

LEBANESE AMERICAN UNIVERSITY

“Determinants of Body Image Dissatisfaction among an
LGBTQ community in Lebanon”

By

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“Never Be Afraid to Show Your True Colors”

“Determinants of Body Image Dissatisfaction among an LGBTQ community in Lebanon”

Nour Mohamad Kalash

ABSTRACT

A substantial mental health discrepancy has been recognized between sexual minorities and heterosexuals due the unique stressors sexual minorities are exposed to. These stressors account for several mental issues associated with body image dissatisfaction, a common concern worldwide. To date, a priori studies revealed inconsistent results with regards to body image dissatisfaction among sexual minorities. Additionally, scarce studies have investigated body image concerns among sexual minorities in Lebanon. Therefore, the aim of this study was to assess the prevalence of body image dissatisfaction among sexual minorities and to further explore the disparity between subgroups. Additionally, this paper sought to assess the correlation between fear of negative evaluation, generalized anxiety disorder, social support, experiences of harassment and discrimination and body image dissatisfaction. The current study is a population cross – section study of which a final sample of 358 participants of different sexual identities filled an online short survey assessing various factors contributing to body image dissatisfaction. Major results showed higher body image dissatisfaction in transgender individuals compared to their cis peers. Similarly, lesbians, gays, bisexuals and queer participants displayed higher body image dissatisfaction when compared to heterosexuals. Additionally, sexual minority subgroups reported disproportionate levels of body image dissatisfaction. Only generalized anxiety disorder, fear of negative evaluation and social support were significantly associated with body image dissatisfaction. In conclusion, these results call attention to body image concerns among sexual minorities and a need for more extensive research with regards to this topic.

Keywords: Body Image Satisfaction, Disordered Eating Behaviors, Sexual Minorities, Sexual Orientation, Gender Identity, LGBTQ.

Table of Contents

Chapter	Page
List Of Abbreviations	x
List of Tables	xi
I. Sexual Minorities in Lebanon	1
II. Background and Literature Review	3
2.1. Body Image Dissatisfaction	3
2.1.1. Body Image	3
2.1.2. Body Image Dissatisfaction	3
2.1.3. Objectification Theory	4
2.2. Sexual Minorities	5
2.2.1. Sexual Identity	5
2.2.2. Minority Stress Theory	6
2.3. Sexual Minorities and Body Image Dissatisfaction	7
2.4. Aim and Hypothesis	11
III. Methodology	12
1.1. Study Design	12
1.2. Pilot Study	12
1.3. Participants	12
1.4. Ethical Considerations	13
1.5. Data Collection	13
1.5.1. Sociodemographic, Sexual Identity, and General Health	14
1.5.2. Alcohol Intake	14
1.5.3. Eating Disorder Examination Questionnaire	14
1.5.4. Body Appreciation Scale	15
1.5.5. Generalized Anxiety Disorder	15
1.5.6. Brief Fear of Negative Evaluation	15
1.5.7. Heterosexist Harassment, Rejection, and Discrimination Scale	16
1.5.8. Multidimensional Scale of Perceived Support	16
1.6. Statistical Analysis	17
IV. Results and Discussion	18
4.1. Results	18
4.1.1. Characteristics of Gender Identity and Sexual Orientation Participants	18
4.1.2. Prevalence of Body Image Dissatisfaction among Sexual Minorities	19

4.1.3.	Body Image Dissatisfaction between Groups of Gender Identity and Sexual Orientation	20
4.1.4.	The Association and Strength of association between Anxiety, Fear of Negative evaluation, Social Support, Harassment and discrimination and Body Image Dissatisfaction	22
4.1.5.	Mediation Analysis	24
4.1.6.	Association Between Body Image and Disordered Eating Behaviors	24
4.2.	Discussion	25
V.	Conclusion	31
	References	32
	Appendices	44
	Glossary of Terms	66

List Of Abbreviations

SM	Sexual Minorities
BID	Body Image Dissatisfaction
DEB	Disordered eating behavior
BMI	Body Mass Index
LGBTQ	Lesbian, Gay, Bisexual, Transgender, and Queer
HEM	Heterosexual Men
HEW	Heterosexual Women
MSM	Men who have sex with men
BAS-2	Body appreciation scale – version 2
GAD-2	Generalized anxiety disorder – shortened version 2
BFNE	Brief fear of negative evaluation scale
MSPSS	Multidimensional of perceived social support scale
HRDS	Heterosexist Harassment, Rejection, and Discrimination Scale

List of Tables

Table 1. Frequency, Mean Age and Mean BMI Among Gender Identity and Sexual Orientation Groups	P 18
Table 2. Scales Mean Scores And SD of the scales Among Sexual Orientation Groups	P 19
Table 3. Scales Mean Scores And SD of the scales Among Gender Identity Groups	P 19
Table 4. Mean Scores Of BAS, Shape Concern And Weight Concern Subscales Between Heterosexuals And LGBQ	P 20
Table 5. Mean Scores & SD Of BAS, Shape And Weight Concern Subscales Between Groups	P 21
Table 6. Pearson Correlation Between Independent Variables And BAS	P 23
Table 7. Regression Table To Check Association Between Independent Variables And Outcome	P 23
Table 8. Association Between Bas And EDE-Q As An Outcome	P 24

Chapter One

Sexual Minorities in Lebanon

Literature is bursting with contrasting sentiments on “sexual orientation”. The American psychological association (2008) referred to “sexual orientation” as the preferred term when denoting to an individual’s attraction, emotionally and/or physically, to same or contrary genders. Yet, to date no consensus among researchers on the root of sexual orientation. Scientists theorized that sexual orientation is determined by a complex of biological and environmental factors (American Psychological Association, 2008). However, the notion of biological factors as gender nonconformity and genetics has gotten a ration of support (Bailey, J. M. et al., 2016). Additionally, In 2013, it was declared by the Lebanese Psychological Association and the Lebanese Psychiatric Association that homosexuality is not considered a condition and for that, it should not be treated (Kerbage, 2014a, 2014b). Despite the controversies on sexual orientation, it has been demonstrated that acceptance of sexual orientation has improved in the western countries (Bailey, J. M. et al., 2016). However, that’s not the case in the Middle East. This was evident through a recent report published by the Pew Research Center on the views of homosexuality around the world which showed an increase toward the rejection of homosexuality in Lebanon between the years of 2013 and 2019 (80% to 85% respectively) (Poushter & Kent, 2020). Middle Eastern nations were more accepting to the emotions and behaviors of non- heterosexuals emotions and behaviors (Michli & Jamil, 2020). Besides being tolerated, non-heterosexuals were also normalized up until the 13th century, after which negative attitudes toward homosexuality became increasingly negative and destructive (Habib, S., 2012) . Today, Middle Eastern countries still criminalize sexual minorities and provoke legal barriers on their freedom of expression (Mendos et al., 2020).

According to freedom house (2021), Lebanon is ranked as one of the most Arab liberal countries within the Middle East. However, involvement in the LGBTQ community in Lebanon is considered a crime. Sexual minorities in Lebanon are prosecuted under the article 534 of the penal code which states that “any carnal union against the order of nature shall be punished with imprisonment for up to one year” (Human Rights Watch, 2019). Despite the numerous attempts to abolish this law, Lebanese forces are still implementing it (Younis, 2017). Thus, LGBTQ in Lebanon are marginalized, ensuing in fear of living in the country

or displaying their identity and/or orientation due to the absence of law and authorities that protects and support their lives (Maalouf et al., 2017).

Though, recently several initiatives are raising the voice to support the rights of sexual minorities in Lebanon, still LGBTQ people are victims of prejudice and discrimination imposed by individuals and institutions (Maalouf et al., 2017). In a survey conducted by Nasr and Zeidan (2015) on Lebanese acceptance and attitudes towards sexualities, over half the 1,200 responders (54.6%) felt that homosexuals should not be accepted in the society with the majority of these responders (75.9%) against considering homosexuality as a normal issue. In addition, homosexuality was also considered as a threat to families and society in general and should not be recognized in public (Nasr and Zeidan., 2015).

Subsequently, the experiences of stigmatization, prejudice, discrimination and rejection of which LGBTQ individuals are exposed to regularly can trigger numerous mental and psychological issues (Maalouf et al., 2017; Michli & Jamil, 2020) of which should be a Public health concern.

Chapter Two

Background and Literature Review

2.1. Body Image Dissatisfaction

2.1.1. Body Image

Body image is a common concern among people worldwide yet its understanding is still progressing. It was first characterized as the psychological portrayal of our bodies that we perceive in our brains (Schilder, 1950). However, Slade (1988) explicated the definition body image to include the way an individual conceives further aspects of the body including shape, size and overall appearance. Thus, the recent definition confirmed Quittkat et al. (2019) interpretation of body image as a “multidimensional concept” that evolves around four main components; the cognitive component which includes one’s beliefs toward his/her body shape and weight, the perceptual component which demonstrates one’s perception towards his/her body irrespective of how it actually looks, the affective component manifesting one’s feeling toward his/her own body shape, weight and parts as either satisfied or not, and last of all, the behavioral component portrayed by attitudes of body checking and/or adjustment. Thus, body image is a progressive phenomenon formulated by the exposure to different factors and experiences. Body image can be either positive or negative. Positive body image refers to an individual’s respect, acceptance and satisfaction of his/her own body and considering his/her body’s capabilities and assets rather than dwelling on its imperfections (Quittkat et al., 2019; Tylka & Wood-Barcalow, 2015). Also, Positive body image is allied to one’s connection with his/her own body (Piran, 2015). To the contrary, a person’s negative evaluation, thoughts and poor identification of his/her own size and shape is considered as negative body image or body image dissatisfaction (BID) which is a critical large-scale measure of body related stress (Quittkat et al., 2019; Seyed Alireza Hosseini & Padhy, 2019).

2.1.2. Body Image Dissatisfaction

Body image dissatisfaction (BID) is defined as an “emotional distress” (Damstetter & Vashi, 2015), that prevails when a person has constant negative thoughts and feelings towards his/her own body. Accordingly, body image dissatisfaction depends on the clashing

beliefs regarding the actual body image and the ideal one. In other words, beliefs of the actual state demonstrate a descriptive concept (for instance; *I am skinny*) whereas the ideal state reveals what is desirable (for instance; *I want to be skinny*) (Heider et al., 2018). Thus, different assessment methods of body image dissatisfaction should take these outlined beliefs into consideration. According to literature, statistics revealed that body image dissatisfaction is common among both males and females (Quittkat et al., 2019; Seyed Alireza Hosseini & Padhy, 2019; Latiff et al., 2018). A study conducted by Fiske et al. (2014) reported that the prevalence of BID among men and women ranges between 8% to 61% and 11% to 72% respectively. This was attributable to the fact that thin ideology is dominating their beliefs as well as the societal standards surrounding them (Quittkat et al., 2019; Nadal, 2017; Tylka & Wood-Barcalow, 2015). Besides the societal standards, the difference in body image concerns among men and women is endorsed by the different body ideals standards. Women sought thinner and toned bodies whereas men desire more muscular and powerful bodies (Fiske et al. 2014; Tylka & Wood-Barcalow, 2015). Besides, a broad spectrum of studies revealed that issues related to body image is not limited to men and women only, yet it affects diverse gender identities and sexual orientations at disproportionate rate (Mirabella et al., 2020; Parker & Harriger, 2020).

2.1.3. Objectification Theory

Since the twitch of research on body image concerns, women were the center of investigation. Hence, plenty of research was first demonstrated on the determinants of body image concerns among women. Accordingly, Fredrickson and Roberts (1997) presented the “objectification theory” which highlight on the idea that women’s body image concerns stem from the objectification theory, which illustrates the way women, in western societies, are treated and evaluated as objects instead of humans and to be noticed based on their appearances neglecting the main roles of their bodies. Consequently, recurrent exposure to objectification experiences leads to self-objectification whereby females tend to internalize the observer’s perspective of appearance as what should be ideal in terms of attraction and frequently monitor their bodies and appearances (Fredrickson et al., 2011). However, advanced literature has confirmed that self-objectification is also implicated in men (Calogero, 2012; Heath et al., 2016). Dakanalis (2017) stated that Women seek physical “attractiveness” whereas men seek physical “effectiveness” as these two standards are considered the norms for enhanced social acceptance. This can strongly validate that physical

beauty translates power for women. Thus, objectification theory is considered as a survival strategy in a sexually objectifying culture which might bring rewarding results yet, a significant number of psychological and health consequences of which involve body image concerns (Calogero, 2012).

Consistent with the objectification theory, numerous studies have integrated self-objectification in sexual minorities (Calogero, 2012). Results confirmed the applicability of the “objectification theory” to sexual minority women (Brewster et al., 2019; Moradi et al., 2019; Watson et al., 2015) as well as sexual minority men (Velez et al., 2016; Wiseman & Moradi, 2010) yet each at a disparate rate. Thus, “self-objectification” and internalization of the standards of attractiveness among sexual minorities can lead to body image dissatisfaction (Calogero, 2012).

2.2. Sexual Minorities

2.2.1. Sexual Identity

Math et al. (2013), defined sexual minorities (SM) as “a group whose sexual identity, orientation or practices differ from the majority of surrounding society.” Sexual identity is complex. It is the overall characterization of a person, formed by the intersection of several components including gender identity and sexual orientation (Shively & De Cecco, 1977). Although gender identity and sexual orientation are global virtues of self, still they are independent and differ in their interpretations. Sexual orientation refers to the sex an individual is attracted to, whereas gender identity refers to the gender of which one’s belongs to regardless of what they were assigned at birth (Moleiro & Pinto, 2015). Generally, gender identity include man, woman, transgender (who’s gender identity different than sex assigned at birth) and recently it involves a more complex gender identity and/or sexual orientation, “Genderqueer”. Genderqueer includes individuals who do not align with their assigned sex gender norms, beyond the two genders (man and woman) or a combination of genders (Littlejohn et al., 2019; Moleiro & Pinto, 2015; Richards et al., 2016). On the other hand, sexual orientation includes lesbians or gays (individuals attracted to same sex), bisexuals (individuals attracted to both genders), Asexual (not attracted to any sex) and heterosexuals (attracted to opposite sex) (Moleiro & Pinto, 2015). Besides, there is a discrepancy between the definitions of sexual orientation in the Middle East compared to western countries (Michli & Jamil, 2020). Smith (2012) explained that when two men engage in a sexual relationship, they would be considered as “homosexual” in western countries, however in the Middle east,

the label would depend on the gender role during this relationship. This redirects to the prominence of the masculine and feminine roles in Middle Eastern Cultures (Smith, 2012). Moreover, “Queer” is a more complex term in sexual orientation of which involves individuals who can be attracted to partners from the entire community and particularly transgender (Goldberg et al., 2019). Thus, sexual minorities individuals self-identified as Lesbians, Gays, Bisexual, Transgender and Genderqueer/Queer (LGBTQ) individuals were studied in this manuscript. It is evident that sexual minorities are predisposed to several unusual stressors compared to heterosexuals, affecting their health and quality of life (Convertino et al., 2021)

2.2.2. Minority Stress Theory

Minority stress was first defined as the stress allied to one’s belonging to an inferior societal group (Brooks; 1981). This framework was further expanded by Meyer (2003) to include sexual minorities. Meyer (2003), touched on the “minority stress theory” which emphasize on the health discrepancies between sexual minorities and their heterosexuals’ counterparts due to the fact that sexual minorities endure different stressors of which are unique, chronic and socially-related, and beyond the usual stressors experienced by heterosexuals (Flores, 2019; Meyer, 2003). Stressor were grouped as distal and proximal stressors. Distal Stressors are objective prejudice stressors guided toward a person (e.g., heterosexist discrimination, victimization..). Proximal stressors encompass the subjective reactions concerning the aforementioned stressors and are exclusive to sexual minorities (e.g., concealment of identity, expectancy of rejection and internalized homonegativity) (Meyer, 1995, 2003). These Chronic stressors constantly confronted by the society in schools, work as well as public and community places (Moreland et al., 2019; Ogunbajo et al., 2020) can generate a traumatic environment for sexual minorities to live in. Such stressors can expose negative impact on the mental health of the LGBTQ individuals in general, and Body image in specific (Ehlke et al., 2020; McCabe et al., 2010; Meyer, 2003; Sutter & Perrin, 2016). Preceding studies have confirmed a positive association among minority stress, mental health, body image concerns and consequently, disordered eating behaviors (Convertino et al., 2021; Watson et al., 2015). Although Minority stress theory is generally used to explain the discrepancy in mental health issues in sexual minorities compared to heterosexuals, yet it does not justify all the observed difference (Pachankis et al., 2020). Intra-minority stress theory tackle the stress LGBTQ individuals encounter from within the SM community they

belong to, thus further exemplifying the disparity of body image concerns among sexual minorities. Intra-minority theory was presented by Pachankis and colleagues (2020) to explain the status-based concerns that gays and bisexual men encounter within their community. Pachankis et al., (2020) explains that Gays and bisexual men experience greater stressors that arise from within their community. These stressors include status pressures to meet the expectations of their SM community which emphasize largely on masculinity and attractiveness. Additionally, due to the fact that gays and bisexual men rely in their relationships on men, they tend to strive for social and sexual benefits (Pachankis et al., 2020). Although it was intended for sexually minority men, it is consistent with similar findings from previous studies regarding sexual minority women. Boyle and Omoto (2014) uncovered a higher risk of mental issues among sexual minority women who professed that they were not meeting their SM community standards. This can raise the question toward the mental health outcomes emerging from community involvement.

2.3. Sexual Minorities and Body Image Dissatisfaction

Outlining the concerning data in term of the prevalence of body image dissatisfaction among sexual minority, several studies have sought to identify the risk and protective factors contributing to its prevalence. Three major frameworks can illuminate the prevalence of BID among LGBTQ communities, the “objectification theory” (Fredrickson and Roberts., 1997), the “Minority Stress theory” (Meyer, 2003) and recently, the “intra-minority theory” (Pachankis et al., 2020). Discrimination, harassment and rejection are constantly featured in the minority stress theory (Meyer, 2003) leading to undesirable outcomes among sexual minorities involving mental issues as well as BID (Convertino et al., 2021; Ehlke et al., 2020; Morrison et al., 2020). A study investigating BID among trans and non-binary individuals found that experiences of harassment and discrimination were associated with lower body appreciation through lower self-esteem and satisfaction with life (Tabaac et al., 2018). Additionally, the constant exposure to discrimination and rejection experiences impose sexual minorities to higher risk of anxiety and anxiety related disorders. An explanation for this is that sexual minorities tend to engage in sexual orientation concealment in order to avoid the social stigma and minority stress, thus increasing their risk of anxiety (Cohen J. M et al., 2016). A frame of research have shown a prevalence of anxiety among LGBTQ individuals (Cohen J. M et al., 2016; Borgogna et al., 2019; Moagi et al., 2021). In a systematic review documenting the mental health of sexual minorities through 199 studies,

over 83% of the studies indicated elevated levels of anxiety and anxiety disorders among sexual minorities (Plöderl & Tremblay, 2015). Likewise, in studies assessing the association between mental health issues including anxiety, and body image dissatisfaction a positive correlation was evident (Aderka et al., 2014; Blashill et al., 2016b; McClain, Z., & Peebles, R., 2016). Social anxiety, a mental health condition, has been linked to body image dissatisfaction (Pawijit et al., 2017; Ahadzadeh et al., 2018), and several studies have shown that sexual minorities are at higher risk of social anxiety and fear of negative evaluation (Mahon, 2017b; Potoczniak et al., 2007) thus at higher risk of experiencing BID. Pawijit et al., (2017) explained the mediating paths between social anxiety and BID by which the individual's self-focused thinking can contribute to fear of negative evaluation which by itself can lead to BID. While protective factors against BID remain blurred, social support has been one of the factors negatively associated with BID and related mental issues (Ehlke et al., 2020; Hodder et al., 2014). According to Meyer (2003) theory, the impact of minority stress on mental health can be diluted through social support. Community involvement can aid in the avoidance of prejudice and discrimination as well as provide evaluation and mental health support (Meyer, 2003). Additionally, Burnette et al. (2018) showed that social support was positively correlated with body appreciation through resilience and self-esteem. Indeed, community involvement can posit several positive outcomes on mental health of the LGBTQ yet, it can also induce undesirable impact. This route was explained through the intra-minority stress (Pachankis et al., 2020) which elucidates the negative role of community involvement which impose pressures and stressors related to that group belonging. As a result, minority stressors and consequently body image dissatisfaction is unpleasant and can have serious impact on one's health through mental issues and disordered eating (Seyed Alireza Hosseini & Padhy, 2019). People falling in the following consequences are powerless to truly recognize their shapes, weight and appearance in general thus engage in coping mechanisms as weight control habits by means of laxatives, restrictive diets as well as excessive PA (Latiff et al., 2018; Seyed Alireza Hosseini & Padhy, 2019; Tsang, 2017).

Regardless of the thriving studies on body image and sexual minorities, it is still unknown whether lesbians, bisexual and heterosexual females experience the same levels of BID. Some studies revealed that the three groups share the same levels of BID (Henn et al., 2019; Koff et al., 2010; Moreno-Domínguez et al., 2019; Smith et al., 2017; Yean et al., 2013) which elucidates what the objectification theory tried to point that all women, regardless of

their orientation, are affected by ideal norms provided by society (Fredrickson & Roberts, 1997). On the other hand, further research has found that heterosexual females are at higher risk of BID than Lesbians (Alvy, 2013; Peplau et al., 2008). These results were clarified in a meta-analysis conducted by Dahlenburg et al. (2020) who stated that lesbians are at lower risk of BID than their heterosexual counterparts due to the fact that although lesbians still endure the pressure to meet the standards confronted by society as cited in the objectification theory (Fredrickson & Roberts, 1997), yet, lesbians are less vulnerable to self-objectification in comparison to their counterparts due to their immersion in a community that emphasize less on the heteronormative standards and the pressure of attracting men, thus less susceptible to BID as conferred by Brown (1987) in the protective theory.

Although the main focus with regards to body image concerns was generally on women, yet men are also prone to BID. Literature on body image dissatisfaction among different male identities displayed inconsistent results. Greentree & Lewis (2011) showed no difference in BID among men of different orientations. Other studies discovered that heterosexual men suffer from more BID than gays (Parent & Bradstreet, 2017; Yean et al., 2013). However, majority of the studies have shown that gay men are at higher risk of body image dissatisfaction than their heterosexual counterparts (Dakanalis et al., 2012; Frederick & Essayli, 2016; He et al., 2020; Peplau et al., 2008). Dahlenburg et al., (2020) proposed several explanations to why gay men might experience higher BID relative to HEM. One major explanation is that gay men are also susceptible to self-objectification and subsequently the pressure to be attractive to interest male partners (Calogero, 2012; Dahlenburg et al., 2020). Another explanation is their involvement in the gay community of which is considered appearance focused (Kousari-Rad & McLaren, 2013; Dahlenburg et al., 2020).

Bisexuals' remark on body perception, on the other hand, is more unique and complex as they are attracted to both men and women. However, research on body image and sexual orientation tend to group bisexuals with lesbians/gays or exclude them completely. Bisexuals tend to be tangled between the societal standards to meet men's world expectation and resistant to the thin beauty ideals as their lesbian peers (Moreno-Domínguez et al., 2019). Beside the different studies that revealed bisexual women have the same levels of BID as heterosexual females and lesbians as aforementioned, other studies confirmed that they are at higher risk of BID than lesbians (Steele et al., 2019; Polimeni et al., 2009) yet lower than their heterosexual counterparts (Frederick et al., 2020; Leavy, 2010). The discrepancy between these results can be explained by the fact that BIW are attracted to both sexes thus, are touched by the internalization of thin ideals and the pressure to attract men as cited in the

objectification theory (Fredrickson & Roberts, 1997), however, when dealing with their same sex partners they tend to feel more comfortable with their size and appearance due to the community that prefers larger bodies (Alvy, 2013; Henn et al., 2019; Markey & Markey, 2013) as well as rejects the heteronormative standards as cited in the protective hypothesis (Hanley and McLaren, 2014; Brown, 1987). Among the numerous studies on BID among bisexuals, it is well noticed that BIM are understudied. Davids & Green (2011) showed that bisexual men had higher BID than heterosexuals yet similar levels as gays. Additionally, involvement in gay community, social comparison as well as sexual orientation were considered as predictors for BID among bisexuals (Davids & Green, 2011).

While studies on Body image issues among transgender has just initiated, it has been shown that BID is prevalent among trans-individuals when compared to heterosexuals (Guss et al., 2017; McGuire et al., 2016; Witcomb et al., 2015). McGuire et al. (2016) revealed that 70% of his trans-gender participants suffered from body image dissatisfaction. In their literature review, Parker & Harriger (2020) clarified that body image dissatisfaction among trans-gender can be endorsed by body shame and concerns regarding body parts of their assigned sex of which they do not desire, as well as worries regarding the effect of body size changes on levels of masculinity and/or femininity in an individual's appearance. This notion was also support in Witcomb et al. (2015) in which trans males and females reported dissatisfaction with body parts, weight and shape and particularly, trans women reported greater drive thinness. When it comes to Queer, to our knowledge, no studies have been done on body image concerns among Queer subgroup thus further studies needed to investigate BID among Queer.

To our knowledge, no studies have assessed the prevalence of body image concerns and the factors affecting it among sexual minorities in Lebanon. However, numerous papers report the factors that might contribute to BID. Maalouf et al. (2017) documented in their report the different facets of discrimination, harassment and rejection experienced by LGBTQ individuals including social stigma and prejudice of which was attributed to the Lebanese mentality. Additionally, another report presented in 2019 by the "human rights watch" showed that transgender individuals in Lebanon are marginalized, experience all sorts of discrimination and rejection, and lack social support as well as their minimum rights. This social stigma and rejection of which LGBTQ are facing can mitigate the fear of rejection and evaluation as well as mental issues (Nasr & Zeidan, 2015). Likewise, Wagner et al., (2013)

showed that MSM experience stigma, harassment and unfair treatment from their surroundings. Also, “The Arab world in seven charts” (2019) survey showed that only 6% of the Lebanese participants exhibited acceptance towards homosexuality.

This signifies that SM in Lebanon are at higher risk of BID compared to heterosexuals as they are exposed to minority stressors. Thus, sexual minorities in Lebanon are a public health concern and should be furthered studied .

2.4. Aim and Hypothesis

The rationale behind this paper is to contribute to the scarce studies in Lebanon that provide a clear picture regarding body image concerns among different sexual orientation and gender identity groups. Additionally, this paper further adds to the debatable results on the disparity of the reported body image concerns among sexual minority subgroups. Thus, the aims of this study are to assess the prevalence of BID among LGBTQ compared to heterosexuals and to further investigate the risk and protective factors contributing the occurrence of body image dissatisfaction among these groups.

We hypothesize that body image dissatisfaction is prevalent among sexual minority groups compared to heterosexuals, yet, it differs between sexual orientation and gender identity subgroups. And we further assume that anxiety, social support, fear of negative evaluation and experiences of prejudice and harassment would predict the occurrence of body image dissatisfaction with all the aforesaid predictors as risk factors except the social support as protector one.

Finally, we hypothesize that individuals with lower BAS are at higher risk of disordered eating behaviors.

Chapter Three

Methodology

3.1. Study Design

The current study is a population based cross-sectional study in which interested participants of different gender identities and sexual orientations were asked to fill an short-online survey through google docs. The survey was accessible in both Arabic and English.

3.2. Pilot Study

A pilot study was conducted prior to the research in order to test the accuracy of the survey in both languages and to better estimate the average time of the survey to be completed. The pilot included a small sample of heterosexuals and LGBTQ (Total N = 6). A number of LGBTQ from media platforms and some colleagues accepted to volunteer in the pilot study. Volunteers followed the same procedure as the main study. According to this pilot, the estimated time to fill the survey was 7 mins. No changes were made to the questionnaires as everything was clear except for some changes in the Arabic terminologies suggested by the LGBTQ participants.

3.3. Participants

The target of this study was to grasp individuals of different sexual orientations and gender identities residing in Lebanon. Thus, a sample of self – identified heterosexual men and women, lesbian, gay, bisexual, transgender, queer, Asexual, None and Pansexual completed the study (Total N = 361). However, As per our inclusion of which aimed to study specifically Cis and LGBTQA individuals residing in Lebanon with a minimum of 16 years of age, three participants of which who reported “other” in the sexual orientation and gender identity question were excluded from the study. Accordingly, the absolute sample used for the final analysis ended in 134 men (mean age 26 ± 6), 187 women (mean age 23 ± 4), 7 Trans-man (mean age 20 ± 3), 4 Trans-woman (mean age 22 ± 4) and 26 queer (mean age 23 ± 3). Considering the study population according to sexual orientations, the final sample involved 159 heterosexuals (mean age 25 ± 5), 76 gay men (mean age 25 ± 6), 24 lesbian

women (mean age 23 ± 4), 62 bisexuals (mean age 21 ± 3), 25 queers (mean age 22 ± 4), and 13 asexual (mean age 27 ± 7). Refer to Table 1.

3.4. Ethical Considerations

Ethical permission for this study was obtained from the institutional review board at the Lebanese American University which is constituted in accordance with the US Code of Federal Regulation (45CFR 46.107, 21CFR 56.107), and Good Clinical Practice ICH. “ Approval number: LAU.SAS.LM4.10/Sep/2020”

3.5. Data Collection

Participants were recruited directly via online requests through social media platforms mainly Facebook and Instagram (Facebook Inc.) , referrals, as well as community groups of which were informed about the study details. Moreover, to further increase the sample size, organizations evolving mainly around Human Rights and specifically sexual minorities in Lebanon were targeted. Organizations interested in the study (Proud Lebanon, AFE and Marsa) were directed to the survey link of which was circulated among the members lists.

Data was collected through an online survey accessed through google docs owned by Google Inc. Prior to the questionnaires, participants were informed about the aim and procedure of the study, the decision of discarding their surveys at any time during the study, and anonymity and confidentiality of which all were clearly identified in an informed consent [Appendix A]. Accessibility to the survey questionnaires was applicable after the agreement to participate according the informed consent.

Additionally, a brochure entitled “Your Guide to a Healthy Eating and Wellbeing” of which was generated by my colleague Hana Harb and I, was offered to participants as an incentive after submitting their surveys. In summary, the tailored brochure sought to guide individuals to healthy eating as well as coping with mental issues related disorders including body image and disordered eating. [Appendix I].

The survey entailed Demographic questions, eating habits, body image and life experiences. It was formulated in way to prevent multiple responses and require all data needed.

3.5.1. Sociodemographic, Sexual Identity, and General Health

To better understand the characteristics of our participants, sociodemographic and general health questions were formed. Participants were asked to convey their age, nationality, area of residence, cohabitation, relationship status, employment status as well as education level. Furthermore, participants were asked to identify their sex at birth (male, female or intersex), gender identity (woman/cis-woman, man/cis-man, trans-woman, trans-man, gender queer or “other”) and sexual orientation (straight/heterosexual, lesbian, gay, bisexual, asexual, queer or “other”).

Additionally, three general health questions were extracted from the National College Health Assessment (2014) and used to assess participant’s health status, chronic medication intake and physical activity [See appendix B.]

3.5.2. Alcohol Intake

One question was extracted from the Alcohol Use Disordered Identification Test-Core (AUDIT-C) developed by the World Health Organization to assess alcohol intake (Bush, 1998). AUDIT C have confirmed high validity and reliability (Osaki et al., 2014) . The question was the following “how often do you have a drink containing alcohol” with choices of “Never”, “Monthly or less”, “2-4 times a month”, “2-3 times a week”, or “4 times a week”. [Appendix B]

3.5.3. Eating Disorder Examination Questionnaire

To examine the risk of disordered eating behaviors among participants, the Eating Disorder Examination Questionnaire (EDE-Q-6.0) was used (Fairburn & Beglin, 1994).It is a self-reported questionnaire that evaluate eating behaviors and concerns over the previous 28 days. It constitutes of a four subscale scores of which answers are based on a 7-point order responses: Restraint Eating (5 items), Eating Concern (5 items), Shape Concern (8 items), and Weight Concern (5 items). Accordingly, the Global EDE-Q score is calculated by

averaging the subscales, with higher scores indicating eating behaviors and concerns. To further understand the prevalence of body image dissatisfaction and concerns, two subscales were analyzed from this scale: weight and shape concern subscales. These two scales were used as they are considered aspects of body image dissatisfaction (Seyed Alireza Hosseini & Padhy, 2019). [Appendix C].

3.5.4. Body Appreciation Scale

As a primary outcome for this study, body image dissatisfaction was assessed using the second version of the body appreciation scale (BAS-2) (Tylka & Wood-Barcalow, 2015). Results of lower body appreciation is an indicative of higher body image dissatisfaction (Andrew et al., 2015). This scale constitutes of 10 items with a 5-point Likert scale with 1 as “Never” and 5 “always”. It is scored by averaging the responses of all the items with lower scores indicative of lower body appreciation thus higher body image dissatisfaction. This scale was validated among western and non-western population (Baceviciene & Jankauskiene, 2020). Additionally, The BAS-2 was validated across sexual minority individuals and demonstrated good test-retest stability and internal consistency ($\alpha = 0.87$ to $\alpha = 0.96$) (Soulliard & Vander Wal, 2019; Tylka & Wood-Barcalow, 2015). [Appendix D]

3.5.5. Generalized Anxiety Disorder

To measure the level of anxiety among participants, the shortened version of the Generalized anxiety disorder (GAD-2) was used (Kroenke et al., 2007). It is a self-report screening tool involving the first 2 questions of the GAD – 7 scale (Spitzer et al., 2006) of which are considered the core anxiety symptoms (Sapra et al., 2020). This scale assess the frequency of anxiety symptoms over the prior 2 weeks period. A total score can range from 0 to 6, and a cut-off point of ≥ 3 is used to identify possible GAD cases. Additionally, mental health issues has been linked to body image dissatisfaction (McClain, Z., & Peebles, R., 2016) thus GAD was used to be tested as a risk factor for BID among sexual minorities. [Appendix E].

3.5.6. Brief Fear of Negative Evaluation

To further assess social anxiety among participants, the Brief fear of Negative Evaluation scale (BFNE) was used (Leary, 1983). It is a shortened form of the a 30-item Fear of Negative Evaluation Scale (Watson & Friend in 1969). This scale reflects fear of evaluation which is a core factor for social anxiety. It consists of 12 items of which participants reflect how much each item applies to them on a 4-point Likert scale 0 “Not a characteristic of me” to 4 “Extremely characteristic of me” with higher scores indicative of greater fear of evaluation. Similarly, BFNE has been demonstrated as risk factor for body image dissatisfaction thus it was included in this study to check this association. [Appendix F]

3.5.7. Heterosexist Harassment, Rejection, and Discrimination Scale

Sexual minorities are regularly exposed to experiences of harassment and discrimination. Thus, the Heterosexist Harassment, Rejection, and Discrimination Scale (HHRDS) (Smith et. Al., 2019) was used to measure the frequency of which lesbian, gay, bisexual, transgender, and queer (LGBTQ) individuals report experiences of harassment, rejection, and discrimination in the past year. The original scale was first formulated for lesbian women (Szymanski, 2006), however it was then adjusted to LGBTQ individuals (Smith et. Al., 2019). It is a 14-item self-report questionnaire alienated into three subscales: Harassment and Rejection, Workplace and School Discrimination, and Other Discrimination. The scale uses a 6-point scale, where 1 “the event has never happened to me” and 6 “the event happened almost all of the time” were higher scores indicative of higher experiences. This scale demonstrated excellent internal consistency ($\alpha = .92$), with the three subscales demonstrating good internal consistency ($\alpha = .89$, $\alpha = .88$, and $\alpha = .87$, respectively) (Smith et. Al., 2019). [Appendix G]

3.5.8. Multidimensional Scale of Perceived Support

As previously noted, social support provoke a protective effect on body image dissatisfaction. Thus, the Multidimensional scale of perceived social support (MSPSS) (Zimet, G.D. et al, 1998) was included in the survey to assess the sufficiency of social support among three aspects: family, friends, and significant others. It is of 12-items scored from 1 “very strongly disagree” to 7 “very strongly agree”, with higher scores representing greater perceived social support. Scoring can also be presented as mean scale scores ranked from 1 to 2.9 (low support), 3 to 5 (moderate support) and a score from 5.1 to 7 (high

support) (Zimet et al., 1988). This scale was used to evaluate the correlation between social support and BID among sexual minorities. [Appendix H]

3.6. Statistical Analysis

Statistical analysis was performed using SPSS- version 25. Descriptive analysis were conducted for all sociodemographic characteristics for each subgroup under both sexual orientation and gender identity represented as mean and standard deviation for continuous variables and percentages for categorical. Additionally, cross tabulation tables were done to further review the characteristics of our participants within subgroups.

Descriptive statistics were also performed to calculate the mean score of scales and their subscales.

An independent-samples t-test was conducted to compare the mean scores of BAS-2 between straight and LGBTQA to check which group had higher BID.

Likewise, ANOVA tests were conducted to test the difference in the mean score of the scales between the gender identity and sexual orientation subgroups. Subsequently, Tukey HSD post-hoc analysis, a pairwise comparison was conducted to detect the difference among subgroup.

Multiple linear regression was performed to test the association of predictors which are BFNE, Social support, HHRDS, and anxiety with BAS-2. Then, the strength of association, was analyzed using correlation coefficients between independent variables and the outcome. Mediation analysis was done to assess if the association between fear of negative evaluation and BID was mediated by BMI. It was done according to Baron and Kenny (1986) Model, which elucidates that mediation is tested through three regression models. Thus 3 significant tests between the three variables (BFNE-BAS-2, BFNE-BMI, BMI-BAS-2) are needed to validate this mediation.

Finally, Regression Analysis was performed to check If BAS-2 is associated with disordered eating habits to further confirm that individuals with body image concerns are at risk of disordered eating behaviors.

Chapter Four

Results and Discussion

4.1. Results

4.1.1. Characteristics of Gender Identity and Sexual Orientation Participants

After excluding the 3 participants that did not fit in the inclusion criteria of which only LGBTQ, cis and heterosexuals to be included in this study, the remaining number of participants included for the final analysis was 358 of which the number of gender identity and sexual orientation groups are documented in Table 1. Additionally, the mean age of total participants was 24 years old with a mean BMI of 24.17 kg/m².

With regards to the residence area, the majority of the participants lived in Beirut and mount Lebanon (51.5% and 36.3%, respectively).

Table 1: Frequency, Mean Age and Mean BMI Among Gender Identity and Sexual Orientation Groups

		Frequency	Age (Mean ± SD)	BMI (Mean± SD)
Gender Identity	Cis-Man	134 (37.4%)	26 ± 6	25.7 ± 5
	Cis-Woman	187 (52.2%)	23 ± 4	22.9 ± 4.2
	Trans-man	7 (2%)	20 ± 3	27.5 ± 4.7
	Trans-woman	4 (1.1%)	22 ± 4	24.5 ± 2.3
	Queer	26 (7.2%)	23 ± 3	24.6 ± 4.7
Sexual Orientation	HEM	52 (15.2%)	27± 6	25.6 ± 3.6
	HEW	102 (29.7%)	24 ± 4	22.5 ± 3.8
	Gay	76 (21.2%)	25 ± 6	25.5 ± 5.4
	Lesbian	24 (6.7%)	23 ± 4	23.5 ± 5.2
	Bisexual	62 (17.3%)	21 ± 3	23.7 ± 5.1
	Queer	25 (7%)	22 ± 4	25.1 ± 3.6
	Asexual	13 (3.6%)	27 ± 7	23.16 ± 4.35
Total			24 ± 5	24.17 ± 4.73

With regards to the tested predictors, LGBQA recorded significantly higher on the examined factors compared to heterosexuals (Table 2). Specifically, LGBQA had higher scores on the Generalized anxiety disorder scale and fear of negative evaluation as well as reported incidences harassment, rejection and discrimination from their surroundings. With

regards to social support, heterosexuals scored significantly higher compared to LGBQA. Similarly, TQ individuals documented higher levels of Anxiety, fear of evaluation and incidences of social stigma and prejudice compared to their Cis-counterparts. Whereas Cis individuals reported higher levels of social support (Table 3).

Table 2: Scales Mean Scores And SD of the scales Among Sexual Orientation Groups

	Sexual Orientation				t (2-tailed sig)
	Heterosexual		LGBQA		
	N	Mean ± SD	N	Mean ± SD	
GAD	159	1.71 ± 0.94	200	2.04 ± 0.951	-3.277**
BFNE	159	32.6 ± 9.69	200	36.1 ± 10.66	- 5.569**
MSPSS	159	5.19 ± 1.42	200	4.72 ± 1.42	3.092**
HHRDS			200	2.48 ± 1.24	

GAD., Generalized Anxiety Disorder; *BFNE.*, Brief Fear of Negative Evaluation; *HHRDS.*, Heterosexist, Harassment, Discrimination & Rejection; *MSPSS.*, Multidimensional Scale Of Perceived Social Support

Table 3: Scales Mean Scores And SD of the scales Among Gender Identity Groups

	Gender Identity					
	Cis-Man		Cis-Woman		TQ	
	N	Mean ± SD	N	Mean ± SD	N	Mean ± SD
GAD	134	1.73 ± 0.96	187	2.04 ± 0.951	37	2.18 ± 0.90
BFNE	134	33.76 ± 9.82	187	34.71 ± 10.63	37	36.32 ± 10.60
MSPSS	134	4.90 ± 1.36	187	4.99 ± 1.50	37	4.71 ± 1.38
HHRDS	82	2.35 ± 1.09	85	2.38 ± 1.36	33	3.08 ± 1.09

GAD., Generalized Anxiety Disorder; *BFNE.*, Brief Fear of Negative Evaluation; *HHRDS.*, Heterosexist, Harassment, Discrimination & Rejection; *MSPSS.*, Multidimensional Scale Of Perceived Social Support

4.1.2. Prevalence of Body Image Dissatisfaction among Sexual Minorities

Body image dissatisfaction was confirmed among sexual orientation groups. This was evident in the independent t-test which presented a significant difference in mean scores on the body appreciation scale in LGBQ (3.23 ± 1.02) compared to Straight (3.74 ± 1.08) individuals (t = 4.589; p-value <0.01). Table 4. Shows that LGBQA ranked lower on the BAS scale compared to heterosexuals signifying negative body image .

Additionally, Shape concern and Weight concerns are considered as indicators of BID (Fairburn & Beglin, 1994). Thus the shape and weight concern subscales from the EDE-Q further confirm BID among sexual minorities. Referring to Table 4., There was significant different in the mean scores between LGBQA and heterosexuals in the shape concern ($t = -3.328$; p -value <0.01) and weight concern ($t = -3.795$; p -value <0.01) subscales. In both subscales, LGBQA had higher mean scores compared to heterosexual individuals indicative higher concerns among this group.

This confirms our first hypothesis which denotes a prevalence of BID among sexual minorities compared to heterosexuals.

Additionally, Table 4. Shows a significant difference in the mean scores between LGBQA and heterosexuals in the global EDE-Q scale ($t = -3.67$; p -value <0.01). LGBQA ranked higher on the global EDE-Q compared to their heterosexual peers, indicating higher risk of DEB.

Table 4: Mean Scores Of BAS-2, Shape And Weight Concern Subscales, and Global EDE-Q score Between Heterosexuals And LGBQA

	Heterosexual		LGBQA		t (2-tailed sig)
	N	Mean \pm SD	N	Mean \pm SD	
BAS-2	159	3.74 \pm 1.08	200	3.23 \pm 1.02	4.589**
Shape Concern	159	2.04 \pm 1.23	200	2.51 \pm 1.39	- 3.328**
Weight Concern	159	1.76 \pm 1.24	200	2.30 \pm 1.41	- 3.795**
EDE-Q	159	1.52 \pm 1.07	200	1.99 \pm 1.35	-3.67**

** $p < 0.01$

BAS., Body Appreciation Scale; LGBQ., Lesbian, Gay, Bisexual, Queer; EDE-Q., Eating Disorder Examination Questionnaire

4.1.3. Body Image Dissatisfaction between Groups of Gender Identity and Sexual Orientation

When considering the difference of body image dissatisfaction between sexual orientation subgroups, there was a significant difference in the mean scores of BAS-2 between the groups as determined by one - way ANOVA ($F = 8.668$; p -value <0.01). Accordingly, Tukey post hoc illustrated that this difference exists mainly between HEM and Bisexual (p -value < 0.01) as well as between HEM and queer (p -value < 0.01) in which both bisexuals ($2.98 \pm$

0.99) and queer (2.75 ± 1.19) individuals had significant lower BAS-2 mean scores compared to HEM (3.89 ± 1.05) indicating lower body appreciation. Similarly, there was a significant difference in the BAS-2 mean scores between HEW and Bisexuals (p-value < 0.01) and HEW and Queer (p-value < 0.01) in which both Queer (2.75 ± 1.19) and Bisexuals (2.98 ± 0.99) had lower BAS than HEW (3.72 ± 1.06).

Regarding Lesbians, their BAS-2 mean scores differ significantly with Queer (p-value= 0.02 <0.05), indicating lower BAS-2 among Queer compared to Lesbian (3.68 ± 1.02). Likewise, Lesbians BAS-2 mean score differed significantly from that of bisexuals as the latter scored lower.

Conversely, there was no significance in the BAS-2, weight and shape concern subscales scores of Lesbian when compared to HEW. Lesbian individuals scored well on BAS-2 scale ($3.68 \pm 1.02 > 3$) as well as weight (1.81 ± 1.15) and shape (2.02 ± 1.29) concern subscales. Same goes for Gay when compared to HEM, Gays scored lower on the BAS-2 score yet, it was not significant. [Refer to Table 5.]

Table 5: Mean Scores & SD Of BAS, Shape And Weight Concern Subscales Between Groups

		BAS-2	Shape Concern	Weight concern
Gender Identity	Man	3.61 ± 1	2.3 ± 1.34	2.04 ± 1.37
	Woman	3.49 ± 1.08	2.2 ± 1.31	1.98 ± 1.32
	Trans-man	1.9 ± 1.19^a	2.77 ± 1	2.89 ± 0.78
	Trans-woman	2.38 ± 0.32	3.72 ± 1.3	4.2 ± 0.8
	Queer	3.09 ± 0.97	2.52 ± 1.45	2.13 ± 1.55
Sexual Orientation	HEM	3.89 ± 1.05	2.11 ± 1.06	1.78 ± 1.13
	HEW	3.72 ± 1.06	1.97 ± 1.32	1.71 ± 1.30
	Lesbian	3.68 ± 1.02	2.02 ± 1.29	1.81 ± 1.15
	Gay	3.41 ± 0.9	2.48 ± 1.46	2.25 ± 1.45
	Bisexual	$2.98 \pm 0.99^{b,c,d}$	2.76 ± 1.25^c	2.48 ± 1.36^c
	Queer	$2.75 \pm 1.19^{b,c,d}$	2.79 ± 1.38	2.77 ± 1.55^c

HEM., Heterosexual Men; HEW., Heterosexual women

Significant Difference from: a., Man and Woman; b.,HEM; c., HEW; d., Lesbian;

These results were further support by Tukey post hoc identifying the significant difference in mean scores of shape ($F = 4.217$; p-value <0.01) and weight ($F = 4.973$; p-value <0.01) concern subscales between sexual orientation groups. Results revealed a significant

difference in the shape concern subscale scores between HEW and Bisexuals (p -value < 0.01) in which Bisexuals (2.76 ± 1.25) marked higher shape concerns compared to HEW (1.97 ± 1.32). Similarly, Bisexuals (2.48 ± 1.36) had significantly higher weight concerns compared to HEW (1.71 ± 1.30) (p -value < 0.01). Also, the mean score for weight concern subscale among queer (2.77 ± 1.55) was significantly higher compared to HEW (1.71 ± 1.30) (p -value < 0.01) indicating higher weight concerns among the queer group.

With regards to gender identity, there was a significant difference in the mean scores of BAS-2 between the groups ($F= 9.029$; p -value < 0.01) where TQ individuals reported lower BAS-2 (2.79 ± 1.067) compared to Cis-men (3.61 ± 1) and Cis-women (3.49 ± 1.084) and higher weight and shape concerns (2.5 ± 1.505 ; 2.7 ± 1.386) compared to Cis-women (1.98 ± 1.318 ; 2.2 ± 1.312) and Cis-men (2.04 ± 1.365 ; 2.3 ± 1.336) . When considering the difference of body image dissatisfaction between gender identity subgroups, there was no significant difference in the mean scores of BAS-2 in Trans-woman (2.38 ± 0.32) compared to men (3.61 ± 1) and women (3.49 ± 1.08) however, there was a significant in trans-man (1.9 ± 1.19) when compared to man and woman (p -value < 0.05).

4.1.4. The Association and Strength of association between Anxiety, Fear of Negative evaluation, Social Support, Harassment and discrimination and Body Image Dissatisfaction

A Pearson correlation test was conducted to examine the strength of the relationship between Anxiety (GAD-2 scale), Fear of Negative evaluation (BFNE), Social Support (MSPSS), as well as harassment and discrimination experiences (HHRDS), and body appreciation (BAS) [Table 6]. Results suggest a weak significant inverse correlation between GAD-2 and BAS ($r = - 0.374$; p -value < 0.01) , likewise there was a weak negative correlation between HHRDS and BAS Yet it was significant ($r = - 0.147$; p -value < 0.05). Furthermore, there was a moderate inverse correlation between BFNE and BAS and this correlation was strongly significant ($r = - 0.509$; p -value < 0.01). This indicates that as GAD-2, BFNE and HHRDS increase, Body appreciation decreases. On the other hand, MSPSS was

positively correlated to BAS ($r = 0.301$; p -value < 0.01) indicative of a protective effect in which BAS escalate whenever the social support increases.

Table 6: Pearson Correlation Between Independent Variables And BAS

	1	2	3	4	5
1.1. BAS	-				
1.2. GAD-2	-.374**	-			
1.3. BFNE	-.509**	.448**	-		
1.4. HHRDS	-.147*	.258**	.060	-	
1.5. MSPSS	.301**	-.171**	-.216**	-.265**	-

BAS., Body Appreciation Scale; GAD-2., Generalized Anxiety Disorder-2; BFNE., Brief Fear of Negative Evaluation; HHRDS., Heterosexist, Harassment, Discrimination & Rejection; MSPSS., Multidimensional Scale Of Perceived Social Support

***.* Correlation is significant at the 0.01 level (2-tailed).

A multiple linear regression was calculated to predict Body appreciation based on BFNE, HHRDS, MSPSS and GAD. After correcting for age, BMI, level of education, exercise level and area of residence, a significant regression equation was found ($F = 9.384$; p -value < 0.01), with an R^2 of 0.307. BAS-2 increased as social support increase, and decrease as BFNE, GAD and HHRDS increase. GAD (p -value = 0.039 < 0.05), Fear of negative evaluation (p -value = 0.00 < 0.05) and social support (p -value = 0.030 < 0.05) were significant predictors of BAS-2. Additionally, Results indicated that MSPSS is a more significant predictor of BAS-2 than other factors through higher standardized coefficient of 0.142. [Table 7]. It is crucial to note that GAD became Significant after adjusting for area of residence.

Table 7: Regression Table To Check Association Between Independent Variables And Outcome

	B	SE B	β	P - value
BAS (Constant)	4.34	.375		.000
Generalized Anxiety Disorder	-.150	.072	-.141	.039
Brief Fear of Negative Evaluation Scale	-.039	.006	-.404	.000

Multidimensional Scale of Perceived Social Support	.102	.047	.142	.030
Discrimination scale	-.035	.054	-.043	.512

a. *Dependent Variable: Body appreciation scale*

B., *Unstandardized Beta*; SE *Standard Error*; β *Standardized Beta*

Note. $R^2 = 30.7\%$

4.1.5. Mediation Analysis

Although, the literature has proven that BMI Mediates the association between BFNE and Body image dissatisfaction (Ahadzadeh et al., 2018) yet our results were not in line with this. Baron and Kenny (1986) suggested that to test for mediation, three regression models should be performed. If one of the three models is not significant, the mediation is rejected. Thus, after performing this analysis, the relation between BMI and BNFE was insignificant (p-value = 0.960 > 0.05). Accordingly, BMI mediating the association between BFNE and BAS-2 was rejected.

4.1.6. Association Between Body Image and Disordered Eating Behaviors

Correlation and regression models to examine the association between Body appreciation scale and EDE-Q results in a significant association ($F= 159.782$; p-value <0.01). BAS-2 was significantly inversely correlated to EDE-Q ($r= - 0.647$; p-value < 0.01). Thus, signifying that higher scores of BAS-2 indicates lower scores of EDE-Q. To further understand this association, regression model illustrates that when BAS-2 increase by one unit, Global EDE-Q decreases by 0.647 (p-value <0.01). [Table 8].

Table 8: Association Between BAS-2 And Ede-Q As An Outcome

	B	SE B	β	P - value
EDE – Q (Constant)	4.015	.186		.000
Body appreciation scale	-.647	.051	-.555	.000

Dependent Variable: Global EDE (four subscales)

4.2. Discussion

Body image is a critical aspect of the mental well-being, yet the remaining literature lacks the representation of association between body image, gender identity and sexual orientation. Hence, this paper meant to provide a broad characterization of body image dissatisfaction among sexual minorities residing in Lebanon. To our knowledge, this is the first study to observe the prevalence, risk and protective factors of BID among sexual minorities residing in Lebanon. Results indicated a prevalence of body image dissatisfaction among sexual minorities as evident by the lower body appreciation and higher weight and shape concerns in LGBTQA compared to heterosexuals, yet a difference in the level of BID exists between LGBTQ subgroups. With regards to the risk and protective factors, results indicated that fear of negative evaluation and generalized anxiety disorder predicted lower levels of body appreciation. Besides, Proximal stressors were positively correlated to body appreciation. On the other hand, Social Support was significantly positively correlated and associated with body appreciation indicating a protective effect against body image dissatisfaction.

Results of this paper validate the hypothesis regarding the prevalence of body image dissatisfaction among sexual minorities in Lebanon. This was evident in the significant higher mean scores on the weight and shape concern subscales and the significant lower mean scores on the body appreciation scale. One leading framework that can explain the link between sexual minorities and Body dissatisfaction in Lebanon is the minority stress theory proposed by Meyer (2003). As previously elucidated, sexual minorities often endure chronic stress related to discrimination, stigmatization, stereotypes and prejudice associated with being a minority. Such experiences can create a stressful environment for sexual minorities to live in. Consistent with the minority stress theory (Meyer., 2003) and the outlined studies (Bränström, 2017; Cronin et al., 2020; Katz-Wise et al., 2015), our results displayed that LGBTQ individuals experience significantly higher stressors compared to heterosexuals of which could strongly explain the increased risk of body image dissatisfaction.

Besides, LGBTQ individuals scored lower on the MSPSS indicative lack of buffering effect towards the minority stress. These results were not surprising as previous reports (Maalouf et al., 2017) documented the experiences of stigmatization and prejudice in which sexual minorities in Lebanon endure during their everyday lives. Moreover, the outcomes of the study further shed the light on the difference of body image concerns between groups of

sexual minority. This could explain that sexual minorities are not experiencing the same levels of body image dissatisfaction, instead some groups impose higher levels of dissatisfaction. This is in line with the several studies that reported disproportionate levels of BID from within subgroups of sexual minorities (Meneguzzo et al., 2020; Alvy, 2013; Dahlenburg et al. 2020). Most precise explanation can be the “intra-minority theory” (Pachankis et al., 2020) in which sexual minorities are exposed to several pressures not only from the heterosexist society, but also from the community they are involved in.

By analyzing the results based on sexual minority subgroups, Lesbian women reported higher levels weight and shape concerns. Additionally, lesbians reported lower levels of body appreciation compared to HEW, yet not significant. These results are not consistent with the previous studies that illustrates that Lesbians are less prone to BID compared to heterosexuals (Alvy, 2013; Peplau et al., 2008). Moreover, Alvy, (2013) denoted that there are sociocultural influences specifically for lesbians of which include rejection of thinness norms and different standards of beauty. Additionally, Meneguzzo, P. et al, 2017 further elaborated on the notion that shape concern among lesbians can be endorsed by the desire for muscularity. In concordance with this, it has been shown that lesbian community has also its own standards and usually prefer “butch” and/or larger body sizes thus they tend to be reported as overweight or obese (Henn et al., 2019; Yean et al., 2013). However, contrary to Yean et al. (2013), in our study lesbians and HEW had normal BMI. This could reflect the notion that lesbians who feel that they are not meeting the standards of their community might display higher body image dissatisfaction and higher levels of shape and weight concerns.

Similar to lesbians, a higher body dissatisfaction was pervade in gays compared to their heterosexual counterparts, Yet not significantly. Our results are in agreement with the recent studies that revealed a higher body concerns and dissatisfaction in gays compared to HEM (Dakanalis et al., 2012; Frederick & Essayli, 2016; He et al., 2020; McArdle & Hill, 2007). It is evident through literature that the gay community is “appearance oriented” and individuals in this community seek other men attraction. In such, gay individuals are at higher risk of self-objectification (Fredrickson & Roberts, 1997) a core factor associated with body image dissatisfaction. (Smith et al., 2011) noted that HEM desire muscular bodies whereas gay men believed that lean bodies are the preferred figures for their potential buddies. Perhaps, such discrepancy can generate a confusion and further pressure to meet the ideal figure they believe is attractive to other men. Additionally, our gay sample are overweight on average,

which could further clarify that these individuals are in burden to meet that “thin ideal” needed for their relationships gains. This might reflected by the notion suggested by McArdle & Hill (2007) that gay men experience higher levels of body image dissatisfaction in desire for smaller ideal weight.

Concerning bisexuals, the data of this study showed a significant higher body image dissatisfaction in bisexuals, men and women, compared to heterosexual men, heterosexual women as well as Lesbians. Additionally, although not significant, yet bisexuals experienced higher BID compared to gays. These result coincides with those studies suggesting that bisexuals may experience more dissatisfaction with their bodies compared to lesbians, heterosexuals and gays (Brennan et al., 2013; Boehmer et al., 2007; Steele et al., 2019). Because they are attracted to both genders, several factors can convoy the occurrence of BID among this group. We assume that bisexuals, both men and women, are tangled between the societal standards to meet the ideal body as well as the ideal standards provoked by the community they are involved in, thus they are pressured to integrate norms of both homosexual and heterosexual cultures. Additionally, it seemed from previous data in our study that both homosexual communities are appearance oriented, and individuals in both communities are exposed to stressors. Additionally, it has been suggested that bisexual physical appearance is influenced by the partner’s choice (Taub, 1999). For instance having a male versus a female partner. This could further confirm the idea that bisexuals tend to experience higher levels of body image dissatisfaction as a result of the constant pressures of achieving the ideal body perceived by their potential partners.. Additionally, it has been shown that bisexuals desire larger body sizes (Moreno-Domínguez et al., 2019). And bisexuals in this study have an average of normal BMI. Which could also explain the increase in body image dissatisfaction. It will be for future studies to determine whether it is sexual orientation or the pressure to meet partner’s ideals that puts bisexuals at risk for body image dissatisfaction.

Transgender individuals are a critical case of which should be studied precisely. However, this data could provide a brief representation for the risk of having BID among transgender. Results indicated that Trans individuals, men and women, reported higher levels of weight and shape concerns and lower levels of body appreciation compared to Cis individuals. These results are in-line with previous studies indicating higher levels of body image dissatisfaction in trans individuals (Becker et al., 2015; Cella et al., 2013; Nagata, J.M.

et al (2020); Steensma et al., 2013; Vocks et al., 2009) . Ålgars et al., (2012) revealed that trans-women strive for thinness in an attempt for more feminine bodies. This may suggest that trans-women are vulnerable to the societal standards regarding thin ideals which is frequently cited in the “objectification theory” (Fredrickson & Roberts, 1997) thus increasing their risk of body image dissatisfaction. However, it is well noted that it is unrealistic for trans-women to achieve their ideal bodies as some bodily structures (ex; wide shoulders) cannot be transformed medically or physically (Jones et al., 2016). This could further lead to mental health issues including anxiety and depression and subsequently, BID. Similarly, trans-men are in pressure to meet the masculine bodies to meet their cultural standards (Jones et al., 2016). Thus, clinicians working with trans individuals must be aware that body image dissatisfaction may be driven by the cultural pressures to achieve a gender-specific ideals; either more feminine for trans-women or muscular for trans-men; of which are most probably unattainable. Although the sample size of transgender individuals was not representative, however, results revealed a greater body image concerns in trans-men compared to trans-women. One explanation could be related to the dissatisfaction with one’s body parts and the desire of having the physical characteristics of their experienced gender and most specifically masculine chest (Ålgars et al., 2012; van de Grift et al., 2016). For instance, Becker et al. (2015) noticed that trans-men were dissatisfied with all female body parts whereas trans-women were only dissatisfied with their sex-specific parts. This could explain the higher body image dissatisfaction in trans-men compared to trans-women. This further encourage clinicians to take a holistic view on body image among trans-individuals rather than focusing on the improvement of sex-specific body parts satisfaction.

As outlined previously, queer is a more complex sexual orientation as they are emotionally and physically attracted to all individuals from LGBTQ community. However, due to the limited research on body image dissatisfaction among queer, it was not possible to fully address the issues related to BID among this subgroup. However, our results revealed that queer individuals ranked the lowest on the body appreciation scale and the highest on weight and shape concern subscales among the sexual orientation subgroups, indicating higher body image dissatisfaction. Queer individuals are part of the sexual minority groups thus they tend to experience higher levels of minority stressors which was also proven in Lebanon. Although this paper was not intended to assess the factors associated with body image dissatisfaction among queer group particularly, yet it provided a broad portrayal

regarding their mental health and risk of BID. Thus future studies are encouraged to assess precisely the status of body image dissatisfaction among queer individuals.

So far, numerous studies have shown that body image dissatisfaction is linked to disordered eating behaviors (Calzo et al., 2017; Ålgars et al., 2012; Mason et al., 2018; Witcomb et al., 2015). In line with this, our analysis showed that BID is negatively associated with disordered eating behaviors suggesting that individuals with higher BID sought disordered eating behaviors as coping strategy lessen the impact of the stressors they are exposed to. Mason et al., (2018) suggested that sexual identity related experiences are associated with internalization of sociocultural norms and distorted emotion regulation which in turn results in BID and consequently, DEB.

Previous literature revealed that minority stressors and mental health issues are major cause in endorsing the development of body image dissatisfaction among sexual minorities. Accordingly, this study investigated the association between generalized anxiety disorder, fear of negative evaluation, social support, experiences of harassment, rejection and discrimination and body appreciation. Fear of negative evaluation, and generalized anxiety were significant risk factors of body image dissatisfaction whereas social support was a significant protector against BID. Besides, although discrimination was not a significant predictor, however it was positively correlated with BID. The association between experiences of discrimination, harassment and rejection and body image dissatisfaction appears to be linked indirectly through the above mentioned risk factors. Supporting previous studies (Mahon et al., 2021; McClain, Z., & Peebles, R., 2016; Pawijit et al., 2017), fear of negative evaluation and generalized anxiety disorders are significant risk factors of body image dissatisfaction. Additionally, social support which retain a protective factor, can buffer the outlined stressors thus decreasing their impact on mental health and subsequently body image (Hodder et al., 2014). Contrary to this, our results revealed that sexual minorities lack the buffering effect of which was evident in the lower scores on the MSPSS in LGBQA compared to heterosexuals. Thus, our results partially confirmed our hypothesis in which only fear of negative evaluation, anxiety and social support were associated with body image dissatisfaction.

As with any study, the present study had several limitations of which should be noted. One major limitation is the small sample size of the sexual minority group and subgroups obtained due to the difficulty of reaching stigmatized sexual minorities especially in Lebanon where sexual orientation can expose an individual to threat. Another limitation is the selection bias which limits the generalizability of our results to sexual minorities of different regions and experiences since most of our participants were from Beirut and Mount Lebanon, in which LGBTQ from these cities are less affected by the cultural and religious stressors. Also, the study design itself is considered a limitation as cross-sectional studies cannot confirm a causal pathway. Although we were able to assess the most important aspects of the minority stressors (Meyer., 2003) related to BID, yet another important factors as sexual concealment and community involvement should be taken into consideration. Moreover, multiple sexual minorities were combined for analysis which further decrease the accuracy of the results. However, since the rationale of this study was to provide a broad picture of the case of sexual minorities in Lebanon thus this limitation did not affect the aim of the study. Finally, Trans gender individuals were underrepresented in this study and due to technical issues they were unable to access the HHRDS scale. Thus, future studies are encouraged to dig deeper into the mental health issues and disorders touching sexual minority subgroups in Lebanon with taking into consideration the above limitations.

Despite these limitations, this paper is the first study to tackle body image dissatisfaction among sexual minorities in Lebanon. Although the sample size was not representative enough, however, having participants from diverse sexual minority subgroups was considered a strength. Lastly, the usage of BAS-2 scale which is a validated scale for body image among sexual minority groups.

Chapter Five

Conclusion

The current study is one of the few studies that tackle sexual minority health related issues. We were able to provide a clear picture regarding the case of sexual minorities and some related mental health issues. It was confirmed that body image dissatisfaction is prevalent among sexual minorities in Lebanon though unevenly among subgroups . Moreover, Minority stressors were positively associated with greater body image dissatisfaction among sexual minorities compared to heterosexuals. Whereas, social support was the only protective factor against body image concerns compared to the assessed factors. Additionally, it was evident that individuals with higher body image dissatisfaction are at higher risk of disordered eating behaviors and other mental issues. Hence, future research are encouraged to examine unique stressors and particularly, stressors from within subgroups communities of which can contribute to body image dissatisfaction.

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Appendices

Appendix A: Informed Consent

LEBANESE AMERICAN UNIVERSITY

Informed Consent Form to Participate in a Research Study
Title of Study: Determinant of Body Image Dissatisfaction and Disordered Eating Behaviors among an LGBTQ community in Lebanon
Version date: Fall 2020

Principal Investigator: Dr. Lama Mattar, Assistant Professor of Nutrition and Graduate Program Coordinator, Department of Natural Sciences, Beirut Campus, Lebanese American University
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Co-Investigator (s): Hana Harb and Nour Kalash, Graduate Students at the Lebanese American University

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Location where the study will be conducted: N/A

You are being asked to take part in a research study to where you will fill out a survey about gender identity and sexuality and its association with body image dissatisfaction and disordered eating behaviors. Please take the time to read the following information carefully before you decide whether or not you want to participate in the research study. You may ask for further clarification or information regarding this study from the researchers noted above.

The study will be conducted over a course of 6-months and you will be required to fill out the survey only once.

If you take part in this study, you will be asked to fill a survey that includes questions regarding your demographic characteristics, eating habits, body image satisfaction, fear of negative evaluation, social support adequacy, and anxiety level.

You will have the alternative to choose not to participate in this research study. There are no direct benefits to you. However, the information obtained in this study will help us understand the correlation between gender identity/sexual orientation and eating disorders. This research study is considered to be minimal risk. That means that the risks associated with this study are the same as what you face every day.

There will be no cost to you from taking part in this study. The survey related to this study will be provided at no cost.

You will not be paid to participate in this study. However, you will be provided with an informative brochure on healthy eating tips.

We will keep your study records as confidential as possible. We will carefully protect the information you provide about yourself and your family. What we learn from your surveys will be described only in a way that does not identify you. To protect your privacy, surveys will be linked to a secret code. Your name will only be recorded on the informed consent form. We will keep the secret code carefully protected in a locked file. The surveys will be stored for a year unless you ask to have them destroyed after the study is completed. Access is only by the principal investigator of the study and authorized personnel. In addition, study records may be reviewed by the Institutional Review Board at the Lebanese American University. Your records will be monitored and may be audited without violating confidentiality. We may publish what we learn from this study.

If we do, any published information resulting from the study will not mention the names of the people who participated in this study.

You should only take part in this study if you want to volunteer. You are free to participate in this study or withdraw at any time. If you choose not to be in the study or to withdraw later on from the study, this will not affect you in any way. There will be no penalty or loss of benefits you are entitled to receive if you stop taking part in the study. If you wish to withdraw from the study, you can contact the investigators noted on the first page of this document.

Whom to contact to get answers to your questions, concerns and complaints.

If you have any questions, concerns or complaints, please call the Principal Investigator / researcher of the study, listed on the first page of this informed consent document

If you have any questions about your rights or welfare as a participant in this study, or you want to talk to someone outside the research group, please contact the Institutional Review Board Office at the Lebanese American University at (01-786456 ext. 2546).

If you have any questions regarding the study, please contact any of the doctors listed on the first page of this informed consent document.

CONSENT TO TAKE PART IN THE STUDY

I have carefully read the above information about this study. All of my questions have been answered to my satisfaction. I know that I may refuse to take part in or withdraw from the study at any time. **I freely give my consent to take part in this study.** I understand that by signing this form I am agreeing to take part in the study.

I Agree

I Disagree

Appendix B: Sociodemographic, General Health, and Alcohol Intake Questionnaires

A. Sociodemographic Questions

1) How old are you?

--- years

2) What is/are your nationality (ies)?

3) Where do you live?

- Akkar
- Baalbek-Hermel
- Beirut
- Beqa
- Mount Lebanon
- Nabatiyeh
- North
- South

4) Who do you live with?

- Parents
- Friends
- Alone
- Partner
- Other:

5) Identify your highest level of education:

- Elementary
- High School Diploma
- Bachelor's Degree
- Masters' Degree
- Doctoral Degree
- Other:

6) What sex were you assigned at birth, such as on an original birth certificate?

- Female
- Male
- Intersex

- 7) Which term do you use to describe your gender identity?
- Woman/Cis-Woman
 - Man/Cis-Man
 - Trans-Woman
 - Trans-Man
 - Queer
 - Other (Non-binary, Gender Fluid, Agender, Questioning)

If you selected "other" above, please specify

- 8) Which terms best describes your sexual orientation?
- Asexual
 - Bisexual
 - Gay
 - Heterosexual/Straight
 - Lesbian
 - Queer-sexual
 - Other (Pansexual, Questioning, Other)
 - If you selected "other" above, please specify

- 9) Are you in a relationship?
- Yes
 - No

- 10) Are you employed?
- Yes
 - No

B. General Health

- 11) Do you suffer from any disease/illness?
- Yes
 - No
- If yes, please specify

- 12) Do you take any chronic medication?
- Yes
 - No
- If yes, please specify

- 13) How often do you exercise (whether strength or cardio)?
- Never
 - 1-2 times a week
 - 3-4 times a week
 - Daily

C. Alcohol Intake

- 14) How often do you have a drink containing alcohol?
- Never
 - Monthly or less
 - 2-4 times a month
 - 2-3 times a week
 - 4 or more times a week

Appendix C: Eating Disorder examination questionnaire (EDE-Q 6.0)



Eating Disorder examination questionnaire (EDE-Q 6.0)

Instructions: The following questions are concerned with the past four weeks (28 days) only.

Please read each question carefully. Please answer all the questions. Thank you.

Questions 1 to 12: Please circle the appropriate number on the right. Remember that the questions only refer to the past four weeks (28 days) only.

	ON HOW MANY OF THE PAST 28 DAYS ...	NO DAYS	1-5 DAYS	6-12 DAYS	13-15 DAYS	16-22 DAYS	23-27 DAYS	EVERY DAY
1	Have you been deliberately trying to limit the amount of food you eat to influence your shape or weight (whether or not you have succeeded)?	0	1	2	3	4	5	6
2	Have you gone for long periods of time (8 waking hours or more) without eating anything at all in order to influence your shape or weight?	0	1	2	3	4	5	6
3	Have you tried to exclude from your diet any foods that you like in order to influence your shape or weight (whether or not you have succeeded)?	0	1	2	3	4	5	6
4	Have you tried to follow definite rules regarding your eating (for example, a calorie limit) in order to influence your shape or weight (whether or not you have succeeded)?	0	1	2	3	4	5	6
5	Have you had a definite desire to have an empty stomach with the aim of influencing your shape or weight?	0	1	2	3	4	5	6
6	Have you had a definite desire to have a totally flat stomach?	0	1	2	3	4	5	6
7	Has thinking about food, eating or calories made it very difficult to concentrate on things you are interested in (for example, working, following a conversation, or reading)?	0	1	2	3	4	5	6
8	Has thinking about shape or weight made it very difficult to concentrate on things you are interested in (for example, working, following a conversation, or reading)?	0	1	2	3	4	5	6
9	Have you had a definite fear of losing control over eating?	0	1	2	3	4	5	6
10	Have you had a definite fear that you might gain weight?	0	1	2	3	4	5	6
11	Have you felt fat?	0	1	2	3	4	5	6
12	Have you had a strong desire to lose weight?	0	1	2	3	4	5	6

PAGE 1/3 PLEASE GO TO THE NEXT PAGE



Eating Disorder examination questionnaire (EDE-Q 6.0)

Questions 13-18: Please fill in the appropriate number in the boxes on the right. Remember that the questions only refer to the past four weeks (28 days).

Over the past four weeks (28 days)....

13	Over the past 28 days, how many times have you eaten what other people would regard as an unusually large amount of food (given the circumstances)?	
14	... On how many of these times did you have a sense of having lost control over your eating (at the time you were eating)?	
15	Over the past 28 days, on how many DAYS have such episodes of overeating occurred (i.e. you have eaten an unusually large amount of food and have had a sense of loss of control at the time)?	
16	Over the past 28 days, how many times have you made yourself sick (vomit) as a means of controlling your shape or weight?	
17	Over the past 28 days, how many times have you taken laxatives as a means of controlling your shape or weight?	
18	Over the past 28 days, how many times have you exercised in a "driven" or "compulsive" way as a means of controlling your weight, shape or amount of fat, or to burn off calories?	

Questions 19 to 21: Please circle the appropriate number. Please note that for these questions the term "binge eating" means eating what others would regard as an unusually large amount of food for the circumstances, accompanied by a sense of having lost control over eating.

		NO DAYS	1-5 DAYS	6-12 DAYS	13-15 DAYS	16-22 DAYS	23-27 DAYS	EVERY DAY
19	Over the past 28 days, on how many days have you eaten in secret (ie, furtively)? ... Do not count episodes of binge eating.	0	1	2	3	4	5	6
		NONE OF THE TIMES	A FEW OF THE TIMES	LESS THAN HALF	HALF OF THE TIMES	MORE THAN HALF	MOST OF THE TIME	EVERY TIME
20	On what proportion of the times that you have eaten have you felt guilty (felt that you've done wrong) because of its effect on your shape or weight? ... Do not count episodes of binge eating.	0	1	2	3	4	5	6
			NOT AT ALL	SLIGHTLY	MODERATELY		MARKEDLY	
21	Over the past 28 days, how concerned have you been about other people seeing you eat? ... Do not count episodes of binge eating.	0	1	2	3	4	5	6

PAGE 2/3 PLEASE GO TO THE NEXT PAGE



Eating Disorder examination questionnaire (EDE-Q 6.0)

Questions 22 to 28: Please circle the appropriate number on the right. Remember that the questions only refer to the past four weeks (28 days).

ON HOW MANY OVER THE PAST 28 DAYS ...		NOT AT ALL	SLIGHTLY		MODERATELY			MARKEDLY
22	Has your weight influenced how you think about (judge) yourself as a person?	0	1	2	3	4	5	6
23	Has your shape influenced how you think about (judge) yourself as a person?	0	1	2	3	4	5	6
24	How much would it have upset you if you had been asked to weigh yourself once a week (no more, or less, often) for the next four weeks?	0	1	2	3	4	5	6
25	How dissatisfied have you been with your weight ?	0	1	2	3	4	5	6
26	How dissatisfied have you been with your shape ?	0	1	2	3	4	5	6
27	How uncomfortable have you felt seeing your body (for example, seeing your shape in the mirror, in a shop window reflection, while undressing or taking a bath or shower)?	0	1	2	3	4	5	6
28	How uncomfortable have you felt about others seeing your shape or figure (for example, in communal changing rooms, when swimming, or wearing tight clothes)?	0	1	2	3	4	5	6

What is your weight at present? (Please give your best estimate.):

What is your height? (Please give your best estimate.):

If female: Over the past three to four months have you missed any menstrual periods? YES NO

If so, how many?

Have you been taking the "pill"? YES NO

PAGE 3/3

THANK YOU

Appendix D: Body Appreciation Scale (BAS-2)

Body Appreciation Scale

For each item, the following response scale should be used:
1=Never, 2=Seldom, 3=Sometimes, 4=Often, 5=Always

Please indicate whether the question is true about you never, seldom, sometimes, often or always.

1. I respect my body.
2. I feel good about my body.
3. I feel that my body has at least some good qualities.
4. I take a positive attitude towards my body.
5. I am attentive to my body's needs.
6. I feel love for my body.
7. I appreciate the different and unique characteristics of my body.
8. My behavior reveals my positive attitude toward my body; for example, I hold my head high and smile.
9. I am comfortable in my body.
10. I feel like I am beautiful even if I am different from media images of attractive people (e.g., models, actresses/actors).

Scoring: Average participants' responses to Items 1-10.

Appendix E: Generalized Anxiety Disorder (GAD-2)

Over the last 2 weeks, how often have you been bothered by the following problems?	Not at all	Several Days	Over half of the days	Nearly every day
1. Feeling nervous, anxious, or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3

Appendix F: Brief - Fear of Negative Evaluation (BFNE)

Brief Fear of Negative Evaluation Scale

Leary (1983)

Read each of the following statements carefully and indicate how characteristic it is of you according to the following scale:

- 1 = Not at all characteristic of me
- 2 = Slightly characteristic of me
- 3 = Moderately characteristic of me
- 4 = Very characteristic of me
- 5 = Extremely characteristic of me

- _____ 1. I worry about what other people will think of me even when I know it doesn't make any difference.
- _____ 2. I am unconcerned even if I know people are forming an unfavorable impression of me.
- _____ 3. I am frequently afraid of other people noticing my shortcomings.
- _____ 4. I rarely worry about what kind of impression I am making on someone.
- _____ 5. I am afraid others will not approve of me.
- _____ 6. I am afraid that people will find fault with me.
- _____ 7. Other people's opinions of me do not bother me.
- _____ 8. When I am talking to someone, I worry about what they may be thinking about me.
- _____ 9. I am usually worried about what kind of impression I make.
- _____ 10. If I know someone is judging me, it has little effect on me.
- _____ 11. Sometimes I think I am too concerned with what other people think of me.
- _____ 12. I often worry that I will say or do the wrong things.

Appendix G: Heterosexist, Harassment, Rejection, and Discrimination Scale (HHRDS)

- | | Never | Once
In A
While | Sometimes | A Lot | Most Of
The Time | Almost All Of
The Time |
|---|-------|-----------------------|-----------|-------|---------------------|---------------------------|
| 1. How many times have you been treated unfairly by strangers because you are an LGBTQ individual? | | | | | | |
| 2. How many times have you been treated unfairly by people in service jobs (by store clerks, waiters, bartenders, waitresses, bank tellers, mechanics, and others) because you are an LGBTQ individual? | | | | | | |
| 3. How many times have you been verbally insulted because you are an LGBTQ individual? | | | | | | |
| 4. How many times have you been made fun of, picked on, pushed, shoved, hit, or threatened with harm because you are an LGBTQ individual? | | | | | | |
| 5. How many times have you been called heterosexist or transphobic names like dyke, lezzie, faggot, queer, tranny, or other names? | | | | | | |
| 6. How many times were you denied a raise, a promotion, tenure, a good assignment, a job, or other such thing at work that you deserved because you are an LGBTQ individual? | | | | | | |
| 7. How many times have you been treated unfairly by teachers or professors because you are an LGBTQ individual? | | | | | | |
| 8. How many times have you been treated unfairly by your employer, boss, or supervisors because you are an LGBTQ individual? | | | | | | |
| 9. How many times have you been treated unfairly by people in helping jobs (by doctors, nurses, psychiatrists, caseworkers, dentists, school counsellors, therapists, pediatricians, school principals, gynecologists, and others) because you are an LGBTQ individual? | | | | | | |
| 10. How many times have you been rejected by friends because you are an LGBTQ individual? | | | | | | |
| 11. How many times have you been treated unfairly by your co-workers, fellow students, or colleagues because you are an LGBTQ individual? | | | | | | |
| 12. How many times have you heard ANTI-LGBTQ remarks from family members? | | | | | | |

13. How many times have you been treated unfairly by your family because you are an LGBTQ individual?

14. How many times have you been rejected by family members because you are an LGBTQ individual?

Appendix H: Multidimensional Scale of Perceived Social Support (MSPSS)

Multidimensional Scale of Perceived Social Support

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the "1" if you **Very Strongly Disagree**
 Circle the "2" if you **Strongly Disagree**
 Circle the "3" if you **Mildly Disagree**
 Circle the "4" if you are **Neutral**
 Circle the "5" if you **Mildly Agree**
 Circle the "6" if you **Strongly Agree**
 Circle the "7" if you **Very Strongly Agree**

	Very Strongly Disagree	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree	Very Strongly Agree
1. There is a special person who is around when I am in need.	1	2	3	4	5	6	7
2. There is a special person with whom I can share joys and sorrows.	1	2	3	4	5	6	7
3. My family really tries to help me.	1	2	3	4	5	6	7
4. I get the emotional help & support I need from my family.	1	2	3	4	5	6	7
5. I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
6. My friends really try to help me.	1	2	3	4	5	6	7
7. I can count on my friends when things go wrong.	1	2	3	4	5	6	7
8. I can talk about my problems with my family.	1	2	3	4	5	6	7
9. I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
10. There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7
11. My family is willing to help me make decisions.	1	2	3	4	5	6	7
12. I can talk about my problems with my friends.	1	2	3	4	5	6	7

Appendix I: Your Guide to a Healthy Eating and Wellbeing

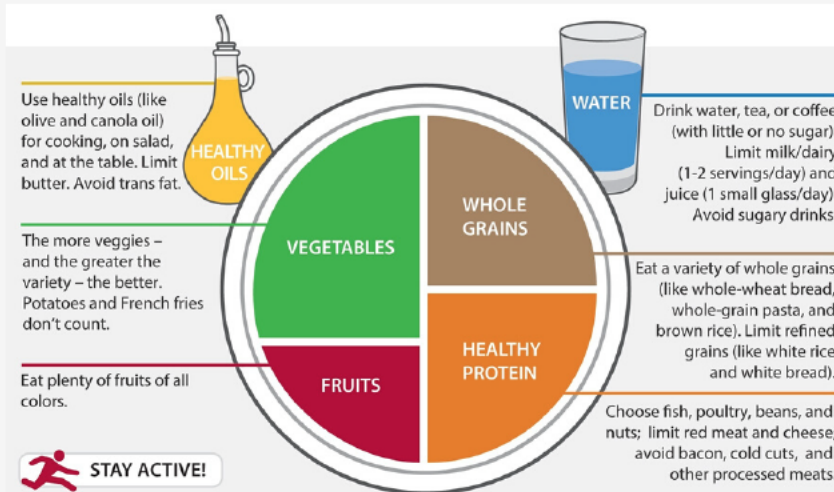
LIFE GETS BETTER TOGETHER



PREPARED BY
HANA HARB
NOUR KALASH

THE HEALTHY PLATE

START SIMPLE AND TAKE HEALTHY EATING ONE STEP AT A TIME.



MYPLATE IS A REMINDER TO FIND YOUR HEALTHY EATING STYLE AND BUILD IT THROUGHOUT YOUR LIFETIME. EVERYTHING YOU EAT AND DRINK MATTERS. THE RIGHT MIX CAN HELP YOU BE HEALTHIER NOW AND IN THE FUTURE

Carbohydrates



Any food made from wheat, rice, oats, cornmeal, barley, or another cereal grain is a grain product
Recommended Daily intake can vary between 85g and 227g
Make at least half of the grains you eat should be whole grains

In general, 1 slice of bread, 1 cup of ready-to-eat cereal, or ½ cup of cooked rice, cooked pasta, or cooked cereal can be considered as 28.3g of grains

Proteins



Recommended Daily intake can vary between 57g and 184g
All foods made from meat, poultry, seafood, beans and peas, eggs, processed soy products, nuts, and seeds are considered as Proteins

In general, 1 ounce of meat, poultry or fish, ¼ cup cooked beans, 1 egg, 1 tablespoon of peanut butter, or ½ ounce of nuts or seeds can be considered as 28.3g



Fruits

Recommended Daily intake can vary between 1 and 2 cups

In general, 1 cup of fruit or 100% fruit juice, or ½ cup of dried fruit can be considered as 1 cup



Vegetables

Recommended Daily intake can vary between 1 and 3 cups

In general, 1 cup of raw or cooked vegetables or vegetable juice, or 2 cups of raw leafy greens can be considered as 1 cup



Dairy

Recommended Daily intake can vary between 3 and 3 cups

All fluid milk products, yogurt, cheese, Calcium-fortified soy milk (soy beverage) are dairy products.
In general, 1 cup of milk, yogurt, or soy milk, 1 ½ ounces of natural cheese, or 2 ounces of processed cheese can be considered as 1 cup Dairy

HEALTHY LIFESTYLE CHOICES

KEEP IN MIND THAT YOU DO NOT NEED TO ACHIEVE DIETARY BALANCE WITH EVERY MEAL, BUT TRY TO GET THE BALANCE RIGHT OVER A DAY OR EVEN A WEEK



USE PLENTY OF HERBS AND SPICES
Due to their anti-inflammatory, antioxidant and other powerful benefits, include as many herbs and spices as possible in your Food



MINIMIZE YOUR SUGAR INTAKE AND SUGARY DRINKS
High sugar intake is linked to numerous ailments, including obesity, type 2 diabetes, heart disease, and cancer



CHOOSE HEALTHIER COOKING METHOD
Healthier cooking methods include baking, broiling, simmering, slow-cooking, poaching, pressure cooking and stewing



GET ENOUGH SLEEP
Have a minimum of 7 to 8 hours of sleep daily for better health



DON'T GO ON A DIET
Instead of going on a diet, try adopting a healthier lifestyle. Focus on nourishing your body instead of depriving it



EAT SLOWLY
The pace at which you eat influences how much you eat

DO I HAVE TO GIVE UP MY FAVORITE COMFORT FOOD?

No! Healthy eating is all about balance

You can enjoy your favorite foods even if they are high in calories, fat or added sugars.

The key is eating them only once in a while, and balancing them out with healthier foods and physical activity



YOUR HANDY GUIDE TO PORTION SIZE

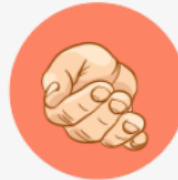
AN EASIER WAY TO ESTIMATE FOOD PORTIONS



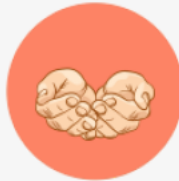
Palm = 3 ounces
Poultry, Meat & Fish



Fist = 1 cup
Rice, Pasta, Fruit, Veggies & Ice Cream



Cupped Hand = 1/2 cup
Beans & Potatoes



2 Cupped Hands = 1 ounce
Chips, Popcorn & Pretzels



Thumb = 1 ounce
Peanut Butter & Hard Cheese

Thumb tip = 1 teaspoon
Cooking Oil, Mayo & Butter

Don't

DID YOU OVEREAT?

Do



Feel Guilty



Put It Behind You



Starve Yourself



Get Back to your nutrition



Over exercise as a punishment



Get Back to your workout Routine

03



ALCOHOLIC DRINKS

DRINK	AMOUNT OF ALCOHOL
REGULAR BEER 350 ML	5%
WINE 150 ML	12%
GIN, RUM, TEQUILA, VODKA, WHISKEY .. 44 ML OR 1 SHOT	40%

Drink Responsibly!

- Don't drink on an empty stomach. eating a little food helps slow the absorption of alcohol
- Decide ahead to limit consumption: no more than one drink a day if you are a woman, and no more than 2 if you are a man
 - If you choose to drink more, pace yourself
 - Slow your pace. put your drink down and socialize
- Alternate. if you have an alcoholic drink, make the next one non-alcoholic
- lighten up! order low - alcohol beer, light wine or a light distilled spirit instead. each has somewhat less alcohol
- know your triggers. if you tend to drink in certain situations or with certain people, try to avoid them. if drinking at home is an issue, keep only a little alcohol or a few alcoholic beverages on hand - or non at all

PHYSICAL ACTIVITY

ADULTS NEED TO DO TWO TYPES OF PHYSICAL ACTIVITY EACH WEEK TO IMPROVE HEALTH
AEROBIC AND MUSCLE STRENGTHENING ACTIVITIES

Aerobic

Adults need to do at least 150 minutes each week of moderate-intensity aerobic activity

OR

75 minutes each week of vigorous-intensity aerobic activity

OR

An equivalent mix of moderate- and vigorous-intensity aerobic activity

Aerobic activity should be performed for at least 10 minutes at a time, preferably, spread throughout the week



Anaerobic

Muscle Strengthening Activities should be done 2 or more days a week

All major muscle groups should be worked. These are the legs, hips, back, abdomen, chest, shoulders, and arms

Exercises for each muscle group should be repeated 8 to 12 times per set

As exercises become easier, increase the weight or do another set



LESS OF THIS

- Exercise to burn calories
- Exercise to Lose Weight
- Exercise to Sculpt your body
- Doing exercises you don't enjoy
- Believing you are too fat to exercise
- Feeling Guilty when you take a rest day
- Exercising a body part with an injury

HEALTHY VS. UNHEALTHY

EXERCISE HABITS

MORE OF THIS

- Exercise to feel good physically
- Exercise to feel good Mentally
- Exercise to feel good emotionally
- Do Exercises you Enjoy
- Separate your appearance from exercise
- Take time off to rest and recover
- Appreciate all that your body can do

SELF - HELP TIPS AND TRICKS

THIS SECTION INCLUDES STRATEGIES AND TIPS TO OVERCOME EMOTIONAL EATING AND ENHANCE BODY ACCEPTANCE

This is likely to take some time, but there are things you can do right now to improve your body image:

- **Accept your genetics:** all bodies are genetically wired to be a particular size and shape, and your body will fight to maintain this. Forcing your body to change is likely to come at a tremendous cost.
- **Consider what you do like about your body.** Scan your body for things you like rather than dislike. If this is difficult, start with a body part that you dislike the least. Practice paying attention to it.
- **Body function.** Consider each body part for its purpose or function. Legs allow us to walk, run, and dance. A womb may bear a child one day. A scar tells a story about your life. What parts of your body are you grateful for?
- **Identify activities that help you feel good in your body.** Go to the beach, play a musical instrument, practice yoga or relaxation, have a bath, walk the dog, visit a friend...
- **Expand your areas of interest.** When undue importance is placed on one aspect of life (e.g. appearance), other interests may be neglected. Think of a new activity to try, or an old interest to return to. Make a plan to try something new this week.
- **Consider the features that make other people attractive.** Is it always purely their appearance? Or is it also their personality, attitude and actions?

Keep at it. Remind yourself that improving body image takes time and practice.

SOME TIPS TO HELP COPE WITH EATING BEHAVIORS:

- **AVOID SKIPPING MEALS**
Skipping meals can contribute to cravings and increase the risk of overeating
- **PRACTICE MINDFULNESS**
Mindfulness is a practice that involves listening to your body and paying attention to how you feel at the moment. This can prevent overeating by helping a person learn to recognize when they no longer feel hungry
- **KEEP A FOOD AND MOOD JOURNAL**
Keeping a food and mood journal that tracks what you eat and how you feel can be an effective tool. It can help identify potential emotional and food triggers and promote healthier eating habits
- **If you're depressed or lonely,** call someone who always makes you feel better, play with your dog or cat, or look at a favorite photo or cherished memento
- **If you're anxious,** expend your nervous energy by dancing to your favorite song, squeezing a stress ball, or taking a brisk walk
- **If you're bored,** read a good book, watch a comedy show, explore the outdoors, or turn to an activity you enjoy (woodworking, playing the guitar, shooting hoops, scrap-booking, etc.)
- **Learn to accept your feelings—even the bad ones** To do this you need to become mindful and learn how to stay connected to your moment-to-moment emotional experience



REACH OUT FOR SUPPORT



MEEDA

WWW.MEEDA.ME



[@MEEDASSOCIATION](https://www.instagram.com/meedassociation)

A FEW SIMPLE STEPS CAN GO A LONG WAY TOWARD IMPROVING
YOUR DIET AND WELLNESS

IF YOU'RE TRYING TO LIVE A HEALTHIER LIFE, **DON'T JUST FOCUS
ON THE FOODS YOU EAT**. EXERCISE, SLEEP, AND SOCIAL
RELATIONSHIPS ARE ALSO IMPORTANT

L G B T Q +

Listen to your feelings

Listen to your body

Accept yourself

Love yourself

Be yourself



Glossary of Terms

Sexual Orientation: the sex an individual is attracted to, emotionally and sexually.

Gender Identity: the gender an individual belongs to regardless of the biological sex.

Heterosexual: Sexual and emotional attraction to opposite sex.

Lesbian: A female's sexual and emotional attraction toward individuals of same sex.

Gay: Male's sexual and emotional attraction toward individuals of same sex.

Queer: Umbrella term comprising individuals whom gender identity or gender expression does not match societal norms.

Cis Gender: Individuals who's gender identity conform with their biological sex.

Transgender: umbrella term comprising individuals whom innate gender identity does not conform with their assigned biological sex.

Trans-man: transgender individual transitioned from female to male.

Trans-woman: transgender individual transitioned from male to female.