

THE MODERATING EFFECTS OF ATTRIBUTIONAL STYLE,  
SOCIAL SUPPORT AND COLLECTIVE SELF-ESTEEM ON THE  
WELLBEING OF THE LGB COMMUNITY IN BEIRUT

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## **Abstract**

Being part of a minority group may engender daily difficulties which affect the mental wellbeing of individuals. In Lebanon, lesbians, gays and bisexuals (LGBs) live in a hostile environment. The current study aims at examining variables which could alleviate their stress. Using the minority stress theory and the stress buffering model, wellbeing was investigated in relation to attributional style (AS), perceived social support (PSS) and collective self-esteem (CSE). It was hypothesized that AS, PSS and CSE have a positive effect on wellbeing and a negative relationship with stress. Moreover, it was assumed that they will moderate the relationship between stress and wellbeing. 143 participants, aged between 18 and 39, filled in both paper and online surveys. Direct negative relationships were found between stress and wellbeing, AS and stress, PSS family and stress and CSE and stress. PSS friends and stress yielded a marginally significant relationship. Direct singular positive relationships were found between AS, PSS and CSE and wellbeing. Moderational hypotheses for PSS and CSE were partially supported, but not for AS. Assumptions about the variables for which no significance was found are discussed. Recommendations for clinicians, researchers and policy makers are made.

## Table of Content

### CHAPTER ONE: INTRODUCTION

Introduction and Context of the Study .....	1
Theoretical Model and Statement of the Problem .....	3
The Minority Stress Theory .....	3
The Stress Buffering Model .....	4
The Variables of the Present Study .....	5
Wellbeing .....	5
Attributional Style .....	6
Perceived Social Support .....	7
Collective Self-Esteem .....	8
The Present Study .....	10
Purpose of the Study .....	10
Significance of the Study .....	11

### CHAPTER TWO: LITERATURE REVIEW & HYPOTHESES

Minority Stress and Wellbeing .....	13
Attributional Style, Stress and Wellbeing.....	14
Perceived Social Support, Stress and Wellbeing .....	16
Collective Self-Esteem and Stress .....	17
Perceived Social Support from Friends and Family and Wellbeing .....	18
Collective Self-Esteem and Wellbeing .....	20

### CHAPTER THREE: METHOD

Design .....	23
Participants .....	23

Materials.....	24
Stress Assessment Scale .....	24
Attributional Style Assessment Scale .....	25
Perceived Social Support Assessment Scale .....	25
Measure of Group Identification Scale .....	26
Wellbeing Assessment Scale .....	27
Data Analysis .....	27
Procedure .....	28
Instrument Preparation .....	28
Data Collection .....	28

#### CHAPTER FOUR: RESULTS

Preliminary Analyses .....	31
Univariate and Multivariate Analyses .....	31
Assumptions of Normality .....	33
Psychometrics .....	34
Test of Hypotheses .....	35
Bivariate Correlations .....	35
Moderation Analyses .....	38
Effects of Stress on Wellbeing at Levels of Attributional Style.....	38
Effects of Stress on Wellbeing at Levels of Collective Self-Esteem .....	39
Effects of Stress on Wellbeing at Levels of Perceived Social Support - Family .	40
Effects of Stress on Wellbeing at Levels of Perceived Social Support – Friend .	41
Further Exploratory Analyses .....	41
Growth Wellbeing.....	42
Relationship Wellbeing.....	43
Self-Acceptance Wellbeing .....	44

Purpose Wellbeing .....	45
Mastery Wellbeing .....	47
Autonomy Wellbeing .....	48
CHAPTER FIVE: Discussion	
Attributional Style and Wellbeing.....	51
Perceived Social Support and Wellbeing.....	53
Collective Self-esteem and Wellbeing.....	56
Limitations .....	58
Clinical Implications .....	61
REFERENCES.....	64
APPENDIXES	
Recruitment Letter to NGOS .....	76
Recruitment Letter to Participants .....	77
Consent Letter to Participants .....	78
The Survey Questionnaires	
The Ryff Wellbeing Scale .....	79
The Shortened Version of the Measure of Gay Related Stressors .....	82
Collective Self-Esteem Scale .....	84
The Perceived Social Support Scale – Friends .....	85
The Perceived Social Support Scale – Family .....	86
The New Attributional Style Questionnaire .....	87
Demographics .....	88

## Tables

Table 1: Descriptive Statistics – Demographics .....	32
Table 2: Descriptive Statistics and Reliabilities for All Variables .....	35
Table 3: Correlational Coefficients between the Various Variables of the Study .....	36
Table 4: Multiple Regression of Stress and Buffers on the Growth Subscale of Wellbeing .....	43
Table 5: Multiple Regression of Stress and Buffers on the Relationship Subscale of Wellbeing	44
Table 6: Multiple Regression of Stress and Buffers on the Self-Acceptance Subscale of Wellbeing .....	46
Table 7: Multiple Regression of Stress and Buffers on the Purpose Subscale of Wellbeing .....	47
Table 8: Multiple Regression of Stress and Buffers on the Mastery Subscale of Wellbeing ....	48
Table 9: Multiple Regression of Stress and Buffers on the Autonomy Subscale of Wellbeing ...	49

The Moderating Effects of Attributional Style, Social Support and Collective Self-Esteem on the Wellbeing of the LGB Community in Beirut

**Introduction and Context of the Study**

Being part of a minority group may engender a different set of difficulties than those encountered by individuals of larger communities. As such, members of minority groups may suffer from a myriad of enduring stressors and face ongoing challenges (Wagner et al., 2013; Burton et al., 2013). Their wellbeing might be shaped and defined by their psychological experiences as members of an underappreciated group.

Lesbian, gay and bisexual (LGB) individuals constitute a minority group. Almost worldwide, LGBs undergo various attacks on their sexual minority status. They may fear for their lives and feel victimized by the general population. They are forced to come to terms with their identity in a context of stigma and rejection. They strive to develop a positive self-entity within a hostile climate associated with marginalization, patriarchy and conservatism (Sheets and Mohr, 2009).

The status quo of LGBs in non-western societies, Lebanon being no exception, is even more undermined. In Lebanon, religious attitudes and conservative social values rule in opposition to individual freedoms and oppress and chastise unique and distinctive subgroups of the population (Nasr and Zeidan, 2015).

In such an aggressive atmosphere, one would hold on to any hope that can protect and preserve one's integrity and strength. In this study, we try to apply previous research and knowledge to elaborate on the understanding of factors which could create a more positive

experience for those living as LGBs in Beirut: what would help buffer against the stress created by living in a prejudiced society and increase the wellbeing of those discriminated against?

Using a survey design, a number of variables, such as attributional style, social support and collective self-esteem were examined to determine if they could alleviate the stress of LGBs in Beirut, Lebanon.

Research on LGB participants showed a significant discrepancy in mental health status between heterosexual individuals and the LGB population, in both the rate of mood disorders and in the general psychological distress experienced (Cochran, Sullivan and Mays, 2003). Burton et al., (2013) assumed that depressive symptoms of LGBs who attempt suicide may be triggered by feelings of hopelessness that are exacerbated by sexual minority specific stress. Rivers and D'Augelli (2001) assumed that this may be due to the isolation that sexual minorities feel in a heteronormative and homophobic environment as well as the stress of admitting their sexual identity (as cited in Shilo and Mor, 2014). Wagner et al., (2013) state that stigma and discrimination lead to low self-esteem and cause mental duress. This might be due to having to conceal one's identity, which drives LGB individuals to isolate themselves socially as a defense mechanism for protection.

Homosexuals in Lebanon still live under the threat of Article 534, which specifies that any "sexual intercourse against the order of nature" should be punished by imprisonment. They are still accused of performing "acts contrary to public morals" (Nasr and Zeidan, 2015). Social and familial discrimination have not subsided. LGBs are still discriminated against, based on physical looks and mannerisms. They do not have any protection, from the legal or the societal stance. There are no anti-discrimination policies in schools, universities or employment sites. There are still many misconceptions about sexual orientation in the general public and the media,

which are strengthened by religious figures (Nasr and Zeidan, 2015). In the last three years alone, LGBs in Beirut were randomly arrested by Internal Security Forces on several occasions and in several locations, such as private apartments, cinemas, nightclubs and bathhouses (Helem, 2014). Police stations are known to use torture and intimidation in order to force arrested individuals to confess their homosexuality. There have been incidences, reported in the media, about coercive rectal examinations on men suspected of homosexuality. Physical violence and assault are common practices carried out by officers to humiliate detainees. Human rights are violated and LGBs are inhumanely abused (Helem, 2014). It is therefore of paramount importance to investigate psychosocial elements that could provide LGB individuals with supplementary support, to alleviate their daily stressors and increase their wellbeing.

### **Theoretical Model and Statement of Problem**

The present study used the minority stress theory and the stress buffering model as a theoretical base. It employed a survey design to examine whether attributional style, social support and collective self-esteem could alleviate stress in the LGB community in Beirut.

**The minority stress theory.** The minority stress theory (Brooks, 1981) states that minority groups are given an inferior status which brings upon them different sorts of social discrimination and prejudice that have a consequent effect on psychological wellbeing (as cited in Lewis et al., 2003). Meyer (1995) states that minority stress arises from the minority's experience as a whole, situated in a dominant culture, where the incongruence between the minority's needs and the social structures leads to psychological distress. According to Meyer (2003), minority stress is unique to the minority group as it constitutes an additional source of stress above and beyond the general stress experienced by other people. This stress requires an adaptation effort that is higher than that of a population which does not have to deal with

stigmatization. It is moreover chronic in the sense that it is related to stable socio-cultural structures. Finally, it is based on social processes and structures rather than on individual conditions, making the stress experienced by LGBs a problem outside of their control. Since LGB stress has been shown to be an additional source of stress (Lewis et al., 2003; Meyer, 1995) it could be expected that it would negatively influence the wellbeing of the community.

**The stress buffering model.** The stress buffering model hypothesizes that the effect of stress on depression is less when one has a high level of social support. Social support is conducive to wellbeing as it decreases the impact of stress and provides new resources (Cohen and Wills, 1985).

Although Cohen and Wills (1985) had specified social support as the main buffer against stress, later on, Roos and Cohen (1987) pinpointed that failing to include personality variables in the stress buffering model is a gap in the literature. Their recommendation was to include personal characteristics in addition to environmental ones, so as to best explain people's disposition and outlook on life stress and on negative events (Roos and Cohen, 1987, as cited in Cauce et al., 1992).

It follows that social support could be positively related to the wellbeing of LGBs, especially when combined with personal characteristics

Therefore, the aim was to investigate attributional style, social support, and collective self-esteem as buffers against stress, and to look into how they might potentially boost the wellbeing of the LBG community in Beirut, in times of duress.

## **The Variables of the Present Study**

The following section presents the definitions and the theoretical background of the study variables.

**Wellbeing.** Emphasis on the study of wellbeing and factors that influence it started with the positive psychology movement, which gained impetus at the beginning of the millennium. Psychology shifted dramatically from examining how individuals merely survive in times of hardships, heal and repair to studying how people can flourish. Research started investigating human strengths that work as buffers against stress and lead to wellbeing in the general population (Seligman and Csikszentmihalyi, 2000).

Heady and Wearing (1992) define wellbeing as a state of balance that can be disturbed by life events. They suggest that the level of wellbeing of a person only changes when external forces disturb this equilibrium. Personal strengths and social connections can act as buffers (Keyes and Lopez 2002, as cited in Gable and Haidt, 2005). The personal factors acting as buffers are formed by the intrapersonal resources a person possesses, such as cognitive personality variables, including attributional styles that may act as a protective factors in the face of negative life events, and by interpersonal resources, such as social support and collective self-esteem, which may facilitate resilience in the face of adversity.

Several theories attempted to explain wellbeing and speculated as to what contributes to it. The construct has been difficult to define despite the emergent interest and wide research dedicated to it. The scientific measurement of wellbeing has long evaded researchers. (Diener, 1984).

For the purpose of this paper, special interest is given to Ryff's wellbeing model (Ryff, 1989; Ryff and Keyes, 1995), and the scale that supports such a multifaceted domain of wellbeing. She asserts that in order to get a comprehensive account of people's sense of wellbeing, one needs to look into whether people feel their lives have purpose, whether their given potential is being realized, whether their ties to others are of quality and whether they feel they are in charge of their lives.

Our interest in various personal characteristics, which act as protective factors, leads us to review attributional style in relation to wellbeing.

**Attributional style.** Humans are inquisitive and search for meaning and order. They wonder about the why of things, are curious and attempt to figure out causes. Heider (1958), the father of Attribution theory, considers this intrinsic process of explaining events as a basic human activity which is universal, and pervasive. Attributions are therefore internal cognitive explanations that aim at interpreting what is behind one's own behavior, as well as others' behaviors (Manusov and Spitzberg, 2008). Heider (1958) was most interested in the dimension of the action's causal locus, meaning whether an action was internal or external to the actor. For instance, in the case of performance, ability and effort are considered internal to the person performing, whereas luck and situational factors are considered external (Manusov and Spitzberg, 2008).

Drawing on the work of Heider, Weiner et al. (1971) contended that there are two dimensions related to attributions, namely, locus of causality and stability. Locus of causality is defined in the same way that Heider (1958) used it, whereas stability is used to refer to the duration of the cause, whether it is constant or temporary. For example, someone's late arrival might be attributed to carelessness in their character (stable) or to probable traffic (unstable).

Expanding on both Heider and Weiner's work, Abramson, Seligman and Teasdale (1978) proposed another dimension for attributions which refined the taxonomy; they added globality to locus and stability. The globality dimension refers to whether the cause attributed to an event affects a wide range of outcomes or is specific only to the outcome in question. For instance, one may think that a bad grade will affect one's semester average (specific) or one's whole future education, as well as career and social value (global). As a consequence of refining the taxonomy of the attribution theory, Abramson, Seligman and Teasdale (1978) reformulated the theory of learned helplessness and proposed the construct of attributional style. The first formulations of the learned helplessness hypothesis were based on animal experiments. Attempts to reproduce findings in humans indicated the inadequacy of the theory for understanding human helplessness. The older formulation had two major deficits. It did not allow for the distinction between universal and personal helplessness in humans, nor did it provide explanations for general versus specific helplessness and chronic versus acute helplessness (Abramson, Seligman and Teasdale, 1978). For the purpose of the present study, the reformulated theory of learned helplessness is applied: upon encountering non-contingent events, people attribute their helplessness to a reason, which might be internal or external, global or specific and stable or unstable. Individuals who interpret outcomes of an action as residing outside of their control experience cognitive, motivational and emotional deficits, which are generally linked to a depressed affect (Abramson, Seligman and Teasdale, 1978).

**Perceived social support.** Another variable that is linked to wellbeing is social support. It contributes to wellbeing by decreasing the impact of stress and providing new resources. Alternatively, it can offer new interpretations to the problems at hand and facilitate a healthier behavior (House, 1981, as cited in Cohen and Wills, 1985).

Cohen and Wills (1985) cite two theories on the process of behavior facilitation. The main effect model suggests that social support has a positive role in wellbeing under all conditions, because social networks can provide a positive and rewarding social experience in general and offer stability as well as "...a recognition of self-worth" (p.311). The second theory is the stress buffering model, which suggests that social support offers more benefit under the negative impact of stress.

Stress happens when one sees a situation as a threat without having an appropriate strategy to cope (Lazarus, 1966 as cited in Cohen and Wills, 1985). Social support acts between the stressful event and the perception that one is incapable of coping, by replacing this perception with the belief that others will intervene to offer necessary resources or to boost one's ability to cope with the stressful event (Cohen and Wills, 1985).

However, although one can be given several kinds of support, an individual can remain feeling unsupported. Social support, in itself, is merely a social network in one's environment that provides a function. It is the subjectively perceived value of social support to the person that leads to one's satisfaction with the quality of support available; it might have nothing to do with the amount of actual support given. Perceived social support reflects the extent to which people feel that their functional needs are fulfilled (Procidano and Heller, 1983).

**Collective self-esteem.** According to Luhtanen and Crocker (1992), collective self-esteem (CSE) is a construct that denotes multiple elements that relate to a person's perception of one's group's value; one's group's worth in society; one's personal feeling about one's worthiness to the social group one belongs to and the importance of the social group to one's self-concept.

Luhtanen and Crocker (1992) summarized several ideas stemming from the theory of social identity developed by Tajfel and Turner (1986). They argued that focusing on the individualistic aspect of self-esteem results in a deficient view of the person's self-concept and social behavior. Belonging to a common social category provides individuals with an additional attribute, other than their personal identity attributes. As each person has a personal entity relating to their private self, people also have a social, or collective, identity which relates to their membership in a group and which adds to their self-concept. This perception of the self in relation to a group provides people with a sense of emotional attachment to a wider entity that resembles them and gives them a sense of belongingness. Luhtanen and Crocker (1992) conclude that a positive collective identity is held as long as one's social group is valued and favored, compared to other groups.

According to Tajfel and Turner (1986), social groups are characterized by positive and negative attributes: conflict of interests which promotes intergroup competition, prejudice and even discrimination; and superordinate goals which promote cooperation. Previous literature, as summarized by Tajfel and Turner (1986), mainly the realistic group conflict theory (represented by the work of Sherif, Harvey, White, Hood and Sherif, 1961), suggested that although intergroup conflict and competition result in antagonistic intergroup dynamics, they improve intra group cohesiveness and cooperation. As such, heightened identification with the in-group is created by negative regards and attitudes towards the out-group.

Tajfel and Turner (1986) supplemented the realistic group conflict theory of Sherif et al., (1961) by focusing on the processes which highlight how group identity is developed and maintained and on the subjective aspects of group membership.

Social psychology defines group membership as belonging to a set of individuals who see themselves and are seen by others as members of the same social category. They also share an emotional involvement in their common experience and agree on a certain evaluation of their group and their belongingness to it. Therefore, intergroup behavior is any behavior on behalf of one or more actors towards others which shows that the two parties identify with different social categories (Tajfel and Turner, 1986).

Two relevant conclusions that stem from the social identity construct are: people strive to increase their self-esteem and to positivize their self-concept; each social identity is linked to a positive or negative evaluation, depending on the in-group and out-group perception of the group. Adding to that, each group is compared in terms of attributes to other groups. A positive comparison leads to high prestige, whereas a negative comparison leads to low prestige (Tajfel and Turner, 1986).

### **The Present Study**

**Purpose of the study.** The present study aims to contribute to the literature on the wellbeing of LGB adults in Lebanon and to help in the understanding of what brings psychological resilience to this minority group in terms of internal and external factors, using the stress buffering model. In this light, the following research questions will be answered:

1. How does stress relate to wellbeing in the Lebanese LGB community?
2. Does a positive attributional style influence perception of experienced stress? Does it enhance wellbeing? Does this effect hold irrespective of level of stress?
3. Does social support exert a beneficial effect on stress and on wellbeing?

4. Does collective self-esteem exert a beneficial effect on stress and on subjective wellbeing? Does those with a high CSE level score differentially than those with a low CSE level, depending on level of stress?
5. In the absence of family support, can friend support compensate for and positively contribute to wellbeing?

**Significance and expected limitations of the study.** This will be among the first studies conducted in Lebanon on the relationship between personal (attributional style) and social (social support and collective self-esteem) resources and how they can be used to increase the wellbeing of LGBs. To the best of our knowledge, the only periodical article found regarding LGBs in a Lebanese population is a study by Wagner et al., (2013) carried out on gay men solely. Moreover, the study focused on stigma and on social values and how they conflict with the acceptance of LGB individuals as part of society (Wagner et al., 2013). The present research is unique in that it focuses on the psychological experience of LGBs in the country.

Moreover, studies in the West on the effects of attributional style and perceived social support have mainly focused on heterosexual adolescents and/or heterosexual and LGB youth (Cauce et al., 1992; Procidano and Heller, 1983; Rueger and Malecki, 2011). This study will inform the literature on the different experience of LGB adults.

As for the variables of attributional style and social support in relation to wellbeing, most of the research has confined its investigation to the singular relationship between one or the other variable and its effect on wellbeing (Ostrander, 1998). No study known to the author of the current study has looked at the interaction of attributional style, social support and collective self-esteem on wellbeing.

Expectations regarding the study should take into account the difficulty of reaching participants and resistance from the community. This might be due to the fact that LGBs in Beirut are still a stigmatized group and they could feel threatened at the idea of participating in a personal survey, despite assurance of anonymity, as disclosure could result in negative consequences.

## Chapter Two

### Literature Review

**Minority stress and wellbeing.** Research findings on minority groups point to a relationship between the stress they experience and their mental health and wellbeing. Such findings report higher levels of anxiety, depression, suicidality and adjustment problems in sexual minorities, compared to their heterosexual counterparts. The impact of stressors on the psychosocial functioning of LGBs is summarized in the literature below.

A study by Meyer (1995) examined the effect of three minority stressors on psychological distress in gay men: internalized homophobia, stigma and actual experiences of discrimination. It was hypothesized that minority stressors would have a combined negative effect on distress. The hypothesis was supported: the stressors were significantly associated with low wellbeing, as measured in numerous mental health domains.

Another study by Lewis et al. (2003) showed that gay related stress explains depressive symptoms independently from life stressors. Though both types of stressors were negatively correlated with wellbeing, gay related stress was established as an independent predictor of depressive symptoms.

Furthermore, in a longitudinal study, Burton et al., (2013), tested gay related stress as an explanatory factor for depressive symptoms in sexual minority youth. 197 heterosexual and LGB adolescents filled in questionnaires for sexual minority stressors, mainly victimization, as well as depressive symptoms. LGB youth reported higher level of depressive symptoms which were mediated by sexual minority stressors. The hypothesis that victimization is partly accountable for depression in sexual minorities was supported.

On the other hand, some studies looked into protective factors in the LGB population. A cross-European study by Van Der Star and Branstrom (2015) examined the general health and subjective wellbeing of 315 LGB members and 315 heterosexual members in relation to discrimination and LGB acceptance. It was found that LGB acceptance was significantly associated with better health and subjective wellbeing, and discrimination was negatively related to those variables.

Based on the above findings, it was expected that:

*Hypothesis 1: The higher the minority stress as assessed by The Measure of Gay Related Stressors, the lower the wellbeing of the LGB adult, as measured by The Ryff Wellbeing Scale.*

**Attributional style, stress and wellbeing.** As stated in our introduction on various buffers against stress, attributional style constitutes an intrapersonal variable which has been studied, in the literature on the cognitive vulnerability to depression, as a protective factor.

Kleiman, Liu and Riskind (2012) examined whether a positive attributional style helps diminish the generation of stressful life events. They found that positive attributional style predicts diminished stressful life events, even after accounting for depressive symptoms. The authors suggest that positive attributional style acts as a resilience factor, protecting individuals from the generation of (dependent and controllable) negative life events.

Another study by Calvete, Orue and Hankin (2013) examined the dynamic relationship between depression, attributional style and stressors; specifically, depression and cognitive vulnerabilities in the generation of stress in people. It was found that negative inferential (attributional) styles lead to the creation of further future stressors.

Based on the above studies, the following hypothesis was generated and tested:

*Hypothesis2: In LGB adults, the more positive the attributional style, as measured by The New Attributional Style Questionnaire (Dykema et al., 1996), the less the experience of stress, as measured by The Measure of Gay Related Stressors (MOGS, Lewis et al., 2008).*

Cheng and Furnham (2003) showed that attributional style can indeed predict wellbeing. Their hypothesis that positive attributional style would be positively correlated with happiness was confirmed: holding an optimistic outlook in the face of negative situations could generate more wellbeing.

A study by Sanjuan and Magallares (2013) examined the relationship between self-serving attributional bias (SSAB) and subjective wellbeing, as mediated by self-esteem. It was found that SSAB has an inverse relation with psychological distress and is both directly and indirectly linked to affect balance. Moreover, SSAB was directly linked to life satisfaction. Therefore, the self-serving attributional bias protects against psychological distress by evaluating situations in a more positive way.

An earlier study by Cheng and Furnham (2001) examined the interaction between attributional style and personality traits and their effect on happiness and mental health. Positive attributional style was significantly correlated with happiness, especially in positive situations. On the other hand, negative attributional style was significantly correlated with psychological distress, especially in negative situations. It was concluded that when one attributes positive outcomes to the self and believes they will occur again, one's score on happiness will increase and one's score on mental illness will decrease.

In addition, Sanjuan et al., (2008), upon examining attributional styles for both positive and negative events and their impact on psychological effects on college students, found that

positive attributional style was linked to positive affect. Positive attributional style showed a direct relationship with psychological wellbeing.

On this basis, the below hypothesis was suggested for the present study:

*Hypothesis3: In LGB adults, the more positive the attributional style, as measured by The New Attributional Style Questionnaire (Dykema et al., 1996), the higher the level of wellbeing, as measured by The Ryff Wellbeing Scale (Ryff, 1989).*

Attributional style has also been shown to have a moderating effect. Goldsmid and Howie (2013), examined the moderating role of attributional style between victimization and wellbeing. It was hypothesized that those with a negative attributional style would have a higher distress level under duress, whereas those with a positive attributional style would not show this distress. It was confirmed that positive attributional style is positively correlated with wellbeing, with victimization level not playing any predictive role. Therefore, the tendency for negative attributions strengthens the connection between victimization and distress.

Based on the above study, the below hypothesis was generated:

*Hypothesis4: Based on whether the attributional style is positive or negative, the interaction between the levels of stressors (high or low) and wellbeing will differ, such that LGB adults with a positive attributional style will have a higher wellbeing score, even when the level of minority stress is high.*

**Perceived social support, stress and wellbeing.** There is a robust literature on the inverse relationship between mental distress and social support.

A study by Wong, Schragar, Holloway et al., (2014) found that social support positively impacted the participants' psychological wellbeing and acted as a buffer against the effects of

gay related stress. The larger the number of people in a subject's social network who could provide material/instrumental support, the less distress the subject showed.

From this study, the below hypothesis was drawn:

*Hypothesis5: The higher the score of perceived social support, as measured by The Perceived Social Support Scale (Procidano, 1983), the lower the stress level, as measured by The Measure of Gay Related Stressors (MOGS, Lewis et al., 2008).*

A study by Feinstein, Wadsworth, Davila and Goldfried (2014) examined how parental support moderates the relationship between minority stress and depressive symptoms in LGB members. It was hypothesized that minority stress is linked to depressive symptoms in individuals reporting low levels of parental acceptance and support but not in those reporting increased levels of parental support. It was found that family support is a protective factor and is linked to lower depressive symptoms; parental support and acceptance were negatively associated with negative mental health outcomes.

The above findings imply the below hypothesis:

*Hypothesis6: LGB adults who have a low perceived social support score, as measured by The Perceived Social Support Scale (Procidano, 1983), will have a lower level of wellbeing, as measured by The Ryff Wellbeing Scale (Ryff, 1989).*

**Collective self-esteem and stress.** People who have internalized their concept of self as part of a group and have perceived their membership to their group as important to their social identity appraise their stressors differently (Haslam and Reicher, 2006). Group membership influences whether a stressor is perceived negatively or not. It was found in several studies that group membership activates coping processes in the same direction that social support does:

members with high identification with their groups are more likely to offer and receive social support. There is evidence that a sense of shared identity buffers against stress and an adverse environment (James, 1995, 1997, as cited in Haslam and Reicher, 2006). It is concluded by several researchers that a sense of shared social identity offers a positive influence on stress, due to the openness that members are likely to have when it comes to actively receiving support from members of the in-group. Below we list some evidence from such studies.

Sellers et al., (2003) examined the relationship between racial identity, racial discrimination, perceived stress and mental health. A specific component of racial identity is racial centrality, or the degree to which one's race is central to one's identity. It was predicted that racial centrality would have a buffering effect against racial discrimination and therefore would alleviate stress. It was concluded that for people with low centrality, discrimination was predictive of stress, whereas for people with high centrality, the correlation was not significant: strong identification with one's race, not being correlated with perception of stress, acts as a buffer against perception of stress.

This allowed for the below hypothesis:

*Hypothesis 7: The higher the collective self-esteem score LGB adults have, as measured by Collective Self-Esteem Scale (CSES; Luhtanen & Crocker, 1992), the lower their stress level, as measured by The Measure of Gay Related Stressors (MOGS, Lewis et al., 2008).*

**Perceived social support (family and friends) and wellbeing.** Some findings show that the relationship between life satisfaction and family support is stronger than the friend-life satisfaction relationship. However, other findings show that the friend - life satisfaction

relationship is more evident. We look at the conflicting evidence below, which leads to our exploratory hypothesis on social support and wellbeing.

Shilo and Savaya (2011) surveyed LGB members to examine the effect of family and friends' support on mental health. They found that family support was negatively correlated with youth's mental distress and positively correlated with wellbeing.

Wagner et al., (2013), describe the role of the family as being highly valued in Lebanon. It is most common for adults to keep living with parents until marriage, which intensifies the bond they share. Snapp et al., (2015) found in their study that family acceptance was a better predictor of wellbeing than friend support. Elizur and Ziv (2001) found that family acceptance of orientation protects the wellbeing of the offspring independently from support from friends. They specify that family is more important for subjects for whom the context of the family of origin is strong and present, like adolescents or people from cultures where family members are tight-knit both geographically and emotionally. Therefore, it may be that LGB adults who have a high score on the family support subscale will have higher wellbeing than those who have a high score on the friends' support scale.

It is noteworthy that research on social support and its contribution to wellbeing in Middle Eastern countries is very scarce. As collectivist societies, they differ from western societies in history and traditions among other things (Brannan, Diener, Mohr, Mortazavi and Stein, 2013). Brannan, Diener, Mohr, Mortazavi and Stein (2013) found that family support predicts subjective wellbeing, higher positive affect and lower negative affect in Jordan, more than friends' support does. They cite Diener and Diener (2009) who found similar results when comparing samples from Jordan and Japan: the sample from Jordan showed a stronger relationship between life satisfaction and family satisfaction. The study (Brannan, Diener, Mohr,

Mortazavi and Stein, 2013) also cites Mansour and Dawani (2008) who concur that family support, but not friend support, is linked to lower perceived stress in college students in Jordan.

Detrie and Lease (2007), cite different results from several studies relevant to the other side of the coin: their research is based on finding support for the friend-life satisfaction relationship. For adults, social support from friends replaces the earlier dependency on family and shows the growing need for finding one's own nest (Wagner, 1996). As individuals mature, support from friends becomes more relevant to their wellbeing. Savin-Williams (1996) states that friends' support may be more important if the family is rejecting of the LGB's status. Finding other adults and youths outside the family who can offer support if the family is highly homophobic can help the LGB cope better with the stress that arises from being an LGB member. Therefore, it may be that LGB adults who have a high score on the friends' support subscale (Procidano, 1983) will have higher wellbeing than those who have a high score on the family support scale.

Given that the literature is inconclusive, an exploratory hypothesis was developed to verify whether friend support would have a greater influence on wellbeing than family support:

*Hypothesis 8: If the score on family support is low, will a high score on friends' support, as measured by the Perceived Social Support scale (Procidano, 1983), correspond to a high score on wellbeing, as measured by the Ryff Wellbeing Scale (Ryff, 1989)?*

**Collective self-esteem and wellbeing.** In a study by Verkuyten (2008), it was hypothesized that ethnic identification mediates the relationship between discrimination and general life satisfaction in a group of Turkish-Dutch living in the Netherlands. Indeed, group identification showed a significant positive relationship with life satisfaction. Moreover, it was

found that a high perceived discrimination level is positively correlated with group identification, which in turn, is positively correlated with life satisfaction.

Detrie and Lease (2007) examined the correlations between social support, social connectedness and collective self-esteem and their effect on wellbeing in a sample of LGB youth. It was hypothesized that the variables of social connectedness and collective self-esteem, combined with social support, would predict wellbeing more than social support alone. It was found that collective self-esteem significantly contributed to the sample's levels of wellbeing.

From this, we drew the below hypothesis:

*Hypothesis9: LGB adults with a high collective self-esteem score, as measured by The Collective Self-Esteem Scale (CSES; Luhtanen & Crocker, 1992), will have a higher level of wellbeing, as measured by The Ryff Wellbeing Scale (Ryff, 1989).*

Corning (2002) examined the moderating effect of collective self-esteem (CSE) on the relationship between perceived discrimination and psychological distress in a sample of women. It was hypothesized that CSE would act as a buffer against perceived discrimination and, therefore, decrease psychological distress. Corning (2002) found that women with a low score on CSE score higher on depression and anxiety as their perceived discrimination score increases. In addition, it was found that for women with a high score on CSE, the effect of discrimination on depression was reduced. As the level of CSE differed, the relationship between psychological distress and perceived discrimination differed: the lower the CSE score was, the higher the psychological distress score was, when perceived discrimination increased. As CSE increased, the effects of discrimination on psychological distress were reduced.

Such differential influence implies a moderating effect and allowed for the below hypothesis:

*Hypothesis10: Collective self-esteem will moderate the relationship between stress and wellbeing, so that LGBs with a high score on collective self-esteem, as measured by The Collective Self-Esteem Scale (CSES; Luhtanen & Crocker, 1992) will have a high score on wellbeing, as measured by the Ryff Wellbeing Scale (1989), irrespective of stress level; whereas those with a low score on collective self-esteem will score differentially, depending on the level of stress.*

## Chapter Three

### Method

#### Design

The present research employs a survey design in which a series of scales were administered to check for direct and moderational relationships between variables.

#### Participants

The sample size required for the present research was determined using guidelines presented in Field (2013). When a small effect (.02) for the regression coefficient  $R^2$  is expected, when examining 4 predictors, the required sample size is 590; however, when a medium effect (.13) for the regression coefficient  $R^2$  is expected, with 4 predictor variables, the required sample size is 85. Considering the difficulty in recruiting the target population for the present research, a target sample size of 200 was set as a compromise between a small and a medium expected effect.

143 LGB participants, aged between 18 and 39, consented to take part in the present study. They were recruited through the following methods: Some were members of NGOs providing services to sexual minorities in Beirut. Some were reached through snowball sampling, especially participants who may have been reluctant to join NGOs. Others were reached through referrals by the LGB individuals themselves to their informal networks. Still others were engaged through informal meeting at LGB meeting places, campuses of universities (Haigazian and AUB), and LGB dating applications.

## Materials

Five scales were used to measure stress, attributional style, perceived social support, collective self-esteem and wellbeing. To avoid sequence presentation effects, the sequence of scale presentations was counterbalanced according to a Latin square for five variables, using an incomplete counterbalancing method.

A socioeconomic demographics sheet was attached as the last page of the survey. It asked for information about sex, sexual orientation, age, SES, educational level, residence area and religious denomination. It also asked participants to specify who they were out to (family, friends or colleagues) and the number of years they have been out for.

**Stress assessment.** The Shortened Version of the Measure of Gay Related Stressors (MOGS, Lewis et al., 2008) was used to assess the extent to which an LGB member has gone through discrimination, or other types of stressors related to being gay, in the last year. It contains 41 items and 9 subscales which relate to: visibility/outness, family reactions to same sex relations, work/general discrimination, general harassment, lack of social rights, violence, and sexual orientation conflict /ambivalent feelings towards sexual identity. Participants had to check and rate the items corresponding to the stressors they experienced on a six point Likert scale, where 1 implies strong disagreement and 6 implies strong agreement. Sample items included statements such as: worrying about introducing a new partner to my family; rejection when I tell someone about my sexual orientation; rumors about me at work due to my sexual orientation and physical assault due to my sexual orientation.

Lewis et al. (2001) concluded these subscales produced moderate to high internal consistency (Cronbach  $\alpha = .73 - .90$ ). Positive correlations with dysphoria, life stressors, and

depressive symptoms have been reported as evidence for the validity of the MOGS (Lewis et al., 2001).

**Attribution style assessment.** The New Attributional Style Questionnaire (Dykema et al., 1996) is a modified form of the expanded ASQ created by Peterson and Villanova in 1988. The previous version was too long (24 items) and too complex, therefore requiring supervision. The NASQ uses only 12 items, which are phrased in less abstract terms, making the situations proposed more tangible to participants. The internality dimension was removed because it did not contribute to negative outcomes or learned helplessness (Abramson, Metalsky and Alloy, 1989). Participants are asked to read each of the 12 situations and imagine it is happening to them. They then choose one main cause for the situation and answer the 2 following questions pertaining to each cause and reflecting its stability and globality dimensions: “How likely is the main cause to continue affecting you?” and “Will the main cause affect just this situation or other areas of your life as well?” Sample items are, for instance: you can’t find a job and you have a serious argument with someone in your family

The metric is a rating score from -3 to +3 (-3: will never affect you/just affects this event; +3: will always affect you/will affect all other areas of your life).

The NASQ has a reliability of .74 to .81. It also has a satisfactory internal consistency (reaching .70) for the two individual dimensions (Smith, Caputi, Crittenden, 2013).

**Perceived social support assessment.** The Perceived Social Support Scale (Procidano, 1983) measures the level of perceived support one is receiving on the social level, as well as the informative and feedback levels, received from both family (PSS-Fa) and friends (PSS-Fr). The two scales each contain 20 items with declarative sentences to which the participants answer

with “yes/no/I don’t know”: my family enjoys hearing about what I think; members of my family seek me out for companionship; my friends give me the support I need and my friends come to me for emotional support. Positive answers are scored as +1 and negative ones as 0. Scores are added up in such a way that the higher the score, the more perceived social support is provided to the individual. PSS-Fr and PSS-Fa respectively resulted in a Cronbach  $\alpha$  of .88 and .90 (Procidano and Heller, 1983).

**Measure of group identification.** Collective Self-Esteem Scale (CSES; Luhtanen & Crocker, 1992) measures the self-esteem of a person in relation to a specific social group. It has 16 items and uses a seven point Likert scale ranging from strongly disagree (1) to strongly agree (7). In this study, the questions were customized to fit the LGB population. Therefore, the nature of the social group was specified as the LGB community, by replacing “social group” with “the LGB group I belong to”. Such alterations are customary when using the CSE scale and have been deemed appropriate by Luhtanen and Crocker (1992). Detrie and Lease (2007) made use of such an alteration in a study with the LGB community, considering that the scale was based on assessing various group memberships.

The CSES contains four subscales measuring the Private, Public, Membership and Identity aspects of self-esteem of individuals involved in a specific social group. The Private subscale assesses the person’s perceptions of his group’s value: in general, I am glad to be a member of the LGB group. The public subscale measures the person’s judgment of his group’s worth according to other people. For the purpose of this study, the public subscale was excluded as it does not pertain to the individual him/herself. The membership subscale measures the individual’s personal feeling about his worthiness to the social group he belongs to: I am a worthy member of the LGB group. And lastly, the identity subscale measures the importance of

the social group membership to the individual's self-concept: the LGB group I belong to is an important reflection of who I am.

The internal reliability coefficient ranged from .83 to .88.

**Wellbeing assessment.** The Ryff Wellbeing Scale (Ryff, 1989) measures 6 facets of wellbeing: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life and personal growth. It contains 54 questions and is rated on a 6 point scale, ranging from strongly disagree (1) to strongly agree (6). Half the items are reverse scored. A high score indicates mastery of one area in people's lives. Sample items are such: most people see me as loving and affectionate; when I look at the story of my life, I am pleased with how things have turned out; I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people and I like most aspects of my personality.

Internal consistency for the different scales ranges from .87 to .93 and test-retest reliabilities range from .81 to .88.

### **Data analysis**

The data were analyzed using the IBM statistical Package for the Social Sciences, version 20 (SPSS). Prior to the main analysis descriptive statistics were used to summarize the data. Pearson's product moment correlation was applied to explore the relationship between the main study variables. For dichotomous scales, Kuder-Richardson Formula 20 was used. Finally, reliability analysis was applied to all instruments. Hypotheses 1, 2, 3, 5, 6, 7, 9 were addressed through correlation and partial correlation analyses. Hypotheses 4, 8 and 10 were addressed using Hierarchical Multiple Regression analysis followed by moderation analysis using the PROCESS add on developed by Andrew Hayes (2012).

## Procedure

**Instrument preparation.** For each of the scales to be used in this study, a number of items were selected for piloting on six non-native English speakers of average understanding of English. Each set of items representing a scale was followed by seven questions developed using guidelines for cognitive interviews (Willis, 1999). The questions were aimed at assessing any difficulties with clarity and comprehension of the scale instructions and items, and with the vocabulary and expressions. The result indicated agreement among the six trial participants that the scale items were, in general, easy to understand, clear and reflective of the intended purpose. Based on suggestions by these participants, synonyms for around a dozen words were added in brackets adjacent to words that were deemed difficult to understand. This measure was taken to assure understanding by participants with average English proficiency.

**Data Collection.** The finalized instruments in addition to the consent form, debriefing form and demographic form were compiled in Qualtrics for online data collection and on paper for field data collection. The sequence of scale presentations were counterbalanced through Qualtrics using full counterbalancing, while partial counterbalancing using the Latin square design was applied for the paper version of the scale. A consent form was presented at the beginning of each survey and a thank you debriefing note at the end, to inform the participants about the purpose of the survey and to provide them with contact information for further possible inquiry.

NGOs were contacted and asked to post the Qualtrics link for the survey on their social media. Out of the nine NGOs which were emailed, seven collaborated by either posting the link themselves (five NGOs) or by asking us to post the link (two NGOs) to avoid authorship confusion. The other two NGOs refused to collaborate for internal policy reasons. Directors of

four of the NGOs also forwarded the link to all their inner circle of friends. Another NGO called the Collective for Research and Training on Development-Action (CRTDA) was recruited for a fee of \$ 35 in order to forward the link to their contact list. CRTDA has contacts for over 8000 individuals working in the private and public sector, to whom they usually send emails relating to ongoing research in the country.

Furthermore, several LGB events in the city were attended, events such as talks about gender, LGB rights and social and legal violations of those rights, and hardcopies of the survey were distributed to LGB members, some of whom filled them in on the spot while others returned them the next day. The link information and a motivational text explaining why participating in the survey would benefit the community was sent to members of an LGB dating application. Many of the members who took the survey forwarded the link to their circle of friends. Therefore, snowball sampling was an effective way of reaching more people.

The psychology student society at the American University of Beirut posted the link on its Facebook page. A few students from the AUB and Haigazian University campuses took hard copies of the survey to fill in and to distribute to their friends, ensuring privacy by providing envelopes to return the completed survey in, sealed and unmarked.

All participants were assured anonymity, as such a study on sexual minorities in Lebanon, which may reveal personal identities, presents a serious threat to the safety of individuals. Be it for online questionnaires or hard copies distributed at meeting points, it was emphasized that no information would be exposed to any entity. Participants did not have to write down their names or email addresses for online surveys. At meeting points, a large dark bag containing other answered scales was available for participants to “throw in” their papers so that their answers would not be related to their identity.

To maximize the number of respondents, flyers with the link information and a few sentences about the study were distributed in pubs and clubs. The response rate this approach yielded is not known.

After collecting filled in surveys from the first 50 participants, we received feedback from more than one participant, people who are activists for LGB rights. They stated that many of the women they know would not fill out the survey because they do not identify as lesbian, gay or bisexual; rather, they identify as “questioning” or “queer”. Some people can be unsure of their sexual identity or for them sexuality is not about a fixed identity but more fluid; hence a Q was added to LGB categories under demographics to include these descriptors. The word “queer” is a more encompassing term and helps in breaking labels.

Moreover, advice was given about adding two questions in new Qualtrics accounts as well, which would help in determining one of the potential reasons for higher scores of stress. Participants were asked to specify if they are out, out to family, friends and colleagues and for how long they have been out. Though the above two suggestions do not directly relate to the study’s primary goal, they may add some valuable information. If someone is not out at all, he/she might not experience as much stress as someone who is out to many and as a result has suffered discrimination. If someone is still in the closet, he/she might experience a different kind of stress than the overt stress that someone who is out can experience.

## **Chapter Four**

### **Results**

#### **Preliminary Analyses**

Prior to analysis, data entry was checked for accuracy and for missing values. Accuracy was substantiated and no missing values were found.

The initial sample size, before outliers were checked and removed, was constituted of 143 participants.

As per the report on univariate and multivariate analyses below, three outliers were removed. The final sample size was therefore comprised of 140 participants. Descriptive statistics are presented in Table 1.

Since the last questions in the demographics, pertaining to whether participants were out to their families, friends and colleagues, were not included in the first Qualtrics account, only 75 (53.6%) respondents answered them.

Age distribution ranged from 18 to 39 almost equally, as per the interquartile frequencies.

#### **Univariate and Multivariate Analyses**

Z scores of each participant on each scale was calculated and all Z scores above the 3.29 cutoff point, significant at the 99.99% confidence interval, were checked. Four such scores were found: one on MOGS; one on the wellbeing - autonomy subscale; one on the perceived social support - friends subscale and one on the CSE scale. Since they constitute less than 5% of the sample, they were retained.

Table 1

*Descriptive Statistics - Demographics*

Characteristic	N (%)
Sex	
Male	58 (41.4)
Female	78 (55.7)
Missing	4 (2.9)
Sexual Orientation	
Lesbian	50 (35.7)
Gay	52 (37.1)
Bisexual	30 (21.4)
Queer	4 (2.9)
Missing	4 (2.9)
Nationality	
Lebanese	119 (85.0)
Palestinian	8 (5.7)
Syrian	1 (.7)
Armenian	6 (4.3)
Other	2 (1.4)
Missing	4 (2.9)
Education	
Below university level	17 (12.1)
BA	72 (51.4)
MA	47 (33.6)
Missing	4 (2.9)
Religious Denomination	
Christian	82 (58.5)
Muslim	45 (32.2)
Druze	8 (5.7)
Missing	5 (3.6)
Participants "Out"	
To Family	17 (12.1)
To Friends	61 (43.6)
To colleagues	25 (17.9)

A further check for outliers was completed at the multivariate level, using Mahalanobis Distance. Results indicated six outliers. Results of Dfbetas and Cook's Distances indicated that only three of the six outliers were influential (values greater than one). Hence, they were eliminated from further analyses.

### **Assumption of Normality**

Normality of the data for all continuous variables was tested through the Kolmogorov-Smirnov test (KS), standardized skew statistics ( $z$  skew), and histograms. The KS test showed significant deviation from normality for four of the wellbeing subscales (autonomy, growth, self-acceptance and mastery) as well as for the perceived social support scale (family and friends) and the MOGS ( $p < .05$  for all). Nevertheless, since the KS test is sensitive to even the smallest deviation from normality and may be misrepresentative of normality, standardized  $z$  scores and frequency histograms were examined.

The normality of score distributions was further assessed. Results indicated a significant skewness in the Measure of Gay Related Stressors scale ( $z = 4.51$ ) and the Perceived Social Support for Friends ( $z = -6.36$ ). The standardized scores for these scales are greater than 3.29, the cutoff point for 99.99% confidence interval, indicating to significantly skewed distributions. Although some skewness exists in the score distribution of the current sample, the sampling distribution is still assumed to be normal, a conclusion which is explained by the central limit theorem: it is assumed hereby that the given sample is adequately large to conclude that the mean of the population will approximate the mean of all samples obtained from the population. Therefore, all samples would follow a more or less normal distribution pattern and all variability would approximate the variability of the population divided by every sample's size (Field, 2013)

## Psychometrics

For the ASQ scale, the bipolar scoring (-3,+3) was transformed to a 7 - 1 scale to facilitate interpretation: scores ranging on the higher end of the scale were interpreted as belonging to the positive attributional style, whereas those ranging on the lower end of the scale were interpreted as belonging to the negative attributional style. Since Peterson (1991a) and Dykema (1996) found that the two dimensions of stability and globality were significantly intercorrelated, a total score for attributional style was used instead of two subscale scores. For further confirmation, the correlation between both dimensions in the present study was  $r = .90, p = .000$ .

Reverse coding was performed on some items in the other scales as per the guidelines for scoring by the authors of the scales.

The mean for CSE was calculated without the scores on item 12, as the reliability computation of the scale indicated that the Cronbach Alpha would increase significantly from  $\alpha .59$  to  $\alpha .71$  if the item was deleted.

Reliabilities of the scales were assessed, resulting in good Kuder-Richardson Formula 20 levels (KR-20) for the PSS-Family and Friends scales and in good Cronbach alpha levels for the remaining scales. Reliability coefficients are presented in Table 2.

Table 2

*Descriptive Statistics and Reliabilities for All Variables*

<i>Variables</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>α</i>
MOGS	140	2.64	.96	1.00	5.93	.95
ASQ	140	3.55	1.02	1.33	6.42	.90
CSE	140	4.69	.85	2.73	6.45	.71
PSS Fa	140	8.79	6.03	.00	20.00	.95*
PSS Fr	140	15.11	5.18	.00	20.00	.80*
Aut	140	4.56	.811	1.78	6.00	.79
Pur	140	4.28	.90	2.11	6.00	.76
Gr	140	4.82	.72	2.67	6.00	.70
SA	140	4.24	1.01	1.00	6.00	.86
Mast	140	3.87	.96	1.22	5.89	.84
Rel	140	4.37	.96	1.44	6.00	.81

\* Kuder-Richardson 20 Test

MOGS = Measure of Gay Related Stress; ASQ =Attributional Style Questionnaire; CSE= Collective self-esteem; PSS Fa = Perceived Social Support – Family; PSS Fr = Perceived Social Support – Friends; Aut = Autonomy; Pur = Purpose; Gr = Growth; SA = Self-acceptance; Mast = Mastery; Rel = Relationship

### **Tests of hypotheses**

**Bivariate correlations.** Pearson's Correlations were computed to determine support for hypotheses H1, H2, H3, H5, H6, H7 and H9. Correlation coefficients are presented in table 3.

Table 3

*Correlational Coefficients between the Various Variables of the Study*

	Sex	CSE	PSS Fam	PSS Fr	Aut	Pur	Gr	S-A	Mast	Rel	ASQ	MOGS
CSE	-.02	-										
PSS Fa	.11	.23**	-									
PSS Fr	.07	.20*	.44**	-								
Aut	.18*	.33**	.22*	.34*	-							
Pur	.03	.09	.29**	.39*	.37**	-						
Gr	.11	.30**	.36**	.46**	.56**	.51**	-					
S-A	.22**	.29**	.46**	.55**	.55**	.65**	.53**	-				
Mast	.15	.23**	.47**	.48**	.43**	.56**	.40**	.77**	-			
Rel	.15	.26**	.45**	.75**	.37**	.49**	.50**	.61**	.54**	-		
ASQ	-.04	.04	.21*	.10	.19*	.27**	.18*	.26**	.21*	.20*	-	
MOGS	-.19*	-.23*	-.24**	-.16	-.31**	-.13**	-.18*	-.29**	-.26**	-.26**	-.30**	-

Note. CSE = collective self-esteem; PSS Fa = Perceived Social Support - Family; PSS Fr = Perceived Social Support - Friends; Aut = Autonomy; Pur = Purpose; Gr = Growth; S-A = Self-acceptance; Mast = Mastery; ASQ = Attributional Style Questionnaire; MOGS = Measure of Gay Related Stress

\*  $p < 0.05$  level; \*\*  $p < 0.01$  level

For the relationship between minority stress and the subscales of wellbeing, a significant negative correlation was found for five of the six subscales; autonomy ( $r = -.31, p = .000$ ), growth ( $r = -.18, p = .03$ ), self-acceptance ( $r = -.29, p = .001$ ), mastery ( $r = -.26, p = .002$ ), relationships ( $r = -.26, p = .002$ ). The one subscale that did not show a significant correlation is purpose ( $r = -.13, p > .05$ ). Therefore, hypothesis one was by large substantiated where the higher the stress one experiences, the lower their wellbeing.

Hypothesis two was supported such that a significant negative correlation was found between attributional style and stress: the higher the ASQ (the more positive the attributional style is), the lower the minority stress ( $r = -.30, p = .000$ ).

Hypothesis three stated that the more positive the attributional style, the higher the score on the wellbeing subscales. It was indeed found that the higher the score on ASQ, the higher the score on the six subscales of wellbeing: autonomy ( $r = .19, p = .025$ ); purpose ( $r = .27, p = .001$ ); growth ( $r = .18, p = .039$ ); self-acceptance ( $r = .26, p = .002$ ); mastery ( $r = .21, p = .012$ ) and relationships ( $r = .20, p = .018$ ). Therefore, there is a significant positive relationship between ASQ and the wellbeing subscales.

As for hypothesis five, stating a negative relationship between the levels of perceived social support from family and friends and the level of stress, a significant relationship was found for perceived social support from family:  $r = -.24, p = .005$ , but only a marginal significance was found for perceived social support from friends  $r = -.16, p = .06$ . The hypothesis was partly supported.

It was postulated in hypothesis six that the lower the perceived social support from friends and family, the lower the levels of wellbeing in the six subscales. In fact, a positive correlational was found between the levels, such that perceived social support from family correlated positively with autonomy ( $r = .22, p = .010$ ), purpose ( $r = .29, p = .000$ ), growth ( $r = .36, p = .000$ ), self-acceptance ( $r = .46, p = .000$ ), mastery ( $r = .47, p = .000$ ) and relationships ( $r = .45, p = .000$ ). As for perceived social support from friends, correlations with the subscales of wellbeing were positive and significant: autonomy ( $r = .34, p = .000$ ); purpose ( $r = .39, p = .000$ ); growth ( $r = .46, p = .000$ ); self-acceptance ( $r = .55, p = .000$ ); mastery ( $r = .48, p = .000$ )

and relationships ( $r = .75, p = .000$ ). The conclusion that stands is that the higher the social support, the more wellbeing experienced.

It was postulated in hypothesis seven that the higher the collective self-esteem, the lower the stress level of the participants. A significant negative correlation was found between the two variables:  $r = -.20, p = .016$ . Hypothesis seven was sustained.

It was hypothesized that collective self-esteem and wellbeing will be positively correlated. This was confirmed for five levels of wellbeing: autonomy ( $r = .33, p = .000$ ); growth ( $r = .30, p = .000$ ); self-acceptance ( $r = .29, p = .000$ ); mastery ( $r = .23, p = .007$ ) and relationships ( $r = .26, p = .002$ ). The subscale of ‘purpose’ did not hold a significant relationship with CSE ( $r = .09, p = .314$ ). Hypothesis nine was for the most part supported.

**Moderation Analyses.** To examine the effect of each moderator (attributional style, perceived social support from family, perceived social support from friends and collective self-esteem) on wellbeing, a separate moderation was run for each of the six subscales of wellbeing. Age and gender were entered as control variables in all subsequent analyses.

*Effect of stress on wellbeing at levels of attributional style.* Before checking for the moderation of attributional style in the association between stress and wellbeing, the collected data pertaining to the scale of ASQ was examined. There was a substantial number of participants who seemed to have misconstrued the instructions of the scale and instead of imagining the situation described as hypothetical, they interpreted it as an actual situation which either happened to them or did not. As a consequence, 60 participants answered in a yes or no statement, instead of giving the main reason for the imagined situation. As this threatens internal

validity these 60 cases were removed and analyses pertaining to attributional style proceeded with a total of 80 participants.

To assess attributional style as a moderator of the relationship between stress and wellbeing, PROCESS macro (Hayes, 2012) was used. Stress, attributional style and wellbeing were centered prior to analysis.

In running the analysis with attributional style as the moderator between stress and each of the wellbeing subscales, the overall models were significant ( $p < .05$  for all), however, no interaction effects emerged between stress and attributional style on any of the wellbeing subscales.

Therefore, hypothesis four, which states that the effect of stressors on wellbeing will differ based on whether attributional style is positive or negative, was not supported.

***Effects of stress on wellbeing at levels of collective self-esteem.*** This moderation was tested to find support for hypothesis ten, which states that the effect of stress on wellbeing will differ at high and low levels of collective self-esteem. More specifically, participants high on CSE will score high on wellbeing, irrespective of stress, whereas those low on CSE will score differentially on wellbeing, depending on the level of stress.

To assess collective self-esteem as a moderator of the relationship between stress and wellbeing, PROCESS macro (Hayes, 2012) was used. Stress, CSE and wellbeing were centered prior to analysis.

In running the analysis with collective self-esteem as the moderator between stress and each of the wellbeing subscales, the overall models were significant ( $p < .05$  for all). The interaction between stress and collective self-esteem, upon predicting the level of different

wellbeing subscales, did not account for a significant proportion of the variation in the following subscales: growth, autonomy, self-acceptance, relationship and mastery. A marginally significant interaction effect emerged between collective self-esteem and stress on the purpose wellbeing subscale,  $b = -.17$ ,  $t(131) = -1.60$ ,  $p = .11$ .

In looking at the breakdown, it is clear that stress levels differentially influence purpose wellbeing at the different levels of CSE. For low CSE, stress level has no influence on purpose,  $b = -.83$ ,  $t(131) = -.03$ ,  $p = .98$ . Whereas when CSE is high, purpose is negatively affected under high levels of stress,  $b = .83$ ,  $t(131) = -2.31$ ,  $p = .02$ . This influence does not appear under low stress level.

Therefore, the moderational hypothesis under investigation is partially supported.

*Effects of stress on wellbeing at levels of perceived social support from family.* This moderation was tested to find support for hypothesis eight, which states that the effect of stress on wellbeing will differ, based on the score of perceived social support from family. The moderating effect of PSS family on the relationship between stress and wellbeing was tested on all six subscales of wellbeing.

To assess perceived social support from family as moderators of the relationship between stress and wellbeing, PROCESS macro (Hayes, 2012) was used. Stress, PSS Family and wellbeing were centered prior to analysis.

In running the analysis with social support from family as the moderator between stress and all wellbeing subscales, while controlling for support from friends, gender and age, the overall models were significant ( $p < .05$  for all). The interaction between stress and perceived family support, upon predicting the level of different wellbeing subscales, did not account for a

significant proportion of the variation in the following subscales: growth, purpose, self-acceptance, relationship and mastery. However, in the prediction of the level of autonomy, there was a marginal significance:  $b = .03$ ,  $t(135) = 1.53$ ,  $p = .13$ . In looking at the breakdown, it is clear that at low levels of family support the relationship between stress and autonomy wellbeing is negative,  $b = -3.83$ ,  $t(135) = -2.77$ ,  $p = .01$ , but at high levels of family support the relationship between stress and autonomy wellbeing is not present,  $b = 3.83$ ,  $t(131) = -1.61$ ,  $p = .11$ . When family support is high, different levels of stress do not differentially influence autonomy wellbeing. Whereas when family support is low and stress is high, autonomy wellbeing is lower than when family support is low and stress is low,  $p = .01$ .

Hence hypothesis eight was partly supported for family.

*Effects of stress on wellbeing at levels of perceived social support from friends.* The interaction term between stress and friend support on all wellbeing subscales was calculated, while controlling for family, gender and age. The overall models were significant ( $p < .05$  for all). The interaction between stress and perceived friend support, upon predicting the level of different wellbeing subscales did not account for a significant proportion of the variation in any of the subscales. Hence hypothesis eight was not supported for friend support.

Therefore, the moderational hypothesis under investigation was partially supported.

### **Further analyses**

Since attributional style, perceived social support and collective self-esteem did not consistently emerge as moderators of the relationship between stress and wellbeing, and since in almost all models they emerged as individual predictors, a hierarchical multiple regression

analysis was conducted to assess whether the moderators acted as predictors for the six levels of wellbeing, in addition to stress.

***Growth wellbeing.*** A hierarchical multiple regression was conducted to assess whether attributional style, perceived social support from friends and family, collective self-esteem and stress predicted the growth subscale of wellbeing. In Block 1, gender and age were entered as covariates using the enter method while in Block 2, attributional style, perceived social support from friends and family, collective self-esteem and stress were entered using the enter method.

Results indicated that model 1 which included gender and age did not significantly predict growth. Next, model 2 was examined and results indicated that in addition to gender and age, attributional style, perceived social support from friends and family, collective self-esteem and stress significantly predicted growth wellbeing ( $F(5, 115) = 5.12, p = .00, R^2 = .21, R^2 \text{ change} = .18$ ). This indicates that an additional 18 % of the variation was explained by the independent variables (AS, PSS Family, PSS Friends and CSE).

In looking at the coefficients table (table 4), the analysis shows that perceived social support from family was the only significant predictor of growth wellbeing ( $b = .04, t(115) = 2.33, p = .02$ ). This indicates that as perceived social support from family increases by 1 unit, growth wellbeing increases by .04 units. Friends support did not show significance in the case of growth wellbeing.

***Relationship wellbeing.*** A hierarchical multiple regression was conducted to assess whether attributional style, perceived social support from friends and family, collective self-esteem and stress significantly predicted the relationship subscale of wellbeing. In Block 1, gender and age were entered as covariates using the enter method while in Block 2, attributional

style, perceived social support from friends and family, collective self-esteem and stress were entered using the enter method.

Table 4

*Multiple Regression of Stress and Buffers on the Growth Subscale of Wellbeing (N = 140)*

Variables	B	SE (B)	$\beta$	t	sig (p)
Age	.01	.01	.07	.79	.43
Gender	.13	.13	.09	1.06	.29
Stress	- .02	.07	-.03	-.35	.73
PSS Fam	.04	.02	.22	2.33	.02
PSS Fr	.04	.03	.16	1.69	.09
CSE	.13	.08	.14	1.63	.101
AS	.09	.06	.13	1.46	.15

Note. PSS Fam = Perceived Social Support from family; PSS Fr = Perceived Social Support from friends; CSE = collective self-esteem; AS = Attributional Style

$R^2 = .21$

Results indicated that model 1 which included gender and age significantly predicted relationship wellbeing ( $F(2, 120) = 6.82, p = .002, R^2 = .10$ ). Next, model 2 was examined and results indicated that in addition to gender and age, attributional style, perceived social support from friends and family, collective self-esteem and stress significantly predicted relationship wellbeing ( $F(5, 115) = 11.69, p = .00, R^2 = .41, R^2 \text{ change} = .30$ ). This indicates that an additional 30 % of the variation was explained by the independent variables (AS, PSS Family, PSS Friends and CSE).

In looking at the coefficients table (table 5), the analysis shows that age ( $b = .04, t(115) = 2.59, p = .01$ ), perceived social support from family ( $b = .05, t(115) = 2.67, p = .009$ ) and perceived social support from friends ( $b = .14, t(115) = 4.71, p = .000$ ) significantly predicted

relationship wellbeing. This indicates that as age increases by one unit, relationship wellbeing increases by .04 units; as perceived social support from family increases by 1 unit, relationship wellbeing increases by .05 units and as perceived social support from friends increases by 1 unit, relationship wellbeing increases by .14 units. However, the  $\beta$  coefficient for friends, compared to family, was larger ( $\beta = .38$  and  $\beta = .21$  respectively).

Table 5

*Multiple Regression of Stress and Buffers on the Relationship Subscale of Wellbeing (N = 140)*

Variables	B	SE (B)	$\beta$	t	sig (p)
Age	.04	.01	.19	2.59	.01
Gender	.26	.15	.13	1.79	.07
Stress	- 1.00	.08	- 1.00	-1.24	.22
PSS Fam	.05	.02	.21	2.67	.01
PSS Fr	.10	.03	.38	4.71	.00
CSE	.05	.09	.04	.53	.60
AS	.07	.08	.07	.87	.38

Note. PSS Fam = Perceived Social Support from family; PSS Fr = Perceived Social Support from friends; CSE = collective self-esteem; AS = Attributional Style

$R^2 = .41$

***Self-acceptance wellbeing.*** A hierarchical multiple regression was conducted to assess whether attributional style, perceived social support from friends and family, collective self-esteem and stress significantly predicted the self-acceptance subscale of wellbeing. In Block 1, gender and age were entered as covariates using the enter method while in Block 2, attributional style, perceived social support from friends and family, collective self-esteem and stress were entered using the enter method.

Results indicated that model 1 which included gender and age significantly predicted self-acceptance wellbeing ( $F(2, 120) = 5.00, p = .008, R^2 = .08$ ). Next, model 2 was examined and

results indicated that in addition to gender and age, attributional style, perceived social support from friends and family, collective self-esteem and stress significantly predicted relationship wellbeing ( $F(5, 115) = 10.01, p = .000, R^2 = .357, R^2 \text{ change} = .28$ ). This indicates that an additional 28% of the variation was explained by the independent variables (AS, PSS Family, PSS Friends and CSE).

In looking at the coefficients table (table 6), the analysis shows that perceived social support from family ( $b = .08, t(115) = 3.75, p = .000$ ) and perceived social support from friends ( $b = .07, t(115) = 2.05, p = .042$ ) significantly predicted self-acceptance wellbeing. This indicates that as perceived social support from family increases by 1 unit, self-acceptance wellbeing increases by .08 units and as perceived social support from friends increases by 1 unit, self-acceptance wellbeing increases by .07 units. Gender was also significantly predictive of a higher score on self-acceptance wellbeing ( $b = .37, t(115) = 2.31, p = .02$ ), indicating that females have a higher self-acceptance wellbeing score than males. CSE was marginally significant ( $b = .19, t(115) = 1.92, p = .06$ , indicating that for every 1 unit increase in CSE, self-acceptance wellbeing increases by .19 units. However, the  $\beta$  coefficient for family, compared to friends, was larger ( $\beta = .31$  and  $\beta = .17$  respectively).

***Purpose wellbeing.*** A hierarchical multiple regression was conducted to assess whether attributional style, perceived social support from friends and family, collective self-esteem and stress significantly predicted the purpose subscale of wellbeing. In Block 1, gender and age were entered as covariates using the enter method while in Block 2, attributional style, perceived social support from friends and family, collective self-esteem and stress were entered using the enter method.

Results indicated that model 1 which included gender and age did not significantly predict purpose. Next, model 2 was examined and results indicated that in addition to gender and age, attributional style, perceived social support from friends and family, collective self-esteem and stress significantly predicted purpose wellbeing ( $F(5, 115) = 3.68, p = .004, R^2 = .16, R^2\text{change} = .14$ ). This indicates that an additional 14% of the variation was explained by the independent variables (AS, PSS Family, PSS Friends and CSE).

Table 6

*Multiple Regression of Stress and Buffers on the Self-Acceptance Subscale of Wellbeing (N = 140)*

Variables	B	SE (B)	$\beta$	t	sig (p)
Age	.01	.02	.06	.79	.43
Gender	.37	.16	.18	2.31	.02
Stress	-.08	.09	-.08	-.91	.37
PSS Fam	.08	.02	.31	3.75	.00
PSS Fr	.07	.03	.17	2.05	.04
CSE	.19	1.00	.15	1.92	.06
AS	.13	.08	.13	1.68	1.00

Note. PSS Fam = Perceived Social Support from family; PSS Fr = Perceived Social Support from friends; CSE = collective self-esteem; AS = Attributional Style

$R^2 = .36$

In looking at the coefficients table (table 7), the analysis shows that perceived social support from family ( $b = .05, t(115) = 2.23, p = .028$ ) and attributional style ( $b = .20, t(115) = 2.36, p = .020$ ) significantly predicted purpose wellbeing. This indicates that as perceived social support from family increases by one unit, purpose wellbeing increases by .05 units and as attributional style increases by 1 unit, purpose wellbeing increases by .20 units. In the case of purpose wellbeing, perceived social support from friends did not show any significance.

**Mastery Wellbeing.** A hierarchical multiple regression was conducted to assess whether attributional style, perceived social support from friends and family, collective self-esteem and stress significantly predicted the mastery subscale of wellbeing.

Table 7

*Multiple Regression of Stress and Buffers on the Purpose Subscale of Wellbeing (N = 140)*

Variables	B	SE (B)	$\beta$	t	sig (p)
Age	.02	.02	.11	1.22	.23
Gender	.06	.16	.03	.39	.70
Stress	.03	.09	.03	.33	.74
PSS Fam	.05	.02	.21	2.23	.03
PSS Fr	.04	.03	.12	1.29	.20
CSE	-.03	.10	-.03	-.29	.77
AS	.20	.08	.22	2.36	.02

Note. PSS Fam = Perceived Social Support from family; PSS Fr = Perceived Social Support from friends; CSE = collective self-esteem; AS = Attributional Style

$R^2 = .16$

Results indicated that model 1 which included gender and age significantly predicted growth ( $F(2, 120) = 4.32, p = .015, R^2 = .07$ ). Next, model 2 was examined and results indicated that in addition to gender and age, attributional style, perceived social support from friends and family, collective self-esteem and stress significantly predicted mastery wellbeing ( $F(5, 115) = 8.33, p = .000, R^2 = .32, R^2 \text{ change} = .25$ ). This indicates that an additional 25% of the variation was explained by the independent variables (AS, PSS Family, PSS Friends and CSE).

In looking at the coefficients table (table 8), the analysis shows that perceived social support from family ( $b = .08, t(115) = 3.60, p = .000$ ) and perceived social support from friends ( $b = .07, t(115) = 2.25, p = .026$ ) significantly predicted mastery wellbeing. This indicates that as perceived social support from family increases by 1 unit, mastery wellbeing increases by .08

units and as perceived social support from friends increases by 1 unit, mastery wellbeing increases by .07 units. However, the  $\beta$  coefficient for family, compared to friends, was larger ( $\beta = .31$  and  $\beta = .19$  respectively).

Table 8

*Multiple Regression of Stress and Buffers on the Mastery Subscale of Wellbeing (N = 140)*

Variables	B	SE (B)	$\beta$	t	sig (p)
Age	.02	.02	.12	1.49	.14
Gender	.25	.16	.13	1.58	.12
Stress	-.07	.08	-.07	-.84	.40
PSS Fam	.08	.02	.31	3.60	.00
PSS Fr	.07	.03	.19	2.25	.03
CSE	.11	1.00	.09	1.08	.28
AS	.09	.08	1.00	1.18	.24

Note. PSS Fam = Perceived Social Support from family; PSS Fr = Perceived Social Support from friends; CSE = collective self-esteem; AS = Attributional Style

$R^2 = .32$

**Autonomy Wellbeing.** A hierarchical multiple regression was conducted to assess whether attributional style, perceived social support from friends and family, collective self-esteem and stress significantly predicted the autonomy subscale of wellbeing. In Block 1, gender and age were entered as covariates using the enter method while in Block 2, attributional style, perceived social support from friends and family, collective self-esteem and stress were entered using the enter method.

Results indicated that model 1 which included gender and age significantly predicted autonomy ( $F(2, 120) = 3.63, p = .029, R^2 = .06$ ). Next, model 2 was examined and results indicated that in addition to gender and age, attributional style, perceived social support from friends and family, collective self-esteem and stress significantly predicted autonomy wellbeing

( $F(5, 115) = 5.22, p = .000, R^2 = .23, R^2 \text{ change} = .17$ ). This indicates that an additional 17% of the variation was explained by the independent variables (AS, PSS Family, PSS Friends and CSE).

In looking at the coefficients table (table 9), the analysis shows that stress ( $b = -.14, t(115) = -1.95, p = .053$ ) was marginally significant in predicting autonomy wellbeing. This indicates that as stress increases by one unit, autonomy wellbeing decreases by .14 units; moreover, collective self-esteem ( $b = .24, t(115) = 2.75, p = .007$ ) significantly predicted autonomy wellbeing: as collective self-esteem increases by 1 unit, autonomy wellbeing increases by .24 units. Both family and friend support did not predict the level of autonomy.

Table 9

*Multiple Regression of Stress and Buffers on the Autonomy Subscale of Wellbeing (N = 140)*

Variables	B	SE (B)	$\beta$	t	sig (p)
Age	.01	.01	.06	.73	.46
Gender	.23	.14	.14	1.70	.09
Stress	-.14	.07	-.18	-1.95	.05
PSS Fam	.01	.02	.04	.39	.70
PSS Fr	.03	.03	1.00	1.05	.30
CSE	.24	.09	.24	2.75	.01
AS	.11	.07	.14	1.62	.11

Note. PSS Fam = Perceived Social Support from family; PSS Fr = Perceived Social Support from friends; CSE = collective self-esteem; AS = Attributional Style

$R^2 = .23$

## **Chapter Five**

### **Discussion**

The aim of the present study was to assess the relationship between attributional style, perceived social support and collective self-esteem and both stress and wellbeing, in addition to investigating whether they moderate the effect of stress on wellbeing. The results supported direct relationships between the variables; however, the variables were found to act as predictors rather than as moderators.

The minority stress model (Meyer, 2003) proclaims that the more the stress, the higher the risk of mental disorders. As it was hypothesized, a number of factors may intercept this relationship. According to the stress buffering hypothesis (Cohen and Hoberman, 1983), external resources such as social support, may decrease the effect of stress on mental health. In addition, the reformulated theory of learned helplessness (Abramson, Seligman and Teasdale, 1978) asserts that having a positive AS buffers against the effect of negative events on wellbeing. Finally, based on social identity theory (Tajfel and Turner, 1986), the CSE construct (Luhtanem and Crocker, 1992) claims that group identification is a protective factor against depressive symptoms. Building on this multifaceted evidence about the interrelation of these variables, this study had the purpose of examining the intrapersonal (attributional style and collective self-esteem) and the interpersonal (social support) resources of LGB adults in Beirut, Lebanon, to see if and how these resources contribute to increasing wellbeing under the impact of sexual minority stress.

**Attributional Style and Wellbeing.** Considering the relationship between stress and wellbeing (H1), which speculated that a higher score on minority stress would yield a lower score on the wellbeing subscales, the findings of the present study are consistent with the results of preceding studies regarding the inverse relationship between minority stress and wellbeing (Burton et al., 2013). One element of minority stress is discrimination. Fingerhut, Peplau and Gable (2010) found a significant association between more exposure to discrimination and poorer wellbeing. In the present study, wellbeing was represented by six subscales, all of which showed a negative correlation with stress, except for purpose. One possible explanation for this lack of significance may be the political, historical and socio-economic events experienced by the Lebanese population, including the current sample. As Lebanon has been in a situation of political unrest for over four decades, purpose in people may have withstood the harmful effects of stress in order to maintain survival. According to Ryff and Singer (1998), one's sense of purpose in life is not necessarily affected by stress, since being subjected to stress could have a reverse effect on people. It could allow them to hold on tighter to their goals, to keep a sense of directedness and to have clear-cut objectives and a solid underlying belief system, as a defense mechanism in order to protect themselves from harm. People are unlikely to give up on their search for meaning and to stop seeing purpose in life, as this domain distinguishes survivors from non-survivors. It seems that for the current sample, threats to one's life and identity helped them maintain purposefulness as a necessary feature of wellbeing that is not significantly affected by stress. Therefore, of all the subscales, purpose could be seen as the core need for people to maintain hope.

As for the relationship between attributional style and perception of stress (H2) and between attributional style and wellbeing (H3), as well as the moderating effect of AS on the

relationship between stress and wellbeing (H4), the direct relationships were consistent with previous research; whereas the moderating hypothesis was not supported. It was evident that the more positive the attributional style, the less the perceived stress. This is in accord with studies from Kleiman, Liu and Riskind (2012) and Calvete, Orue and Hankin (2013), who found a significant negative relationship between AS and perception of stress. Moreover, Hamilton et al., (2014), examined whether negative cognitive (attributional) style as a cognitive vulnerability exacerbates the effect of early pubertal timing on interpersonal stress generation. They hypothesized that early maturation would be predictive of more interpersonal dependent stressors in adolescents with a more negative cognitive style. It was found that negative cognitive styles increase the risk of experiencing heightened stress in girls who mature early, compared to those who do not display these cognitive vulnerabilities. One explanation of this significant relationship might be that individuals with negative attributional styles might exhibit unintentional behavior which could place them in difficult situations with others and contribute to the manifestation of stressful events (Hamilton et al., 2014).

The significant relationship between attributional style and wellbeing corroborates the previous results of Cheng and Furnham (2003) and of Sanjuan et al., (2008). Related evidence is provided by Ciarrochi et al., (2007) who studied the long-term effects of hope, self-esteem and positive attributional style on psychological adjustment. They explored the distinctive effect of positive attributional style on self-reported emotional wellbeing. It was found that positive attributional style was negatively correlated with fear, hostility and sadness and positively correlated with joy. Metalsky (1988) had provided a possible explanation; those with positive attributional styles, who construe positive events as internal, stable and global, may have higher levels of self-efficacy, optimism and self-confidence and lower levels of self-blame,

dysfunctional beliefs and depressogenic inferential style. Therefore they would have a more positive perception of self, of the world and of the future, all of which have been shown to add to resilience.

While the direct relationships between AS and perception of stress and AS and wellbeing held significance, the moderating effect of AS on stress and wellbeing did not yield a significant outcome. Such a result is inconsistent with the study of Goldsmid and Howie (2013). A factor that may have contributed to this lack of significance is issues in the sample of the current study: more than 40% of the participants did not properly understand the AS questionnaire. Since confused responses had to be removed, the remaining number was too low to produce significance for a small effect.

**Perceived Social Support and Wellbeing.** As to whether perceived social support could exert a beneficial effect on stress (H5) and on wellbeing (H6), the findings of the present study showed a significant negative relationship between family support and stress, but only a marginal significance between friend support and stress. This is consistent with a study by Snapp et al., (2015) which examined the effects of family acceptance in conjunction with other types of social support. They found that family acceptance and friend support contribute in unique yet overlapping ways to LGBs' psychological adjustment. Thus, although friend support is strongly related to wellbeing in adults, family support had a stronger overall impact which outweighed friend support.

Additional evidence for the importance of social support comes from the results of the current study about the relationship between perceived social support from friends and family and wellbeing (H6). Consistent with the results of Feinstein, Wadsworth, Davila and Goldfried (2014), the current study found that family support may protect individuals from the experience

of depressive symptoms within a setting that reflects minority stress. A recent study by Tabaac et al (2015) integrated several constructs, including social support, into a path model. The regression analysis showed that 25% of the variance in mental health was explained by social support from friends and family: high social support was inversely correlated with depression and low social support was predictive of poor mental health.

Family and friends play different roles in the life of an individual. These roles are very much influenced by culture. It seems that in Lebanese culture, family support outweighs friends' support as a protective factor in the case of the current sample, as investigated in the exploratory hypothesis (H8). Such a finding is consistent with research done by Brannan, Diener, Mohr, Mortazavi and Stein (2013), Wagner et al., (2013) and Elizur and Ziv (2001), all of whom ran their research in Middle-Eastern countries. In general, in collectivist countries and interdependent cultures, family plays a stronger role than friends. Support to the role of family in the life of Lebanese youth comes from a study by Harb (2010). Harb explored social identities and self-categorization of Lebanese youth, expecting youth to be a factor for valuing peer relationships and individuality over family, nation, and sect. Results indicated that family was the most sanctioned form of self-categorization; youth highly identified with the wider culture and were concerned with inter communal relations and with family dynamics. Lebanese youth rated low on individual differentiation. This concludes that Lebanese adults present a collectivist view of the self. Markus and Kitayama (1991) claimed that one's concept of the self is influenced by culture, and in turn influences the experiences of individuals, their cognitive, emotional and behavioral attitudes. The western individualistic view portrays the individual as independent and autonomous, with a unique constellation of internal traits and values on which one bases one's behavior. The non-western collectivist outlook holds an interdependent view of

the self, in which the individual is an assimilated part of the setting. Individuals see themselves as less differentiated from the group and are motivated to fit in. Their behavior is contingent on and relevant to others and their internal attributes take on a secondary place.

According to Hallaq (2001, as cited in Dwairy and Achoui, 2006), Lebanon has a more democratic and liberal aspect than other Arab countries, due to having been more exposed to Western cultures. The findings of the present study were expected to reflect more of an individualistic character, giving family less importance in providing social support. However, it seems the core values of the country still approach the values of collectivism, where family stands out as the major provider of support.

Of interest is the exception to the above finding in the relationship subscale of wellbeing, where friends' support was more predictive of wellbeing than family support. In fact, upon inspecting demographics, it is clear that less than a quarter of the participants in this sample were out to their family whereas more than three quarter of the participants were out to their friends.

Furthermore, the results indicated that neither perceived social support from family nor perceived social support from friends predicted the autonomy level of the participants. Since Lebanon is still a somewhat collectivist culture (Harb, 2010), LGBs in Beirut may still care a great deal about the expectations of others and still feel concerned about their-opinions. It might be that family support and friend support do not help much in protecting individuals from social pressure and therefore do not provide more wellbeing in this regard.

It is worth noting that social support from family was found in the current study to moderate the effects of stress on the subscale of autonomy – wellbeing. When family support is low, it does not differentially affect the autonomy of individuals in relation to stress levels.

However when family support is high, it enhances autonomy wellbeing even under high levels of stress. The particular relevance of autonomy to stress and wellbeing studies has been highlighted by Abramson, Seligman and Teasdale (1978). Lack of control signifies an increased level of stress, whereas availability of control has been identified as a key coping resource (Folkman, 1984, as cited in Edwards and Rothbard, 1999). Therefore, autonomy could be studied separately from other dimensions of wellbeing. Moreover, it could be studied in relation to attachment theories and psychosocial developmental stages, because the facilitation of a healthy transition to autonomy is enhanced by secure attachment and a sense of connectedness with parents (Ryan and Lynch, 1989, as cited in Moretti and Peled, 2004).

**Collective Self-esteem and Wellbeing.** In search for evidence on whether CSE exerts a beneficial effect on stress (H7) as well as on wellbeing (H9) and whether CSE might have a differential effect on wellbeing, depending on the level of stress (H10), evidence was found for the first two premises, and marginal significance was found for the moderational premise. The findings of the current study on the negative relationship between levels of collective self-esteem and stress are consistent with the above mentioned literature review, e.g. Sellers et al., (2003), and with the findings of Sanchez and Vilain (2009), who showed that collective self-esteem is a protective factor against fears and other stressors in a sample of male to female transsexuals.

The results of the current study about the positive relationship between levels of collective self-esteem and wellbeing lend support to the findings of Detrie and Lease (2007) and Verkuyten (2008) and Branscombe and colleagues (1999), who explained that stigmatized groups may perceive prejudice as a rejection and may as a result internalize the negative evaluation of others, which would lead to poor wellbeing. Since people have such a need to belong, when they know they will probably not be accepted by the more powerful group, they

start identifying with the lower status in-group and adaptively invest themselves in it in order to feel accepted, which in turn, increases their wellbeing. Moreover, not feeling “alone” in facing the stigma decreases depression and anxiety. It is important to note that the subscale of ‘purpose’ of wellbeing did not hold a significant relationship with CSE in the current study. This is in line with the absence of relationship found between stress and purpose in hypothesis one of the present study.

CSE was expected to moderate the effect of stress on all wellbeing subscales (H10). The results did not corroborate this prediction. Significance was only found for the purpose subscale: for low CSE, stress level has no influence on purpose. Whereas when CSE is high, purpose is negatively affected under high levels of stress. The marginal significance of the moderating effect of CSE on purpose wellbeing, when the same did not apply to the other subscales, may be explained by the fact that a number of elements which could have affected wellbeing under stress were not considered in this study. The transactional model (Lazarus, 1999, as cited in Major, McCoy, Kaiser, & Quinton, 2003) suggests there are several factors that can moderate the wellbeing of an individual; one’s exposure to prejudice, one’s perception of it, one’s cognitive appraisal of the threatening events and one’s coping skills could all affect self-esteem and wellbeing (Lazarus, 1999, as cited in Major, McCoy, Kaiser, & Quinton, 2003).

Other researchers (Major and McCoy, 2003) have looked at collective self-esteem in a manner that is counter to what has been discussed in the current study. Whereas the reviewed research mentioned herein has highlighted the positive effect of CSE on wellbeing, other studies have suggested that lower CSE may lead to fewer depressive symptoms. Major and McCoy (2003) found that perceived prejudice has a negative impact on depressive symptoms only in individuals who highly identify with the in-group. The rationale behind this stated direction is

that for high identifiers (meaning for those high on CSE), the group is central to their self-concept. It follows that perceived discrimination against the group would have more negative consequences for their wellbeing. On the other hand, the less central the group is to the person, the smaller the probability that any perceived discrimination would lead to depressive symptoms. Major and McCoy (2003) drew on Crocker and Major's perspective (1989), which states that for low identifiers (meaning for those low on CSE), perceived discrimination against the group may act as a buffer against negative emotions and low self-esteem. This may be due to the fact that prejudice in this case is external to the self and the person can discount his/her part in contributing to it (Crocker and Major, 1989, as cited in Major et al., 2003). As said earlier, many variables may be at play and go beyond the scope of this study.

Further search of the literature showed the possibility of a mediation effect rather than a moderation effect. Cassidy et al (2004), investigated the moderating and mediating roles of collective self-esteem on the relationship between perceived ethnic discrimination and psychological distress. The results regarding collective self-esteem as a moderator showed that it failed to moderate the discrimination-distress relationship, but provided support for its mediating role. Also a study by Fischer and Holz (2007) found a mediating effect of CSE on the relationship between stress and wellbeing. It is worth mentioning that the current study looked at stress as an independent variable, not at discrimination. If discrimination was considered as the independent variable, perhaps a different picture could have emerged.

### **Limitations**

The direct hypotheses in the present study were supported and were consistent with previous research as per the review above. The moderating hypotheses were not sufficiently supported and this could have been due to several reasons. According to Cohen (1992, as cited in

Frazier, Tix and Barron, 2004), the effect size for interaction was not enough to detect significant moderation effects. The sample in the current study was not big enough to reach small effect size. To remedy this, it is suggested that more significant predictors, such as discrimination and group vitality, be added as covariates in order to increase the multiple correlation among the complete model and the outcome variable (Jaccard and Wan, 1995, as cited in Frazier, Tix and Barron, 2004). There are several likely reasons for the small sample in this study. The data collection period was very short (45 days). It was also hard to reach participants. This may be due to the fact that LGBs in Beirut are still a stigmatized group and could have felt threatened at the idea of participating, although anonymity was assured, as disclosure could have resulted in negative consequences. Many LGBs might have been put off by the title of the study which includes a label. As Meyer and Wilson (2009) asserted, some people who have same-sex relationships, and who may be considered a sexual minority under one definition or another, would not identify themselves as lesbians, gays or bisexuals.

Another reason for not having enough participants may have been the total length of all the questionnaires a participant had to answer. Another reason for not having enough participants may have been the total length of all the questionnaires a participant had to answer. It was estimated that 35 minutes were needed and as it appeared, participants might not have felt engaged or committed to partake in such a lengthy survey. The total number of participants on Qualtrics was 352; however, more than half dropped out 10 minutes into the questionnaire, as the software was able to show.

Another limitation pertained to the ASQ. More than 40% of the participants did not correctly follow the instructions and, therefore, had to be dropped from the results pertaining to the attributional style moderating hypothesis.

It should be noted that for future studies it is preferable to use a wellbeing scale that has a total score for the construct. Wellbeing and happiness are multidimensional and it has been hard to find a suitable measurement for the construct (Diener, 1984). Although the scale used takes into consideration the multiple facets of wellbeing, it is possible that one who has a low score on one or more subscales might still feel happiness and score high on wellbeing. Another way to measure the level of wellbeing is to assess it on a daily basis or to take an inventory of feelings as experienced in the last two weeks by the participant. There are several things that could influence someone's psychological state and an overall assessment and a singular score could reflect a different picture in someone's wellbeing.

Moreover, only targeting LGBs living in Beirut, although more convenient, has a restricting effect when it comes to generalizing the results to the greater Lebanese LGB community. Even more, the participants were mainly part of the visible LGB community in Beirut, whether contacted through NGOs or LGB venues. This limitation should have been counteracted by snowball sampling to a certain degree.

The current study could benefit from further investigations and modifications. First, translating the scales to Arabic and applying adequate factor analysis would facilitate accuracy of response due to conceptual familiarity. Second, expanding the study to other cities in Lebanon might provide a different picture than the one obtained, as the quantity and quality of stress and available resources outside the capital may vary. Third, investigating the lack of moderation between the variables might help in reaching consensus on their interaction or not.

The wellbeing of sexual minority adults in Beirut is constantly challenged by the stigma and discrimination that taints the social sphere in which they live. It is thus important to

encourage studies which look at ways of improving wellbeing and reducing the conceivable consequences of gay-related stress.

### **Clinical Implications**

The implications of this study could be translated to a programmatic level and serve new public policy interventions in regards to mental health service provision.

The findings of the present study might encourage NGOs working with LGBs to focus on activating minority group coping, in order to encourage members to maintain solid connections within the community.

It might be beneficial to make literature on stress and coping and on stigma available in hospitals for psychiatric and clinical staff.

Clinicians who provide therapy for LGBs could deepen their knowledge of minority stress. They could work on becoming more knowledgeable in making accurate assessments of the prejudice encountered by LGBs (acute or chronic), the effect of stigma on them (how it affects their interpretations of their daily experiences), whether they have signs of internalized homophobia (negative social attitudes turned inwards) and how concealment of their sexual orientation is affecting them on the cognitive, emotional, behavioral and identity levels, in order to help them better cope, adjust and adapt (Hatzenbuehler, 2009, as cited in Alessi, 2014). Assessment should also be made of the coping mechanisms of the LGB individuals, of their social and interpersonal strengths and of their cognitive schemas (Alessi, 2014).

Clients could be guided through reattribution interventions to change their attributional styles. Therapists might be able to gently encourage social and familial connections. Moreover, group level coping resources should be fortified and LGB individuals' feelings about being part

of the LGB group should be positivized, through offering psychoeducation about the effects of stigma and internalized homonegativity to counteract their negative consequences on the person's intrapersonal and interpersonal outcomes and boost self-acceptance.

Further research could investigate the role of other possible moderators between minority stress and wellbeing, in order to find more protective factors which might be more beneficial in collectivist and religious cultures, such as Lebanon. It is advised that future studies explore higher order interactions and test a three-way interaction between AS, SS and CSE as moderators between stress and wellbeing.

It is hoped that Beirut will eventually have community-based mental health clinics, with clear nondiscrimination policies. Till then, NGOs are encouraged to develop more awareness campaigns for the wellbeing of LGBs and to work on advocating for LGBs' mental health and the importance of establishing nondiscriminatory laws. At the same time, they should remain informed by psychological research such as this, to build on the existing strengths of members and to implement findings which investigate efficient ways to protect and reinforce the wellbeing of the community.

According to Rivers and Noret (2008), LGBs should no longer be viewed as damaged victims of their oppressive conditions. Instead, they should be seen as self-determined and empowered agents who have control of their lives. Nevertheless, the mental health outcomes of stigma and discrimination are not to be underestimated and the responsibility for better coping and resilience falls onto individuals as well as society (Meyer, 2003).

The results of this research are directed towards future social, clinical and research-based interventions, with the aim of changing the status quo of LGBs in Beirut and of seeing the silver lining in a situation which can only improve with more awareness and effort.

## References

- Abramson, L. Y., Seligman, M. E., & Teasdale, J. D. (1978). Learned helplessness in humans: critique and reformulation. *Journal of Abnormal Psychology, 87*(1), 49–74.  
<http://doi.org/10.1037/0021-843X.87.1.49>
- Abramson, L. Y., Metalsky, G. I., & Alloy, L. B. (1989). Hopelessness Depression : A Theory-Based Subtype of Depression. *Psychological Review, 96*(2), 358–372.
- Ajrouch, K. J., Reisine, S., Lim, S., Sohn, W., & Ismail, A. (2010). Perceived everyday discrimination and psychological distress: does social support matter? *Ethnicity & Health, 15*(4), 417–434. <http://doi.org/10.1080/13557858.2010.484050>
- Alessi, E. J. (2014). REVIEW ARTICLES A Framework for Incorporating Minority Stress Theory into Treatment with Sexual Minority Clients. *Journal of Gay & Lesbian Mental Health, 18*(April), 47–66. <http://doi.org/10.1080/19359705.2013.789811>
- Brannan, D., Diener, R., Mohr, C. D., & Mortazavi, S. (2013). Friends and family: A cross-cultural investigation of social support and subjective well-being among college students. *Journal of Positive Psychology, 9760* (April 2013), 37–41.  
<http://doi.org/10.1080/17439760.2012.743573>
- Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality and Social Psychology, 77*(1), 135–149. <http://doi.org/10.1037/0022-3514.77.1.135>

- Burton, C. M., Marshal, M. P., Chisolm, D. J., Sucato, G. S., & Friedman, M. S. (2013). Sexual Minority-Related Victimization as a Mediator of Mental Health Disparities in Sexual Minority Youth: A Longitudinal Analysis. *Journal of Youth and Adolescence*, 42(3), 394–402. <http://doi.org/10.1007/s10964-012-9901-5>
- Calvete, E., Orue, I., & Hankin, B. L. (2013). Transactional relationships among cognitive vulnerabilities, stressors, and depressive symptoms in adolescence. *Journal of Abnormal Child Psychology*, 41(3), 399–410. <http://doi.org/10.1007/s10802-012-9691-y>
- Cassidy, C., O'Connor, R. C., Howe, C., & Warden, D. (2004). Perceived Discrimination and Psychological Distress: The Role of Personal and Ethnic Self-Esteem. *Journal of Counseling Psychology*, 51(3), 329–339. <http://doi.org/10.1037/0022-0167.51.3.329>
- Cauce, A. M., Hannan, K., & Sargeant, M. (1992). Life stress, social support, and locus of control during early adolescence: interactive effects. *American Journal of Community Psychology*, 20(6), 787–798.
- Cheng, H., & Furnham, A. (2001). Attributional Style and Personality As Predictors of Happiness and Mental Health. *Journal of Happiness Studies*, 2, 307–327.
- Cheng, H., & Furnham, A. (2003). Attributional style and self-esteem as predictors of psychological well-being. *Counselling Psychology Quarterly*, 16(2), 121–130. <http://doi.org/10.1080/0951507031000151516>
- Ciarrochi, J., Heaven, P. C. L., & Davies, F. (2007). The impact of hope, self-esteem, and attributional style on adolescents' school grades and emotional well-being: A longitudinal

study. *Journal of Research in Personality*, 41(6), 1161–1178.

<http://doi.org/10.1016/j.jrp.2007.02.001>

Cochran, S., Sullivan, G. & Mays, V. (2003). Prevalence of Mental Disorders, Psychological Distress, and Mental Health Services Use Among Lesbian, Gay and Bisexual Adults in the United States. *Journal of Consulting and Clinical Psychology*, 71(1), 53–61.

<http://doi.org/10.1037/0022-006X.71.1.53>

Cohen, S., & Wills, T. (1985). Stress, Social Support, and the Buffering Hypothesis.

*Psychological Bulletin*, 98(2), 310–357.

Cohen, S., & Hoberman, H. (1983). Positive events and social supports as buffers of life change stress. *Journal of Applied Social Psychology*, 13, 99–125. [http://doi.org/10.1111/j.1559-](http://doi.org/10.1111/j.1559-1816.1983.tb02325.x)

[1816.1983.tb02325.x](http://doi.org/10.1111/j.1559-1816.1983.tb02325.x)

Cohen, S., & McKay, G. (1984). Social support, stress, and the buffering hypothesis: A theoretical analysis. *Handbook of Psychology and*

*Health*. <http://doi.org/10.1387/ijdb.082595mg>

Corning, A. F. (2002). Self-esteem as a moderator between perceived discrimination and psychological distress among women. *Journal of Counseling Psychology*, 49(1), 117–

126. <http://doi.org/10.1037/0022-0167.49.1.117>

Detrie, P. & Lease, S. (2007). The relation of social support, connectedness, and collective self-esteem to the psychological well-being of lesbian, gay, and bisexual youth. *Journal of*

*Homosexuality*, 53(4), 173–199. <http://doi.org/10.1080/00918360802103449>

- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95 (3), 542, 575
- Dwairy, M. (2006). Introduction to Three Cross-Regional Research Studies on Parenting Styles, Individuation, and Mental Health in Arab Societies. *Journal of Cross-Cultural Psychology*, 37(3), 221–229. <http://doi.org/10.1177/0022022106286921>
- Dykema, J., Bergbower, K., Doctora, J. D., & Peterson, C. (1996). An Attributional Style Questionnaire for General Use. *Journal of Psychoeducational Assessment*, 14, 100–108. <http://doi.org/10.1177/073428299601400201>
- Edwards, J. R., & Rothbard, N. P. (1999). Work and Family Stress and Well-Being: An Examination of Person – Environment Fit in the Work and Family Domains, 77(2), 85–129.
- Elizur, Y., & Ziv, M. (2001). Family support and acceptance, gay male identity formation, and psychological adjustment: A path model. *Family Process*, 40(2), 125–144. <http://doi.org/10.1111/j.1545-5300.2001.4020100125.x>
- Feinstein, B., Wadsworth, L., Davila, J., & Goldfried, M. (2014). Do Parental Acceptance and Family Support Moderate Associations Between Dimensions of Minority Stress and Depressive Symptoms Among Lesbians and Gay Men? *Professional Psychology: Research and Practice*, 45(4), 239–246. <http://doi.org/10.1037/a0035393>
- Field, A. P. (2013). *Discovering statistics using IBM SPSS Statistics: And sex and drugs and rock'n'roll* (4<sup>th</sup>ed.). London: Sage. Retrieved from: <http://www.statisticshell.com/docs/exploringdata.pdfm>

- Fingerhut, A. W., Peplau, L. A., & Gable, S. L. (2010). Identity, minority stress and psychological well-being among gay men and lesbians. *Psychology and Sexuality, 1*(2), 101–114. <http://doi.org/10.1080/19419899.2010.484592>
- Fischer, A. R., & Holz, K. B. (2007). Perceived discrimination and women's psychological distress: The roles of collective and personal self-esteem. *Journal of Counseling Psychology, 54*(2), 154–164. <http://doi.org/10.1037/0022-0167.54.2.154>
- Frazier, P. A, Tix, A, P & Barron, K. E. (2004). Correction: Testing Moderator and Mediator Effects in Counseling Psychology Research. *Journal of Counseling Psychology, 51*(1), 2004. <http://doi.org/10.1037/0022-0167.51.1.115>
- Gable, S. L., & Haidt, J. (2005). What (and Why) Is Positive Psychology? *Review of General Psychology, 9*(2), 103–110. <http://doi.org/10.1037/1089-2680.9.2.103>
- Goldsmid, S., & Howie, P. (2013). Mediating and moderating role of attributional style in the association between victimization and wellbeing. *Emotional and Behavioral Difficulties, 18*(4), 423–434. <http://doi.org/10.1080/13632752.2013.803682>
- Hamilton, J. L., Stange, J. P., Kleiman, E. M., Hamlat, E. J., Abramson, L. Y., & Alloy, L. B. (2014). Cognitive Vulnerabilities Amplify the Effect of Early Pubertal Timing on Interpersonal Stress Generation During Adolescence. *Journal of Youth and Adolescence, 43*(5), 824–833. <http://doi.org/10.1007/s10964-013-0015-5>
- Harb, C. (2010). Describing the Lebanese Youth: A national and psycho-social Survey. Issam Fares Institute for Public Policy and International Affairs, Working Paper Series (1). American University of Beirut, Lebanon.

- Haslam, S. A., & Reicher, S. (2006). Stressing the group: social identity and the unfolding dynamics of responses to stress. *The Journal of Applied Psychology*, 91(5), 1037–1052.  
<http://doi.org/10.1037/0021-9010.91.5.1037>
- Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation and conditional process modeling. Retrieved from  
<http://www.afhayes.com/public/process2012.pdf>
- Headey, B. and Wearing, A. (1992). *Understanding happiness: A Theory of Subjective Well-being*. Longman Cheshire. Melbourne. Retrieved from  
[http://www1.eur.nl/fsw/happiness/hap\\_bib/freetexts/headey\\_b\\_1992.pdf](http://www1.eur.nl/fsw/happiness/hap_bib/freetexts/headey_b_1992.pdf)
- Helem and The Legal Agenda. (2014). *AL-AGHA BATHHOUSE: A RAID FROM ANOTHER AGE*. Retrieved from <https://docs.com/helem-lebanon/8266/al-agma-hammam-a-raid-from-another-age-english#>
- Kleiman, E. M., Liu, R. T., & Riskind, J. H. (2012). Enhancing attributional style as a resiliency factor in depressogenic stress generation. *Anxiety, Stress & Coping*, 26(4), 1–8.  
<http://doi.org/10.1080/10615806.2012.684381>
- Lewis, R. J., Derlega, V. J., Griffin, J. L., & Krowinski, A. C. (2003). Stressors for Gay Men and Lesbians: Life Stress, Gay-Related Stress, Stigma Consciousness, and Depressive Symptoms. *Journal of Social and Clinical Psychology*, 22(6), 716–729.  
<http://doi.org/10.1521/jscp.22.6.716.22932>

Lewis, R. J., Derlega, V. J., Berndt, A., Morris, L. M. & Rose, S. (2001). An Empirical Analysis of Stressors for Gay Men and Lesbians. *Journal of Homosexuality*, 42(1), 63 – 88.

[http://doi.org/10.1300/J082v42n01\\_04e](http://doi.org/10.1300/J082v42n01_04e)

Luhtanen, R., & Crocker, J. (1992). A Collective Self-Esteem Scale: Self-Evaluation of One's Social Identity. *Personality and Social Psychology Bulletin*, 18(3), 302–318.

<http://doi.org/10.1177/0146167292183006>

Major, B., Mccoy, S., Kaiser, C., & Quinton, W. (2003). Prejudice and self-esteem : A transactional model. *European Review of Social Psychology*, 14(1), 77–104.

<http://doi.org/http://dx.doi.org/10.1080/10463280340000027>

Manusov, V. & Spitzberg, B. (2008). In *Individually Centered Theories of Interpersonal Communication: Attribution Theory Finding Good Cause in the Search for Theory* (pp. 37 – 49). Retrieved from [http://www.corwin.com/upm-data/21200\\_Chapter\\_3.pdf](http://www.corwin.com/upm-data/21200_Chapter_3.pdf)

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98(2), 224–253. <http://doi.org/10.1037/0033-295X.98.2.224>

McCoy, S. K., & Major, B. (2003). Group identification moderates emotional responses to perceived prejudice. *Personality and Social Psychology Bulletin*, 29(8), 1005–1017.

<http://doi.org/10.1177/0146167203253466>

Metalsky, G. I., Laird, R. S., Heck, P. M., & Joiner, T. E. (1988). Attributional Theory: Clinical Applications. *Theories of Behavior Therapy: Exploring Behavior Change*, 385–413.

- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior*, 36(1), 38–56. <http://doi.org/10.2307/2137286>
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674–697. <http://doi.org/10.1037/0033-2909.129.5.674>
- Meyer, I. H., & Wilson, P. A. (2009). Sampling lesbian, gay, and bisexual populations. *Journal of Counseling Psychology*, 56(1), 23–31. <http://doi.org/10.1037/a0014587>
- Moretti, M. M. & Peled, M. (2004). Adolescent-parent attachment: Bonds that support healthy development. *Pediatric Child Health*, 9(8), 551–555.
- Nasr, N. and Zeidan, T. (2015). “As long as they stay away” *Exploring Lebanese Attitudes Towards Sexualities and Gender Identities*. Arab Foundation for Freedoms and Equality. Retrieved from <http://gsrc-mena.org/gsrc/as-long-as-they-stay-away-exploring-lebanese-attitudes-towards-sexualities-and-gender-identities/>
- Ostrander, R. (1998). The Role of Age, Family Support, and Negative Cognitions in the Prediction of Depressive Symptoms. *School Psychology Review*, 27(1), 121–137.
- Procidano, M. E., & Heller, K. (1983). Measures of perceived social support from friends and from family: Three validation studies. *American Journal of Community Psychology*, 11(1), 1–24. <http://doi.org/10.1007/BF00898416>
- Rivers, I., & Noret, N. (2008). Well-Being Among Same-Sex- and Opposite-Sex-Attracted Youth at School. *School Psychology Review*, 37(2), 174–187. Retrieved from

<http://proxy.lib.csus.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=32848650>

Rueger, S. Y., & Malecki, C. K. (2011). Effects of stress, attributional style and perceived parental support on depressive symptoms in early adolescence: a prospective analysis. *Journal of Clinical Child and Adolescent Psychology*, 40(3), 347–359.

<http://doi.org/10.1080/15374416.2011.563461>

Ryff, C. D., & Keyes, C. L. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719–727. <http://doi.org/10.1037/0022-3514.69.4.719>

Ryff, C. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069–1081. <http://doi.org/10.1037/034645>

Ryff, C. D., & Singer, B. (1998). The Contours of Positive Human Health. *Psychological Inquiry*, 9(1), 1–28.

Sánchez, F. J., & Vilain, E. (2009). Collective self-esteem as a coping resource for male-to-female transsexuals. *Journal of Counseling Psychology*, 56(1), 202–209. <http://doi.org/10.1037/a0014573>

Sanjuán, P., & Magallares, A. (2013). Coping Strategies as Mediating Variables Between Self-serving Attributional Bias and Subjective Well-Being. *Journal of Happiness Studies*, 1–11. <http://doi.org/10.1007/s10902-013-9430-2>

- Sanjuán, P., Pérez, A., Rueda, B., & Ruiz, Á. (2008). Interactive effects of attributional styles for positive and negative events on psychological distress. *Personality and Individual Differences, 45*(2), 187–190. <http://doi.org/10.1016/j.paid.2008.03.004>
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology - An introduction. *American Psychologist, 55*(1), 5–14. <http://doi.org/10.1037//0003-066x.55.1.5>
- Sellers, R. M., Caldwell, C. H., Schmeelkone, K. H., Zimmerman, M. A., (2003). Racial Identity, Racial Discrimination, Perceived Stress, and Psychological Distress among African American Young Adults, *44*(3), 302–317.
- Sheets, R. L., & Mohr, J. J. (2009). Perceived social support from friends and family and psychosocial functioning in bisexual young adult college students. *Journal of Counseling Psychology, 56*(1), 152–163. <http://doi.org/10.1037/0022-0167.56.1.152>
- Shilo, G., & Mor, Z. (2014). The impact of minority stressors on the mental and physical health of lesbian, gay, and bisexual youths and young adults. *Health & Social Work, 39*(3), 161–71. <http://doi.org/10.1093/hsw/hlu023>
- Shilo, G., & Savaya, R. (2011). Effects of Family and Friend Support on LGB Youths' Mental Health and Sexual Orientation Milestones. *Family Relations, 60*(3), 318–330. <http://doi.org/10.1111/j.1741-3729.2011.00648.x>
- Smith, P., Caputi, P., & Crittenden, N. (2013). Measuring Optimism in Organizations: Development of a Workplace Explanatory Style Questionnaire. *Journal of Happiness Studies, 14*(2), 415–432. <http://doi.org/10.1007/s10902-012-9336-4>

Snapp, S., Watson, R., Russell, S., Diaz, R., & Ryan, C. (2015). Social Support Networks for LGBT Young Adults: Low Cost Strategies for Positive Adjustment. *Family*

*Relations*, 64(3).<http://doi.org/10.1111/fare.12124>

Tabaac, A. R., Perrin, P. B., & Trujillo, M. A. (2015). Multiple mediational model of outness, social support, mental health, and wellness behavior in ethnically diverse lesbian, bisexual,

and queer women. *LGBT Health*, 2(3), 243–249. <http://doi.org/10.1089/lgbt.2014.0110>

Tajfel, H., & Turner, J. C. (1986).The Social Identity Theory of Intergroup Behavior. *Psychology of Intergroup Relations*, 7–24.

Van der Star, A., & Bränström, R. (2015). Acceptance of sexual minorities, discrimination, social capital and health and well-being: a cross-European study among members of same-

sex and opposite-sex couples. *BMC Public Health*, 15(1),

812.<http://doi.org/10.1186/s12889-015-2148-9>

Verkuyten, M. (2008). Life satisfaction among ethnic minorities: The role of discrimination and group identification. *Social Indicators Research*, 89(3), 391–404.

<http://doi.org/10.1007/s11205-008-9239-2>

Wagner, G. J., Aunon, F. M., Kaplan, R. L., Karam, R., Khouri, D., Tohme, J., & Mokhbat, J. (2013).Sexual stigma, psychological well-being and social engagement among men who

have sex with men in Beirut, Lebanon. *Culture, Health & Sexuality*, 15(5), 570–

82.<http://doi.org/10.1080/13691058.2013.775345>

Weiner, B., Frieze, I., Kukla, A., Reed, L., Rest, S., & Rosebaum, R. (1971). Perceiving the causes of financial success and failure, 1 – 26. Retrieved from

<http://www.researchgate.net/publication/232428593>

Willis, G. B. (1999). Cognitive Interviewing. A “how to” guide. *Evaluation*, 1–37.

<http://doi.org/10.1525/jer.2006.1.1.9>

Wong, C. F., Schrage, S. M., Holloway, I. W., Meyer, I. H., & Kipke, M. D. (2014). Minority Stress Experiences and Psychological Well-Being: The Impact of Support from and Connection to Social Networks within the Los Angeles House and Ball Communities.

*Prevention Science*, 15, 44–55. <http://doi.org/10.1007/s11121-012-0348-4>

### **Letter to NGOs**

To Whom it May Concern,

I am a clinical psychology graduate student at Haigazian University. I am currently in the data collection phase of my thesis.

I am trying to assess different buffers against minority stressors in the LGB population in Beirut. In particular, I am evaluating attributional styles, social support, and collective self-esteem, and their relation to wellbeing. Although this type of research is important, there is a lack of data that can help improve the services offered to the LGB community in our region.

I hope the findings of this research would enable the creation of protocols and support programs - which will address the needs of this population.

The findings of the study will be made public upon completion in summer 2016. The online survey will be completely anonymous as no personal information will be requested from the participants, or from you regarding your members.

I hope there is a possibility to publish the survey link on your social media pages, and share it with LGB members on your mailing list.

Kindly let me know if you need more detailed information as an organization in order to offer your assistance and support.

Regards,

Ruba Matta

### **Letter to Participants**

Dear friends!

Living in a conservative society, with regular stress related to being gay, affects our psychological wellbeing. Sadly, we rarely find a safe place to express our worries and frustrations.

NGOs are already doing a much appreciated effort to facilitate important services for us; however, there is no database to help develop programs for safeguarding mental health and providing psychological support for those in need.

So I decided to run a study on factors that act as buffers against stress and that work to increase wellbeing. I hope the study results can inform and guide NGOs and other professionals in providing a set of new services that we are lacking.

This research is meant to investigate several sorts of difficulties experienced by the LGBTQ community and to suggest coping approaches based on empirical findings - which, we hope, would "make things a bit better".

Here's our chance to voice our experiences in a safe, scientific and nonjudgmental context. It's also one of the first studies in the region to include the experiences of LBQ women.

So if you or anyone you know has experienced same sex attractions (even if you don't identify as LGBTQs), please contribute to this project that benefits us all; please take the survey and pass it on to friends.

[https://qtrial2016q1az1.qualtrics.com/SE/?SID=SV\\_6Dvd7fHByqfW41T](https://qtrial2016q1az1.qualtrics.com/SE/?SID=SV_6Dvd7fHByqfW41T)

### **Consent form**

Dear participant,

The current study is an academic survey exploring the relationship between various variables and the wellbeing of the LGB community in Beirut. Your participation consists of completing a series of questionnaires that require truthful responding. The survey is anonymous; no name or other identifying information is required. Data will be handled with confidentiality and stored on the personal computer of the investigator protected with a password that only the primary investigator will have. The data will then be analyzed at the group level and NOT individually. If you have any questions about the study or your participation do not hesitate to contact me at [roubam80@yahoo.com](mailto:roubam80@yahoo.com)

Your valuable participation in this research is on a voluntary basis. You are free to stop the questionnaire at any time. All the information you provide will be confidential and anonymous.

If you would like to take part in the study please click on the icon indicating your agreement.

Completion of the questionnaire will take approximately 25-35 minutes of your time.

Thank for you for your interest and your participation.

I hereby agree to take part in this research

I do not agree to take part in this research

### **Ryff's Wellbeing Questionnaire**

The following set of questions deals with how you feel about yourself and your life. Please remember that there are no right or wrong answers.

(1 = Strongly Disagree, 6 = Strongly Agree)

Most people see me as loving and affectionate

In general, I feel I am in charge of the situation in which I live

I am not interested in activities that will expand my horizons

When I look at the story of my life, I am pleased with how things have turned out

Maintaining (keeping) close relationships has been difficult and frustrating for me

I am not afraid to voice (give) my opinions, even when they are in opposition to the opinions of most people

The demands of everyday life often get me down

I live life one day at a time and don't really think about the future

In general, I feel confident and positive about myself

I often feel lonely because I have few close friends with whom to share my concerns

My decisions are not usually influenced by what everyone else is doing

I do not fit very well with the people and the community around me

I tend to focus on the present, because the future nearly always brings me problems

I feel like many of the people I know have gotten more out of life than I have

I enjoy personal and mutual (shared) conversations with family members or friends

I tend to worry about what other people think of me

I am quite good at managing the many responsibilities of my daily life

I don't want to try new ways of doing things - my life is fine the way it is

Being happy with myself is more important to me than having others approve of me

I often feel overwhelmed (crushed) by my responsibilities

I think it is important to have new experiences that challenge how you think about yourself and the world

My daily activities often seem trivial and unimportant to me

I like most aspects of my personality

I don't have many people who want to listen when I need to talk

I tend to be influenced by people with strong opinions

When I think about it, I haven't really improved much as a person over the years

I don't have a good sense of what it is I am trying to accomplish in life

I made some mistakes in the past, but I feel that all in all everything has worked out for the best

I generally do a good job of taking care of my personal finances and affairs

I used to set goals for myself, but that now seems like a waste of time

In many ways, I feel disappointed about my achievements in life

It seems to me that most other people have more friends than I do

I enjoy making plans for the future and working to make them a reality

People would describe me as a giving person, willing to share my time with others

I have confidence in my opinions, even if they are contrary to the general consensus (agreement of most people)

I am good at juggling (manipulating) my time so that I can fit everything in that needs to be done

I have a sense that I have developed a lot as a person over time

I am an active person in carrying out the plans I set for myself

I have not experienced many warm and trusting relationships with others

It's difficult for me to voice my own opinions on controversial matters (on matters that are disputed)

I do not enjoy being in new situations that require me to change my old familiar ways of doing things

Some people wander aimlessly through life, but I am not one of them

My attitude about myself is probably not as positive as most people feel about themselves

I often change my mind about decisions if my friends or family disagree

For me, life has been a continuous process of learning, changing, and growth

I sometimes feel as if I've done all there is to do in life

I know that I can trust my friends, and they know they can trust me

The past had its ups and downs, but in general, I wouldn't want to change it

I have difficulty arranging my life in a way that is satisfying to me

I gave up trying to make big improvements or changes in my life a long time ago

When I compare myself to friends and acquaintances, it makes me feel good about who I am

I judge myself by what I think is important, not by the values of what others think is important

I have been able to build a home and a lifestyle for myself that is much to my liking

There is truth to the saying that you can't teach an old dog new tricks (you can't teach an old person new habits)

### Measure of Gay Related Stress

Below are some issues you may have dealt with because of your sexual orientation. *Please check those events which you have experienced and indicate how stressful the issue/event was for you.* Be sure that all check marks are directly across from the items they correspond to.

(1 = Never, 6 = Almost constantly)

Worrying about introducing a new partner to my family

Rejection when I tell about my sexual orientation

Feeling uncomfortable being in public with groups of gays/lesbians (i.e., in a bar, church, rally)

Expectation from friends and family who do not know that I am gay/lesbian for me to date and marry someone of the opposite sex

Keeping my orientation secret from family and friends

Lack of support from family members due to my orientation

Working in a homophobic environment

Having my lover and family in the same place at the same time

Have problems telling straight friends about my sexual orientation

Rumors about me at work due to my sexual orientation

Actual loss of job due to sexual orientation

Discrimination in social services due to my orientation

Inability to get some jobs due to my sexual orientation

A feeling that I must always prove myself at work because of my sexual orientation

Fear that I will be attacked due to my sexual orientation

Dating someone openly gay/lesbian when I am not that open

Harassment at work due to my sexual orientation

Worrying about having people at work find out I'm gay/lesbian

Being outed to my family

Loss of friends due to my sexual orientation

Rejection by family members due to my sexual orientation

Distance between me and family due to my orientation

Fearful of being "outed" at work

My family's lack of understanding about my orientation

Physical assault (attack) due to my sexual orientation

Threat of violence due to my sexual orientation

Constant need to be careful to avoid having anti-gay/lesbian violence directed at me

Harassment due to my sexual orientation

Being called names due to my sexual orientation

Mental health discrimination due to my sexual orientation

Shame and guilt because I am gay or lesbian

Conflict between my self-image and the image people have about gays and lesbians

Difficulty accepting my sexual orientation

Being "outed" at work.

Unwillingness of my family to accept my partner

Housing discrimination due to my sexual orientation

Lack of security at work because I gay or lesbian

Hiding my sexual orientation from others

Fearful of being "outed" to my family

Fear of losing my job due to sexual orientation

Verbal assault(attack) due to my sexual orientation

### Collective Self-Esteem

People can be members of different social groups or social categories. We would like you to consider **your LGB group** when responding to the following statements. There are no right or wrong answers to any of these statements; we are interested in your honest reactions and opinions. Please read each statement carefully, and respond by using the following scale form.

(1 = Strongly Disagree, 7 = Strongly Agree)

I am a worthy (valuable) member of the LGB group

I often regret that I belong to the LGB group

Overall, my cultural group has very little to do with how I feel about myself.

I feel I don't have much to offer to the LGB group

In general, I'm glad to be a member of the LGB group

The LGB group I belong to is an important reflection of who I am

I am a cooperative participant in the activities of the LGB group

Overall, I often feel that the LGB group is not worthwhile

The LGB group is unimportant to my sense of what kind of a person I am

I often feel I'm a useless member of the LGB group

I feel good about the LGB group I belong to

In general, belonging to the LGB group is an important part of my self-image

### **Perceived Social Support - Friends**

The statements which follow refer to feelings and experiences which occur to most people at one time or another in their relationship with their friends. For each statement there are three possible answers: Yes, No, Don't know. Please select the answer you choose for each item.

My friends give me the moral support I need

Most other people are closer to their friends than I am

My friends enjoy hearing about what I think

When I confide (entrust) in the friends who are close to me, I get the idea that it makes them uncomfortable

I rely on my friends for emotional support

If I felt that one or more of my friends were upset with me, I'd just keep it to myself

I feel that I'm on the fringe in my circle of friends (less important member)

There is a friend I could go to, if I were just feeling down without feeling funny (uncomfortable) about it later

My friends and I are very open about what we think about things

My friends are sensitive to my personal needs

My friends come to me for emotional support

My friends are good at helping me solve problems

I have a deep sharing relationship with a number of friends

My friends get good ideas from me about how to do things

When I confide in friends, it makes me feel uncomfortable

My friends seek me out (reach out to me) for companionship

I think that my friends feel that I'm good at helping them solve problems

I don't have a relationship with a friend that is intimate, like other people do

I've recently gotten a good idea about how to do something from a friend

I wish my friends were much different

### **Perceived Social Support - Family**

The statements which follow refer to feelings and experiences which occur to most people at one time or another in their relationship with their families. For each statement there are three possible answers: Yes, No, Don't know. Please select the answer you choose for each item.

My family gives me the moral support I need

I get good ideas about how to do things from my family

Most other people are closer to their family than I am

When I confide (entrust) in the members of my family who are closest to me, I get the idea that it makes them uncomfortable

My family enjoys hearing about what I think

Members of my family share many of my interests

Certain members of my family come to me when they have problems or need advice

I rely on my family for emotional support

There is a member of my family I could go to if I were just feeling down, without feeling funny (uncomfortable) about it later

My family and I are very open about what we think about things

My family is sensitive to my personal needs

Members of my family come to me for emotional support

Members of my family are good at helping me solve problems

I have a deep sharing relationship with a number of members of my family

Members of my family get good ideas from me about how to do things

When I confide (entrust) in members of my family, it makes me feel uncomfortable

Members of my family seek me out (reach out to me) for companionship

I think that members of my family feel that I'm good at helping them solve problems

I don't have a relationship with a member of my family that is intimate, like other people do

I wish my family were much different

### Attributional Style Questionnaire

Read each situation and vividly (in detail) imagine it happening to you.

If the situation were to hypothetically happen to you, what do you feel is the **one main cause** behind it?

Write the main cause in the box provided. Then answer the 2 questions below for each statement:

- How likely is it that the main cause you gave will continue to affect you?
- Does the main cause you gave affect just this situation, or does it affect other areas of your life?

You have trouble sleeping

You feel sick and tired most of the time

You have a serious injury

You can't get the work done that others expect of you

You can't find a job

You don't understand what your boss wants you to do

You are fired from your job

You don't help a friend who has a problem

You have financial problems

A friend is very angry with you

You are guilty of breaking the law

You have a serious argument with someone in your family

We will now ask you some general demographics, please answer all items to the best you can

1. Sex:

X Female      X Male

2. How do you define your sexual orientation?

X Lesbian      X Gay      X Bisexual      X Queer

**3. Age:**

4. Nationality:

- Lebanese
- Palestinian
- Syrian
- Armenian
- Other

5. Education:

- No schooling
- Brevet
- Baccalaureate
- Technical School
- BA
- MA

**6. Occupation:**

7. Residence Area:

- Ashrafieh                      - Hamra                      - Manara                      - Suburbs
- Badaro                      - Gemmeyzeh                      - Downtown                      - Other

8. Religious Denomination:

- Christian Orthodox                      - Muslim Sunni
- Muslim Shiite
- Christian Catholic
- Christian Protestant                      - Druze
- Christian Maronite

9. Are you out to most of your family/friends/colleagues?

Family:           - out           - not out

Friends:           - out           - not out

Colleagues:       - out           - not out

10. If out, how long have you been out for?

- Less than 6 months

- one to three years

- more than three years