and group basis, is offered to individuals suffering from or at risk of developing an eating disorder.. The programme is still being piloted and may thus benefit from the findings provided within this study. The program may dedicate and execute services specialized for the gay and bisexual male population in particular. Male patients that meet the criteria for disordered eating and identify as gay or bisexual can receive specific interventions that target the factors of shame-proneness and self-objectification that have been empirically verified through this study to predict disordered eating. For example, the interventions, whether at an individual or group basis, can address the participants' feelings of shame concerning their sexuality by encouraging the participants to develop feelings of compassion towards themselves and reducing the internalized stigma that they have developed of themselves.

# CHAPTER VIII

# CONCLUSION

The present study contributed to the scarce literature on the mental health of the LGBT population in the Lebanon and the Middle East. The findings of the study revealed that a large proportion of the variance in disordered eating patterns was explained by self-objectification and shame-proneness among Lebanese gay and bisexual men. These findings thus underline the significance of the Lebanese gay and bisexual male population's internalized experiences as well as their emphasis on their bodily appearance on their disordered feelings, attitudes, and behaviours towards eating. Despite being preliminary, the findings are the first to provide evidence on the factors that contribute to the development of disruptive eating patterns among the population under study in Lebanon and assist mental health professionals in the treatment of eating disorders among gay and bisexual men in the Middle East.

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# APPENDIX A: ONLINE INFORMED CONSENT FORM

**American University of Beirut**
P.O. Box 11011
Riad El Solh, 1107 2020
Beirut, Lebanon

**CONSENT TO SERVE AS A PARTICIPANT IN A RESEARCH PROJECT**

This is an invitation to participate in an AUB-IRB approved Research Study for Dr. Fatimah El-Jamil at AUB. It is not an official message from AUB.

**Project Title:** Predictors of Disordered Eating Patterns Among Self-Identified Gay and Bisexual Men in Lebanon.

**Primary Investigator:**
Fatimah El-Jamil, Ph.D.
Graduate Program Coordinator,
Department of Psychology, AUB
fa25@aub.edu.lb
01-350000 Ext. 4372

**Research Collaborator (Co-investigator):**
Mohamad Naamani
Graduate Student of Clinical Psychology, Department of Psychology, AUB
mnaamani94@gmail.com or
mnn10@aub.edu.lb
71-368085

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**Nature and Purpose of the Project:**

This study is about understanding the factors that influence feelings, attitudes, and behaviours associated with eating among men that identify as gay and bisexual. Gay and bisexual men are highly vulnerable to mental health issues, particularly eating disorders. This has been evident in the Western literature but not in the Middle Eastern literature since research addressing non-heterosexual individuals in the Middle East is scarce. As such, the current study aims at exploring the risk factors for and protective factors against feelings, attitudes, and behaviours associated with eating among self-identified gay and bisexual men in Lebanon.

Please note that the survey will collect sensitive information about emotions and sexual desires.

**Explanation of Procedures:**

To participate in this study, you have to be a Lebanese male who is 18 years of age or above and self-identifies as gay or bisexual. Even though transgender individuals might experience same-sex attractions and thus identify as gay or bisexual, their experiences are distinct from non-transgender gay men and as such, cannot be captured by the scope of this study. Therefore, they are excluded from this study. It is expected that 300 participants will be recruited for this study.

As a research participant, you will be asked to read this consent form and consider carefully your participation. You will then be asked to respond to a questionnaire written in English or Arabic depending on your preference. You are only urged to read the questions carefully, and to answer in a truthful and honest manner. Please do not agonize over your answers. There are no right or wrong answers, and first impressions are usually fine. Just think about what best reflects your own opinions or feelings.

Please understand that your participation is voluntary and that you have the right to discontinue your participation anytime without any justification or penalty. Additionally, refusal to participate will not affect in any way your relationship with AUB or with the organizations involved in sharing information about the opportunity to participate in the study. Clicking on the "*I accept to participate in this study"* button indicates that you have read and understood the consent form and agreed to participate in the study.

It is expected that your participation in this survey will last no more than 20-30 minutes.

**Anonymity and Confidentiality:**

The results of your participation will be kept confidential to the fullest extent possible. We will not ask you to provide your name or any identifying information during your participation. Only the project director and co-investigator will have access to the data, which will be anonymous as no identifying information will be linked to the data you provided. Only information that cannot be traced to you will be used in reports or manuscripts published or presented by the director or investigator. The data will be kept in a password protected computer in the primary investigator's office for a period of three years following the termination of the study. After the three years have elapsed,

the raw data will be discarded. Therefore, there is no need to worry about the confidentiality and anonymity of your answers during data collection, data analysis, and publication of the study. Additionally, the research records for this study may be audited without breaching confidentiality.

To maintain your own privacy, you are strongly discouraged from sharing any information related to the length or structure of the survey. You are also encouraged to answer the questions in a private setting because some of the questions might be personal and sensitive.

**Potential Risks:**

There are no more than minimal risks associated with participation in this survey. We are aware that some of the questions might be personal and sensitive and might make you feel uncomfortable. In case this happens, you are kindly asked to inform the co-investigator collecting the data. Additionally, we have provided you with a list of names and phone numbers of NGOs and sexual health clinics in Lebanon that provide minimal charges for psychological, social, and legal services at the end of the consent form.

**Potential Benefits:**

Your participation in this survey will give you the opportunity to enter a draw to win a gift voucher worth $250 from Virgin Megastore. Your participation will also help in voicing out the experiences of gay and bisexual individuals in conservative cultures like Lebanon and will contribute to the research on this topic especially since there is a scarcity of relevant research in our region of the world. Your participation might also guide other professionals in the field, such as social workers, activists, researchers, and mental health providers, in providing better services for the LGB community based on local findings.

**Costs/Reimbursements:**

Your participation in this survey will give you the opportunity to enter a draw to win a gift voucher worth $250 from Virgin Megastore. This is only applicable to those who meet the inclusion criteria of the study. To enter the draw, you will be directed to a page that is separate/different from that which included the study's survey. The page will provide you with information regarding the draw as well as an individualized code that will in no way be linked to the responses you provided in the survey. The page will also provide you with a link to a website on which the winning code will be reported on a specified date.

Once the targeted number of eligible participants has been achieved, a code will be randomly selected to identify the winning participant. The winning code will be reported on the website you were provided with on the specified date along with the contact information of the co-investigator. The winning participant is responsible for contacting the co-investigator in order to retrieve the gift voucher. Once this is done, all of the codes including that of the winning participant will be deleted.

**Alternative Procedures:**

Should you decide not to give consent to participate in this survey, no alternative procedures will be offered. You may, however, contact the project director or co-investigator to learn more about the study conducted.

**Alternatives to Participation:**

There are no alternatives to participation if you were to decide not to participate in this survey.

**Termination of Participation:**

Should you decide to give consent to participate in this survey, the project director and co-investigator might disregard your answers if the results show that you have not abided by the instructions given at the top of each set of questions or if the answers appear not to be truthful. You may choose to terminate your participation at any point without any justification.

**Withdrawal from the Project:**

Your participation in this survey is completely voluntary. You may withdraw your consent to participate in this research at any point without any justification or penalty. You are also free to stop filling the questionnaires at any point in time without any explanation. Additionally, refusal to participate will not affect in any way your relationship with AUB or with the organizations involved in sharing information about the opportunity to participate in the study.

**Who to Call if You Have Any Questions:**

This project has been reviewed and approved for the period indicated by the American University of Beirut (AUB) Institutional Review Board for the Protection of Human Participants in Research and Research Related Activities.

You can always contact IRB for general questions, concerns, complaints about the research, and questions about subjects' rights in addition to obtaining information about or offering input regarding the study on the following number:

IRB, AUB: 01-350000 Ext. 5445 or 5454

If you have any concerns or questions about the conduct of this research project, you may contact:

| | |
|---|---|
| Fatimah El-Jamil: | E-mail: fa25@aub.edu.lb<br>Phone number: 01-350000 Ext. 4372 |
| Mohamad Naamani: | E-mail: mnaamani94@gmail.com<br>or mnn10@aub.edu.lb<br>Phone number: 71-368085 |

**Debriefing:**

If you are interested in learning about the outcome of the study, you may contact the co-investigator, Mohamad Naamani. After data analysis is completed, a summary of the results can be emailed to you upon request.

**Online Consent to Participate in this Research Project:**

Clicking on the "*I Accept to participate in this study"* button indicates that you have read and understood the consent form and agreed to participate in this research project. The purpose, procedures, and the potential risks and benefits of your participation have been explained to you in details. You can refuse to participate or withdraw your participation in this study at anytime without penalty.

**As promised, below is the list of names and phone numbers of NGOs and Sexual Health Clinics in Lebanon**. **You can seek psychological and social support in case you experienced any form of emotional discomfort related to the study.**

- Arab Foundation for Freedoms and Equality (non-governmental, non-profit organization)
  Tel: 01-326469
  Website: http://afemena.org/
- Helem (non-governmental, non-profit organization):
  Tel: 71-916147
  Website: http://helem.net
- Lebanese Medical Association for Sexual Health (on-governmental, non-profit organization):
  Website: http://lebmash.org

- Marsa Sexual Health Centre (non-governmental, non-profit organization)
  Tel: 01-737647
  Website: http://.marsa.me
- MOSAIC (non-governmental, non-profit organization)
  Tel: 01-395445
  Website: https://www.mosaicmena.org
- Proud Lebanon (non-governmental, non-profit organization)
  Tel: 76-608205
  Website: http://proudlebanon.org

# APPENDIX B: ARABIC VERSION OF THE ONLINE INFORMED CONSENT FORM

الجامعة الأمريكية في بيروت
صندوق بريد رقم: 11011
رياض الصلح، 11072020
بيروت - لبنان

**الموافقة على المشاركة في مشروع بحثي**

هذه دعوة للمشاركة في دراسة بحثية للدكتورة فاطمة الجميل في الجامعة الأميركية في بيروت وبموافقة مجلس المراجعة المؤسساتية. وهذه الدعوة لا تعد رسالة رسمية من الجامعة الأميركية في بيروت.

**عنوان المشروع:** منبّئات اختلال أنماط الأكل لدى الرجال المثليّي الجنس والثنائيّي الميل الجنسي في لبنان.

**المحقق الرئيسي:**
د. فاطمة الجميل
منسقة برنامج الدراسات العليا، قسم علم النفس في الجامعة الأميركية في بيروت
بريد الكتروني: fa25@aub.edu.lb
هاتف: 01-350000 مقسم 4372

**الباحث/المحقق المساعد:**
محمد نعماني
طالب ماجستير، إختصاص علم النفس السريري، قسم علم النفس في الجامعة الأمريكية في بيروت
بريد الكتروني: mnaamani94@gmail.com أو mnn10@aub.edu.lb
هاتف: 71-368085

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**طبيعة المشروع والهدف منه:**

تهدف هذه الدراسة إلى فهم العوامل التي تؤثر على المشاعر والمواقف والسلوكيات المرتبطة بالأكل لدى الرجال المثليّي الجنس والثنائيّي الميل الجنسي. يُعتبر الرجال المثليّو الجنس والثنائيّو الميل الجنسي معرّضين جدا إلى مشاكل في الصحة العقلية لا سيما إلى إختلال أنماط الأكل. وقد كان هذا الأمر واضحا في الكتابات والأبحاث الغربية ولكن ليس في تلك الشرق أوسطية لأن

الأبحاث التي تتعلق بالأفراد ذوي التوجه المثليّ الجنسي في الشرق الأوسط نادرة. ومن هذا المنطلق تهدف الدراسة الحالية إلى إكتشاف عوامل الخطر والعوامل الوقائية في ما يتعلق بالمشاعر والمواقف والسلوكيات المرتبطة بالأكل لدى الرجال المثليّي الجنس والثنائيي الميل الجنسي في لبنان.

تجدر الاشارة إلى أن الاستطلاع سوف يجمع معلومات حساسة تتعلق بالعواطف والرغبات الجنسية.

**الإجراءات المتبعة:**

إن كنت تود المشاركة في هذه الدراسة، ينبغي أن تكون رجلا لبنانيا تبلغ من العمر 18 عاما وما فوق، وتعتبر نفسك مثليّ الجنس أو ثنائيّ الميل الجنسي. وعلى الرغم من أن الأفراد المتحوّلين جنسياً قد ينجذبون لأشخاص من نفس الجنس وبالتالي يعرّف عنهم بمثليي الجنس أو ثنائيي الميل الجنسي، تُعدّ تجاربهم مختلفة عن الرجال المثليين غير المتحوّلين جنسياً وبالتالي لا يمكن شملهم في هذه الدراسة وهم مستثنون منها. ومن المتوقع أن يتم إشراك 300 مشارك في هذه الدراسة.

وبصفتك مشاركا في البحث، سيطلب منك قراءة استمارة الموافقة والتفكير جدياً في مشاركتك. بعد ذلك سيطلب منك الإجابة على الإستبيان المكتوب باللغة الإنكليزية أو العربية وذلك حسب اللغة التي تفضلها. يتم حثك فقط على قراءة الأسئلة بعناية والإجابة عنها بصدق وصراحة. نتمنى عليك عدم الشعور بالألم تجاه إجاباتك إذ ما من إجابات صحيحة أو خاطئة والإنطباعات الأولية عادة ما تكون جيدة. فكّر فقط في أفضل ما يعكس آراءك ومشاعرك الخاصة.

عليك أن تفهم أن مشاركتك طوعية ويمكنك التوقف عن المشاركة في أي وقت من دون أي تبرير أو بند جزائي. بالإضافة إلى ذلك، إن رفضك المشاركة لن يؤثر بأي حال من الأحوال على علاقتك مع الجامعة الأمريكية في بيروت أو مع المنظمات المعنية في مجال تبادل المعلومات حول فرصة المشاركة في هذه الدراسة. إن الضغط على زر "*أقبل المشاركة في هذه الدراسة*" يشير إلى أنك قرأت وفهمت استمارة الموافقة ووافقت على المشاركة في هذه الدراسة.

من المتوقع ألا تستغرق مشاركتك في هذا الاستطلاع أكثر من 20-30 دقيقة.

**كتمان الهوية والسرّية:**

سيتم الحفاظ على سرية نتائج مشاركتك إلى أقصى حد ممكن. ولن نسألك عن إسمك أو عن أي معلومات تعريفية عنك أثناء مشاركتك. ولن يتمكن أحد من الولوج إلى البيانات سوى مدير المشروع أي المحقق الرئيسي والباحث المساعد. وهذه البيانات بدورها ستكون مجهولة الهوية ولن يتم ربط أي معلومة تحدد هوية الشخص المشارك بالبيانات التي قدّمتها. وحدها المعلومات التي لا يمكن ان تعزى إليك سيتم إستخدامها في التقارير أو المخطوطات المنشورة أو التي سيتم عرضها من قبل المدير أو المحقق. وسيتم حفظ البيانات في جهاز كمبيوتر محمي بكلمة سر في مكتب

المحقق الرئيسي لمدة ثلاث سنوات بعد الإنتهاء من الدراسة. وبعد انقضاء ثلاث سنوات، سيتم التخلص من البيانات الأولية. لذلك، ليست هناك حاجة للقلق حول سرية وهوية صاحب الاجابات خلال جمع البيانات وتحليلها ونشر الدراسة. بالإضافة إلى ذلك، يمكن إخضاع سجلات البحث الخاصة بهذه الدراسة إلى التدقيق من دون انتهاك السرية.

وبغية الحفاظ على خصوصيتك، ننصحك بضرورة عدم مشاركة أي معلومة تتعلق بمدة الاستطلاع أو هيكليته. كما نشجعك على الإجابة على الأسئلة في مكان خاص لأن بعض الأسئلة قد تكون شخصية وحساسة.

**المخاطر المحتملة:**

لا يوجد أكثر من الحد الأدنى من المخاطر المرتبطة بالمشاركة في هذا الاستطلاع. نحن ندرك أن بعض الأسئلة قد تكون شخصية وحساسة وقد تشعرك بعدم الارتياح. في حال حدوث ذلك، نرجو منك إبلاغ الباحث المساعد المسؤول عن جمع البيانات. لذلك، قمنا بتزويدك بقائمة في نهاية استمارة الموافقة تتضمن أسماء وأرقام هواتف منظمات غير حكومية وعيادات الصحة الجنسية في لبنان التي توفر الخدمات النفسية والاجتماعية والقانونية مقابل رسم مالي ضئيل.

**المنافع المحتملة:**

ستتيح لك مشاركتك في هذا الاستطلاع الفرصة للدخول في سحب للفوز بقسيمة شرائية بقيمة 250$ من Virgin Megastore . أيضاً، سوف تساعد مشاركتك في التعبير عن تجارب مثليي الجنس وثنائيي الميل الجنسي في ظل الثقافات المحافظة مثل لبنان، كما وستسهم في إجراء البحث حول هذا الموضوع لا سيما أن الأبحاث في هذا المجال نادرة في منطقتنا. كما وقد تساهم مشاركتك أيضا في إرشاد أشخاص محترفين آخرين في هذا المجال مثل الأخصائيين الإجتماعيين والناشطين والباحثين ومقدمي الرعاية الصحية العقلية، لتقديم خدمات أفضل لمجتمع مثليي الجنس وثنائيي الميل الجنسي (LGB) وذلك إستنادا إلى نتائج الاستطلاع المحلية.

**التكاليف/ التسديدات:**

ستتيح لك مشاركتك في هذا الاستطلاع الفرصة للدخول في سحب للفوز بقسيمة شرائية بقيمة 250$ من Virgin Megastore . وهذا ينطبق فقط على أولئك الذين يستوفون المعايير المحددة للدراسة. ومن أجل الدخول في السحب، سيتم توجيهك إلى صفحة منفصلة/مختلفة عن تلك التي تضمنت الاستطلاع. وستزودك الصفحة بالمعلومات المتعلقة بالسحب، كما ستزودك برمز خاص لك. ولن يتم ربط الرمزبأي شكل من الأشكال بالاجوبة التي ستقدمها في الاستطلاع. بالإضافة إلى ذلك، ستزودك الصفحة برابط للموقع الذي سيعلن رمز المشارك الفائز في تاريخ محدد.

وبمجرد الحصول على العدد المستهدف من المشاركين المؤهلين، سيتم اختيار رمزاً بشكل عشوائي لتحديد المشترك الفائز سوف يعلن الموقع رمز المشارك الفائز كما وسيزودك بمعلومات الإتصال

للباحث المساعد لكي تتواصل معه من أجل استلام الجائزة. وبمجرد الانتهاء من ذلك، سيتم محو كافة الرموز المقدمة بما في ذلك الرمز للمشترك الفائز.

**الإجراءات البديلة:**

إذا قررت عدم إعطاء الموافقة على المشاركة في هذا الاستطلاع، لن يتم تقديم أية إجراءات بديلة. مع ذلك، يمكنك الاتصال بمدير المشروع أو الباحث المساعد لمعرفة المزيد بخصوص الدراسة التي أجريت.

**بدائل للمشاركة:**

لا توجد بدائل للمشاركة إذا كنت قررت عدم المشاركة في هذا الاستطلاع.

**إنهاء المشاركة:**

إذا قررت الموافقة على المشاركة في هذا الاستطلاع، قد يتجاهل مدير المشروع والباحث المساعد عن إجاباتك إذا أظهرت النتائج أنك لم تلتزم بالتعليمات الواردة في أعلى كل مجموعة من الأسئلة أو إذا لم تكن الإجابات صريحة. يمكنك اختيار إنهاء مشاركتك في أي وقت من دون الحاجة إلى تقديم أي مبرر.

**الانسحاب من المشروع:**

إن مشاركتك في هذه الدراسة الاستقصائية طوعية بالكامل. يمكنك سحب موافقتك على المشاركة في هذا البحث في أي وقت من دون الحاجة لتقديم أي مبرر أو وجود أي بند جزائي. وأنت حر أيضا في التوقف عن ملء الاستبيان في أي وقت من دون تقديم أي تفسير. بالإضافة إلى ذلك، فإن رفض المشاركة لن يؤثر بأي شكل من الأشكال على علاقتك مع الجامعة الأميركية في بيروت أو مع المنظمات المشاركة في تبادل المعلومات حول فرصة المشاركة في الدراسة.

**بمن عليك الإتصال إن كان لديك أي أسئلة:**

قد تم مراجعة هذا المشروع والموافقة عليه للمدة المحددة من قبل مجلس المراجعة المؤسساتية لحماية الأفراد المشاركين في الأبحاث والأنشطة ذات الصلة في الجامعة الأميركية في بيروت (AUB).

كما ويمكنك دائما الاتصال بمجلس المراجعة المؤسساتية (IRB) على الرقم التالي إن كان لديك أسئلة عامة أو مخاوف أو شكاوى متعلقة بالبحث أو إن كان لديك أسئلة عن حقوق الأشخاص المعنيين بالدراسة أو تودّ الحصول على معلومات أو تقديم مساهمات بشأن الدراسة:

مجلس المراجعة المؤسساتية في الجامعة الأميركية في بيروت: 01-350000 مقسم 5445 أو 5454

إذا كان لديك أي مخاوف أو أسئلة حول سير هذا المشروع البحثي، يمكنك الاتصال ب:

فاطمة الجميل: البريد الإلكتروني: fa25@aub.edu.lb
رقم الهاتف: 01-350000 مقسم 4372
محمد نعماني: البريد الإلكتروني: mnaamani94@gmail.com أو mnn10@aub.edu.lb
رقم الهاتف: 71-368085

**ملخّص المعلومات:**

إذا كنت ترغب في معرفة نتائج الدراسة، يمكنك الاتصال بالباحث المساعد محمد نعماني. وبعد الانتهاء من تحليل البيانات، يمكننا، وبناءً للطلب، إرسال ملخص عن النتائج إلى بريدك الالكتروني.

**موافقة إلكترونية للمشاركة في هذا المشروع البحثي:**

يشير النقر على زر "أقبل المشاركة في هذه الدراسة" إلى أنك قد قرأت وفهمت استمارة الموافقة ووافقت على المشاركة في هذا المشروع البحثي. وقد تم شرح الهدف والإجراءات والمخاطر المحتملة والمنافع من مشاركتك بالتفصيل. يمكنك رفض المشاركة أو الإنسحاب من هذه الدراسة في أي وقت من دون وجود أي بند جزائي.

تجد أدناه، قائمة بأسماء وأرقام هواتف المنظمات غير الحكومية وعيادات الصحة الجنسية في لبنان. يمكنك طلب الدعم النفسي والاجتماعي في حال واجهت أي شكل من أشكال الانزعاج العاطفي ذات الصلة بالدراسة.

- المؤسسة العربية للحريات والمساواة (منظمة غير حكومية، منظمة غير ربحية)

  هاتف رقم: 01-326469

  الموقع الإلكتروني: http://afemena.org/
- حلم (منظمة غير حكومية، منظمة غير ربحية):

  هاتف رقم: 71-916147

  الموقع الإلكتروني: http://helem.net
- الجمعية الطبية اللبنانية للصحة الجنسية (منظمة حكومية غير ربحية):

  الموقع الإلكتروني: http://lebmash.org
- مركز مرسى للصحة الجنسية (غير حكومية، منظمة غير ربحية)

هاتف رقم: 01-737647

الموقع الإلكتروني: http://.marsa.me

- منظمة موزاييك (منظمة غير حكومية، غير ربحية)

هاتف: 01-395445

الموقع الإلكتروني: https://www.mosaicmena.org

- براود لبنان (منظمة غير حكومية، غير ربحية)

هاتف: 76-608205

الموقع الإلكتروني: http://proudlebanon.org

# APPENDIX C: PAPER-BASED INFORMED CONSENT FORM

**American University of Beirut**
P.O. Box 11011
Riad El Solh, 1107 2020
Beirut, Lebanon

**CONSENT TO SERVE AS A PARTICIPANT IN A RESEARCH PROJECT**

This is an invitation to participate in an AUB-IRB approved Research Study for Dr. Fatimah El-Jamil at AUB. It is not an official message from AUB.

**Project Title:** Predictors of Disordered Eating Patterns Among Self-Identified Gay and Bisexual Men in Lebanon.

**Primary Investigator:**
Fatimah El-Jamil, Ph.D.
Graduate Program Coordinator,
Department of Psychology, AUB
fa25@aub.edu.lb
01-350000 Ext. 4372

**Research Collaborator (Co-investigator):**
Mohamad Naamani
Graduate Student of Clinical Psychology, Department of Psychology, AUB
mnaamani94@gmail.com or
mnn10@aub.edu.lb
71-368085

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**Nature and Purpose of the Project:**

This study is about understanding the factors that influence feelings, attitudes, and behaviours associated with eating among men that identify as gay and bisexual. Gay and bisexual men are highly vulnerable to mental health issues, particularly eating disorders. This has been evident in the Western literature but not in the Middle Eastern literature since research addressing non-heterosexual individuals in the Middle East is scarce. As such, the current study aims at exploring the risk factors for and protective factors against feelings, attitudes, and behaviours associated with eating among self-identified gay and bisexual men in Lebanon.

Please note that the survey will collect sensitive information about emotions and sexual desires.

**Explanation of Procedures:**

To participate in this study, you have to be a Lebanese male who is 18 years of age or above and self-identifies as gay or bisexual. Even though transgender individuals might experience same-sex attractions and thus identify as gay or bisexual, their experiences are distinct from non-transgender gay men and as such, cannot be captured by the scope of this study. Therefore, they are excluded from this study. It is expected that 300 participants will be recruited for this study.

As a research participant, you will be asked to read this consent form and consider carefully your participation. You will then be asked to respond to a questionnaire written in English or Arabic depending on your preference. You are only urged to read the questions carefully, and to answer in a truthful and honest manner. Please do not agonize over your answers. There are no right or wrong answers, and first impressions are usually fine. Just think about what best reflects your own opinions or feelings.

Please understand that your participation is voluntary and that you have the right to discontinue your participation anytime without any justification or penalty. Additionally, refusal to participate will not affect in any way your relationship with AUB or with the organizations involved in sharing information about the opportunity to participate in the study. Choosing the "I accept to participate in this study" option provided at the end of the consent form indicates that you have read and understood the consent form and agreed to participate in the study.

It is expected that your participation in this survey will last no more than 20-30 minutes.

**Anonymity and Confidentiality:**

The results of your participation will be kept confidential to the fullest extent possible. We will not ask you to provide your name or any identifying information during your participation. Only the project director and co-investigator will have access to the data, which will be anonymous as no identifying information will be linked to the data you provided. Only information that cannot be traced to you will be used in reports or manuscripts published or presented by the director or investigator. The data will be kept in a password protected computer in the primary investigator's office for a period of three years following the termination of the study. After the three years have elapsed, the raw data will be discarded. Therefore, there is no need to worry about the confidentiality and anonymity of your answers during data collection, data analysis, and

publication of the study. Additionally, the research records for this study may be audited without breaching confidentiality.

To maintain your own privacy, you are strongly discouraged from sharing any information related to the length or structure of the survey. You are also encouraged to answer the questions in a private setting because some of the questions might be personal and sensitive.

**Potential Risks:**

There are no more than minimal risks associated with participation in this survey. We are aware that some of the questions might be personal and sensitive and might make you feel uncomfortable. In case this happens, you are kindly asked to inform the co-investigator collecting the data. Additionally, we have provided you with a list of names and phone numbers of NGOs and sexual health clinics in Lebanon that provide minimal charges for psychological, social, and legal services at the end of the consent form.

**Potential Benefits:**

Your participation in this survey will give you the opportunity to enter a draw to win a gift voucher worth $250 from Virgin Megastore. Your participation will also help in voicing out the experiences of gay and bisexual individuals in conservative cultures like Lebanon and will contribute to the research on this topic especially since there is a scarcity of relevant research in our region of the world. Your participation might also guide other professionals in the field, such as social workers, activists, researchers, and mental health providers, in providing better services for the LGB community based on local findings.

**Costs/Reimbursements:**

Your participation in this survey will give you the opportunity to enter a draw to win a gift voucher worth $250 from Virgin Megastore. This is only applicable to those who meet the inclusion criteria of the study. To enter the draw, you will be provided with a form that is separate/different from that which included the study's survey. The form will provide you with information regarding the draw. You will then be asked to pick out a sheet of paper that will contain a code that will in no way be linked to the responses you provided in the survey from a jar filled with similar sheets. The form will also provide you with a link to a website on which the winning code will be reported on a specified date.

Once the targeted number of eligible participants has been achieved, a code will be randomly selected to identify the winning participant. The winning code will be reported on the website you were provided with on the specified date along with the contact information of the co-investigator. The winning participant is responsible for contacting the co-investigator in order to retrieve the gift voucher. Once this is done, all of the codes provided will be deleted.

**Alternative Procedures:**

Should you decide not to give consent to participate in this survey, no alternative procedures will be offered. You may, however, contact the project director or co-investigator to learn more about the study conducted.

**Alternatives to Participation:**

There are no alternatives to participation if you were to decide not to participate in this survey.

**Termination of Participation:**

Should you decide to give consent to participate in this survey, the project director and co-investigator might disregard your answers if the results show that you have not abided by the instructions given at the top of each set of questions or if the answers appear not to be truthful. You may choose to terminate your participation at any point without any justification.

**Withdrawal from the Project:**

Your participation in this survey is completely voluntary. You may withdraw your consent to participate in this research at any point without any justification or penalty. You are also free to stop filling the questionnaires at any point in time without any explanation. Additionally, refusal to participate will not affect in any way your relationship with AUB or with the organizations involved in sharing information about the opportunity to participate in the study.

**Who to Call if You Have Any Questions:**

This project has been reviewed and approved for the period indicated by the American University of Beirut (AUB) Institutional Review Board for the Protection of Human Participants in Research and Research Related Activities.

You can always contact IRB for general questions, concerns, complaints about the research, and questions about subjects' rights in addition to obtaining information about or offering input regarding the study on the following number:

IRB, AUB: 01-350000 Ext. 5445 or 5454

If you have any concerns or questions about the conduct of this research project, you may contact:

| | |
|---|---|
| Fatimah El-Jamil: | E-mail: fa25@aub.edu.lb<br>Phone number: 01-350000 Ext. 4372 |
| Mohamad Naamani: | E-mail: mnaamani94@gmail.com<br>or mnn10@aub.edu.lb<br>Phone number: 71-368085 |

**Debriefing:**

If you are interested in learning about the outcome of the study, you may contact the co-investigator, Mohamad Naamani. After data analysis is completed, a summary of the results can be emailed to you upon request.

**Consent to Participate in this Research Project:**

Signing in the space provided below indicates that you have read and understood the consent form and agreed to participate in this research project. The purpose, procedures, and the potential risks and benefits of your participation have been explained to you in details. You can refuse to participate or withdraw your participation in this study at anytime without penalty.

☐ I accept to participate in this study
☐ I do not accept to participate in this study

**As promised, below is the list of names and phone numbers of NGOs and Sexual Health Clinics in Lebanon**. **You can seek psychological and social support in case you experienced any form of emotional discomfort related to the study.**

- Arab Foundation for Freedoms and Equality (non-governmental, non-profit organization)
  Tel: 01-326469
  Website: http://afemena.org/
- Helem (non-governmental, non-profit organization):
  Tel: 71-916147
  Website: http://helem.net

- Lebanese Medical Association for Sexual Health (on-governmental, non-profit organization):
  Website: http://lebmash.org
- Marsa Sexual Health Centre (non-governmental, non-profit organization)
  Tel: 01-737647
  Website: http://.marsa.me
- MOSAIC (non-governmental, non-profit organization)
  Tel: 01-395445
  Website: https://www.mosaicmena.org
- Proud Lebanon (non-governmental, non-profit organization)
  Tel: 76-608205
  Website: http://proudlebanon.org

# APPENDIX D: ARABIC VERSION OF THE PAPER-BASED INFORMED CONSENT FORM

الجامعة الأمريكية في بيروت
صندوق بريد رقم: 11011
رياض الصلح، 11072020
بيروت - لبنان

**الموافقة على المشاركة في مشروع بحثي**

هذه دعوة للمشاركة في دراسة بحثية للدكتورة فاطمة الجميل في الجامعة الأميركية في بيروت وبموافقة مجلس المراجعة المؤسساتية. وهذه الدعوة لا تعد رسالة رسمية من الجامعة الأميركية في بيروت.

**عنوان المشروع:** منبّئات اختلال أنماط الأكل لدى الرجال المثليّي الجنس والثنائيّي الميل الجنسي في لبنان.

**المحقق الرئيسي:**

د. فاطمة الجميل
منسقة برنامج الدراسات العليا، قسم علم النفس في الجامعة الأميركية في بيروت
بريد الكتروني: fa25@aub.edu.lb
هاتف: 01-350000 مقسم 4372

**الباحث/المحقق المساعد:**

محمد نعماني
طالب ماجستير، إختصاص علم النفس السريري، قسم علم النفس في الجامعة الأمريكية في بيروت
بريد الكتروني: mnaamani94@gmail.com أو mnn10@aub.edu.lb
هاتف: 71-368085

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**طبيعة المشروع والهدف منه:**

تهدف هذه الدراسة إلى فهم العوامل التي تؤثر على المشاعر والمواقف والسلوكيات المرتبطة بالأكل لدى الرجال المثليّي الجنس والثنائيّي الميل الجنسي. يُعتبر الرجال المثليّو الجنس والثنائيّو الميل الجنسي معرّضين جدا إلى مشاكل في الصحة العقلية لا سيما إلى إختلال أنماط الأكل. وقد كان هذا الأمر واضحا في الكتابات والأبحاث الغربية ولكن ليس في تلك الشرق أوسطية لأن

الأبحاث التي تتعلق بالأفراد ذوي التوجه المثليّ الجنسي في الشرق الأوسط نادرة. ومن هذا المنطلق تهدف الدراسة الحالية إلى إكتشاف عوامل الخطر والعوامل الوقائية في ما يتعلق بالمشاعر والمواقف والسلوكيات المرتبطة بالأكل لدى الرجال المثليّي الجنس والثنائيي الميل الجنسي في لبنان.

تجدر الاشارة إلى أن الاستطلاع سوف يجمع معلومات حساسة تتعلق بالعواطف والرغبات الجنسية.

**الإجراءات المتبعة:**

إن كنت تود المشاركة في هذه الدراسة، ينبغي أن تكون رجلا لبنانيا تبلغ من العمر 18 عاما وما فوق، وتعتبر نفسك مثليّ الجنس أو ثنائيّ الميل الجنسي. وعلى الرغم من أن الأفراد المتحوّلين جنسياً قد ينجذبون لأشخاص من نفس الجنس وبالتالي يعرّف عنهم بمثليي الجنس أو ثنائيي الميل الجنسي، تُعدّ تجاربهم مختلفة عن الرجال المثليين غير المتحوّلين جنسياً وبالتالي لا يمكن شملهم في هذه الدراسة وهم مستثنون منها. ومن المتوقع أن يتم إشراك 300 مشارك في هذه الدراسة.

وبصفتك مشاركا في البحث، سيطلب منك قراءة استمارة الموافقة والتفكير جدياً في مشاركتك. بعد ذلك سيطلب منك الإجابة على الإستبيان المكتوب باللغة الإنكليزية أو العربية وذلك حسب اللغة التي تفضلها. يتم حثك فقط على قراءة الأسئلة بعناية والإجابة عنها بصدق وصراحة. نتمنى عليك عدم الشعور بالألم تجاه إجاباتك إذ ما من إجابات صحيحة أو خاطئة والإنطباعات الأولية عادة ما تكون جيدة. فكّر فقط في أفضل ما يعكس آراءك ومشاعرك الخاصة.

عليك أن تفهم أن مشاركتك طوعية ويمكنك التوقف عن المشاركة في أي وقت من دون أي تبرير أو بند جزائي. بالإضافة إلى ذلك، إن رفضك المشاركة لن يؤثر بأي حال من الأحوال على علاقتك مع الجامعة الأمريكية في بيروت أو مع المنظمات المعنية في مجال تبادل المعلومات حول فرصة المشاركة في هذه الدراسة. يشير اختيار خيار "*أقبل المشاركة في هذه الدراسة*" الوارد في نهاية إستمارة الموافقة إلى أنك قرأت وفهمت إستمارة الموافقة ووافقت على المشاركة في الدراسة.

من المتوقع ألا تستغرق مشاركتك في هذا الاستطلاع أكثر من 20-30 دقيقة.

**كتمان الهوية والسرّية:**

سيتم الحفاظ على سرية نتائج مشاركتك إلى أقصى حد ممكن. ولن نسألك عن إسمك أو عن أي معلومات تعريفية عنك أثناء مشاركتك. ولن يتمكن أحد من الولوج إلى البيانات سوى مدير المشروع أي المحقق الرئيسي والباحث المساعد. وهذه البيانات بدورها ستكون مجهولة الهوية ولن يتم ربط أي معلومة تحدد هوية الشخص المشارك بالبيانات التي قدّمتها. وحدها المعلومات التي لا يمكن ان تعزى إليك سيتم إستخدامها في التقارير أو المخطوطات المنشورة أو التي سيتم عرضها من قبل المدير أو المحقق. وسيتم حفظ البيانات في جهاز كمبيوتر محمي بكلمة سر في مكتب

المحقق الرئيسي لمدة ثلاث سنوات بعد الإنتهاء من الدراسة. وبعد انقضاء ثلاث سنوات، سيتم التخلص من البيانات الأولية. لذلك، ليست هناك حاجة للقلق حول سرية وهوية صاحب الاجابات خلال جمع البيانات وتحليلها ونشر الدراسة. بالإضافة إلى ذلك، يمكن إخضاع سجلات البحث الخاصة بهذه الدراسة إلى التدقيق من دون انتهاك السرية.

وبغية الحفاظ على خصوصيتك، ننصحك بضرورة عدم مشاركة أي معلومة تتعلق بمدة الاستطلاع أو هيكليته. كما نشجعك على الإجابة على الأسئلة في مكان خاص لأن بعض الأسئلة قد تكون شخصية وحساسة.

**المخاطر المحتملة:**

لا يوجد أكثر من الحد الأدنى من المخاطر المرتبطة بالمشاركة في هذا الاستطلاع. نحن ندرك أن بعض الأسئلة قد تكون شخصية وحساسة وقد تشعرك بعدم الارتياح. في حال حدوث ذلك، نرجو منك إبلاغ الباحث المساعد المسؤول عن جمع البيانات. لذلك، قمنا بتزويدك بقائمة في نهاية استمارة الموافقة تتضمن أسماء وأرقام هواتف منظمات غير حكومية وعيادات الصحة الجنسية في لبنان التي توفر الخدمات النفسية والاجتماعية والقانونية مقابل رسم مالي ضئيل.

**المنافع المحتملة:**

ستتيح لك مشاركتك في هذا الاستطلاع الفرصة للدخول في سحب للفوز بقسيمة شرائية بقيمة 250$ من Virgin Megastore . أيضاً، سوف تساعد مشاركتك في التعبير عن تجارب مثليي الجنس وثنائيي الميل الجنسي في ظل الثقافات المحافظة مثل لبنان، كما وستسهم في إجراء البحث حول هذا الموضوع لا سيما أن الأبحاث في هذا المجال نادرة في منطقتنا. كما وقد تساهم مشاركتك أيضا في إرشاد أشخاص محترفين آخرين في هذا المجال مثل الأخصائيين الإجتماعيين والناشطين والباحثين ومقدمي الرعاية الصحية العقلية، لتقديم خدمات أفضل لمجتمع مثليي الجنس وثنائيي الميل الجنسي (LGB) وذلك إستنادا إلى نتائج الاستطلاع المحلية.

**التكاليف/ التسديدات:**

إن مشاركتك في هذا الاستطلاع ستتيح لك الفرصة للدخول في سحب للفوز بقسيمة شرائية بقيمة 250$ من Virgin Megastore . سيتم تزويدك باستمارة منفصلة/مختلفة عن تلك التي شملت الاستطلاع. ستزوّدك هذه الاستمارة بالمعلومات المتعلقة بالسحب. سوف يطلب منك اختيار ورقة مكتوب عليها رمز من جرة مليئة بأوراق مماثلة. لن يتم الرمز بأي شكل من الأشكال بأجوبتك الواردة في الاستطلاع. سوف تزودك الاستمارة برابط للموقع الذي سيعلن رمز المشارك الفائز في تاريخ محدد.

بمجرد الحصول على العدد المطلوب من المشاركين المؤهلين، سيتم اختيار رمزاًعشوائيا ليكون الفائز. سوف يعلن الموقع رمز المشارك الفائز كما وسيزودك بمعلومات الإتصال للباحث المساعد لكي تتواصل معه من أجل استلام الجائزة. بعد الانتهاء من ذلك، سيتم محو جميع الرموز المقدّمة.

**الإجراءات البديلة:**

إذا قررت عدم إعطاء الموافقة على المشاركة في هذا الاستطلاع، لن يتم تقديم أية إجراءات بديلة. مع ذلك، يمكنك الاتصال بمدير المشروع أو الباحث المساعد لمعرفة المزيد بخصوص الدراسة التي أجريت.

**بدائل للمشاركة:**

لا توجد بدائل للمشاركة إذا كنت قررت عدم المشاركة في هذا الاستطلاع.

**إنهاء المشاركة:**

إذا قررت الموافقة على المشاركة في هذا الاستطلاع، قد يتجاهل مدير المشروع والباحث المساعد عن إجاباتك إذا أظهرت النتائج أنك لم تلتزم بالتعليمات الواردة في أعلى كل مجموعة من الأسئلة أو إذا لم تكن الإجابات صريحة. يمكنك اختيار إنهاء مشاركتك في أي وقت من دون الحاجة إلى تقديم أي مبرر.

**الانسحاب من المشروع:**

إن مشاركتك في هذه الدراسة الاستقصائية طوعية بالكامل. يمكنك سحب موافقتك على المشاركة في هذا البحث في أي وقت من دون الحاجة لتقديم أي مبرر أو وجود أي بند جزائي. وأنت حر أيضا في التوقف عن ملء الاستبيان في أي وقت من دون تقديم أي تفسير. بالإضافة إلى ذلك، فإن رفض المشاركة لن يؤثر بأي شكل من الأشكال على علاقتك مع الجامعة الأميركية في بيروت أو مع المنظمات المشاركة في تبادل المعلومات حول فرصة المشاركة في الدراسة.

**بمن عليك الإتصال إن كان لديك أي أسئلة:**

قد تم مراجعة هذا المشروع والموافقة عليه للمدة المحددة من قبل مجلس المراجعة المؤسساتية لحماية الأفراد المشاركين في الأبحاث والأنشطة ذات الصلة في الجامعة الأميركية في بيروت (AUB).

كما ويمكنك دائما الاتصال بمجلس المراجعة المؤسساتية (IRB) على الرقم التالي إن كان لديك أسئلة عامة أو مخاوف أو شكاوى متعلقة بالبحث أو إن كان لديك أسئلة عن حقوق الأشخاص المعنيين بالدراسة أو تودّ الحصول على معلومات أو تقديم مساهمات بشأن الدراسة:

مجلس المراجعة المؤسساتية في الجامعة الأميركية في بيروت: 01-350000 مقسم 5445 أو 5454

إذا كان لديك أي مخاوف أو أسئلة حول سير هذا المشروع البحثي، يمكنك الاتصال ب:

فاطمة الجميل: البريد الإلكتروني: fa25@aub.edu.lb
رقم الهاتف: 01-350000 مقسم 4372
محمد نعماني: البريد الإلكتروني: mnaamani94@gmail.com أو mnn10@aub.edu.lb
رقم الهاتف: 71-368085

**ملخّص المعلومات:**

إذا كنت ترغب في معرفة نتائج الدراسة، يمكنك الاتصال بالباحث المساعد محمد نعماني. وبعد الانتهاء من تحليل البيانات، يمكننا، وبناءً للطلب، إرسال ملخص عن النتائج إلى بريدك الالكتروني.

**موافقة إلكترونية للمشاركة في هذا المشروع البحثي:**

يشير التوقيع في الفراغ الوارد أدناه إلى أنك قرأت وفهمت إستمارة الموافقة ووافقت على المشاركة في هذا المشروع البحثي. وقد تم شرح كافة الأهداف والإجراءات والمخاطر المحتملة والمنافع من مشاركتك على نحو مفصل. يمكنك رفض المشاركة أو سحب مشاركتك من هذه الدراسة في أي وقت من دون وجود أي بند جزائي.

☐ أقبل المشاركة في هذه الدراسة
☐ لا أقبل المشاركة في هذه الدراسة

تجد أدناه، قائمة بأسماء وأرقام هواتف المنظمات غير الحكومية وعيادات الصحة الجنسية في لبنان. يمكنك طلب الدعم النفسي والاجتماعي في حال واجهت أي شكل من أشكال الانزعاج العاطفي ذات الصلة بالدراسة.

- المؤسسة العربية للحريات والمساواة (منظمة غير حكومية، منظمة غير ربحية)

  هاتف رقم: 01-326469

  الموقع الإلكتروني: http://afemena.org/
- حلم (منظمة غير حكومية، منظمة غير ربحية):

  هاتف رقم: 71-916147

  الموقع الإلكتروني: http://helem.net

- الجمعية الطبية اللبنانية للصحة الجنسية (منظمة حكومية غير ربحية):

  الموقع الإلكتروني: http://lebmash.org
- مركز مرسى للصحة الجنسية (غير حكومية، منظمة غير ربحية)

  هاتف رقم: 01-737647

  الموقع الإلكتروني: http://.marsa.me
- منظمة موزاييك (منظمة غير حكومية، غير ربحية)

  هاتف: 01-395445

  الموقع الإلكتروني: https://www.mosaicmena.org
- براود لبنان (منظمة غير حكومية، غير ربحية)

  هاتف: 76-608205

  الموقع الإلكتروني: http://proudlebanon.org

# APPENDIX E: ADVERTISEMENT OF THE STUDY

## Opportunity to participate in a study and win a gift voucher worth $250

We would like to invite you to participate in a study on feelings, attitudes, and behaviours associated with eating among men that identify as gay and bisexual in Lebanon.

### You are eligible to participate in the study if you are:

1. A Lebanese man who identifies as either gay or bisexual
2. 18 years of age or above

The study aims at examining and understanding eating patterns as well as their predictors among self-identified gay and bisexual men in Lebanon.

### What will you be asked to do?

You will be asked to fill out a questionnaire about your mental health symptoms and stressors you might be experiencing.

Completion of the study is expected to take no longer than 20-30 minutes of your time.

If you are interested in participating in the study, you can either:

1. Access the study via the link (https://survey.aub.edu.lb/index.php/917769/lang-en) that will direct you to an online version of the survey

**OR**

2. Contact the co-investigator Mohamad Naamani at 71-368085 in order to arrange to meet at a location that is convenient for you to complete a paper-based version of the survey

All *eligible* participants will be given the opportunity to enter a draw to win a gift voucher worth $250 from Virgin Megastore. The draw will take place once the targeted number of responses has been achieved.

For questions and further information, please contact the principle investigator Dr. Fatimah El Jamil at the American University of Beirut at 01-350000 Ext. 4372 or the co-investigator Mohamad Naamani at 71-368085.

Please note that to ensure your privacy and confidentiality, you will not be asked to provide any personal information.

# APPENDIX F: ADVERTISEMENT OF THE STUDY IN ARABIC

**فرصة للمشاركة في دراسة والفوز بقسيمة شرائية بقيمة $250**

نود دعوتك للمشاركة في دراسة حول المشاعر والمواقف والسلوكيات المرتبطة بالأكل لدى الرجال المثليي الجنس والثنائيي الميل الجنسي في لبنان.

أنت مخوّل للمشاركة في الدراسة إذا كنت:

1. رجلا لبنانيا مثلي الجنس أو ثنائي الميل الجنسي
2. عمرك 18 سنة وما فوق

تهدف الدراسة إلى فحص وفهم أنماط الأكل ومُنبئات هذه الأنماط لدى الرجال المثليي الجنس والثنائيي الميل الجنسي في لبنان.

ما الذي سيطلب منك القيام به؟

سوف يطلب منك ملء إستبيان حول أعراض الصحة العقلية الخاصة بك وعوامل الضغط التي تعاني منها.

من المتوقع ألا تستغرق الدراسة أكثر من 20 إلى 30 دقيقة من وقتك.

إن كنت ترغب في المشاركة في الدراسة، يمكنك إما:

1. الولوج إلى الدراسة عن طريق الرابط (https://survey.aub.edu.lb/index.php/917769/lang-ar) الذي سوف يرشدك إلى نسخة الاستطلاع الإلكترونية

أو

2. الإتصال بالباحث المساعد السيد محمد نعماني على الرقم 71-368085 من أجل ترتيب لقاء في المكان الذي يناسبك لملء نسخة ورقية من الاستطلاع

سيتم منح جميع المشاركين *المؤهلين* الفرصة للدخول في سحب للفوز بقسيمة شرائية بقيمة $250 من Virgin Megastore. وسيجري السحب بعد الوصول إلى العدد المستهدف من الإجابات.

للاستفسار ولمزيد من المعلومات، يرجى الاتصال بالمحقق الرئيسي د. فاطمة الجميل في الجامعة الأميركية في بيروت على الرقم 01-350000 – مقسّم 4372 أو بالباحث المساعد محمد نعماني على الرقم 71-368085.

تجدر الإشارة إلى أنه بهدف ضمان الخصوصية والسرية، لن يطلب منك تقديم أي معلومات شخصية.

# APPENDIX G: DEBRIEFING FORM

Thank you for participating in our study. Your time and effort are much appreciated. The purpose of this study is to examine the risk and protective factors of disordered eating patterns among self-identified gay and bisexual men in Lebanon.

We invited individuals who were Lebanese, were of male gender, were 18 years of age or above, and self-identified as gay or bisexual. In this study, you were asked to fill out a questionnaire that included items that assessed your attitudes, feelings, and behaviours towards eating in addition to a number of factors that are predicted to have an influence on them. These factors include:

- Self-objectification, which is the extent to which one places great emphasis on his or her own appearance.
- Body dissatisfaction, which is the extent to which one perceives his or her own body and figure negatively.
- Shame-proneness, which is the extent to which one negatively evaluates him or her self.
- Guilt-proneness, which is the extent to which one negatively evaluates his or her behaviours or failure to act in certain situations.
- Positive minority identity, which is the extent to which one considers his or her LGB identity as central to his or her sense of self and has positive thoughts, feelings, and emotions towards that identity.
- A sense of connectedness to the LGB community, which is the extent to which one is a part of and has a well-defined relationship and emotional connection with members of the LGB community.

We predict that greater levels of self-objectification, body dissatisfaction, and shame-proneness will be associated with greater disordered eating patterns whereas greater levels of guilt-proneness will be associated with lower disordered eating patterns among gay and bisexual men. We also predict that positive minority identity and a sense of connectedness to the LGB community will emerge as predictors of disordered eating patterns among gay and bisexual men.

Thank you once more for your participation in our study. If you have further questions about the study or wish to withdraw your participation at this point in the study, please contact the principle investigator Fatimah El-Jamil at 01-35000 Ext. 4372 or the co-investigator Mohamad Naamani at 71-368085. In addition, if you have any concerns about any aspect of the study, you may contact the Institutional Review Board of the American University of Beirut at 01-350000 Ext. 5445 or 5454.

If you are interested in learning about the outcome of the study, you may contact the co-investigator, Mohamad Naamani, via the abovementioned contact information. After

data analysis is completed, a summary of the results can be emailed to you upon request.

Below is the list of names and phone numbers of NGOs and Sexual Health Clinics in Lebanon. You can seek psychological and social support in case you experienced any form of emotional discomfort related to the study.

- Arab Foundation for Freedoms and Equality (non-governmental, non-profit organization)
  Tel: 01-326469
  Website: http://afemena.org/
- Helem (non-governmental, non-profit organization):
  Tel: 71-916147
  Website: http://helem.net
- Lebanese Medical Association for Sexual Health (on-governmental, non-profit organization):
  Website: http://lebmash.org
- Marsa Sexual Health Centre (non-governmental, non-profit organization)
  Tel: 01-737647
  Website: http://.marsa.me
- MOSAIC (non-governmental, non-profit organization)
  Tel: 01-395445
  Website: https://www.mosaicmena.org
- Proud Lebanon (non-governmental, non-profit organization)
  Tel: 76-608205
  Website: http://proudlebanon.org

# APPENDIX H: DEBRIEFING FORM IN ARABIC

**إستمارة ملخّص المعلومات**

شكرا لمشاركتك في دراستنا. ونحن نقدر وقتك وجهدك تقديرا كبيرا. إن الهدف من هذه الدراسة هو معاينة عوامل الخطر والوقاية المرافقة للخلل في أنماط الأكل لدى الرجال المثليين وثنائيي الميل الجنسي في لبنان.

وجهنا دعوة إلى أشخاص لبنانيين، من الرجال فقط، من عمر18 سنة أو أكثر الذين يعتبرون أنفسهم مثليي الجنس أوثنائيي الميل الجنسي. طلب منك في هذه الدراسة ملء استبيان يتضمن عناصر تقييم لمواقفك ومشاعرك وسلوكياتك تجاه تناول الطعام بالإضافة إلى عدد من العوامل التي من المتوقع أن يكون لها تأثير على ما سبق. وتشمل هذه العوامل:

- تجسيد الذات: إلى أي مدى يركّز المرء على مظهره إلى حد كبير.
- عدم الرضى عن الجسم: إلى أي مدى ينظر المرء نظرة سلبية إلى جسمه.
- العرضة للخزي: إلى أي مدى يقيم المرء نفسه بصورة سلبية.
- العرضة للشعور بالذنب: إلى أي مدى يقيّم المرء سلبياً سلوكياته أو عدم قدرته على التصرف في بعض المواقف.
- هوية الأقلية الإيجابية: إلى أي مدى يعتبر المرء هويته كشخص مثلي الجنس أو ثنائي الميل الجنسي أمراً أساسياً في إدراكه لذاته وإلى أي مدى يتمتع بأفكار ومشاعر وعواطف إيجابية تجاه هذه الهوية.
- إحساس بالترابط مع مجتمع المثليي الجنس والثنائيي الميل الجنسي (LGB): إلى أي مدى يعتبر المرء نفسه جزءاً من هذا المجتمع (LGB) وله علاقة محددة وجيدة وتواصل عاطفي مع أعضاء هذا المجتمع (LGB).

ونحن نتوقع أن تترافق المستويات العليا من تجسيد الذات وعدم الرضى عن الجسم والعرضة للخزي مع معدلات أعلى من إختلال أنماط الأكل عند الرجال المثليين وثنائيي الميل الجنسي. في حين أن المستويات العليا من العرضة للشعور بالذنب سوف تترافق مع انخفاض نسبة الإختلال في أنماط الاكل عند الرجال المثليين والثنائيي الميل الجنسي. كما نتوقع أن تشكّل هوية الأقلية الإيجابية والإحساس بالترابط مع مجتمع المثليي الجنس والثنائيي الميل الجنسي (LGB) منبّئات لاختلال أنماط الأكل لدى الرجال المثليين والثنائيي الميل الجنسي.

شكرا من جديد لمشاركتك في دراستنا. وإن كان لديك المزيد من الأسئلة حول الدراسة أو ترغب في الإنسحاب من المشاركة في هذه المرحلة من الدراسة، يرجى الاتصال بالمحقق الرئيسي د. فاطمة الجميل على الرقم التالي 01-350000 مقسم 4372 أو مع الباحث المساعد محمد نعماني على الرقم 71-36805. وإذا كان لديك أي مخاوف بشأن أي جانب من جوانب الدراسة، يمكنك الاتصال مجلس

المراجعة المؤسساتية في الجامعة الأميركية في بيروت على الرقم 01-350000 مقسم 5445 أو 5454.

إذا كنت ترغب في معرفة نتائج الدراسة، يمكنك الاتصال بالباحث المساعد محمد نعماني. وبعد الانتهاء من تحليل البيانات، يمكننا، وبناء لطلبك، إرسال ملخص عن نتائج الدراسة إلى بريدك الالكتروني.

تجد أدناه قائمة بأسماء وأرقام هواتف المنظمات غير الحكومية وعيادات الصحة الجنسية في لبنان. يمكنك طلب الدعم النفسي والاجتماعي في حال واجهت أي شكل من أشكال الانزعاج العاطفي المتعلقة بالدراسة.

- المؤسسة العربية للحريات والمساواة (منظمة غير حكومية، منظمة غير ربحية)

  هاتف رقم: 01-326469

  الموقع الإلكتروني: http://afemena.org/
- حلم (منظمة غير حكومية، منظمة غير ربحية):

  هاتف رقم: 71-916147

  الموقع الإلكتروني: http://helem.net
- الجمعية الطبية اللبنانية للصحة الجنسية (منظمة حكومية غير ربحية):

  الموقع الإلكتروني: http://lebmash.org
- مركز مرسى للصحة الجنسية (غير حكومية، منظمة غير ربحية)

  هاتف رقم: 01-737647

  الموقع الإلكتروني:http://.marsa.me
- منظمة موزاييك (منظمة غير حكومية، غير ربحية)

  هاتف: 01-395445

  الموقع الإلكتروني: https://www.mosaicmena.org
- براود لبنان (منظمة غير حكومية، غير ربحية)

  هاتف: 76-608205

  الموقع الإلكتروني: http://proudlebanon.org

# APPENDIX I: GIFT VOUCHER INFORMATION SHEET

Thank you for participating in our study. Your time and effort are highly appreciated. We would like to provide you with the opportunity to enter a draw to win a gift voucher worth $250 from Virgin Megastore. In order to enter the draw, please save the individualized code you have been provided with.

Please note that the code will not in any way be linked to the responses you provided in the survey.

Once the targeted number of eligible participants is achieved, the codes will be entered into a randomizer that will randomly select the code of the winning participant. The winning code will be reported on the website (http://and-the-winner-is.webs.com) on the 25$^{th}$ of March 2018.

You are then required to contact the co-investigator whose contact information will be provided on the website in order to retrieve the gift voucher. Once this is done, all of the codes including that of the winning participant will be deleted.

Thank you once more for your participation and good luck in the draw!

# APPENDIX J: GIFT VOUCHER INFORMATION FORM IN ARABIC

شكراً لمشاركتك في دراستنا. وإذ إننا نقدر تقديرا كبيرا جهدك ووقتك، نقدّم لك فرصة المشاركة في السحب للفوز بقسيمة شرائية بقيمة 250$ من Virgin Megastore. ومن أجل المشاركة في السحب، يرجى الحفاظ برمز التعريف الذي تم تزويدك به.

تجدر الاشارة إلى أنه لن يتم ربط الرمز بأي شكل من الأشكال بالأجوبة التي قدمتها في الاستطلاع. وبمجرد الحصول على العدد المطلوب من المشاركين المؤهلين، سيتم إدخال الرموز ليتم إختيار رمز للمشارك الفائز عشوائيا. سيتم الإبلاغ عن رمز المشارك الفائز على الموقع (http://and-the-winner-is.webs.com) في 25 مارس.

وبمجرد الانتهاء من ذلك، سيتم محو كافة الرموز المقدمة بما فيها الرمز للشخص الفائز.

شكرا لمشاركتك مرة أخرى وحظاً موفقاً في السحب!

# APPENDIX K: DEMOGRAPHICS QUESTIONNAIRE

Please answer all of the questions honestly. You will not be judged based on your responses. Please feel free to ask if you need any of the questions explained to you.

1. Age:
    - ☐ Under 18 years
    - ☐ 18-29 years
    - ☐ 30-49 years
    - ☐ 50-64 years
    - ☐ 65 years or older
2. Gender at birth:
    - ☐ Male
    - ☐ Female
3. Nationality:
    - ☐ Lebanese
    - ☐ Other: _____
4. Please select the item/s that best describe/s you (you can select more than one item):
    - ☐ Straight
    - ☐ Gay
    - ☐ Bisexual
    - ☐ Transgender
    - ☐ Questioning
    - ☐ None of the above
    - ☐ Other: _____
5. Highest level of education attained (if you are still studying, please select the level of education you are currently at):
    - ☐ Lower than high school
    - ☐ High school
    - ☐ Technical school
    - ☐ Undergraduate
    - ☐ Graduate/Masters
    - ☐ Postgraduate/Ph.D.
6. What is your or your family's monthly income?
    - ☐ Less than $200
    - ☐ $201-$500
    - ☐ $501-$1000
    - ☐ $1001-$1500
    - ☐ $1501-$2000
    - ☐ $2001-$3000
    - ☐ $3001-$5000
    - ☐ More than $5000
7. What is your religious affiliation?

- ☐ Christian Catholic
- ☐ Christian Maronite
- ☐ Christian Orthodox
- ☐ Muslim Sunni
- ☐ Muslim Shi’a
- ☐ Druze
- ☐ Atheist
- ☐ Agnostic (I believe that nothing can be known about the existence of God)
- ☐ Other: _____

# APPENDIX L: ARABIC VERSION OF THE DEMOGRAPHICS QUESTIONNAIRE

يرجى الإجابة عن كافة الأسئلة بصراحة. لن يتم تكوين صورة معينة عنك أو إصدار أحكام عليك حسب إجاباتك.
يرجى طلب المساعدة لشرح أي من الأسئلة.

1. العمر:
   - ☐ تحت 18 سنة
   - ☐ 18-29 سنة
   - ☐ 30-49 سنة
   - ☐ 50-64 سنة
   - ☐ 65 سنة و ما فوق
2. الجنس عند الولادة:
   - ☐ ذكر
   - ☐ أنثى
3. الجنسية:
   - ☐ اللبنانية
   - ☐ غير ذلك، حدد: _____
4. يرجى اختيار أكثر صفة تمثلك (يمكن اختيار أكثر من خيار واحد):
   - ☐ مستقيم جنسياً
   - ☐ مثليّ الجنس
   - ☐ ثنائيّ الميل االجنسي
   - ☐ متحوّل جنسياً
   - ☐ غير متأكد
   - ☐ لا خيار من الخيارات المذكورة
   - ☐ غير ذلك، حدد: _____
5. التحصيل العلمي الأعلى (إذا كنت ما زلت تتابع دراستك، يرجى تحديد المستوى التعليمي الذي تتابعه حاليا):
   - ☐ ما دون الشهادة الثانوية
   - ☐ الشهادة الثانوية
   - ☐ شهادة تعليم مهني
   - ☐ إجازة جامعية
   - ☐ تعليم عالي – ماجستير
   - ☐ دكتوراه
6. ما هو مدخولك أو مدخول أسرتك الشهري؟
   - ☐ أقل من 200$
   - ☐ بين 201$ و 500$
   - ☐ بين 501$ و 1000$
   - ☐ بين 1001$ و 1500$
   - ☐ بين 1501$ و 2000$
   - ☐ بين 2001$ و 3000$
   - ☐ بين 3001$ و 5000$
   - ☐ أكثر من 5000$
7. ما هو مذهبك؟

- ☐ مسيحي كاثوليكي
- ☐ مسيحي ماروني
- ☐ مسيحي أرثوذوكسي
- ☐ مسلم سني
- ☐ مسلم شيعي
- ☐ درزي
- ☐ ملحد
- ☐ لا أدريّ (أعتقد أن وجود الله أمر لا يمكن معرفته)
- ☐ غير ذلك، حدد: _____

# APPENDIX M: EATING ATTITUDES TEST-26 (EAT-26)

Carefully read each of the items listed below, and record the number that best expresses how frequently the statements describe you:

1 = Never
2 = Rarely
3 = Sometimes
4 = Often
5 = Usually
6 = Always

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1. | I am terrified about being overweight. | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. | I avoid eating when I am hungry. | 1 | 2 | 3 | 4 | 5 | 6 |
| 3. | I find myself preoccupied with food. | 1 | 2 | 3 | 4 | 5 | 6 |
| 4. | I have gone on eating binges where I feel that I may not be able to stop. | 1 | 2 | 3 | 4 | 5 | 6 |
| 5. | I cut my food into small pieces. | 1 | 2 | 3 | 4 | 5 | 6 |
| 6. | I am aware of the calorie content of foods that I eat. | 1 | 2 | 3 | 4 | 5 | 6 |
| 7. | I particularly avoid food with a high carbohydrate content (i.e., bread, rice, potatoes, etc.). | 1 | 2 | 3 | 4 | 5 | 6 |
| 8. | I feel that others would prefer if I ate more. | 1 | 2 | 3 | 4 | 5 | 6 |
| 9. | I vomit after I have eaten. | 1 | 2 | 3 | 4 | 5 | 6 |
| 10. | I feel extremely guilty after eating. | 1 | 2 | 3 | 4 | 5 | 6 |
| 11. | I am preoccupied with a desire to be thinner. | 1 | 2 | 3 | 4 | 5 | 6 |
| 12. | I think about burning up calories when I exercise. | 1 | 2 | 3 | 4 | 5 | 6 |
| 13. | Other people think that I am too thin. | 1 | 2 | 3 | 4 | 5 | 6 |
| 14. | I am preoccupied with the thought of having fat on my body. | 1 | 2 | 3 | 4 | 5 | 6 |
| 15. | I take longer than others to eat my meals. | 1 | 2 | 3 | 4 | 5 | 6 |
| 16. | I avoid food with sugar in them. | 1 | 2 | 3 | 4 | 5 | 6 |

| | |
|---|---|
| 17. I eat diet foods. | 1 2 3 4 5 6 |
| 18. I feel that food controls my life. | 1 2 3 4 5 6 |
| 19. I display self-control around food. | 1 2 3 4 5 6 |
| 20. I feel that others pressure me to eat. | 1 2 3 4 5 6 |
| 21. I give too much time and thought to food. | 1 2 3 4 5 6 |
| 22. I feel uncomfortable after eating sweets. | 1 2 3 4 5 6 |
| 23. I engage in dieting behaviour. | 1 2 3 4 5 6 |
| 24. I like my stomach to be empty. | 1 2 3 4 5 6 |
| 25. I have the impulse to vomit after meals. | 1 2 3 4 5 6 |
| 26. I enjoy trying new rich foods. | 1 2 3 4 5 6 |

# APPENDIX N: ARABIC VERSION OF THE EATING ATTITUDES TEST-26 (EAT-26)

يرجى قراءة العبارات الواردة أدناه وتحويق الرقم الذي يعبّر عن مدى توصيف العبارة لك:

1= أبداً
2= نادراً
3= أحياناً
4= غالباً
5= عادةً
6= دائماً

| | |
|---|---|
| 1. أرتعب من أن يكون وزني فوق المعدل الطبيعي. | 6 5 4 3 2 1 |
| 2. أتجنب تناول الطعام عند الشعور بالجوع. | 6 5 4 3 2 1 |
| 3. أجد نفسي دائم التفكير بالطعام. | 6 5 4 3 2 1 |
| 4. أكون شرهاً وأشعر أنني قد لا أتمكن من التوقف عن تناول الطعام. | 6 5 4 3 2 1 |
| 5. أقطّع طعامي إلى أجزاء صغيرة. | 6 5 4 3 2 1 |
| 6. أدرك كمية السعرات الحرارية الموجودة في الأطعمة التي أتناولها. | 6 5 4 3 2 1 |
| 7. أتجنب تحديداً الطعام الغني بالنشويات (مثل الخبز والأرز والبطاطا، إلخ..). | 6 5 4 3 2 1 |
| 8. أشعر أن الآخرين يفضلون لو أنني أتناول المزيد من الطعام. | 6 5 4 3 2 1 |
| 9. أتقيأ بعد تناول الطعام. | 6 5 4 3 2 1 |
| 10. أشعر بالذنب الشديد بعد تناول الطعام. | 6 5 4 3 2 1 |
| 11. تسيطر عليّ الرغبة بأن أكون أكثر نحالة. | 6 5 4 3 2 1 |
| 12. أفكر بحرق السعرات الحرارية أثناء التمرين. | 6 5 4 3 2 1 |
| 13. يعتقد الآخرون أنني نحيل جداً. | 6 5 4 3 2 1 |
| 14. تشغل بالي فكرة وجود الدهون على جسمي. | 6 5 4 3 2 1 |
| 15. أستغرق وقتا في تناول الوجبات أكثر من غيري. | 6 5 4 3 2 1 |
| 16. أتجنب الأطعمة التي تحتوي على السكر. | 6 5 4 3 2 1 |
| 17. أتناول أطعمة الحمية الغذائية. | 6 5 4 3 2 1 |
| 18. أشعر أن الطعام يتحكم بحياتي. | 6 5 4 3 2 1 |
| 19. أتحكم بنفسي عند وجود الطعام. | 6 5 4 3 2 1 |
| 20. أشعر أن الآخرين يضغطون عليّ لتناول الطعام. | 6 5 4 3 2 1 |
| 21. أكرّس الكثير من الوقت والتفكير بالطعام. | 6 5 4 3 2 1 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 22. لا أشعر بالراحة بعد تناول الحلويات. | 1 | 2 | 3 | 4 | 5 | 6 |
| 23. أتبع مسلك الحمية الغذائية. | 1 | 2 | 3 | 4 | 5 | 6 |
| 24. أحب أن تكون معدتي خاوية. | 1 | 2 | 3 | 4 | 5 | 6 |
| 25. لديّ الرغبة بالتقيؤ بعد تناول وجبات الطعام. | 1 | 2 | 3 | 4 | 5 | 6 |
| 26. أستمتع بتجربة الأطعمة الغنية الجديدة. | 1 | 2 | 3 | 4 | 5 | 6 |

# APPENDIX O: SELF-OBJECTIFICATION QUESTIONNAIRE (SOQ)

We are interested in how people think about their bodies. The questions below identify 10 different body attributes. Please circle the number that best expresses the extent to which each body attribute is considered to be of concern to you when thinking about your physical self-concept (i.e., body).

Note: It does not matter *how* you describe yourself in terms of each attribute. For example, fitness level can be of great concern to you when thinking about your body regardless of whether you consider yourself to be physically fit, not physically fit, or any level in between.

1 = Not at all
2 = Slightly
3 = Moderately
4 = Very
5 = Extremely

When thinking about your body, to what extent are you concerned with the following body attributes:

| | |
|---|---|
| 1. Physical coordination | 1 2 3 4 5 |
| 2. Health | 1 2 3 4 5 |
| 3. Weight | 1 2 3 4 5 |
| 4. Strength | 1 2 3 4 5 |
| 5. Sex appeal | 1 2 3 4 5 |
| 6. Physical attractiveness | 1 2 3 4 5 |
| 7. Energy level (i.e., stamina) | 1 2 3 4 5 |
| 8. Firm/sculpted muscles | 1 2 3 4 5 |
| 9. Physical fitness level | 1 2 3 4 5 |
| 10. Measurements (e.g., chest, shoulders) | 1 2 3 4 5 |

# APPENDIX P: ARABIC VERSION OF THE SELF-OBJECTIFICATION QUESTIONNAIRE (SOQ)

نحن مهتمون بمعرفة كيف ينظر الناس إلى أجسامهم. الأسئلة أدناه تحدد عشرة سمات جسدية مختلفة. يرجى تحويق الرقم الذي يصف إلى أي مدى تعني لك السمة الجسدية عندما تفكر بجسمك.

ملاحظة: ليس مهماكيف تصف نفسك في ما يتعلق بكل سمة جسدية. على سبيل المثال، قد يكون مستوى اللياقة البدنية مهما جدا بالنسبة إليك عندما تفكر بجسمك بغض النظر إن كنت تعتبر نفسك تتمتع باللياقة البدينة أو لا تتمتع بها أو ما بينهما.

1= مطلقاً
2= قليلاً
3= باعتدال
4= جداً
5= إلى أبعد حد

عندما تفكر بجسمك، إلى أي مدى تهتم بالسمات الجسدية التالية:

| | |
|---|---|
| 1. التنسيق الجسدي | 5 4 3 2 1 |
| 2. الصحة | 5 4 3 2 1 |
| 3. الوزن | 5 4 3 2 1 |
| 4. القوة | 5 4 3 2 1 |
| 5. الجاذبية الجنسية | 5 4 3 2 1 |
| 6. الجاذبية الجسدية | 5 4 3 2 1 |
| 7. مستوى الطاقة (أي قدرة التحمّل) | 5 4 3 2 1 |
| 8. العضلات المشدودة/المنحوتة | 5 4 3 2 1 |
| 9. مستوى اللياقة البدنية | 5 4 3 2 1 |
| 10. المقاسات (مثلا الصدر والكتفين) | 5 4 3 2 1 |

# APPENDIX Q: MALE BODY DISSATISFACTION SCALE (MBDS)

Circle the number that best describes how you currently feel about your body. Please read all of the questions carefully and answer honestly.

1. I am happy with how much muscle I have compared to how much fat I have.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

2. Other people think I have a good body.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

3. I am a good weight for my height.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

4. I wish I had more muscular arms.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

5. I am hesitant to take my shirt off in public because people will look at my body.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

6. I fantasize about having more muscle.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Rarely | Sometimes | Often | Always |

7. I have thoughts of dissatisfaction towards my body.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Rarely | Sometimes | Often | Always |

8. I think I have a generally attractive body.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

9. I wish I had a more V-shaped torso (upper body).

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

10. I wish I could become more toned in order to accentuate the muscle I do have.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

11. I am more muscular than the average male my age.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

12. I worry about being more muscular.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Rarely | Sometimes | Often | Always |

13. I wish I had bigger biceps.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

14. I think my pectoral (chest) muscles are well developed.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

15. I have a “six-pack” or “washboard” stomach.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

16. Others would find me more attractive if I had more muscle.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

17. I wish I could lose more fat.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

18. My body looks healthy.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

19. I like to show off my body.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Rarely | Sometimes | Often | Always |

20. The shape of my body is one of my assets.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

21. I look like I could lift more weight than the average male my age.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

22. I wish I had better muscle definition.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

23. My body is sexually appealing to others.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

24. I think about how different my body looks from what my ideal body would look like.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Rarely | Sometimes | Often | Always |

25. I wish I could build a better body for myself.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

# APPENDIX R: ARABIC VERSION OF THE MALE BODY DISSATISFACTION SCALE (MBDS)

حوّق الرقم الذي أفضل ما يعبّر عمّا تشعر به حالياً تجاه جسمك. يرجى قراءة كافة الأسئلة بعناية والاجابة عنها بصراحة.

1. أنا سعيد بكمية العضلات مقارنةً بكمية الدهون لديّ.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| لا أوافق بشدة | لا أوافق | محايد | أوافق | أوافق بشدة |

2. يظن الآخرون أنني أحظى بجسم جيد.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| لا أوافق بشدة | لا أوافق | محايد | أوافق | أوافق بشدة |

3. وزني يتوافق مع طولي.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| لا أوافق بشدة | لا أوافق | محايد | أوافق | أوافق بشدة |

4. أتمنى لو كان لديّ ساعدان مفتولا العضلات أكثر.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| لا أوافق بشدة | لا أوافق | محايد | أوافق | أوافق بشدة |

5. أتردّد بخلع قميصي أمام العامة لأن الناس سينظرون إلى جسمي.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| لا أوافق بشدة | لا أوافق | محايد | أوافق | أوافق بشدة |

6. أتخيّل نفسي مفتول العضلات أكثر.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| أبداً | نادراً | أحياناً | غالباً | دائماً |

7. تراودني أفكار عدم الرضى عن جسمي.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| أبداً | نادراً | أحياناً | غالباً | دائماً |

8. أعتقد أن جسمي مثير بشكل عام.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| لا أوافق بشدة | لا أوافق | محايد | أوافق | أوافق بشدة |

9. أتمنى لو كان بدني العلوي منحوتا أكثر.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| لا أوافق بشدة | لا أوافق | محايد | أوافق | أوافق بشدة |

10. أتمنى أن تكون عضلاتي منحوتة/مشدودة أكثر لأتمكن من إظهارها.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| لا أوافق بشدة | لا أوافق | محايد | أوافق | أوافق بشدة |

11. أنا مفتول العضلات أكثر من رجل عادي آخر في عمري.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| لا أوافق بشدة | لا أوافق | محايد | أوافق | أوافق بشدة |

12. أقلق تجاه الحصول على المزيد من العضلات.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| أبداً | نادراً | أحياناً | غالباً | دائماً |

13. أتمنى لو كانت العضلة ذات الرأسين (Biceps) أكبر.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| لا أوافق بشدة | لا أوافق | محايد | أوافق | أوافق بشدة |

14. أعتقد أن عضلات صدري نامية جدا.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| لا أوافق بشدة | لا أوافق | محايد | أوافق | أوافق بشدة |

15. عضلات معدتي مقسّمة وظاهرة.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| لا أوافق بشدة | لا أوافق | محايد | أوافق | أوافق بشدة |

16. قد يجدني الآخرون أكثر جاذبية لو كنت مفتول العضلات أكثر.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| لا أوافق بشدة | لا أوافق | محايد | أوافق | أوافق بشدة |

17. أتمنى لو كان بإمكاني خسارة المزيد من الدهون.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| لا أوافق بشدة | لا أوافق | محايد | أوافق | أوافق بشدة |

18. يبدو جسمي صحياً.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| لا أوافق بشدة | لا أوافق | محايد | أوافق | أوافق بشدة |

19. أحب أن أتباهى بجسمي.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| أبداً | نادراً | أحياناً | غالباً | دائماً |

20. شكل جسمي هو أحد نقاط قوتي.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| لا أوافق بشدة | لا أوافق | محايد | أوافق | أوافق بشدة |

21. أوحي أنني بإمكاني رفع أوزان أكثر من رجل آخر عادي من عمري.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| لا أوافق بشدة | لا أوافق | محايد | أوافق | أوافق بشدة |

22. أتمنى لو كانت عضلاتي ظاهرة أكثر.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| لا أوافق بشدة | لا أوافق | محايد | أوافق | أوافق بشدة |

23. جسمي مثير جنسيا للآخرين.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| لا أوافق بشدة | لا أوافق | محايد | أوافق | أوافق بشدة |

24. أفكر في الفرق بين شكل جسمي حاليا وشكل جسمي المثالي.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| أبداً | نادراً | أحياناً | غالباً | دائماً |

25. أتمنى لو أنني أستطيع الحصول على جسم أفضل.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| لا أوافق بشدة | لا أوافق | محايد | أوافق | أوافق بشدة |

# APPENDIX S: INTERNALIZED SHAME SCALE (ISS)

Below is a list of statements describing feelings or experiences that you may have from time to time or that are familiar to you because you have had these feelings and experiences for a long time. most of these statements describe feelings and experiences that are generally painful or negative in some way. Some people will seldom or never have had many of these feelings. Everyone has had some of these feelings at some time, but if you find that these statements describe the way you feel a good deal of time, it can be painful just reading them. Try to be as honest as you can in responding.

Read each statement carefully and circle the number that indicates the frequency with which you find yourself feeling or experiencing what is described in the statement.

0 = Never
1 = Seldom
2 = Sometimes
3 = Often
4 = Almost always

| | | |
|---|---|---|
| 1. | I feel like I am never quite good enough. | 0 1 2 3 4 |
| 2. | I feel somehow left out. | 0 1 2 3 4 |
| 3. | I think that people look down on me. | 0 1 2 3 4 |
| 4. | All in all, I am inclined to feel that I am a success. | 0 1 2 3 4 |
| 5. | I scold myself and put myself down. | 0 1 2 3 4 |
| 6. | I feel insecure about others' opinions of me. | 0 1 2 3 4 |
| 7. | Compared to other people, I feel like I somehow never measure up. | 0 1 2 3 4 |
| 8. | I see myself as being very small and insignificant. | 0 1 2 3 4 |
| 9. | I feel I have much to be proud of. | 0 1 2 3 4 |
| 10. | I feel intensely inadequate and full of self-doubt. | 0 1 2 3 4 |
| 11. | I feel as if I am somehow defective as a person, like there is something basically wrong with me. | 0 1 2 3 4 |
| 12. | When I compare myself to others, I am just not as important. | 0 1 2 3 4 |
| 13. | I have an overpowering dread that my faults will be revealed in front of others. | 0 1 2 3 4 |

| | |
|---|---|
| 14. I feel I have a number of good qualities. | 0 1 2 3 4 |
| 15. I see myself striving for perfection only to continually fall short. | 0 1 2 3 4 |
| 16. I think others are able to see my defects. | 0 1 2 3 4 |
| 17. I could beat myself over the head with a club when I make a mistake. | 0 1 2 3 4 |
| 18. On the whole, I am satisfied with myself. | 0 1 2 3 4 |
| 19. I would like to shrink away when I make a mistake. | 0 1 2 3 4 |
| 20. I replay painful events over and over in my mind until I am overwhelmed. | 0 1 2 3 4 |
| 21. I feel I am a person of worth at least on an equal plane with others. | 0 1 2 3 4 |
| 22. At times, I feel like I will break into a thousand pieces. | 0 1 2 3 4 |
| 23. I feel as if I have lost control over my body functions and my feelings. | 0 1 2 3 4 |
| 24. Sometimes, I feel no bigger than a pea. | 0 1 2 3 4 |
| 25. At times I feel so exposed that I wish the earth would open up and swallow me. | 0 1 2 3 4 |
| 26. I have this painful gap within me that I have not been able to fill. | 0 1 2 3 4 |
| 27. I feel empty and unfilled. | 0 1 2 3 4 |
| 28. I take a positive attitude toward myself. | 0 1 2 3 4 |
| 29. My loneliness is more like emptiness. | 0 1 2 3 4 |
| 30. I feel like there is something missing. | 0 1 2 3 4 |

# APPENDIX T: ARABIC VERSION OF THE INTERNALIZED SHAME SCALE (ISS)

في ما يلي قائمة من العبارات التي تصف مشاعر وخبرات قد تشعر بها وتمر بها بين الحين والآخر أو التي قد تكون مألوفة بالنسبة إليك كونك تعيش هذه المشاعر والخبرات منذ وقت طويل. معظم هذه العبارات تصف مشاعر وخبرات أليمة أو سلبية بشكل عام. قليلا أو نادرا ما قد يختبر بعض الناس الكثير من هذه المشاعر. فكل منا عرف هذه المشاعر في مرحلة ما. لكن إن شعرت أن هذه العبارات تعبر عن حالك معظم الأحيان، قد تشعر بالضيق والألم لمجرد قراءتها. حاول أن تكون صادقا قدر الإمكان عند الإجابة.

إقرأ كل عبارة بعناية وحوّق الرقم الذي يعبّر عن تواتر ما تشعر به أو تختبره وفقا لما هو مذكور في العبارة.

0= أبدا
1= نادرا
2= أحيانا
3= غالبا
4= يكاد يكون دائما

| | | | | | |
|---|---|---|---|---|---|
| 1. أشعر أنني لست جيدا ما يكفي. | 0 | 1 | 2 | 3 | 4 |
| 2. أشعر أنني متروك إلى حد ما. | 0 | 1 | 2 | 3 | 4 |
| 3. أعتقد أن الناس ينظرون إليّ نظرة دونية. | 0 | 1 | 2 | 3 | 4 |
| 4. بشكل عام، أميل للشعور أنني ناجح. | 0 | 1 | 2 | 3 | 4 |
| 5. أوبّخ نفسي وأحطّ من شأني. | 0 | 1 | 2 | 3 | 4 |
| 6. أشعر بالقلق تجاه آراء الآخرين عني. | 0 | 1 | 2 | 3 | 4 |
| 7. أشعر أنني لا أتساوى مع الآخرين حين أقارن نفسي بهم. | 0 | 1 | 2 | 3 | 4 |
| 8. أرى نفسى صغيرا جدا وغير مهم. | 0 | 1 | 2 | 3 | 4 |
| 9. أشعر أنه لديّ الكثير لأفتخر به. | 0 | 1 | 2 | 3 | 4 |
| 10. أشعر أنني قاصر جدا وأشكك بنفسي كثيراً. | 0 | 1 | 2 | 3 | 4 |
| 11. أشعر أن ثمة خطب بي. تشوبني الأخطاء. | 0 | 1 | 2 | 3 | 4 |
| 12. عندما أقارن نفسي بالآخرين، أشعر أنني لست على نفس القدر من الأهمية. | 0 | 1 | 2 | 3 | 4 |
| 13. يتملكني الخوف من أن تظهر عيوبي أمام الآخرين. | 0 | 1 | 2 | 3 | 4 |
| 14. أشعر أنني أتمتع بعدد من المزايا الجيدة. | 0 | 1 | 2 | 3 | 4 |
| 15. أرى نفسي أسعى دائما إلى الكمال لكنني دائما لا أحصل عليه. | 0 | 1 | 2 | 3 | 4 |

| | | | | | |
|---|---|---|---|---|---|
| 16. أظن أن الآخرين قادرون على رؤية عيوبي. | 0 | 1 | 2 | 3 | 4 |
| 17. يمكن أن أضرب رأسي بالهراوة عندما أقترف خطأ ما. | 0 | 1 | 2 | 3 | 4 |
| 18. أنا راضٍ عن نفسي بشكل عام. | 0 | 1 | 2 | 3 | 4 |
| 19. أفضّل أنّ أتلاشى عن الوجود عندما أقترف خطأ ما. | 0 | 1 | 2 | 3 | 4 |
| 20. أستعيد الأحداث المؤلمة في عقلي مرارا وتكرارا حتى تتغلّب عليّ هذه الأفكار. | 0 | 1 | 2 | 3 | 4 |
| 21. أشعر أنني ذو قيمة على الأقل بشكل متساو مع الآخرين. | 0 | 1 | 2 | 3 | 4 |
| 22. أشعر في بعض الأحيان أنني سأتكسّر لآلاف القطع. | 0 | 1 | 2 | 3 | 4 |
| 23. أشعر أنني فقدت السيطرة على وظائف جسمي وعلى مشاعري. | 0 | 1 | 2 | 3 | 4 |
| 24. أشعر أحياناً أن حجمي لا يتجاوز حجم حبة البازيلاء. | 0 | 1 | 2 | 3 | 4 |
| 25. أشعر أحيانا أنني مكشوف جدا إلى حد أنني أتمنى أن تنفتح الأرض وتبتلعني. | 0 | 1 | 2 | 3 | 4 |
| 26. لديّ هوة مؤلمة في داخلي لم أتمكن من ردمها. | 0 | 1 | 2 | 3 | 4 |
| 27. أشعر أنني فارغ. | 0 | 1 | 2 | 3 | 4 |
| 28. أتحلّى بالايجابية تجاه نفسي. | 0 | 1 | 2 | 3 | 4 |
| 29. وحدتي أقرب إلى الفراغ. | 0 | 1 | 2 | 3 | 4 |
| 30. أشعر أن ثمة شي ناقص. | 0 | 1 | 2 | 3 | 4 |

# APPENDIX U: GUILT INVENTORY (GI)

For this section of the questionnaire, please answer the questions using the response format presented below:

1 = Very untrue of me or strongly disagree
2 = Not true of me or disagree
3 = Sometimes true sometimes not or undecided
4 = True of me or agree
5 = Very true of me or strongly agree

| | | |
|---|---|---|
| 1. | I believe in a strict interpretation of right and wrong. | 1 2 3 4 5 |
| 2. | I have made a lot of mistakes in my life. | 1 2 3 4 5 |
| 3. | I have always believed strongly in a firm set of moral-ethical principles. | 1 2 3 4 5 |
| 4. | Lately, I have felt good about myself and what I have done. | 1 2 3 4 5 |
| 5. | If I could do certain things over again, a great burden would be lifted from my shoulders. | 1 2 3 4 5 |
| 6. | I have never felt great remorse or guilt. | 1 2 3 4 5 |
| 7. | My goal in life is to enjoy it rather than live up to some abstract set of moral principles. | 1 2 3 4 5 |
| 8. | There is something in my past that I deeply regret. | 1 2 3 4 5 |
| 9. | Frequently, I just hate myself for something I have done. | 1 2 3 4 5 |
| 10. | My parents were very strict with me. | 1 2 3 4 5 |
| 11. | There are only a few things I would never do. | 1 2 3 4 5 |
| 12. | I often feel “not right” with myself because of something I have done. | 1 2 3 4 5 |
| 13. | My ideas of right and wrong are quite flexible. | 1 2 3 4 5 |
| 14. | If I could live my life over again, there are a lot of things I would do differently. | 1 2 3 4 5 |
| 15. | There are many things I would never do because I believe they were wrong. | 1 2 3 4 5 |

| | |
|---|---|
| 16. I have recently done something that I deeply regret. | 1 2 3 4 5 |
| 17. Lately, it hasn't been easy being me. | 1 2 3 4 5 |
| 18. Morality is not as "black and white" as many people would suggest. | 1 2 3 4 5 |
| 19. Lately, I have been calm and worry-free. | 1 2 3 4 5 |
| 20. Guilt and remorse have been a part of my life for as long as I can recall. | 1 2 3 4 5 |
| 21. Sometimes, when I think about certain things I have done, I almost get sick. | 1 2 3 4 5 |
| 22. In certain circumstances, there is almost nothing I wouldn't do. | 1 2 3 4 5 |
| 23. I do not believe that I have made a lot of mistakes in my life. | 1 2 3 4 5 |
| 24. I would rather die than commit a serious act of wrongdoing. | 1 2 3 4 5 |
| 25. I feel a strong need to live up to my moral values. | 1 2 3 4 5 |
| 26. I often have a strong sense of regret. | 1 2 3 4 5 |
| 27. I worry a lot about things I have done in the past. | 1 2 3 4 5 |
| 28. I believe that you can't judge whether something is right or wrong without knowing the motives of the people involved and the situation in which they are acting. | 1 2 3 4 5 |
| 29. There are a few things in my life that I regret having done. | 1 2 3 4 5 |
| 30. If I could relive the last few weeks or months, there is absolutely nothing I have done that I would change. | 1 2 3 4 5 |
| 31. I sometimes have trouble eating because of things I have done in the past. | 1 2 3 4 5 |
| 32. I never worry about what I do; I believe life will take care of itself. | 1 2 3 4 5 |
| 33. At the moment, I don't feel particularly guilty about anything I have done. | 1 2 3 4 5 |
| 34. Sometimes, I can't stop myself from thinking about things I have done which I consider to be wrong. | 1 2 3 4 5 |
| 35. I never have trouble sleeping. | 1 2 3 4 5 |

| | |
|---|---|
| 36. I would give anything if, somehow, I could go back and rectify some things I have recently done wrong. | 1 2 3 4 5 |
| 37. There is at least one thing in my recent past that I would like to change. | 1 2 3 4 5 |
| 38. I am immediately aware of it when I have done something morally wrong. | 1 2 3 4 5 |
| 39. What is right or wrong depends on the situation. | 1 2 3 4 5 |
| 40. Guilt is not a particular problem for me. | 1 2 3 4 5 |
| 41. There is nothing in my past that I deeply regret. | 1 2 3 4 5 |
| 42. I believe that moral values are absolute. | 1 2 3 4 5 |
| 43. Recently, my life would have been much better if only I hadn't done what I did. | 1 2 3 4 5 |
| 44. If I had my life to begin over again, I would change very little, if anything. | 1 2 3 4 5 |
| 45. I have been worried and distressed lately. | 1 2 3 4 5 |

# APPENDIX V: ARABIC VERSION OF THE GUILT INVENTORY (GI)

في ما يتعلق بالقسم التالي من الإستبيان، يرجى الإجابة عن الأسئلة باستخدام أسس الإجابة الآتية:

1= لا ينطبق عليّ إطلاقا أو لا أوافق بشدة
2= لا ينطبق عليّ أو لا أوافق
3= ينطبق عليّ أحياناً ولا ينطبق أحيانا أخرى أو محايد
4= ينطبق عليّ أو أوافق
5= ينطبق عليّ بشدة أو أوافق بشدة

| | | | | | |
|---|---|---|---|---|---|
| 1. أؤمن بالتفسير الصارم للخطأ والصواب. | 1 | 2 | 3 | 4 | 5 |
| 2. إقترفت الكثير من الأخطاء في حياتي. | 1 | 2 | 3 | 4 | 5 |
| 3. لطالما آمنت بشدة بمبادئ أخلاقية جازمة. | 1 | 2 | 3 | 4 | 5 |
| 4. شعرت مؤخراً بشعور جيد تجاه نفسي وما قمت به. | 1 | 2 | 3 | 4 | 5 |
| 5. لو كان بإمكاني القيام بأمور معينة مجدداً، لزال حملٌ كبيرٌ عن أكتافي. | 1 | 2 | 3 | 4 | 5 |
| 6. لم أشعر مطلقا بندم أو ذنب شديد. | 1 | 2 | 3 | 4 | 5 |
| 7. هدفي في الحياة هو التمتع بحياتي عوضا عن العيش وفقاً لمجموعة مجرّدة من المبادئ الأخلاقية. | 1 | 2 | 3 | 4 | 5 |
| 8. ثمة أمر من الماضي أندم عليه كل الندم. | 1 | 2 | 3 | 4 | 5 |
| 9. أكره نفسي مراراً لأمر فعلته. | 1 | 2 | 3 | 4 | 5 |
| 10. كان والديّ حازمين جداً معي. | 1 | 2 | 3 | 4 | 5 |
| 11. هناك أمور قليلة جداً قد لا أفعلها. | 1 | 2 | 3 | 4 | 5 |
| 12. غالباً ما أشعر "بالسوء" تجاه نفسي بسبب أمر فعلته. | 1 | 2 | 3 | 4 | 5 |
| 13. أتميز بالكثير من المرونة في ما يتعلق بالخطأ والصواب. | 1 | 2 | 3 | 4 | 5 |
| 14. لو كان لي أن أعيش حياتي مجددا، لفعلت الكثير من الأمور بطريقة مختلفة. | 1 | 2 | 3 | 4 | 5 |
| 15. هناك الكثير من الأمور التي لا يمكن أن أقوم بها لأنها خاطئة بنظري. | 1 | 2 | 3 | 4 | 5 |
| 16. قمت مؤخراً بعمل ما أندم عليه كل الندم. | 1 | 2 | 3 | 4 | 5 |
| 17. لم يكن من السهل أن أكون على طبيعتي مؤخرا. | 1 | 2 | 3 | 4 | 5 |
| 18. الأخلاقية ليست الحكم على الأمور ك "أسود أو أبيض" كما يعتقد الكثيرون. | 1 | 2 | 3 | 4 | 5 |
| 19. كنت هادئاً ومرتاح البال مؤخراً. | 1 | 2 | 3 | 4 | 5 |
| 20. لطالما كان الشعور بالذنب والندم جزءاً من حياتي. | 1 | 2 | 3 | 4 | 5 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21. عندما أفكر أحياناً بأمور معينة قمت بها، أشعر بالإعياء. | 1 | 2 | 3 | 4 | 5 |
| 22. ما من شيء يمكن ألا أقوم به في ظروف معينة. | 1 | 2 | 3 | 4 | 5 |
| 23. لا أعتقد أنني اقترفت الكثير من الأخطاء في حياتي. | 1 | 2 | 3 | 4 | 5 |
| 24. أفضّل الموت على القيام بأمر خاطئ. | 1 | 2 | 3 | 4 | 5 |
| 25. أشعر بحاجة شديدة للعيش وفقاً لمبادئي الأخلاقية. | 1 | 2 | 3 | 4 | 5 |
| 26. غالباً ما أشعر بالندم الشديد. | 1 | 2 | 3 | 4 | 5 |
| 27. أقلق كثيرا حيال أمور قمت بها في الماضي. | 1 | 2 | 3 | 4 | 5 |
| 28. أعتقد أنه لا يمكن الحكم على مدى صحة أو خطأ أمر ما بدون معرفة دواعي الأشخاص والظروف المحيطة بهذا الأمر. | 1 | 2 | 3 | 4 | 5 |
| 29. هناك القليل من الأمور في حياتي التي أندم على القيام بها. | 1 | 2 | 3 | 4 | 5 |
| 30. لو كنت لأعيش الأسابيع أو الأشهر القليلة الماضية من جديد، ما كنت لأغير أي أمر قمت به. | 1 | 2 | 3 | 4 | 5 |
| 31. أعاني أحيانا من عدم القدرة على تناول الطعام بسبب أمور قمت بها في الماضي. | 1 | 2 | 3 | 4 | 5 |
| 32. لا أقلق بشأن ما أقوم به، إذ أعتقد أن شؤون الحياة تسير من تلقاء نفسها. | 1 | 2 | 3 | 4 | 5 |
| 33. لا أشعر بالندم حالياً حيال أي أمر قمت به. | 1 | 2 | 3 | 4 | 5 |
| 34. لا يمكنني التوقف عن التفكير أحيانا بأمور فعلتها وأعتبرها خاطئة. | 1 | 2 | 3 | 4 | 5 |
| 35. لا أعاني أبدا من مشاكل في النوم. | 1 | 2 | 3 | 4 | 5 |
| 36. أقدّم أي شيء لو كان بإمكاني العودة بالزمن وتصحيح بعض الأمور الخاطئة التي اقترفتها مؤخرا. | 1 | 2 | 3 | 4 | 5 |
| 37. ثمة أمر واحد على الأقل في ماضيّ أودّ تغييره. | 1 | 2 | 3 | 4 | 5 |
| 38. أعي اقترافي أي أمر خاطئ فور القيام به. | 1 | 2 | 3 | 4 | 5 |
| 39. الخطأ والصواب يعتمدان على الحالة القائمة. | 1 | 2 | 3 | 4 | 5 |
| 40. لا يشكّل الندم مشكلة بالنسبة لي. | 1 | 2 | 3 | 4 | 5 |
| 41. ما من شيء في ماضيّ أندم عليه كل الندم. | 1 | 2 | 3 | 4 | 5 |
| 42. أعتقد أن القيم الأخلاقية مطلقة. | 1 | 2 | 3 | 4 | 5 |
| 43. لكانت حياتي أفضل بكثير مؤخرا لو لم أقم بما فعلت. | 1 | 2 | 3 | 4 | 5 |
| 44. لو كان لي أن أبدأ حياتي من جديد، لغيّرت القليل القليل، إن لم أغير شيء. | 1 | 2 | 3 | 4 | 5 |
| 45. أشعر بالقلق والضيق مؤخراً. | 1 | 2 | 3 | 4 | 5 |

# APPENDIX W: IDENTITY AFFIRMATION SUBSCALE OF THE LESBIAN, GAY, AND BISEXUAL IDENTITY SCALE (LGBIS)

For each of the following questions, please mark the response that best indicates your current experience as an LGB person. Please be as honest as possible: Indicate how you really feel now, not how you think you should feel. There is no need to think too much about any one question. Answer each question according to your initial reaction and then move on to the next.

1 = Disagree Strongly
2 = Disagree
3 = Disagree Somewhat
4 = Agree Somewhat
5 = Agree
6 = Agree Strongly

| | |
|---|---|
| 1. I am glad to be an LGB person. | 1 2 3 4 5 6 |
| 2. I'm proud to be part of the LGB community. | 1 2 3 4 5 6 |
| 3. I am proud to be LGB. | 1 2 3 4 5 6 |

# APPENDIX X: ARABIC VERSION OF THE IDENTITY AFFIRMATION SUBSCALE OF THE LESBIAN, GAY, AND BISEXUAL IDENTITY SCALE (LGBIS)

يرجى تحديد الإجابة التي تعبّر عن تجربتك كشخص مثليّ الجنس أو ثنائي الميل الجنسي (LGB) بكل صراحة. حدّد كيف تشعر الآن وليس كيف يفترض بنظرك أن تشعر. ليس من الضروري أن تفكر كثيرا بأي من الأسئلة. أجب عن السؤال حسب ردة فعلك الأولية ثم انتقل إلى السؤال التالي.

1= لا أوافق بشدة
2= لا أوافق
3= لا أوافق إلى حد ما
4= أوافق إلى حد ما
5= أوافق
6= أوافق بشدة

| | |
|---|---|
| 1. أنا سعيد كوني مثليّ الجنس أو ثنائي الميل الجنسي (LGB). | 1 2 3 4 5 6 |
| 2. أنا أفتخر بكوني جزء من مجتمع المثليي الجنس أو الثنائيي الميل الجنسي (LGB). | 1 2 3 4 5 6 |
| 3. أنا أفتخر كوني كشخص مثلي الجنس أو ثنائي الميل الجنسي (LGB). | 1 2 3 4 5 6 |

# APPENDIX Y: IDENTITY CENTRALITY SUBSCALE OF THE LESBIAN, GAY, AND BISEXUAL IDENTITY SCALE (LGBIS)

For each of the following questions, please mark the response that best indicates your current experience as an LGB person. Please be as honest as possible: Indicate how you really feel now, not how you think you should feel. There is no need to think too much about any one question. Answer each question according to your initial reaction and then move on to the next.

1 = Disagree Strongly
2 = Disagree
3 = Disagree Somewhat
4 = Agree Somewhat
5 = Agree
6 = Agree Strongly

| | | |
|---|---|---|
| 1. | My sexual orientation is an insignificant part of who I am. | 1 2 3 4 5 6 |
| 2. | My sexual orientation is a central part of my identity. | 1 2 3 4 5 6 |
| 3. | To understand who I am as a person, you have to know that I'm LGB. | 1 2 3 4 5 6 |
| 4. | Being an LGB person is a very important aspect of my life. | 1 2 3 4 5 6 |
| 5. | I believe being LGB is an important part of me. | 1 2 3 4 5 6 |

# APPENDIX Z: ARABIC VERSION OF THE IDENTITY CENTRALITY SUBSCALE OF THE LESBIAN, GAY, AND BISEXUAL IDENTITY SCALE (LGBIS)

يرجى تحديد الإجابة التي تعبّر عن تجربتك كشخص مثلي الجنس أو ثنائي الميل الجنسي (LGB) بكل صراحة. حدّد كيف تشعر الآن وليس كيف يفترض بنظرك أن تشعر. ليس من الضروري أن تفكر كثيرا بأي من الأسئلة. أجب عن السؤال حسب ردة فعلك الأولية ثم انتقل إلى السؤال التالي.

1= لا أوافق بشدة
2= لا أوافق
3= لا أوافق إلى حد ما
4= أوافق إلى حد ما
5= أوافق
6= أوافق بشدة

| | |
|---|---|
| 1. ميلي الجنسي جزء غير مهم في تحديد هويتي. | 6 5 4 3 2 1 |
| 2. ميلي الجنسي جزء أساسي في تحديد هويتي. | 6 5 4 3 2 1 |
| 3. لفهم من أكون، عليك أن تعرف أنني مثلي الجنس أو ثنائي الميل الجنسي (LGB). | 6 5 4 3 2 1 |
| 4. كوني مثلي الجنس أو ثنائي الميل الجنسي (LGB) يشكّل ناحية مهمة جدا من حياتي. | 6 5 4 3 2 1 |
| 5. أعتقد أن كوني مثلي الجنس أو ثنائي الميل الجنسي (LGB) جزء مهم من كياني. | 6 5 4 3 2 1 |

# APPENDIX AA: CONNECTEDNESS TO THE LGBT COMMUNITY SCALE

Please read each of the items, and circle the number that best describes your current experiences and feelings:

1 = Disagree Strongly
2 = Disagree
3 = Agree
4 = Agree Strongly

| | | |
|---|---|---|
| 1. | You feel you're a part of Lebanon's LGBT community. | 1 2 3 4 |
| 2. | Participating in Lebanon's LGBT community is a positive thing for you. | 1 2 3 4 |
| 3. | You feel a bond with the LGBT community. | 1 2 3 4 |
| 4. | You are proud of Lebanon's LGBT community. | 1 2 3 4 |
| 5. | It is important for you to be politically active in Lebanon's LGBT community. | 1 2 3 4 |
| 6. | If we work together, gay, bisexual, and lesbian people can solve problems in Lebanon's LGBT community. | 1 2 3 4 |
| 7. | You really feel that any problems faced by Lebanon's LGBT community are also your own problems. | 1 2 3 4 |
| 8. | You feel a bond with other members of the LGBT community with the same gender as yours. | 1 2 3 4 |

# APPENDIX BB: ARABIC VERSION OF THE CONNECTEDNESS TO THE LGBT COMMUNITY SCALE

يرجى قراءة كل بند وتحويق الرقم الذي أفضل ما يعبّر عن تجاربك ومشاعرك الحالية.

1= لا أوفق بشدة
2= لا أوافق
3= أوافق
4= أوافق بشدة

| | |
|---|---|
| 1. تشعر أنك جزء من المجتمع اللبناني الخاص بالمثليي الجنس والثنائيي الميل الجنسي والمتحولين جنسيا(LGBT). | 4 3 2 1 |
| 2. المشاركة في المجتمع اللبناني الخاص بالمثليي الجنس والثنائيي الميل الجنسي والمتحولين جنسيا (LGBT) أمر إيجابي بالنسبة إليك. | 4 3 2 1 |
| 3. تشعر برابط مع المجتمع اللبناني الخاص بالمثليي الجنس والثنائيي الميل الجنسي والمتحولين جنسيا (LGBT). | 4 3 2 1 |
| 4. تشعر بالفخر بالمجتمع اللبناني الخاص بالمثليي الجنس والثنائيي الميل الجنسي والمتحولين جنسيا (LGBT). | 4 3 2 1 |
| 5. من المهم بالنسبة إليك أن تكون ناشطاً سياسياً في المجتمع اللبناني الخاص بالمثليي الجنس والثنائيي الميل الجنسي والمتحولين جنسيا (LGBT). | 4 3 2 1 |
| 6. إذا عملنا معاً، يمكن لمثليي الجنس والثنائيي الميل الجنسي أن يحلّوا المشاكل في المجتمع اللبناني الخاص بالمثليي الجنس والثنائيي الميل الجنسي والمتحولين جنسيا (LGBT). | 4 3 2 1 |
| 7. تشعر أن المشاكل التي يواجهها المجتمع اللبناني الخاص بالمثليي الجنس والثنائيي الميل الجنسي والمتحولين جنسيا (LGBT) هي مشاكلك أنت أيضا. | 4 3 2 1 |
| 8. تشعر برابط مع أعضاء آخرين من نفس جنسك في المجتمع اللبناني الخاص بالمثليي الجنس والثنائيي الميل الجنسي والمتحولين جنسيا (LGBT). | 4 3 2 1 |

# APPENDIX CC: FIGURES

Figure 1

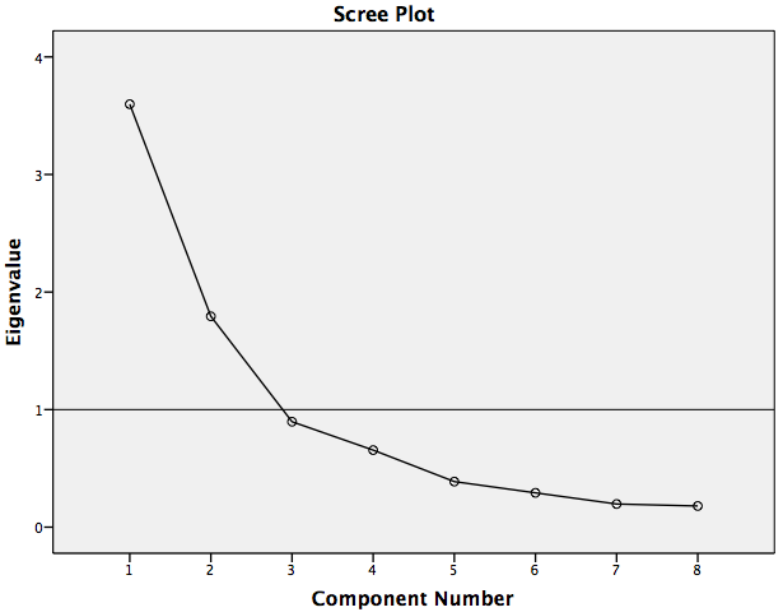



Figure 2

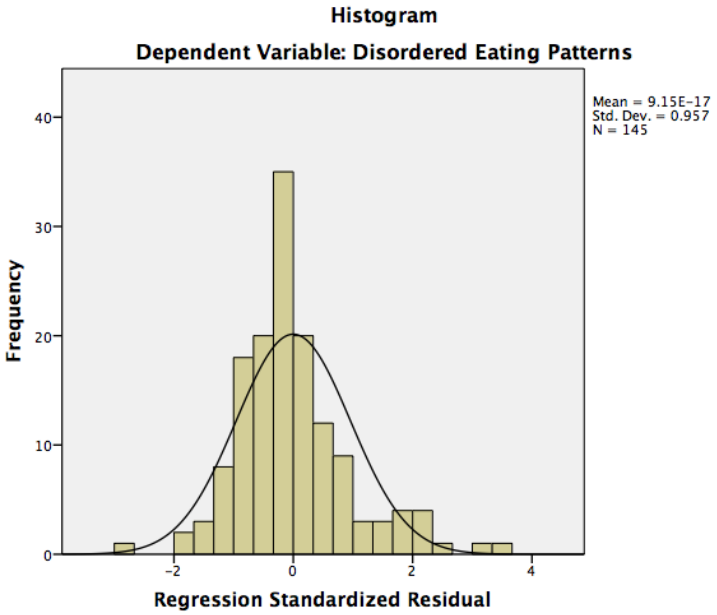
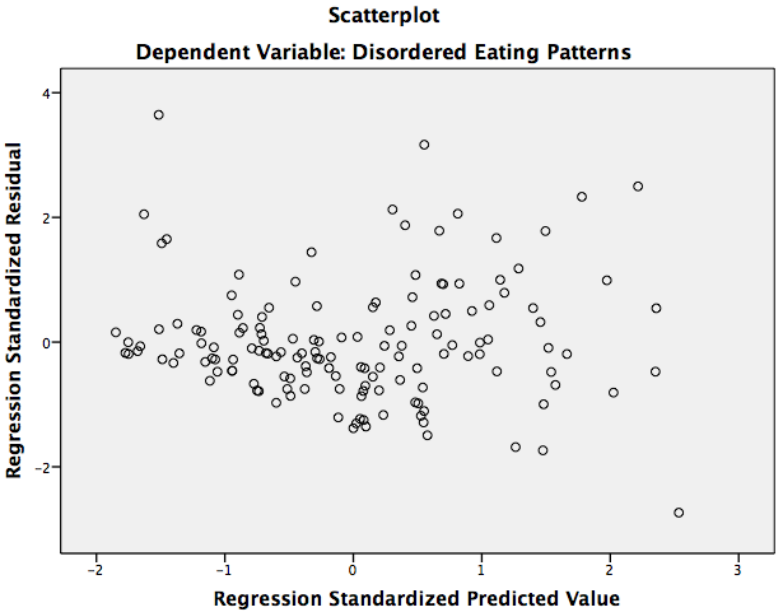


Figure 3


Scatterplot
Dependent Variable: Disordered Eating Patterns
Regression Standardized Residual
Regression Standardized Predicted Value
4
2
0
-2
-2
-1
0
1
2
3