Mental and Sexual Health Outcomes of Gay and Bisexual Men in Lebanon

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I declare that the work presented in this thesis is, to the best of my knowledge and belief, original and my own work, except as acknowledged in the text. The material (presented as my own) has not been submitted previously, in whole or in part, for a degree at any other institution.

Abbreviations and glossary

AIDS	Acute Immunodeficiency Syndrome
ART	Antiretroviral therapy
CDC	Centers for Disease Control and Prevention
CES-D	Center for Epidemiologic Depression Scale
Chemsex	Drugs usage in sexualized contexts
EMR	Eastern Mediterranean Region
GBM	Gay and bisexual men
LGB	Lesbian, gay, bisexual
MSM	Men who have sex with men
NGOs	Non-governmental organizations
OR	Odds ratio
PLHIV	People living with HIV
PrEP	Pre-exposure prophylaxis
QoL	Quality of Life
STIs	Sexually transmitted infections
WHO	World Health Organization

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Abstract

This project explores two aspects concerning gay and bisexual men (GBM) in Lebanon: (1) the influence of religiosity, family, and societal perceptions on their sexual identity formation, and (2) the resulting mental and sexual health outcomes as they navigate identity-related challenges. Guided by the *identity process theory*, which views identity as a dynamic process shaped by various social and cultural factors, this project includes a comprehensive review of existing research and theoretical insights, along with findings from three empirical studies.

The first study (cross-sectional) examines psychosocial stressors affecting internalized sexual orientation stigma and mental health outcomes in GBM. Results highlight differences between GBM, with bisexuals experiencing increased stigma and more familial pressure to conform to heterosexual norms. Non-religious individuals were more likely to disclose their sexual orientation but faced increased mental health challenges. Bisexuality and religiosity positively correlated with internalized stigma, while openness about one's sexuality correlated negatively. Frequent religious attendance was associated with lower levels of depression and psychological distress.

The second study (semi-structured qualitative) aimed to understand mental, sexual, and identity-related challenges in GBM. Bisexual men often adhered to societal norms, displaying less sexual adventurousness while navigating stigmatized relationships with men. Identity principles, supportive environments, religion, and time influenced self-acceptance.

The third study (experimental) examined the influence of family experiences on identity threat and psychological distress in GBM. Recalling a family coming-out experience was linked to increased psychological distress and internalized stigma. Family outness indirectly predicted psychological distress through the mediation of identity threat. Religion had no significant impact on family outness, psychological distress, or identity threat.

Guided by the *identity process theory*, this project illuminates distinct facets of the experiences of GBM in Lebanon. The complex interplay between internalized stigma, psychological distress, and family dynamics contributes to a nuanced understanding of coping strategies among these groups.

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Chapter 1: Introduction

1. Introduction of the thesis

In the past, homosexuality was viewed as a disease and anti-gay sentiments were commonplace (Drescher, 2015). While many countries have made progress in reducing the stigma surrounding homosexuality, some individuals, organizations, and governments still perpetuate homophobia in various parts of the world. However, the reality is that this stigma continues to harm individuals, particularly young people who identify as gay, by limiting their access to essential resources like healthcare, education, employment, religious services, and familial acceptance (Hatzenbuehler, 2014). This discrimination also deprives them of the right to live a normal psychological life. This is particularly true for countries where same-sex relationships are legally prohibited, like the case of Lebanon.

"Identity principles" typically refer to the foundational concepts and beliefs that shape an individual's sense of self and identity. These principles can include aspects like one's values, beliefs, personal experiences, and cultural influences that contribute to the formation of one's identity (Kemph, 1969b). It has been demonstrated that gay men are more significantly impacted by psychological risks and stressors in Western industrialized society, which impact their identity principles and subsequently results in maladaptive behaviors. In some contexts, threats to self-esteem and self-efficacy among gay men after homophobic remarks and experiences can lead to a devaluation of the self and an inability to negotiate condom use during sexual encounters (Jaspal, 2016; Jaspal & Siraj, 2011). In addition, gay men who live with HIV can attempt to shield their identities through isolation which can lead to psychological adversity (Jaspal & Williamson, 2017). In order to avoid adverse health outcomes, certain gay men can resort to various coping strategies. One example is re-prioritizing the multiple elements of their identities by accentuating religious identities over sexual identity when facing a threat (Jaspal & Cinnirella, 2010). There are no similar studies among Lebanese gay men exploring the interactions of identity principles with psychosocial stressors and the resulting coping strategies, on both mental and sexual health.

Religiosity can have a positive impact on the mental health of minorities through various mechanisms (Koenig et al., 2012). Firstly, religious communities offer strong social support networks, mitigating feelings of isolation and loneliness, common risk factors for mental health

challenges. Secondly, faith and religious practices, such as prayer and meditation, function as effective coping mechanisms during stressful times, aiding individuals in managing emotional distress and anxiety. Additionally, religion provides a profound sense of purpose and meaning in life, particularly valuable for minorities facing discrimination, enabling them to focus on broader, transcendent goals. Active participation in religious communities, involving community service and volunteering, boosts self-esteem and overall mental well-being (Koenig et al., 2012; Pargament, 1997). Lastly, some religious doctrines discourage risky behaviors, such as substance abuse and unsafe sexual practices, which can have detrimental effects on mental health. Membership in cultural and religious groups is a crucial part of identity in Lebanon, and some studies have tried to examine the complex relationship between these groups and sexual identity. Young people in Lebanon can experience prejudice and rejection when they refuse to adapt to mainstream norms due to a variety of pressures they face (Kazarian, 2005). Given that Lebanese legislation and social norms prohibit sexual diversity like non-heterosexual identities, this may result in the regulation of sexuality (Obeid et al., 2019) as individuals may feel compelled to conform to the established legal and social expectations surrounding sexuality. Non-heterosexual people in Lebanon may suffer from poor mental health as a result of these discriminatory social attitudes against homosexuality. Assi et al. (2020) show in their study on Lebanese students that non-heterosexual students have less access to the protective effects of religiosity and are more likely than their heterosexual counterparts to resort to maladaptive coping strategies such as self-harm. In another study on the same population, Jaspal et al. (2020) examined the possibility that non-heterosexual people may be less prone to adopt coping mechanisms as a result of their diminished connection with religion and ethnicity. The authors also discussed identity resilience as a mediating factor in Lebanese male students' adaptive coping. This thesis proposes to specifically target the Lebanese gay and bisexual men (GBM) population in order to better understand the psychosocial stressors that are connected to outcomes in mental and sexual health. In fact, the process of navigating one's sexual identity within a heteronormative and religiously enhanced context can create unique challenges and stressors for individuals identifying as gay or bisexual. These challenges, in turn, may contribute to distinct patterns of mental health outcomes and sexual risk-taking behaviour. Therefore, moving forward, the aim is to understand some aspects of the complex interactions between identity processes and the psychosocial stressors that contribute to sexual risk-taking behaviours among the Lebanese GBM population.

Sexual risk-taking behaviors such as low condom use, multiple sexual partners, and poor HIV testing rates among Lebanese gay men have been described in the literature. The World Health Organization (WHO) (2017) reported testing rates among Lebanese gay men ranging from 25% in 2010 to 38% in 2014. A 2010 bio-behavioral study conducted in Beirut in men who have sex with men (MSM) reported that 75% had non-regular sexual partners but only 39% reported using condoms during every sexual encounter (Mahfoud et al., 2010). With 36% of MSM reportedly having sold sex, there is evidence of overlapping risks across this population. Despite a high level of knowledge about HIV and perceptions of infection risk, only 22% of MSM had ever previously tested for HIV. Evidently, knowledge seems to be a very weak predictor of preventive behaviors in this highly stigmatized context. Analysis from a qualitative study of 31 MSM from Beirut found that trust, commitment, and intimacy guided decisions related to condom use (Wagner et al., 2012).

Fear of infection is a driving force for HIV testing, but it is buffered by fear of positive results and associated stigma. In addition, disclosure of sexual orientation to family and parents as well as generally being comfortable with one's sexual orientation ensured consistent condom use and HIV testing. According to Wagner et al. (2012), respondents who were more at ease with their sexual orientation and who had told their parents about it likely do use condoms regularly and get HIV tests routinely. A bio-behavioral study of 213 MSM in Beirut showed that being in a relationship as well as having any kind of university education decreased the odds of unprotected anal sex (Wagner et al., 2014). Analysis from a 2019 sample of 226 young MSM in Beirut showed that integration into gay community, as an aspect of sexual identity development, predicted both HIV testing and high-risk sexual behaviors (Wagner et al., 2020). Whereas sexual risk-taking evidently seems to be high across the Lebanese MSM population, the psychosocial correlates and antecedents of these behaviors are poorly studied (Maatouk & Jaspal, 2020a). This project will look to shed light on these mechanisms and link them to psychosocial antecedents, mental health, and identity variables.

On another hand, this project will particularly look at the sub-group of bisexual men. Within the broad group of Lesbian, gay and bisexual (LGB) communities, bisexuals may be viewed as a minority despite that many studies from Western societies reported that their percentages were even higher than gays and lesbians (Copen et al., 2016; Zaza et al., 2016). However, the bisexual population often remains hidden and consequently marginalized, making it challenging to fully understand the issues faced by this less visible group. Research on the

challenges experienced by bisexual individuals is primarily documented in Western literature: disregard of their sexual orientation (Ross, Dobinson & Eady, 2010); internalized and external homonegativity and binegativity which lead to self-acceptance challenges (Feinstein & Dyar, 2017); lack of acceptance from heterosexual partners, and isolation related to limited bisexual community (Feinstein & Newcomb, 2017); childhood adversity (Jorm et al., 2002); negative support from friends and family (Movement Advancement Project, 2019); poor overall health including physical and mental health (Feinstein et al., 2018 and Movement Advancement Project, 2019); workplace potential discrimination (Tweedy & Yescavage, 2013) and higher rates of stalking by an intimate (mainly male) partner, as well as sexual assault and violence when compared with women (Chen et al., 2020).

There is empirical evidence connecting several forms of distal stress, including those experienced by sexual minorities, to poorer mental and physical health. Bisexual men have been found to be at increased risk of: engaging in illegal drug use (Green & Feinstein, 2012), reporting depression and anxiety (Gruskin & Gordon, 2006), having chronic disease and HIV and other sexually transmitted infections or STIs (Gust et al., 2013). Moreover, illicit drug use has been reported high in these communities and has been associated with riskier sexual behavior and HIV infection (Ross et al., 2010). Poor mental health is frequently associated with drug use and sexual risk-taking. Research on identity among bisexual men in Lebanon is inexistent and little is known about sexual self-identification among *behaviorally* bisexual men (Maatouk & Jaspal 2020a). While it is hypothesized that many MSM prefer the label of "bisexual" to destigmatize their behavior, no previous studies have been conducted about bisexual men in Lebanon. Furthermore, it is true that some conclusions can be drawn from small samples of men who self-identify as bisexual, often combined with MSM samples but these studies were not dedicated to bisexual men. Recently, literature recognized the complexities of behaviorally bisexual men' sexual lives and health implications in terms of both risk and resilience. The significance of sexual self-identity in bisexual men research is still relatively unclear and inexistent in Lebanon. This is one of the aspects that will be studied in this project. Indeed, the comparative analysis of GBM holds pivotal importance. It serves as a cornerstone for tailoring support interventions, bridging research gaps, promoting inclusivity, addressing health disparities, and deepening understanding of the distinctive challenges and health implications experienced by GBM in Lebanon. While both groups may confront stressors related to their sexual orientation, there is a growing body of literature that endeavors to discern the specific factors influencing the well-being of each group. These discerned factors necessitate focused attention and investigation.

2. Overview of the thesis

Aims/hypotheses

The provided information underscores a significant gap in the literature within Lebanon, a nation where same-sex relationships are legally prohibited. Furthermore, participation in cultural and religious groups constitutes a vital aspect of identity, which may interact intricately with identity processes and psychosocial stressors contributing to sexual risk-taking behaviors among the Lebanese GBM population, especially given the concentrated HIV epidemic among MSM (see Chapter 3). Additionally, the significance of sexual self-identity in research on bisexual men remains relatively unexplored and absent in the Lebanese context. Although both groups encounter stressors related to their sexual orientation, an emerging body of literature seeks to discern the specific factors influencing the well-being of each group. In terms of theoretical framework, *Identity process theory* will be used. Indeed, this theory posits that identity is a dynamic, evolving construct influenced by various social, cultural, and contextual factors. It emphasizes that identity development is an ongoing process, not a fixed state, and explores how individuals form their sense of self through interactions and experiences. The theory highlights the role of social identity and the impact of societal and cultural influences on shaping one's identity.

In light with the gaps presented, and in the frame of the *Identity process theory*, the overall aim of this study is to understand sexual identity, mental and sexual health outcomes in adult GBM in Lebanon. This will allow then to compare all these factors between bisexual men and gay men to understand what differences there are, if any, between these 2 groups.

The hypotheses, specifically the first five hypotheses (numbered 1 to 5, as outlined below in this section) were meticulously developed, drawing from insight from the literature, theoretical considerations, combined with the candidate's clinical expertise and practice and the results progressively obtained through fieldwork with GBM patients over eight years.

Accordingly, the inception of the first study was based on a synthesis of findings from the literature, theoretical considerations, fieldwork and clinical practice. Subsequently, upon obtaining the results of the initial study, a strategic decision was made to conduct the second study. This subsequent investigation was designed to provide an additional layer of validation

for the findings of the first study, employing a different methodological lens to ensure robustness and reliability.

Building upon the outcomes of the first two studies, a crucial phase of interpretation ensued, leading to the formulation of hypotheses for the third study. This set of hypotheses (numbered 6 to 9, outlined below) was intricately linked to the insights derived from the design and results of the preceding studies.

It is imperative to acknowledge, preceding the detailed list of hypotheses, that the formulation of the initial five hypotheses preceded the commencement of the first study. Moreover, the design of the subsequent study was informed by the results of the first study, and the hypotheses for the subsequent study were derived from the cumulative outcomes of both studies. This sequential approach underscores the iterative and dynamic nature of hypothesis development, mirroring the methodological progression from quantitative to qualitative and ultimately to experimental methodologies. Informed by the diverse approaches to sequential designs, the candidate strategically employed a mixed-method explanatory sequential design, opting for a sequential progression from quantitative to qualitative methods. Recognizing the absence of a universally correct methodology, this strategic decision was guided by the understanding that initial quantitative analysis could provide a general understanding, while subsequent qualitative exploration refines and explains statistical results, aligning with the rationale highlighted in the literature (Walker & Baxter, 2019). A mixed-methods approach where statistical trends (quantitative data) were combined with narratives and lived experiences (qualitative data), provides in this specific context a better understanding of the research problem (see Chapter 5 on Methodological overview for further details). This approach was followed with the collection and analysis of quantitative and qualitative data in response to research questions, using rigorous qualitative and quantitative methods, integrating findings for interpretation of results, and framing the design within the theory (Identity process theory).

Central to this process is the recognition that not all hypotheses were preconceived before embarking on the three studies. Instead, they evolved incrementally, shaped by the unfolding research journey. This deliberate and iterative approach underscores the rigor and adaptability inherent in both the research design and the formulation of hypotheses.

Research questions

In this project, the aim will be to answer the following questions:

How do GBM conduct, manage and present their identity in distinct contexts (e.g. cultural, social, religious, economic, education different settings)?

How do GBM respectively manage their identities and what are the differences between them? How does identity management affect mental and sexual health outcomes?

What are the differences between GBM in mental and sexual health outcomes?

Hypotheses

The following hypotheses were tested across the project:

- (1) In comparison to homosexual men, bisexual men are more likely to report experiencing internalized stigma, less outness, and family pressure to have a heterosexual marriage.
- (2) Compared to Christians and Muslims, non-religious people will report more outness and a lower likelihood of familial pressure to get married, but they will also experience poorer mental health.
- (3) While being out will be negatively related with internalized sexual orientation stigma, religiosity and being bisexual will be positively connected with internalized stigma.
- (4) More individuals expected to get married reported a history of self-harm.
- (5) Frequency of attending one's place of worship will be negatively associated with psychological distress and depression.
- (6) People who experienced family outness (recalling a negative family experience related to sexuality) will report more identity threat and distress compared to those in the stable condition.
- (7) Family outness (recalling a negative family experience related to sexuality) will have an effect on the independent variable of psychological distress through the mediation of identity threat.
- (8) Internalized sexual orientation stigma will have an effect on the independent variable of psychological distress through the mediation of identity threat.
- (9) The quadripartite variables of family outness-internalized sexual orientation stigmaidentity threat-psychological distress will be unaffected by religiosity.

Please refer to the paragraph titled "Aims/hypotheses" for an overview of how these hypotheses were formulated.

Overview of studies

This research has 2 main parts. The first one (Chapters 2,3,4 and 5) is a review of empirical and theoretical findings about GBM identity, orientation, sexual and mental health outcomes and major studies in this field conducted in Western literature and in Lebanon. The second part (Chapters 6,7,8) consists of 3 empirical studies, whereby in study 1 and 3 hypotheses are tested and research questions are explored in study 2, as per below:

Internalized sexual orientation stigma and mental health in a religiously diverse sample of gay and bisexual men in Lebanon (Study 1)

Aim: This cross-sectional study looked at the factors that influence internalized stigmas related to sexual orientation and mental health indicators (such as depression and psychological distress) in a sample of GBM from Lebanon who were from a variety of religious backgrounds. *Method:* A sample size of 277 participants self-identifying as GBM, aged 18 and above were recruited from private clinics and non-governmental organizations and correlations and predictions were studied using ANOVA, t-tests, and multiple regression.

Link to research question: This study aimed at exploring the different psychosocial stressors among Lebanese MSM and studying their association with threats to identity principles and adverse behaviors and mental/sexual health outcomes.

Internalized sexual orientation stigma, coming out, self-acceptance, religiosity and sexual behavior among bisexual and gay men: qualitative findings (Study 2)

Aim: Participants were solicited on perceived identities, stressful experiences, sexual health behaviours in relation to sense of self and mental health. A special interest was given to sexual identity, connection with and support from people, stigma about sexuality, family and other support, use of drugs in sexual experiences, HIV status, and psychological well-being.

Method: Fifteen GBM aged 18 and above were recruited and 60 to 90-minute interviews were conducted using a semi-structured questionnaire with open-ended questions. All interviews were digitally recorded and fully transcribed for further qualitative analysis.

Link to research question: Past experiences and exposures of Lebanese MSM helped elucidate how they have constructed their identities, as well as the coping strategies used to protect their identity principles.

Impact of psychological stressors on the process of identity construction among Lebanese MSM and bisexual men (Study 3)

Aim: The objective of this study was to investigate the impact of psychological stressors (related to family support regarding one's sexuality) on the process of identity construction among Lebanese GBM.

Method: A sample size of 100 Lebanese MSM/bisexual men were randomly divided into 2 separate participant pools. The first group was requested to recall (and briefly describe in few sentences) a prior event where family had pressure over any aspect of their sexuality ("can you recall an experience where your family had a pressure regarding any aspect of your sexuality?" - negative change condition) and the second group was asked to recall a positive family had a positive attitude regarding their sexuality ("can you recall an experience where your family ("can you recall an experience where your family had a positive family ("can you recall an experience where your family had a positive attitude regarding any aspect of your sexuality?" - unrelated to sexuality at all) (stability condition). After the manipulation, participants were asked to answer questions from the identity threat scale and the psychological distress scale.

Link to research question: This study aimed at investigating the impact of recalling a negative family experience related to sexuality on identity threat, and how this threat can disrupt identity construction by forcing individuals to adapt and respond to the challenges they face, ultimately influencing how they perceive and construct their identities in the face of these threats.

Finally, Chapter 9 will discuss all the findings in the frame of the empirical evidence and the theory and Chapter 10 will conclude.

Ethical considerations

The proposed research focused on collecting data from Lebanese GBM. This population represents a sexual minority that is difficult to access in Lebanon due to the risk of stigmatization associated with social disclosure. As sexual health care is privatized in Lebanon, contact was made with MSM in private clinics that represent safe and trusted spaces for this population.

The nature of this research will require the target population to sometimes revisit psychologically stressful memories. Ethical standards and norms governed the way this research was conducted. There are various documents (e.g. British Psychological Society code of conduct) that helped guide and inform decisions related to data collection and use. In addition to obtaining ethical approval ahead of the investigation, the researcher ensured that

every step of this project was delivered in ways that would prioritize the present and future wellbeing of the targeted population over other objectives and sought outcomes from this project.

Ethical approval for study 1 was sought and obtained from the Research Ethics Committee at De Montfort University. Ethical approvals for studies 2 and 3 were sought from the School Research Ethics Committee (SREC) at NTU. Throughout the project, the BPS Code of Ethics and Conduct guided decisions on issues that are mainly related to consent, confidentiality, and risk.

Chapter 2: Mental and sexual health outcomes in gay and bisexual men (review of evidence)

1. Definitions

In this section, I define sex, sexuality, sexual health and mental health, identity and sexual identity, and I overview some concepts about sexual orientation. Other terms such as religion, religiosity, spirituality are all also defined below.

Sex

The biological traits that distinguish humans as females or males are referred to as "sex". These biological traits are not mutually exclusive, and some people possess both. Although the term "sex" is frequently used to refer to "sexual activity" in many languages, and for technical purposes when discussing sexuality and sexual health, the above definition is recommended (World Health Organization, 2006).

Sexuality

Sexuality is "a central aspect of being human throughout life and encompasses sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction" (Rao & Nagaraj, 2015, p.S296). Biological, psychological, social, economic, political, cultural, ethical, legal, historical, religious, and spiritual elements all affect sexuality (World Health Organization, 2006).

Sexual health

Sexual health is a state of physical, emotional, mental and social well-being in relation to sexuality. It relies on a positive, inclusive, and respectful approach to sexuality and sexual relationships and requires consented and safe sexual experiences. The sexual rights of every person must be respected and upheld in order to achieve and sustain sexual health (World Health Organization, 2006).

Mental health

Mental health is a state of well-being where an individual can effectively cope with the normal stresses of life, can work productively and is able to contribute to their community (World Health Organization, 2016). It assumes that the individual can maintain his wellbeing and cope to the different psychosocial stressors like distress, anxiety, depression, self-harm, and others.

Identity

A steady sense of one's goals, beliefs, values, and life role constitute one's "identity" (Kemph, 1969b). Identity is intersectional. Gender, color, ethnicity, social status, religion, and sexual orientation are all included in one's identity. It is a keyword that carries the full weight of the need for a sense of who one is, with an overwhelming pace of change in surrounding social context. This concept tries to explain the effect of changes in the groups and networks in which people and their identities are embedded and the societal structures and practices in which those networks are themselves embedded. Identity exploration, assessment, and commitment to a comprehensive set of identity characteristics are all part of the dynamic process known as *Identity development*. (Dillon et al., 2011).

Sexual identity

Numerous authors have attempted to examine sexual identity, particularly for gay men. Being conscious of one's potential divergence from sexual standards and one's self as a sexual being are of particular importance to sexual identity. In addition to acknowledging one's sexual orientation—gay, bisexual, or heterosexual—it also refers to awareness and acceptance of one's thoughts, feelings, and actions. It defines a sexual being. Sexual identity and sexual orientation have been used interchangeably. They cannot, however, be used synonymously. In conservative settings, a guy with homosexual tendencies who engages in sex only with men might not self-identify as gay (Maatouk & Jaspal, 2020a). In this situation, identification would seem to be at odds with his orientation or behavior. There is evidence that a person's sexual orientation is decided early in life. However, sexual identity can appear at any time during the course of a life. Numerous authors conducted interviews with people who have claimed to "find" their sexual identities around their middle age (Savin-Williams et al., 2006). Social representations may have an impact on sexual identity labels. They could be at odds with the

sense of self or identity that people want to convey or project to others. Thus, sexual identity's precursors are subjective perception appraisal and categorization. This definition of sexual identity is the result of the person's own subjective view, evaluation, and classification of their sexuality as well as culture. Because of this, sexual identity and cultural and social context are inextricably linked.

Concept of sexual orientation

There is no specific theory explaining an individual's attraction to men, women, or both. Many hypotheses have been proposed in order to understand sexual orientations and sexual identities. The focus will be on the previous findings tapping into the psychological aspects of homosexuality and its social representations in different societal contexts. There will also be a summary of what is known about sexual orientation and sexual identity and the distinction between them.

According to the American Psychological Association, sexual orientation refers to an "enduring pattern of emotional, romantic and/or sexual attractions to men, women or both sexes" (American Psychological Association, 2008). The sexual orientation of a person can be either heterosexual, bisexual, or same sex (gay or lesbian). The majority of men are heterosexual, according to research, but there are very few gay men and even fewer bisexuals. Therefore, those who identify as same sex are a small minority (Bjørnson, 2015).

Four phenomena fall under the general rubric of "sexual orientation". First, *sexual behavior* consists of sexual interactions between persons of the same sex (homosexuals), opposite sex (heterosexuals), or both sexes (bisexual). This was the main objective of Kinsley who developed a scale to "measure" sexual orientation (Galupo et al., 2014). While a correlation exists between sexual orientation and sexual behavior, the correlation is not as perfect as it appears to be: some heterosexual men with no previous sexual contacts with other men could experience sexual relations with another male under particular circumstances. Another instance of how social settings affect the relationship between sexual orientation and behavior is the stigmatization of homosexuality in societies where a gay man might never act on this attraction. Second, *sexual identity* is one's self-conception as a homosexual, heterosexual or bisexual. Here also there could be differences between sexual identity and sexual orientation. The classic example is that of gay men who are not aware of their sexual orientation and who deny it and remain closeted.

Third comes the degree of *sexual attraction* to the same sex, the other sex, or both sexes (Bailey et al., 2016). Whereas some believe that sexual orientation depends on categories, others assess sexual orientation as a continuum ranging from exclusive opposite-sex to exclusive same sex attraction with degrees of non-exclusivity in between, usually rated on a 5- or 7-point Kinsey-like scale (Savin-Williams, 2016).

Fourth comes one's physiological *sexual arousal* to men vs women. Among the methodological problems here are people who experience sexual arousal in response to other men, but who may not construe this cognitively as "attraction" but rather may attribute it to other factors. This was further developed by Jaspal and Cinnirella (2010) in Muslim gay men, and by Maatouk and Jaspal (2020) in bisexual men living in conservative societies.

it is worth mentioning that the degree of association among homosexual attraction, behavior, and identity varies across individuals in different cultural contexts. Most researchers focus on self-reported patterns of sexual attraction rather than sexual behavior or identity which can be extremely constrained by local culture especially that sexual attraction is at the source of behavior and identity rather than the other way around (Bailey et al., 2016). Research attempts to study sexual orientation using sexual attraction rather than emotional attraction as a proxy, which makes empirical findings less complicated to interpret. Studies relying on emotional attraction would not be practical.

Religion

Religion is defined as a set of beliefs, practices, rituals and language that characterize a community engaged in the search for transcendent meaning and a framework of moral guidance, often centered around a belief in a divine or superhuman power (Arrey et al., 2016).

Religiosity

Religiosity refers to a person's connection to formal beliefs, group practices, and institutional aspects of faith. Those who "identify themselves as "religious" tended to link their beliefs to institutional, traditional, ritualized, and social expressions of faith (Paloutzian & Park, 2003, p.25)." In essence, religiosity is characterized as the engagement in a system of organized beliefs and worship that reflects commitments to the specific beliefs and practices associated with particular traditions (Paloutzian & Park, 2003).

Spirituality

Spirituality is "a personal life principle which animates a transcendent quality of relationship with God" (Paloutzian & Park, 2003, p.25). It involves seeing human existence in a bigger, more meaningful context and caring about the purpose of life and unseen aspects, like your connection to a supreme being. People often describe spirituality as a sense of closeness to God or feeling connected to the world and living things, expressing their deep feelings or experiences of connection with sacred beings or forces. It can also be seen as a search for universal truth, a form of belief that relates you to the world and gives meaning and definition to existence. (Paloutzian and Park, 2003).

2. Poor mental health outcomes in gay and bisexual men

In this section, a review of empirical studies on gay identity, sexual orientation, and mental health outcomes in GBM in the literature will be presented. The aim is not to provide a "systematic review", but to have an overall empirical background for the 3 studies of the thesis.

Poor mental health is more prevalent in GBM compared with heterosexual men. This was shown in 3 meta-analyses where significantly higher rates of depression, anxiety, substance dependence and abuse were reported (King et al., 2008; Meyer, 2003; Plöderl et al., 2006). Chakraborty et al. (2011) conducted the Adult Psychiatric Morbidity Survey in 2007 (n = 7403) where MSM from the United Kingdom were interviewed. Being gay was associated with different mental health disorders such as feeling unhappy, depression, generalized anxiety disorder, obsessive compulsive disorder, suicidal behavior, self-harm and alcohol/drug dependence. Another survey published later by Hickson et al. (2016) recruited 5,799 MSM from England, Scotland, and Wales. The authors looked at independent relationships between sociodemographic factors and four indices of mental health (depression, anxiety, attempted suicide, and self-harm). The prevalence of mental illness was significant: 21.3% of respondents reported symptoms of depression, 17.1% reported anxiety, 3.0% had tried suicide, and 6.5% had self-harmed in the previous year. The non-sexuality variables (younger age, lower education and lower income) were linked to all four mental health indicators. However, depression was also linked to being a member of ethnic minorities and to being bisexual. These results were new since previous studies failed to exhaustively correlate psychological or other factors to mental health indicators (Jaspal, 2019).

The above-mentioned large studies from the United Kingdom corroborate international findings that MSM and bisexual men are predisposed to mental health illnesses. Different countries and cultures like the Netherlands (Sandfort et al., 2014), National Latino and Asian American Study (Chae & Ayala 2010), Australia (Prestage et al., 2018), China (Liu et al., 2018 and Wen & Zheng, 2019), Canada (Salway et al., 2018) and the Middle East (Assi, Jaspal & Maatouk, 2020) have reported similar results. Methodologically, obtaining a global prevalence of mental health disorders in MSM is challenging for many reasons. First, these disorders are dynamically evolving, and diagnoses change with time. Second, many of these disorders constitute a spectrum of diseases rather than a definite diagnosis. This is particularly true with anxiety spectrum of diseases. Third, many papers fail to follow one universal classification of diseases and some of them report clinical symptoms without diagnoses. Finally, as an attempt to overcome the biases mentioned above, a meta-analysis by Semlyen et al. (2016) found that symptoms of common mental disorder were 26.2% among lesbian/gay, and 34% among bisexual, highlighting higher rates in the latter group.

Thus, several large studies and meta-analyses are consistent with the conclusion that MSM and bisexual men are predisposed to mental health illnesses. More in-depth studies attempted to investigate the factors that are linked to low mental health outcomes in GBM. To be able to understand "why" do some GBM experience negative mental health outcomes, social psychologists have been increasingly interested in the procedures used by people to explain and interpret their social worlds, mainly social representations. According to Moscovici (1981, p.182), social representations are "concepts, statements and explanations originating in daily life in the course of inter-individual communications". This theory is based on the collective character of the different members of social groups, i.e., who collectively hold numerous common social representations. The latter orient people and provide a code for social exchange, for naming and unambiguous classification (Potter & Litton, 1985). According to the *identity process theory*, social representations play a crucial role in shaping how individuals navigate identity threat and coping mechanisms (Jaspal & Breakwell, 2014).

When it comes to identity threat and coping, the *Identity process theory* suggests that challenges to one's identity, such as social stigmas or discrimination, can activate coping mechanisms. Individuals may turn to social representations as a resource for coping with identity threats. The common social representations serve as a support system, providing individuals with frameworks for understanding and responding to identity-related challenges. Conversely, identity threat can also influence the construction of social representations. This

reciprocal relationship highlights how social representations and identity threat/coping are interconnected processes within the framework of the *Identity process theory*.

Finally, while existing literature from various countries consistently demonstrates higher rates of mental health issues among GBM, mental health outcomes of Lebanese GBM remain significantly understudied as later presented in Chapter III. The available limited studies shed light on aspects of quality of life and the relationship between social support, stressors, and depression among Lebanese MSM.

3. Factors leading to poor mental health in gay and bisexual men

After overviewing the literature which reported a link between poor mental health and gay sexual orientation, the papers that reported association between high prevalence of stressors, and negative psychological indicators in GBM will be reviewed.

3.1. Individual factors

Identity is a term that is used in psychology but also in everyday conversation. "An identity is the set of meanings that define who one is when one is an occupant of a particular role in society, a member of a particular group, or claims particular characteristics that identify him or her as a unique person" (Burke & Stets, 2009, p. 3). For each individual, there are multiple identities based on their gender (male or female), sexual orientation (being homosexual, heterosexual, or other), religion (being religious, atheist or other), nationality, etc. The misleading characteristic of an identity is that it can be non-specific as to what the term means (Diamond, 2002). The focus here will be on the gender and sexual identities. The complex theoretical components of social and psychological identities will be discussed in another chapter (see Chapter 4).

A prominent risk factor of mental health disorders in GBM is the internalized LGB-related prejudice (Hall, 2018). Consistent with the minority stress theory (Meyer, 2007), results showed that hiding one's sexual identity (and the consequent stress) along with coming out are risk factors of depression. According to the theory, gay and bisexual individuals can experience not only an array of typical life stressors (like illness, death of a loved one, job loss), but also stressors specific to their minority sexual orientation identity. These specific stressors can be

categorized into four domains: prejudice events (harassment, discrimination, rejection), expectations of prejudice events, concealment of identity, and the internalization of negative societal attitudes (*internalized homophobia or internalized sexual orientation stigma*).

Moreover, Meyer (2007) discussed that individuals who face obstacles to come out, because of shame, guilt, or threat, usually follow a mal-adaptive coping. In fact, identity concealment inhibits expression and interferes with close interpersonal relationships, thus is burdensome (Critcher & Ferguson, 2014). Reciprocally, being open with others about one's sexual identity and depression are inversely related. Despite its difficulty, coming out can also lead to support and coping assistance (Meyer, 2007). If prejudice is dealt with negatively, it is reported to be a risk factor of mental health disorders.

Within the minority stress theory, age was found to modulate mental health outcomes. In both age categories, it is evident that sexual identity development without a minority stress frame, leads to better mental health outcomes. However, in youth, Rosario et al. (2011) reported that high level of integration of sexual identity was less likely linked to depression. Many LGB youth are less likely to conform to traditional gender roles (Hall, 2018) but this factor was unrelated to depression. Additionally, being gender nonconforming, which usually happens at later phases of sexual identity development, may place the person at an increased danger of bullying and harassment, which in turn causes depressed status (Hall, 2018). The development of sexual identity, at a younger age was found a protective factor against depression. For instance, Rendina et al. (2019) found through cross-sectional data from a sample of MSM in New York City, that gay sexual identity and childhood gender non-conformity were associated with sexual identity development at a younger age, and were associated with faster progression through the development process. However, this conclusion should be interpreted cautiously as it was also shown, in the same paper, that a fast progression (rather than a "normal" one) through the sexual identity development process was associated with more discrimination, emotional dysregulation, sexual compulsivity and later anxiety and depression. Thus, it is clear that a "normal" (neither fast nor slow) progression speed towards sexual identity development in youth leads to better mental health outcomes.

Thus, individual factors leading to poor mental health outcomes in GBM are mainly summarized under "age". The latter translates previous experiences in childhood, university time, and previous relationships. Other individual factors could include personality traits, genetic characteristics, temper, etc. This type of factors is hard to assess and explore. Moreover, pinpointing and exploring the full spectrum of individual factors that may influence mental health outcomes in this population is complex and challenging.

3.2. Relationships and social interactions

Beside individual factors, social contexts in which individuals live can have significant implications in terms of development and psychological coping (Rosario et al., 2011). Let us first start by introducing further the concept of *Social representations* which are cognitive structures which function to facilitate communication between members of a collectivity because of their shared or consensual form. These shared or consensual cognitive structures create a common ground, fostering a shared reality among group members. Social representations are not only essential for communication but also play a crucial role in how individuals navigate their social environment and construct meaning from their experiences. The creation of social representations involves two key processes: anchoring and

objectification (Maatouk & Jaspal, 2020). Anchoring integrates novel and unfamiliar phenomena into existing thought patterns, while objectification transforms abstract concepts into concrete, tangible forms, often using metaphors. These processes occur across diverse social contexts such as media, literature, political discourse, patient-practitioner interactions, and everyday conversations.

For the individual, their role is to give novel experiences (whether people, objects, events) meaning by setting them in a contextual frame that makes them familiar (Moscovici, 1981). Moscovici's work provides insights into the formation and evolution of these representations, shedding light on the intricate processes through which shared meanings are constructed and maintained within social groups. Social representations contribute significantly to identity formation and management, influencing how individuals cope with threats to their identity. If these coping mechanisms are positive, mental health outcomes are better and vice versa. The maladaptive strategies included perceived burden to others ("burdersomeness" by Hall, 2018), feelings of social isolation and lack of belonging. They usually lead to avoidance, suppression, distraction, and an overall negative self-esteem. The consequent mental health disorders are usually depression (Hall, 2018), suicidal behavior (through or not depression) (Barzilay et al., 2015; Joiner, 2005), anxiety disorders including social phobia and generalized anxiety etc. Reciprocally, self-esteem and positive coping strategies (e.g., social support, constructive reinterpretation) are prominent protective factors against depression (Hall, 2018). According

to Meyer (2007), integrating one's sexual identity with other identities within self to achieve identity synthesis can serve as a protective factor, moderating the impact of specific stressors and influencing mental health outcomes. Meyer's concept of identity synthesis suggests that when individuals successfully integrate their sexual identity with other facets of their overall identity, they create a more cohesive and harmonious sense of self. This integration may include aspects such as gender identity, cultural background, and personal values. By intertwining these various dimensions, individuals can foster a more resilient foundation, which, in turn, helps buffer against the negative effects of external stressors related to prejudice and discrimination. His work sheds light on how social representations of sexual minorities, including those related to homosexuality and bisexuality, can impact mental health. The process of identity synthesis becomes a proactive coping strategy, enabling individuals to navigate societal challenges with greater resilience. Reliance on positive coping strategies was frequently found to be reversely linked to depression, which is also consistent with results from youth in the general population (Cairns et al., 2014). In conclusion, by drawing on Moscovici's work, one can deepen the exploration of social representations as cognitive structures that go beyond facilitating communication to actively shaping individual experiences, identity management, and mental health outcomes, particularly in the context of sexual identity. This holistic perspective contributes to a more comprehensive understanding of the intricate interplay between social representations and various facets of individual psychology, identity, and well-being.

Difficulties faced in developing a cohesive sexual identity within certain social contexts can have detrimental effects on an individual's psychological well-being, including internalized homophobia, distorted self-perception, and decreased self-esteem, ultimately hindering the formation of a healthy self-concept. Conversely, perceiving support and friendliness from others can enhance self-esteem. Social context encompasses the received social support and attitudes of one's social environment, as well as the perceived social support in comparison to the actual social attitudes. Furthermore, social support involves an individual's perception of their worth and feeling cared for by others, as well as being content with the support they receive from their surroundings (Sarason et al., 1987). Therefore, the role of family, friends, school environment, and the wider community is crucial in providing these factors.

Specifically, regarding sexual identity, literature suggests that "adolescent development is further influenced by being gay or bisexual in an essentially heterosexual society" (Hossain & Ferreira, 2019, p52). Studies have shown a positive correlation between individuals who

experience social support, hold positive attitudes towards homosexuality, and an increase in self-esteem (McNicholas, 2002). Conversely, individuals may feel distanced and disconnected from the socially favored heterosexual group, leading to negative self-esteem development towards that group (Grossman, 1997). In fact, not conforming to expected heterosexual behavior and experiencing homosexuality may put individuals at risk of disparagement, hindering positive self-concept development and formation (Rotheram-Borus et al., 1995). A systematic review on the impact of social context on the self-concept of gay and lesbian youth (Hossain & Ferreira, 2019) reported that a supportive social environment and positive social relationships can positively enhance self-perception, self-acceptance, and self-esteem.

A social interaction relies on family factors, outgroup friendships, intragroup friendships, romantic and sexual relationships. For instance, Schrimshaw et al. (2018) reported a number of specific reasons for non-disclosure in bisexual men including anticipation of negative emotions/reactions and of negative changes in relationships; conviction and anticipation that others held stigma and rejection toward homosexuality; history of negative reactions to coming out; wanting to maintain good perceptions from others; fear that those told about sexuality would disclose to non-tolerant people; and fear of rejection due to culture or religion. Also, romantic relationships were found to be a moderator of the associations between discrimination and anxiety in gay men. Positive associations between discrimination and mental health issues (depression and anxiety) were seen in bisexual men who were single, but not in those who were in relationships (Feinstein et al., 2016). However, perceptions of greater control in romantic relationships increased the risk of having condomless anal sex in gay men (Cook et al., 2016). The reported aspects of social interaction will be detailed in the next subsections.

3.2.1. Role of the family

A protective factor for GBM's mental health outcomes is parental responsiveness. Indeed, Lawrenz and Habigzang (2019) found through a sample study that mental health was negatively affected by the need to conceal sexual orientation and parental responsiveness was associated with lower incident enacted stigma and depression.

Conversely, family rejection is a risk factor for depression. For instance, being homeless due to rejection by parents is positively associated with depression (Hall, 2018). The relationship between family support and depression showed contradictory results (some studies showing a protective effect and others showing no effect) (Hall, 2018). Previous research has found that supportive families are more likely to accept gay orientation which mediates gay men's psychological adjustment. In fact, family acceptance leads to family support and knowledge,

which both positively affect identity formation. For instance, Elizur and Ziv (2001) focused on the schema of support-acceptance-knowledge within families, and their effect on gay identity, self-esteem and mental health. Among 114 Israeli gay men, the main effect of family support/acceptance on gay identity was related to disclosure. In fact, the study identified a compelling link between family support/acceptance and the development of gay identity. Notably, the primary influence of familial support was observed in the process of disclosing one's sexual orientation. The research shed light on how family dynamics could significantly impact the overall well-being of gay individuals, emphasizing the pivotal role of familial acceptance in shaping a positive gay identity. Furthermore, the research highlights the broader impact of family support and acceptance on the coping mechanisms of gay men. It emphasizes how an environment of support and acceptance within the family unit serves as a vital resource for navigating the challenges associated with being gay. By fostering a sense of belonging and validation, family support contributes significantly to the psychological adjustment and well-being of gay individuals. Finally, the study's findings challenge conventional notions about familial acceptance in societies with traditional family values. Despite potential cultural barriers, Elizur and Ziv's research suggests that families can play a positive and supportive role in the lives of gay men. This assertion forms the basis of what the authors term the "resiliency model." The resiliency model suggests that, irrespective of societal norms, families have the capacity to foster resilience and contribute positively to the psychological well-being of gay individuals.

3.2.2. Social support and group relationships

Social support from friends, or outgroup friendship, is a protective effect for mental health disorders despite the presence of studies which could not report this protection (Hall, 2018). Concurrent friend support is more often protective against depression than friend support in the past. Social stigma has been studied empirically and reports give very useful insight in the relation between stigma from family, from friends, and general social stigma and MSM behavior. In a study of 304 gay men, Hart et al. (2017) reported a link between **childhood bullying** and adult loneliness, depression, and anxiety. Furthermore, a review of empirical findings on psychosocial and health outcomes associated with peer victimization related to sexual orientation and gender identity was conducted by Collier et al. (2013) between 1995-2012 in twelve countries. Despite the methodological and social contexts diversity, the authors

reported that peer victimization secondary to sexual orientation and gender identity is linked to a diminished sense of school belonging and higher levels of depression. Moreover, peer victimization increases the risk of educational trajectory disruptions, substance abuse and traumatic stress. Another study (n=1423) of GBM revealed greater rates of mental health disorders in those who had experienced significant **levels of victimization**, according to Sattler and Christiansen (2017). Furthermore, this study introduced a new concept beside victimization which is the **expectation of being rejected**. In fact, Sattler and Christiansen (2017) reported that individuals who expected to be rejected by others expressed a higher rate of mental health disorders.

Expectations regarding rejection are shaped by **social representations** in an individual's context. For instance, sexual minorities face greater exposure to discrimination and rejection and thus may engage in "sexual orientation concealment" in order to avoid danger. This social stigma and minority stress places individuals at further risk for anxiety and related disorders. A sample of 157 GBM and 157 heterosexuals were investigated, and it was found that sexual minority adults reported greater symptoms of anxiety relative to heterosexuals. Concealment of sexual orientation by feigning heterosexuality significantly predicted symptoms of social phobia (Cohen et al., 2016). Furthermore, enacted stigma is associated with depression and social anxiety (Pachankis et al., 2018). Both internalized and anticipated sexual orientation stigma show parallel associations with social anxiety. Stigma was associated with depression among men showing higher masculinity levels as compared to those with higher femininity (Pachankis et al., 2018), probably because of a greater internal prejudice.

In regard to bisexual men, a critical review aimed at understanding the relationship between discrimination towards bisexual people and their mental and physical health (Pennasilico and Amodeo, 2019). The authors mentioned different forms of bisexual discrimination, such as biphobia, bisexual invisibility, and bi-erasure, showing how biphobia is different from homophobia, and how heavily it is perpetrated inside and outside the LGB community. In fact, despite constituting a significant proportion of the population, bisexual people often face marginalization and discrimination due to societal misconceptions and systemic biases. Biphobia and bisexual erasure perpetuate the invisibility of bisexual individuals across various domains, including media representation and everyday social interactions. This erasure is rooted in a social phenomenon known as the epistemic contract of bisexual erasure, which reflects the societal response to the perceived threat posed by bisexuality to existing norms and systems. The consequences of bisexual invisibility extend beyond social exclusion, affecting

the health and well-being of bisexual individuals. Studies indicate higher rates of depression, anxiety, and suicidal ideation among bisexual individuals compared to their gay, lesbian, and heterosexual counterparts. This disparity is exacerbated by minority stress, experienced due to the stigmatization of bisexual identity within both broader society and LGB communities. In healthcare contexts, biphobia and identity erasure further compound the challenges faced by bisexual individuals, hindering access to appropriate healthcare services. Bisexual people are less likely to disclose their sexual orientation to healthcare providers, leading to gaps in understanding and addressing their unique health needs.

As such, this discrimination can have physical and mental health outcomes which will be detailed by the end of this chapter and by the end of Chapter 4.

3.2.3. Ingroup relationships

Peers providing social support, as well as being in a romantic relationship and engaging in sexual activity, have been found to offer protection against depression. However, **body self-image as perceived by peers and HIV status** can significantly influence this protection. For example, Marmara et al. (2018) surveyed 796 gay men in Australia and found that various measures of body image disturbance were independently linked to self-esteem, well-being, and psychological distress. These links were moderated by relationship status and type, indicating that although gay men may feel pressured to meet appearance-related standards to attract partners, being in a relationship does not necessarily mitigate the impact of body image dissatisfaction on mental health. Similarly, HIV status can also affect mental health outcomes. Lyons et al. (2016) found that low levels of internalized HIV-related stigma, employment status, higher levels of support, and family support were all associated with positive mental health outcomes among 357 HIV-positive gay men in Australia. Rejection from the gay community due to HIV status or body image issues may result in isolation, which has been linked to depression.

Intra-group rejection has been studied in a reciprocal way. Petruzzella et al. (2019) found that gay community connectedness was associated with lower internalizing symptoms. These results were more prominent for non-white gay men, those whose sexual identity was more central to their overall identity, and those who are more feminine. More self-described "feminine" men experience fast reductions in concealment, compared to more self-described "masculine" men. Another study conducted by Salfas et al. (2019) aimed at examining and

comparing the roles of community involvement and identification in affecting GBM's mental health. It was found that community involvement was positively associated with better mental health outcomes, in addition to moderating the impact of internalized homonegativity on mental health.

3.3. Other factors and correlates of mental health outcomes in MSM

A negative social interaction experienced for example by being ignored, treated poorly, experiencing abuse or neglect or any other traumatic event like an assault, a disaster, or a serious accident **during childhood** were all unequivocally associated with depression. Particularly, some studies examined school-related factors and found that bullying victimization at school was a risk factor for depression (Hall, 2018). However, evidence failed to report a link between general stressful life events (such as the death of a loved one or the breakup of a romance) and depression.

Mental health outcomes among GBM are influenced by various factors, including socioeconomic status. Research has shown that men from higher socio-economic backgrounds may experience fewer anticipated stigmas than men from lower socio-economic backgrounds (Pachankis et al., 2018; Jaspal et al., 2019). Conversely, studies have also found that experiencing discrimination due to **lower socio-economic status** is associated with higher levels of discrimination and predicts increased symptoms of depression and anxiety (Gamarel et al., 2012).

Jaspal (2019; 2020) reported other factors such as belonging to an **ethnic or a religious minority**. Moreover, Shangani et al. (2019) studied differences in reports of minority stressors by race/ethnicity and socio-economic status among sexual minority adults. They found that African Americans and Latinos experience greater anticipated stigma in comparison to White people. In African Americans, high socio-economic status was associated with more enacted stigma, while the opposite was true for White people. They concluded that stress processes operate differently for sexual minority people of color than they do for White sexual minorities, and for low socio-economic status in comparison to high socio-economic status. Furthermore, Baiden et al. (2020) studied the overlapping effect of sexual orientation and race/ethnicity on suicidal behaviors among adolescents. It was found through a sample study that non-White

sexual minority adolescents were more likely to report suicidal ideations. Hispanic gay adolescents were more likely to commit suicidal attempts. Black and Native American/Native Hawaiian/Pacific Islander bisexual adolescents have higher odds of attempting suicide. They also found many of the other associations already discussed such as family support, previous sexual assault, bullying etc.

All these empirical studies suggest that situational stressors (low economic status, belonging to ethnic/religious minority) result in negative psychological behavior and predispose gay men to poorer mental health outcomes. However, most of these factors were not assessed in GBM in Lebanon.

3.4. Religious identity

According to Ellison and Levin (1998), religion and spirituality may both have an impact on health through a variety of processes. Religion ensures the provision of social relationships and guides personal lifestyles and health practices. Furthermore, it promotes positive selfperceptions, provides specific coping resources and behavioral responses to stress, generates positive emotions like love and forgiveness, and promotes health beliefs.

Religion and spirituality are important for 50% of LGB of the American society. In fact, the Pew Research Center reported that 51 % of LGB adults; 52% of gay and 51% of bisexual men were religiously affiliated (Pew, 2013; Ellison and Levin, 1998). Additionally, there is a strong correlation between religion and spirituality and a number of outcomes related to mental and physical health, which paradoxically makes them both risk and protective factors (Lassiter, 2014). Religion and spirituality seem to have complementary effect on mental health. In fact, Lassiter et al. (2019) found while spirituality appeared to be negatively correlated with depression and rejection, religiosity was positively associated to these mental health outcomes. Furthermore, religiosity and spirituality had opposing impacts on resilience and social support, whereby the former held negative correlations, and the latter was positively associated. While religiosity that lacked elements of spirituality and was expressed more through behaviors had a more negative impact on mental health.

The mental health of MSM may be influenced by religion and spirituality. In their conceptual model based on a systematic review, Lassiter and Parsons (2016) go over how religion and spirituality manifest on the structural, societal, and individual levels. Religion and spirituality can have different consequences depending on how they present themselves at different levels. The health of MSM is influenced via one of these three levels independently, but with a multi-level interaction. As an illustration, if policies (structural level) are impacted by homophobic religious ideas, they may also influence MSM's personal spiritual beliefs, which may both have an impact on adverse health outcomes like depression (individual level). Conversely, supporting policies can have a favorable effect on societal and personal levels, such as low condom-free sex and low number of sex partners. Therefore, how religion and spirituality present themselves at one level may affect how they affect the other levels.

There has been conflicting evidence regarding the relationship between personal religious and spiritual practices and results related to mental health in MSM. Some studies offer proof to support the relationship between religion and spirituality at the individual level with health outcomes for MSM (Eliason et al., 2011; Kipke et al., 2007; Richards & Folkman, 1997; Ross et al., 2004; Woods et al., 1999). These studies found a strong correlation between religious coping and a reduction in depression symptoms. Additionally, research show that religion and spirituality improve people's health by reducing blood pressure, oxidative stress, and levels of stress hormones (Lassiter & Parsons, 2016). Religion and spirituality have been shown to enhance immune performance in HIV-positive people (Ironson et al., 2006).

Some empirical findings differentiated between religiousness and religious experiences. Religiousness itself was not found to be related to depression; on the opposite, there is narrow evidence that it has a protective effect on depression (Hall, 2018). However, negative religious experiences such as negative thoughts about one's faith and membership in a religious group that opposes LGB rights, may raise one's risk for depression. Experiencing rejection by one's religious community likely contribute to identity struggles and mental health disorders (Hall, 2018). Moreover, religious identity provides a certain "belonging" feeling used as a social support within the religious group. Thus, having a conflict between youths' religion and their sexual identity was also found to be a risk factor. For instance, a study conducted in Lebanon (Assi et al., 2020) indicated that compared to their heterosexual counterparts, gay participants showed higher levels of psychological distress, were more likely to express self-harm, and had lower levels of religiosity. Additionally, self-harm was predicted by sexual orientation distress while religiosity offered protection against psychological distress.

4. Mental health outcomes

After discussing the major factors associated with mental health in GBM, the next section will focus on some categories of mental health disorders which have been empirically reported. To avoid repetitive information, only empirical conclusions specific to each category will be provided.

4.1. Depression

Assessing depression among GBM is methodologically difficult to obtain due to a combination of societal factors, individual factors, and challenges in research design and measurement. In an attempt to measure a potential rate, Ross et al. (2018) reports a rate of 18% based on 20 studies (compared with 13% in heterosexuals). To compare between LGB and heterosexual youth depressive risks and protective factors, Hall (2018) found that the main reasons for the high percentage of depression are related to **sexual identity coping mechanisms** (internalized LGB-phobia, the stress from hiding and the stigma of their identity, lack of coping) and **social representations** (parental rejection, abuse, negative religious experience, bullying). Reciprocally, the protective factors against the high risk of depression include positive LBGT identity representation, social support from friends, and family support. Thus, the association between psychosocial factors and depression are reciprocal.

Many papers assessed the role of sexual identity coping mechanisms in depression. In fact, a meta-analysis reported categorical data on depression comparing sexual minority youth with heterosexual young people and it was mentioned that the risk of having symptoms of depression in GBM was determined by an odds ratio of 2.94 (p < 0.001 when compared with heterosexuals) (Lucassen et al., 2017). Moreover, findings of a meta-analysis conducted by Dürrbaum and Sattler (2020) on the effect of minority stress and mental health in LGB suggested that **minority stress** correlates more strongly with depression than with other mental health problems. These results are consistent with what has been discussed in the section "Identity factors" (Hall, 2018). Furthermore, Lee et al. (2019) examined the association between internalized homophobia and depression among Korean LGB adults, and its correlation with age. The results concluded that higher levels of **internalized homophobia** were recorded among older individuals, while depression and suicidal ideations were more prevalent among young individuals. Also, individuals with higher internalized homophobia

experienced higher chances of depressive episodes than those with lower internalized homophobia.

Concerning social representations like parental rejection, abuse, negative religious experiences and the role of unsupportive partner(s), they were also reported (Taylor et al., 2019). In addition, Travers et al. (2020) stressed on the role of trauma exposure in their paper on LGB individuals in Northern Irish. The results indicated that the LGB youths are more associated with **trauma exposure** and symptoms of post-traumatic stress disease, depression, and anxiety, but not with negative alcohol abuse. It was found that family support can help mediate these associations.

This also applies to the older population as explored by Nelson and Andel (2020) who found that LGB individuals were found to be twice as likely to experience depression than heterosexuals, but also report better self-rated physical health, because of previous trauma exposure.

Among other causes, **discrimination** was associated with increased depression in MSM (Tabler et al., 2019). More explicitly, English et al. (2018) explored how racial prejudice and gay rejection affect people's ability to cope with their emotions, depression and anxiety, and drug/alcohol addiction in Black, Latino and Multiracial MSM in the United States. It was found that racial discrimination and its interaction with gay rejection were associated with high levels of emotional difficulties, which lead to depression and anxiety within 6 months, and heavy drinking (but not drug use) within 12 months. There is evidence about intersection of racial and sexual minority stress on emotion coping for Black, Latino, and multiracial MSM.

4.2. Suicidal ideation and self-harm risk

Luong et al. (2017) conducted a systematic review of literature on suicidal ideation and selfharm in young MSM, identifying risk and protective factors across three levels: individual (such as substance abuse and early sexual debut), family-related (including homelessness and parental abuse), and social (such as fear of community violence and bullying). Protective factors included high self-esteem, adaptive coping mechanisms, family acceptance, and positive sexual minority LGB stereotypes, school, and peer support.

Similarly, Yildiz (2018) conducted a systematic review to assess suicidal behavior in sexual minorities and found that they experience a higher risk of suicidal ideation, attempts, and

completion than heterosexuals. According to Luong et al. (2017), the rate of suicidal ideation ranged widely from 10% to 71% across studies, while the rate of suicide attempts ranged from 4% to 44.2%.

Salway et al. (2018) conducted a systematic review and meta-analysis to examine differences in suicidal thoughts and attempts among sexual minority groups, finding that bisexual respondents reported the highest proportion, followed by gay and lesbian respondents, and heterosexual respondents. These disparities were attributed to institutional and interpersonal experiences of monosexism, biphobia, and bisexual erasure. Monosexism, identified as a systemic issue, involves favoring monosexual identities (either heterosexual or homosexual) over bisexuality, thereby contributing to the marginalization of bisexual individuals. Biphobia, a discriminatory attitude directed specifically at bisexual individuals, further exacerbated the challenges faced by this group. Moreover, the phenomenon of bisexual erasure, where bisexuality is disregarded or invalidated, was recognized as a contributing factor leading to a lack of acknowledgment and understanding of the unique struggles of bisexual individuals. Beyond merely recognizing the disparities, the study emphasized the significance of tackling the underlying systemic and interpersonal issues that contribute to the heightened risk of suicide ideation and attempts within the bisexual community. In a study by Romanelli et al. (2020), it was found that suicide risk was highest among gay and bisexual groups, with bisexual men and women being seven times more likely to experience suicidal ideation and attempt suicide, and fourteen times more likely to have a suicide plan.

Understanding the drivers of suicide in GBM, as well as other sexual minorities, is crucial to better comprehend the development of depressive symptoms and suicidal behavior, as explored by Ferlatte et al. (2019). Through their interviews, they found three main themes: **adverse childhood events** and **negative adolescent experiences at first**, then **homophobia-based violence** disrupted their education and employment which lead to lack of capital which in its turn exasperates suicidality, thirdly the **social stigma and isolation**. The themes overlap axes such as **sexuality, class, ethnicity, and mental health status**. Therefore life-course trajectories and multiple social axes need to be considered while treating suicidal drivers.

Rehman et al. (2020) reported that those with **lower incomes** have a higher tendency to engage in self-harm. These self-harmers showed higher levels of internalized homophobia, LGB victimization, and prejudice than non-self-harmers. The authors concluded that being exposed to **situational stressors** increases the likelihood of developing self-hatred, which can result in a greater risk of developing a maladaptive coping mechanism such as self-harm. Speculatively, the low income and self-harm relationship may result from less economic capital and therefore fewer social resources to cope effectively with distress.

Moreover, some authors considered that individuals who experience multiple forms of discrimination are at higher risks of poor mental health, while others said that they may develop resilience against the additional forms of discrimination.

Vargas et al. (2020) conducted a review of published studies to examine evidence in support of risk and resilience models. Their report supported for the risk model, that is, that people with **multiple discriminatory factors** have higher risk of poor mental health. Both racism and heterosexism predicted symptoms of depression, but only heterosexism predicted suicidality. The evidence eventually shows that multiply discriminated groups exhibit higher risk of mental health problems. This was found, for instance, by Mendoza-Perez and Ortiz-Hernandez (2020) among a sample of Mexican gay, homosexual and bisexual men. A stronger association between increased sexual orientation-based discrimination and violence and with negative mental health outcomes was observed.

In conclusion, it is difficult to empirically differentiate between risk factors of suicide and those of depression. It is however clear that factors such as internalized homophobia, stigma of self-identity, maladaptive coping, and other social and relationship stressors lead to depression. These factors also play roles along with life-course trajectories, psychological disorders, and situational stressors to create a background for some individuals to reach the suicidal level.

4.3. Alcohol and drugs addiction

Alcohol and drug usage in GBM can be primary or secondary to mental health disorders. It can also be a risk factor of mental disorders leading to a vicious circle between depression and alcohol/drugs consumption.

Few studies have assessed rates of primary drugs or alcohol usage in this group. For instance, a systematic review conducted by Tomkins et al. (2018) showed that the most commonly reported recreational drug across the included studies was methamphetamines (39% of citations), with crystal methamphetamine being specifically reported. However, the authors did not aim at assessing whether this consumption was primary or secondary to mental health disorders.

Even though the association of discrimination to heavy drinking is widely acknowledged, specifically within stress and coping frameworks, there hasn't been enough comprehensive reviews of the evidence. Gilbert and Zemore (2016) conducted a systematic review of the English language literature to summarize studies examining the relationship between discrimination and alcohol-related outcomes. Sexual orientation discrimination related studies assessed both internalized and interpersonal factors; nevertheless, the literature mostly focused on global tests of correlation using cross-sectional data. The authors discussed how they could not find a consensus on the positive link between sexual orientation discrimination and drinking.

On the other side, Petruzzella et al. (2020) examined the associations between gay specific stress and general stressors, and the negative affect on alcohol use. It was found that gay specific external stress, gay specific internal stress, and general stress all have negative affect over time, while general stress contributes to higher fluctuation in alcohol use over time. The findings highlight the importance of general stress on gay men's psychological functioning. Moreover, Chaudhry and Reisner (2019) focused on the major depression and alcohol and illicit drug abuse or dependence among sexual minorities and found that bisexual and gay men had the highest alcohol and drug abuse as well as dependence.

However, findings suggest that alcohol use may change according to different sociocultural norms, social context, and drinking triggering factors such as relaxing, socializing with peers, coping with psychosocial stressors, and enhancing sexual discovery (Feinstein & Newcomb, 2017). In New York city, it was found that MSM who scored higher on all three drinking motivation scales (convivial, intimate, negative coping drinking) were more likely to engage in alcohol drinking to intoxication compared to those who reported no alcohol drinking to intoxication. Black and Hispanic MSM had lower odds of intoxication compared to White MSM, and those reporting lower perceived familial socio-economic status had lower odds compared to higher socio-economic status.

Drugs usage in sexualized contexts, known as "chemsex" and the secondary adverse mental health outcomes for those engaging in chemsex are increasingly reported. "Chemsex" has been used to describe the consumption of drugs before or during sex to enhance and sustain the sexual experience. In a study conducted among beneficiaries of a sexual health clinic in Nottingham, United Kingdom, it was found that 60% of chemsex-engaging MSM participants reported a history of depression or anxiety (Dearing & Flew, 2015). Another study by Bourne et al. (2015) reported short-term depression, anxiety and psychosis following chemsex

engagement. On the long term, memory loss and personality change were reported. Ward et al. (2016) mentioned that 15.8% of chemsex-related admissions in HIV-positive patients in Manchester (United Kingdom) were attributed to psychosis.

Certainly, mental health disorders and sexual identity stigma are not isolated in individuals' lives but are rather experienced with other stressors such as ethnic discrimination. For instance, Ogunbajo et al. (2019) explored the relationship between substance use and the mental health outcomes among Immigrant African GBM. There was a correlation of substance use and depression. The factors independently associated with substance use were age, outness, homophobic experiences, forced sex, housing instability, and internalized homophobia. Substance use and depression were associated with personal experiences back home and in host countries.

In the next section, the focus will be on the empirical findings specifically in bisexual men.

5. Mental health outcomes in bisexual men

Studies have indicated that bisexual individuals experience higher rates of poor mental health outcomes compared to other LGB categories, but the extent of these disparities remains unclear. Semlyen et al. (2016) found that symptoms of common mental disorders were more prevalent in bisexual individuals (34%) than in lesbian/gay individuals (26.2%). Similarly, Ross et al. (2018) conducted a meta-analysis of studies on standardized measures of depression or anxiety specific to bisexual people and found consistently higher rates of depression and anxiety compared to other subgroups. Discrimination, bisexual invisibility, and lack of support were identified as potential contributors to these disparities. Chan et al. (2020) found similar results in their survey, which also showed that bisexual men were more likely to have identity uncertainty, conceal their sexual orientation, and feel disconnected from the LGB community, making them more vulnerable to mental health disorders. Hickson et al. (2016) also found that depression was associated with being bisexual. Salway et al. (2018) conducted a meta-analysis investigating the relationship between bisexual identity and suicidal ideation and found that bisexual individuals reported the highest proportion of having considered suicide. Maimon et al. (2019) also found an association between mental health and bisexual orientation, specifically related to identity denial. Hayfield et al. (2018) investigated how bisexual

individuals manage their identities through their relationships and found that bisexual relationships were often invisible, making bisexual identity difficult to understand. La Roi et al. (2019) explored sexual identity and dimensions among bisexual men and found lower valence and integration of sexual identity, which did not diminish the effect of minority stress on mental health.

In summary, it is important to delve into the topic of mental health among bisexual individuals due to the concerning disparities revealed by numerous studies. As indicated above, research consistently indicates that bisexual individuals face higher rates of poor mental health outcomes compared to other segments of the sexual minorities. These disparities are not only significant but also complex, stemming from factors such as discrimination, bisexual invisibility, lack of support, and identity challenges. Understanding the extent and underlying causes of these mental health disparities is essential to inform targeted interventions, support systems, and policies that can mitigate these adverse effects and promote the well-being of bisexual individuals. Addressing these disparities is particularly important in the context of Lebanon where the broad sexual minorities are stigmatized. Bisexual men in such context might be less and less visible, and more prone to identity threats and negative coping mechanisms.

In the next section, a review of empirical studies on some aspects of sexual health outcomes both in gay and bisexual men will be provided.

6. Sexual health in gay and bisexual men

MSM are disproportionally affected with HIV compared to other population groups. A scoping review of systematic reviews using the Centers for Disease Control and Prevention (CDC)'s Prevention Research Synthesis database published between 1988 and 2017 was conducted by Higa et al. (2020). The scoping review revealed that among the MSM subgroups frequently highlighted in the systematic reviews, prominent categories included those identifying as HIV-positive, individuals of Black or African American heritage, and younger age groups.

Another paper from the United States shows that MSM represent 81% of people living with HIV (PLHIV) aged 13 years and above (CDC, 2021). At a global level, analysis based on countries with available trend estimates suggest that GBM have not benefited equally from

HIV prevention and treatment services, which keep them disproportionately affected by HIV (UNAIDS, 2023).

Testing is a major factor in the prevention of HIV and STIs. Motives for testing for HIV have been reported by many researchers. Lorenc et al. (2011) conducted a systematic review of the attitudes of MSM concerning HIV testing in the United Kingdom. They concluded that the uncertainty of unknown HIV status and the sense of responsibility towards oneself or one's partner are important motives for testing. However, denial and fear of the consequences of a positive HIV test, and the perception of stigma, from other gay men or from the wider culture are barriers to testing. Similar results were reported in Europe (Deblonde et al., 2010), in the United States (Noble et al., 2017) and Canada (Ha et al., 2014). Importantly, cognitive and affective variables associated with testing behavior have been assessed. In their systematic review of global studies, Evangeli et al. (2016) found that the relationships between HIV knowledge and testing, and between HIV risk perception and testing were both positive and significant. Other correlates included: perceived testing benefits, testing fear, perceived behavioural control/self-efficacy, prejudiced attitudes towards people living with HIV, and knowing someone with HIV.

Another factor in the prevention of HIV/STIs is sexual behavior, which is difficult to measure (Garnett & Anderson, 1996). Some variables which empirically showed high transmissibility of HIV (such as condomless anal sex, number of partners in the last 3, 6 or 12 months, drugs or alcohol consumption) are usually used to quantify the risk of getting HIV/STIs. Other variables include **risk perception** which can positively impact preventive strategies to avoid having HIV and add stigma to initially stigmatized individuals (Dacus & Sandfort, 2020). For instance, Black GBM are known to be at increased risk of getting infected with HIV. Their ethnic minority status is linked to ethnic and racial discrimination, language barriers, and cross-country employment transitions. It was shown that those among them who have a perception of the high risk of HIV adopt protective strategies that will prevent an infection (Lewis & Wilson, 2017; Dacus & Sandfort, 2020). Similarly, in the Lebanese context (see chapter III), discrimination, disclosure of sexual orientation, and fear of infection have been identified as key influencers on testing behaviors and consistent condom use (Wagner et al., 2015; Tohme et al., 2016b). The role of religion has also been associated with recent condomless sex, showcasing the complexity of social representations in shaping sexual practices.

Relationship dynamics associated with sexual behavior among MSM were examined. It was shown that positive relationship dynamics are associated with less risk with partners outside the relationship, but were associated with greater rates of unprotected anal intercourse with primary partners (Hoff et al., 2016). Burton et al. (2018) reported that love and emotional attachment were the only significant predictors of inconsistent condom use. This is in line with previous work showing that in romantic relationships, men often privileged the expression of commitment, trust and love as more important than their own health (Flowers et al., 1997). Factors influencing condom use, such as trust, commitment, and intimacy in the Lebanese context, resonate with global findings, but the nuanced relationship between being in a relationship and condom use in Lebanon appears to be controversial, with varying results across studies (see Chapter III).

Alcohol and drugs consumption or addiction can also affect sexual behavior. Concerns have been focused on the use of "club" drugs among MSM and on the role of drugs as posited risk factors for HIV transmission (Drumright et al., 2006). The use of club drugs has been reported among MSM in different contexts such as the United States, Canada, western Europe, and Australia (Kokkevi et al., 1998; Drumright et al., 2006). The association between this type of drug uses and HIV involves many different facets of social, physical, and psychological health. The latter include reduction in physical pain, altered mental state, increased sexual desires that could result in one or more risk behaviors. Other behaviors that increase HIV/STI risk include decreased condom use; increased number of partners, increased duration of sexual contact with the same partner, or both; increased tissue damage or increased likelihood of blood to blood or semen to blood contact; and the sharing of needles. Drugs most frequently used are methamphetamine, GHB/GBL, mephedrone, cocaine and ketamine. Published research suggest that chemsex is associated with riskier behaviours and an increase in the risk of transmission for HIV and other STIs. (Maxwell et al., 2019). Although chemsex participants have expectations that the drugs will positively affect their sexual encounters, HIV positive MSM are more likely to engage in the behaviour than HIV negative MSM. Participants were more likely to engage in unprotected anal intercourse than men who do not engage in chemsex.

Compared with drugs, alcohol has been less studied. However, evidence suggests alcohol use and misuse are highly prevalent among MSM and that alcohol-related behaviors often increase between adolescence and young adulthood (Allen et al., 2015). The impact of alcohol consumption on intentions to engage in unprotected sex has been assessed by Rehm et al. (2012). In this meta-analysis, it was found that an increase in blood alcohol content of 0.1mg/ml resulted in an increase of 5% in the likelihood of engaging in condomless anal sex. Moreover, adults in the United States reporting greater public religiosity were at lower risk for alcohol use disorders (Meyers et al., 2017). In fact, public religiosity may be particularly important among non-Hispanic Blacks, while intrinsic religiosity may be particularly important among non-Hispanic Whites, and among Hispanics who frequently attend religious services. Psychological evaluation of alcohol consumption among MSM and its link to unprotected sex has been controversial. While some papers link unprotected sex to the pharmacological effect of alcohol, some others found that alcohol expectancy effects, rather than pharmacological effects only, lower the intentions of condom use (Wray et al., 2019).

Researchers in the sexual health field updated the set of "sexual behavior" with recent variables. For instance, the use of **social networking applications (apps)** on smartphones has the potential to impact sexual health and behaviour. A systematic review by Choi et al. (2017) reported a prevalence of unprotected sex between 17.0% and 66.7% among apps users. The mean number of sexual partners ranged between 1.4 and 2.9 (1-month period), and between 46.2 and 79.6 (lifetime). The authors mentioned 2 studies that found that the prevalence of HIV infection was 1.9% and 11.4%, respectively. The self-reported prevalence of prior diagnosis of STIs (excluding HIV) ranged from 9.1% to 51.0%. On the other side, Pre-exposure prophylaxis (PrEP), is a recent HIV prevention strategy. Traeger et al. (2018) conducted a systematic review of open-label trials reporting sexual risk outcomes in the context of daily oral PrEP usage in HIV-negative MSM up to August 2017. Rectal chlamydia (OR 1.59) and any STI diagnosis (OR 1.24) both increased significantly with PrEP use. The majority of the research in the report provided evidence that condom-free intercourse was becoming more common among PrEP users. While as later presented in Chapter 3, higher PrEP adherence among Lebanese GBM were linked to the disclosure of sexual orientation and happiness about sexual orientation.

In this section, empirical data about sexual health outcomes in GBM was reviewed. While literature exploring the impact of religiosity and family experiences on the sexual behavior of GBM is limited, there is also a dearth of research framing the intricate relationships among these variables, identity threat, and mental health outcomes within a theoretically grounded framework. Additionally, there is an absence of studies that specifically investigate the distinctions between GBM in the Lebanese context, where religious identity and family bonds hold significant importance that might further render bisexuals more invisible. Another specific

aspect worth exploring is how the paradoxical effects of religiosity, as discussed in section 3.4, manifest within the context of Lebanon.

7. Conclusion

In this chapter, empirical findings regarding the negative mental health outcomes in GBM were discussed along with some of the main associations between poor mental health outcomes and being gay or bisexual. It is evident that sexual identity development without a minority stress frame, leads to better coping mechanisms and mental health outcomes. Moreover,

difficulties in developing an integrated sexual identity because of specific social contexts may have negative implications for the psychological adjustment such as internalized homophobia, distorted self-perception, and decreased self-esteem, which consequently inhibits the development of a healthy self-concept. A social interaction relies on family factors, outgroup friendships, intragroup friendships, romantic and sexual relationships. Was also overviewed the paradoxical effect of religiosity on mental health in GBM. Syndromes such as depression, alcohol and drugs addiction, suicidal ideation and self-harm were discussed. Finally, different aspects of sexual health in GBM were overviewed including testing behavior and sexual behavior. Considering these findings, the lack of similar studies among GBM in Lebanon will be discussed. Empirical findings related to the social representations and religious identity in a country such as Lebanon are very few, despite some papers epidemiologically investigating mental and sexual health broad outcomes. This chapter about Western societies can serve as a baseline of evidence which will be compared to available reports in the field from Lebanon.

Chapter 3: Lebanese context: sociopolitical situation, sexual minorities, mental and sexual health outcomes in gay and bisexual men

1. Sociopolitical overview and homosexuality status in Lebanon

The year 1943 saw Lebanon's separation from the French mandate. Up until 1975, the nation was one of the Middle East's few genuine democratic states. The nation's capital, Beirut, was renowned for its liberal governmental ideology toward many religious sects. While upholding and fostering their individual religious and cultural traditions, Sunni and Shia Muslims, Druze, Christian Maronites, Greek Catholics, Greek Orthodox, and people of other faiths all adhere to a common set of public principles and practices, while retaining and nurturing their respective religious and cultural norms. The Lebanese government fell in 1975 as a result of the lengthy and protracted sectarian conflict. Over a million people had been evicted from their houses by 1990, and 9,000 had died (Labaki & Abou Rjeili, 1994). After the civil war, Lebanon's population composition altered as well as the state and national identities. Another competing social identity—religion—was fostered by the fractured national identity and the striking vulnerability of the state. A number of measures aimed at reducing homosexuality in Lebanon have resulted from the importance placed on religious identities.

2. Social and psychological difficulties faced by LGB individuals in Lebanon

LGB rights have a problematic history in Lebanon. The legislation forbids sexual relations that "contradict the law of nature" (Article 534 of the Lebanese Penal Code of 1943). This offense covers homosexual partnerships, and LGB people risk up to a year in jail (Makarem, 2012). Although this law has occasionally been used to imprison LGB individuals, Lebanon might be seen as being more welcoming and tolerant of LGB individuals than other Middle Eastern nations (except for Israel). In reality, the law is not frequently applied, and a number of influential Lebanese lawmakers have criticized it as well as the investigative techniques it has promoted (such as anal examinations) (Cichowitz et al., 2018).

Practically, the degree to which homosexuality is accepted in the society varies depending on the many "social" and religious identities. Pride events are occasionally and discreetly manifested, if any. Religious authorities and certain conservative political and social figures typically respond by attacking them. They are usually covered by the "prior censorship approval". Social representations of non-heterosexual identities in Lebanon are unfavorable as a result of the stigmatizing messages that are spread by governmental and religious institutions (all faith groups). In the context of bisexuality, bisexual identity is erased due to their marginalization and lack of recognition while homosexuality is acknowledged but condemned. Lebanese LGB people "live out" their sexual identities despite social, religious, and political restrictions on free expression of LGB identities. One of the most liberal towns in the Middle East is Beirut, which has a thriving homosexual scene, a few gay pubs, clubs, and many of community centers. Additionally, although gay social networking websites and apps are banned from public network, GBM use them extensively to socialize and plan casual sexual encounters. Many LGB youth do seek assistance with their romantic relationships, sexual health, and rights advocacy. However, it is important to remember that Beirut is not at all indicative of Lebanon as a whole, which generally does not accept homosexuality. There isn't a "gay culture" in Lebanon.

Due to the stigma that exists in Lebanon's society against sexual minorities, LGB individuals may experience social and psychological difficulties as a result of their sexual orientation. Empirical studies of GBM in Lebanon provide important insight into the lived experiences of non-heterosexual men but little specific focus on those of bisexual men. These studies offer vital insights into the lived experiences of non-heterosexual males. These studies will be discussed in the following section.

3. Sexual identity, sexual orientation and stigma in gay and bisexual men

There has been limited exploration of sexual identity in Lebanon. A study conducted in 2019 examined the relationship between indicators of sexual identity development and HIV protective behaviors, such as condom use during anal intercourse and HIV testing, in a sample of 226 young MSM in Beirut (Ghanem et al., 2019). Results showed that 82.3% of the sample had undergone an HIV test. The study identified integration into the gay community as a component of sexual identity development that was strongly linked to recent condom-free anal sex with unrelated partners and a history of HIV testing. Peer judgmental communication about sex and prejudice related to sexuality were associated with gay integration and condomless anal sex.

Another 2019 study among 292 native and non-native-born MSM collected data about experiences of violence and discrimination in the context of a larger behavior survey (Orr et al., 2019). MSM born outside Lebanon (mainly in Syria) were found to face higher levels of discrimination and violence than native-born MSM. Socioeconomic status was also found to be associated with discrimination and violence among native- and foreign-born MSM.

A third study was conducted and recruited a sample of 226 MSM between 18 and 29 in 2019 (El Khoury et al., 2019). Sexual violence was found to be highly prevalent in this sample. 17.3% of the sample experienced child sexual abuse while 63.3% experienced any form of post-childhood sexual violence. 48.7% of the sample experienced being forced or pressured to have sex during their lifetime including 32.3% prior to the age of 18. The likelihood of experiencing abusive relationships or at least one type of sexual harassment in adulthood was higher for those who had experienced childhood abuse.

Previously in 2013, 31 MSM from Lebanon were interviewed to better understand the interactions between stigma and social engagement, and psychological wellbeing (Wagner et al., 2013). Mechanisms for coping with stigma were social avoidance, limiting social interactions with peers to the internet, and withdrawals from relationships. Most participants reported verbal harassment and being treated as different or lesser in social contexts because of their sexual orientations.

In conclusion, it is clear that literature about Lebanese GBM identity lack of studies assessing the sexual identity development and the different social contexts that may have implications for the psychological adjustment, such as role of family, religion, group memberships. In the next section, mental health outcomes will be reviewed.

4. Mental health outcomes

Very few papers assessed mental health outcomes in Lebanese MSM. A 2010 cross-sectional study assessing the Quality of Life (QoL) of 41 Lebanese adult patients living with HIV/AIDS using self-administered questionnaires (Abboud et al., 2010). The QoL instrument reported high scores for cognitive functioning, social functioning, and medical care. The lowest reported domain scores were for financial status, sexual functioning and mental health. QoL was

positively predicted by being married, and negatively predicted by perceived stigma and prevalence of symptoms. Generally, this study reports a fair level of QoL among asymptomatic well-functioning Lebanese adults living with HIV/AIDS.

A recent study by Wagner et al. 2019 (226 MSM) examined the relationship between social support and stressors associated to sexual minorities and depression. Among the sample, 16% reported having current depression, 33% said they had ever considered suicide, including 8% who had self-harmed, and 69% said they had experienced discrimination in the previous year. Lower levels of social support as well as structural stresses like unemployment and illegal immigration as well as social stressors like discriminatory experiences of all kinds and sexual orientation discomfort were linked to depression. The only factor that significantly predicted serious depression in multivariate analysis was discomfort with one's sexual orientation.

Thus, it is clear that mental health outcomes in Lebanese GBM context have not been widely studied despite the several stressors that have been overviewed such as civil war, conflicts with neighboring countries and economic crisis (see beginning of Chapter 3).

5. HIV situation in Lebanon

The HIV epidemic in Lebanon is concentrated among MSM with a prevalence of 12% (Heimer et al., 2017). Whereas 47.7% of seropositive incident cases were MSM in 2016, at least 94% of the 2019 cases were MSM (Maatouk et al., 2021). A 2018 integrated bio-behavioral study estimated the size of the Lebanese MSM population to be between 16.000 and 20.000. In addition, this study reported a 12% HIV prevalence and 58% HIV testing rate among Lebanese MSM. Although both knowledge of HIV risk and prevalence of HIV are high among Lebanese MSM, testing rates remain much below expectations. As of December 2019, there are 2570 PLHIV in Lebanon among which almost 1700 are receiving antiretroviral therapy (ART) care (National AIDS Program Lebanon, 2019).

In Lebanon, a comprehensive continuum of HIV care from prevention to treatment and retention in care services is available through a consortium of stakeholders that include thematic non-governmental organizations (NGOs) and governmental entities. The National AIDS Program also offers access to PrEP and post exposure prophylaxis. The quality of HIV care can however be undermined because the cost of comprehensive care, clinical monitoring of HIV patients, and treatment of other health issues such as mental health are not covered by the government. In addition, several factors collectively hinder a regular access to HIV care

such as the lack of sexual health coverage by private insurance companies, the elimination of sexual healthcare from primary healthcare settings, the weakness of the Lebanese healthcare system, and HIV stigma. However, understanding of behavioral and cultural drivers of MSM towards HIV services and risk-taking will be essential to maximize HIV testing and tailor targeted behavioral interventions (Maatouk, et al., 2021).

Although Lebanon is one of the safest EMR countries for sexual minorities, little is known about HIV risk factors among MSM in Lebanon (Maatouk & Jaspal, 2019). According to Wagner et al. (2012), GBM who were quite at ease with their sexual orientation and had told their family and parents about it tended to be more likely to consistently use condoms and be tested for HIV. However, sexual behavior has not been assessed in a comprehensive review of social, psychological, and individual factors. Yet, with the present data, one can notice that individual factors are more reportedly associated with risky behavior whereas social determinants, if positive, are more protective. This can be due to an increased knowledge in the latter case. Maatouk et al. (2021) found a link between testing motives and risk perception in a sample of 1364 Lebanese MSM. Their results suggest that those who engage in sexual risk behaviours (alcohol/substance use; use of mobile phone applications to find sexual partners; frequent unprotected intercourse) and who appraise their risk to be high are more likely to have been tested for HIV/STIs than those who do not.

6. HIV situation in the Eastern Mediterranean Region

A 2017 editorial reflects on the continuously growing HIV epidemic in the Eastern Mediterranean Region (EMR) (Hermez et al., 2017). Over 95% of new infections reportedly occurred among MSM, people who inject drugs, prisoners, and sex workers. The main obstacle to the successful progression of the continuum of care, according to the authors, remains at the top of the cascade with the **very low coverage of HIV testing services** (WHO, 2017). The main challenges to rapid scale up of HIV services in the Region are inadequate service delivery approaches, insufficient service availability, distance to testing services, cumbersome processes to get a final test result, poor referral services, weak community support. This difficulty is further accentuated by stigma and discrimination against PLHIV and key populations – including in health care settings – punitive laws and criminalization of key populations (WHO, 2017).

The epidemic of HIV is however concentrated in MSM (Mumtaz et al., 2011; Mumtaz et al., 2021). The high levels of reported risk behaviors in the form of multiple partners, biomarkers of risks (STIs), low rate of consistent condom use (<25%), frequency of male sex work (20%-76%), and substantial overlap with heterosexual risk behavior and injecting drug use suggest potential for spread. However, behavioral risk could potentially be even higher as these reported numbers are now outdated.

According to Maatouk and Jaspal (2020b), 95% of new HIV infections in the EMR are within key populations, (people who inject drugs, MSM and sex workers). Stigma, prejudice, and the threat of prosecution all contribute to low testing rates, which limits the scope and potency of HIV prevention initiatives in the EMR.

7. Sexual behavior, HIV testing and sexual health outcomes

Since the beginning of studies on sexual behavior in MSM in Lebanon, high-risk behavior was reported with high number of non-regular sexual partners, low (39%) reported usage of condoms, sex work (36%) and low testing for HIV (22%) (Mahfoud et al., 2010). Factors that influence condom use in MSM were reported to be trust, commitment, and intimacy (Wagner et al., 2012). Interestingly, being in a relationship and using condom was assessed and results are controversial: one study showed positive correlation (Wagner et al., 2012) whereas several others showed negative correlations (Wagner et al., 2014; Wagner et al., 2015; Tohme et al., 2016a). Moreover, both gay discrimination and MSM disclosure were associated with lack of condom use (Wagner et al., 2015; Tohme et al. 2016b). Consistently, fear of infection is a driving force for HIV testing but is buffered by fear of positive results and associated stigma. Wagner et al. (2012) reported that disclosure of sexual orientation to family and parents as well as generally being comfortable with one's sexual orientation ensured consistent condom use and HIV testing. Concerning non-HIV (STIs) testing, a 2020 report by Maatouk et al. (1364 participants) suggest that people who are aware of their risk behavior (risk perception) are more likely to be tested. Another variable of the broad spectrum of social representations - being Christian - was reported to correlate with any recent condomless sex with partners of unknown or positive HIV status (Wagner et al., 2020).

Disclosure of sexual orientation and happiness about sexual orientation were also reported to correlate with higher PrEP adherence (Maatouk & Jaspal, 2021). Previously reported, use of

substances just prior to or during sex and sense of community among young MSM were significant predictors of PrEP willingness (Storholm et al., 2019).

8. Conclusion

This chapter summarized most of the empirical findings from Lebanon in terms of sexual and mental health outcomes among GBM. It also showed that there are many gaps in research in Lebanon in this field. One clear gap is the mental health outcomes and, particularly, how these outcomes may relate to sexual behaviour. Social psychological variables might impact on poor mental health which in turn is associated with more engagement in risk behaviour. But this is undetermined in Lebanese context. Studies dedicated to bisexual are clearly lacking. Moreover, none of the mentioned research appears to be guided by a particular theoretical framework. Therefore, a review of the theories will be provided in the following chapter.

Chapter 4: Theory frame

This section will focus on the theories that have been proposed by major researchers in the field to understand gay identity, bisexual identity, and their link to mental and sexual health outcomes.

To function emotionally on an individual level, group identities are necessary. Conflicting requirements for individuation and affiliation are addressed by identities (Brewer, 1991). Identity processes may influence mental health both directly and in interaction with stressors. The various theories on gay identity will be the main topic of this chapter. It will go over earlier studies that explored the psychological facets of gay identity and how it is represented in various societal contexts. Additionally, it outlines the research on bisexual men's sexual identity.

1. Theories about sexual identity

1.2. Minority stress theory

Minority stress theory has developed from a number of sociological and psycho-social theories that discuss adverse health effects of prejudice and stigma on the lives of affected individuals or communities (Kolb, 1954; Crocker & Major, 1989; Major & O'Brien, 2005). This theory conceptualizes *stress* as mediator in the relationship between stigmatizing societal structures such as homophobia and the many health outcomes, mainly mental health (Frost et al., 2013; Hatzenbuehler et al., 2010; Meyer, 2003). But what is the link between stress and mental health outcomes in stigmatized identities or communities?

Stress is defined by Pearlin (1999, p.163) as "any condition having the potential to arouse the adaptive machinery of the individual". This definition also reflects the phenomenological meaning of *stress*, which includes physical, mental, or emotional pressure. Stressors are defined as events that require the individual to adapt to this new situation. These events include traumatic events (losing a partner), eventful life stressors (losing a job), chronic stress (economic stress), role stress (family support, religious identity, etc.) as well as daily forms of stress (Dohrenwend, 2000). The concept of social stress suggests that not only personal events are a source of stress to the individual, but rather social conditions can as well create stressors which may lead to mental and physical outcomes. Thus, people belonging to stigmatized social

communities based on socioeconomic status, race/ethnicity, gender, or sexuality can have an impact on people's lives. Consequently, these stressful causes would require adaptation in these communities (Allison, 1998; Clark et al., 1999; Meyer, 1995).

From Dohrenwend's social stress concept, Ilan Meyer distinguished *minority stress* as a particular form of social stress in which individuals are socially stigmatized because of their minority position (Meyer, 2003). For instance, the minority individual is likely to be subject to conflicts because his cultural and social norms are different from the dominant ones. Such a conflict between dominant and minority groups is reportedly due to a lack of social institutions (Durkheim, 1951). Thus, this conflict induces a sense of normlessness, a lack of social control and a decreased feeling of belonging (Durkheim, 1951).

Meyer defined minority stress processes as a continuum ranging from distal stressors (defined as objective events) to proximal personal processes (defined as subjective and related to individual perceptions). From the distal to the proximal stressors, he proposed three minority stress processes that were pertinent to LGB individuals: (1) external, objective stressful events; (2) expectations of such events and its corresponding required vigilance; and (3) the internalization of negative societal attitudes. Another stress process was admitted: concealment of one's sexual orientation (DiPlacido, 1998; Meyer, 2003). For instance, a man can be in a relationship with another man but not identify as gay (minority status). Nevertheless, if he is perceived as gay by others because of stigma and prejudice toward LGB people (distal minority stress process), he may suffer from stressors associated with this stigma. He might exhibit caution in social interactions (expectations of rejection), conceal his identity out of fear of retaliation and harm, or internalize stigma (internalized homophobia). These 3 processes constitute the proximal minority stress processes. Meyer added other general circumstances (job loss or death of an intimate) which might contribute, along with the distal and proximal processes to the final mental health outcomes. The distinction between the objective (structural discrimination for example) and the subjective (individual discrimination for example) conceptualization of stress has important implications on interventions. Thus, the stressors can be overlapping, representing their interdependency (Miller & Major, 2000; Meyer, 2003). Moreover, coping and social support from individuals or peers further modulate the mental health outcomes.

Thus, mental health outcomes in minorities are modulated by the minority stress model. The impact of this model on sexual health have been studied in Western societies but not in

Lebanon. One can speculate that a man who is gay or bisexual in Lebanon might not identify as so (minority status). He might be cautious when interacting with his family and heterosexual friends (expectations of rejection), hide identity for anticipation and fear of harm (concealment), and/or internalize stigma (internalized homophobia). General circumstances such as economic status might further contribute to his mental health outcomes. Interventions in this context should target the subjective (individual discrimination) rather than the objective (structural discrimination) conceptualization of stress. In such context, coping and social support from friends or family or peers have a crucial impact on mental health outcomes as they are the unique reversible variables.

In summary, while the minority stress theory provides a useful framework for understanding the impact of societal stigma on mental health, it has limitations when it comes to studying GBM in Lebanon as it does not address cultural specificity, the complexity and dynamic nature of identity, and may not capture the full range of subjective experiences and personal perceptions that contribute to stress and mental health outcomes. Using a more culturally sensitive and nuanced framework like the *Identity process theory* could offer a more comprehensive understanding of the mental and sexual health outcomes in this specific context.

1.3. The social psychology of identity

The question of what causes different people to possess a "gay identity" is relatively new and not well explored. Social psychology debates on identity tried to distinguish between social identity and individual identity (Jaspal, 2014). Some theories of sexual identity will be presented in this part.

Cass's model

Dank's (1971) early model of gay identity development included two stages: identification and self-acceptance, which were based on qualitative interviews. However, this model was criticized for its simplicity and focus on the coming out process. Plumer (1975) proposed a four-stage model: sensitization, signification, coming out, and stabilization, which also highlighted the impact of homonegativity on gay individuals. Lee (1997) identified three stages: signification, coming out, and going public, but this model was criticized for being behavior-oriented and stereotypical. Hencken and O'Dowd proposed a three-step process based on self-awareness of feelings, self-acceptance, and social change leading to public identification, which was also criticized for its call for political activism. Cass's (1979) model

explored the mental processes involved in gay identity development and included six stages: identity confusion, identity comparison, identity tolerance, identity acceptance, identity pride, and identity synthesis. However, this model was criticized for being more descriptive of the coming out process than a model of identity development. Troiden (1989) proposed a non-linear four-stage model that emphasized the individual's feelings and cognitions. Alderson (1998) combined mental processes with stage models of gay identity in his ecological model, which aimed to go beyond the coming out process. Overall, the various models of gay identity development have been subject to criticism and refinement over time, highlighting the complex nature of sexual identity development.

Although Cass's model served as a reference for many authors, it lacked evidence on whether individuals' progression is linear or not and whether movement between the different stages can be predicted. Moreover, this model assumes that the construction of gay identity is normative and ignores other sexual identity categories that can be manifested during life. In the Lebanese context, identity confusion can be achieved through the social representation of heterosexuality as a normal accepted behavior, unlike sexual relations which "contradict the law of nature" (which includes homosexuality) (Maatouk & Jaspal, 2020). The consequent identity comparison may rise because of the natural comparison of one's self gay identity with the sexual identity of the normal and accepted heterosexual men. Identity tolerance, acceptance and pride might not be achieved in Lebanon. For instance, many international pride events and LGB-related conferences have been cancelled because of religious and political pressures and arrests were sometimes recorded (Maatouk & Jaspal, 2020). Moreover, fewer GBM have received social validation of their sexual identity in the Lebanese context compared with those who had not received validation. Furthermore, GBM may express different responses to Cass's model based on whether they live in urban or rural areas. For instance, LGB are more tolerated in the central areas of the capital, Beirut, compared to peripheral areas or, worse, to rural regions.

Thus, Cass's model does not sufficiently consider the cultural factors, non-linearity, and sociopolitical dynamics specific to Lebanon. A more contextually relevant and inclusive model that acknowledge non-linear progression, variability in social acceptance, and the impact of external stressors on identity development, is needed to understand the mental and sexual health outcomes of GBM in this particular context.

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Social identity theory

Cox and Gallois argued in 1996 that all stage theories fail to capture the complexity of human development and that assimilation into mainstream society does not necessarily signal a higher plane of development. Other critiques note that these models have often neglected individual differences in race, ethnicity, age, and social economic class (Alderson, 1998). They suggested the "social identity theory" proposed in 2004 by Tajfel and Turner as a better means of describing gay identity.

Social identity theory is based on the idea that people enhance self-esteem by viewing their own group in positive terms. It emphasizes how being part of various groups can significantly enhance an individual's well-being. The theory posits that individuals derive meaning and purpose from their group affiliations, contributing to a sense of identity and belonging. In the context of health, this social identification is theorized to impact well-being by reducing loneliness and enhancing overall mental health. This perspective underscores the idea that belonging to a community or group plays a pivotal role in mitigating feelings of isolation, thereby positively impacting an individual's mental and emotional state (McNamara et al., 2021). Group comparisons are often a natural outcome of this process. This theory is based on the individual's relationship with social groups and the effect of social group on the identity structure. It can be summarized by two processes: social categorization (simplifying the social world by slotting stimuli into categories) and social comparison (evaluating social categories by considering convergences and divergences between the ingroups and outgroups) (Tajfel & Turner, 2004).

Social categorization is a process that enables individuals to simplify the social world into categories. For instance, the word "gay" generates a series of stimuli that anticipate a pattern of thought and behavior different in a homosexual group compared to a heterosexual group, or in a Western society compared to a non-Western society. Several factors determine how a social stimulus is categorized: individual motivation, political rhetoric, social representations, etc. Social categorization, as a fundamental aspect of social identity theory, is deeply rooted in the intricate dynamics of group interactions (Cox & Gallois, 1996). Faced with a vast array of social stimuli, individuals instinctively engage in the cognitive process of categorization to simplify and navigate this complexity. This categorization extends not only to understanding others but also to self-categorization, shaping one's identity based on shared group memberships. The self-categorization process is more than mere labeling; it involves the adoption of normative behaviors, characteristics, and values associated with a particular group

membership. For GBM, self-categorization may involve the adoption of normative behaviors associated with their sexual orientation, leading to the formation of "us/them" dichotomies, where individuals identify with their group and differentiate it from others, such as the distinction between the gay and straight communities. However, the existence of multiple social identities can present challenges, especially for those with minority identities, as they may face conflicts and negative reactions from different groups. For example, individuals may grapple with the intersection of identities such as being homosexual and religious. The social identity approach posits that individuals possess both social and personal identities, with interactions influenced by the salience of these identities. In contexts where social identity salience leads to interactions becoming interpersonal, focusing on individual characteristics rather than group membership. This intricate interplay between social and personal identities underscores the nuanced nature of social categorization and its profound impact on group dynamics, particularly within the context of diverse identities, including those of GBM.

Social comparison can be understood by the way individuals categorize themselves as group members and then develop their own sense of self. If this sense of self is seen badly, it has a negative effect on the personality and vice versa. This is why stigmatizing gay can lead to distress to an individual who identifies as a member of this group, motivating the individual to evaluate his ingroup more positively than outgroups because of self-esteem feelings that are provided. Men with a strong gay social identity are motivated to attenuate stigma towards their group identity. This has been reported in different contexts such as HIV positive status, having sex with multiple partners, conforming to heteronormative norms such as monogamy and marriage (Jaspal, 2019).

Social identity theory allows to understand some aspects of self-esteem enhancement in Lebanese contexts. An example of this theory comes from PLHIV or from the LGB members who promote a positive view of their group to boost their own self-esteem. Another example comes from belonging to a religious group who promotes one's identity in Lebanon and might boost the self-esteem. Nevertheless, this theory does not address the structural stressors faced by GBM in Lebanon such as legal and social discrimination, religious and family pressures to have a heterosexual marriage for instance, and the lack of social acceptance, that are crucial factors influencing mental and sexual health outcomes. As such, the social identity theory's emphasis on self-esteem enhancement overlooks the impact of the aforementioned external

stressors on the well-being of individuals. As such, while the theory may effectively explain the well-being of religious groups in Lebanon or individuals living with HIV, its applicability becomes more nuanced in the context of intersecting sexual, religious, and family identities. The intricate interplay of these identities may not align neatly with the theory's assumptions, particularly when examining the health outcomes of individuals navigating these multifaceted aspects of identity. In addition, the link between social identity and health in the Lebanese context necessitates an exploration of how group dynamics impact health-seeking behaviors. In the case of GBM, the threat between sexual and religious identities adds a layer of complexity that requires a more tailored understanding. This involves investigating the tools and strategies individuals employ to seek health services when belonging to a group that faces challenges and threats related to their identity. Understanding the dynamics between social identity and health-seeking behaviors becomes crucial for developing targeted interventions that acknowledge the unique challenges posed by the intersections of sexual orientation, religious beliefs, and family ties within the Lebanese GBM community. Thus, this theory cannot be fully applied in the context of GBM in Lebanon, where structural stressors are acknowledged as inevitable, given that understanding how individuals cope with threats to their identity is crucial. This is why the *Identity process theory*'s comprehensive approach to identity development, threat response, coping strategies, and resilience factors makes it a more suitable framework for studying the mental and sexual health outcomes of GBM in Lebanon.

On a different note, while the social identity theory highlights the positive aspects of community belonging, it also lays the groundwork for exploring the potential negative implications, thereby introducing the concepts of "social cure theory" and "social curse".

Social cure theory and social curse

The essence of the social cure theory, proposed by Jetten et al. (2012), revolves around the idea that identity-based group dynamics play a pivotal role in fostering individual health and wellbeing. It emphasizes how being part of social groups contributes to a 'primary appraisal' process, helping individuals make sense of the world and interpret various aspects of their environment (Häusser et al., 2020). This foundational understanding, in turn, influences how individuals perceive and respond to potential threats and opportunities, shaping their overall stress and coping mechanisms.

Additionally, the theory has a 'secondary appraisal' process, wherein groups provide psychological resources such as social support and collective efficacy. This collective support enables individuals to evaluate their ability to cope with challenges collectively, leading to stress reduction and improved health outcomes. The social cure effect is demonstrated across diverse groups, including those with long-term mental health problems, older adults, adolescents, and individuals recovering from addiction.

Within the realm of GBM, this perspective provides insights into both the potential positive effects of social cure and the risks associated with social curse.

In the context of sexual minorities, identity-based group dynamics play a crucial role in shaping health and well-being. The social cure theory suggests that belonging to a supportive community can positively influence health outcomes among GBM. The shared identity provides a framework for understanding the world, interpreting challenges, and cultivating a sense of collective efficacy. Through social support networks, these groups create an environment that aids in coping with the unique stressors faced by sexual minorities, promoting overall mental and sexual health (Stevenson et al., 2023). In this regard, "social prescribing" refers to this practice of recommending which social activities will work for certain individuals to provide support, mainly in terms of health and wellbeing. It relies on group memberships, that can provide individuals with a sense of belonging and purpose as well as emotional reassurance, information and practical support, all of which enable them to cope with the challenges of their everyday lives. On the other hand, "social isolation" leaves individuals prone to mental and physical illness (Stevenson et al., 2023).

The Social cure theory implies that not all individuals within these identity-based groups experience the same level of support or inclusion. In the context of sexual minorities, social exclusion, discrimination, and stigma may lead to adverse health outcomes. The negative impact of social curse becomes evident when exclusionary practices within the group contribute to mental health challenges, sexual health disparities, and an overall decrease in well-being.

The potential for a Social Curse emerges when considering the impact of social exclusion on GBM (Kellezi & Reicher, 2012). The integration of group dynamics in stress appraisal reveals a complex interplay between the benefits and drawbacks of group identification. While groups can serve as a source of strength, facilitating feelings of support and capability in the face of stressors, they can also contribute, through various mechanisms, to distress and feelings of incapability (Wakefield et al., 2019). Through the Integrated Social Identity Model of stress (Haslam & Reicher, 2006), it is explained that if group boundaries are seen as permeable, members are less inclined to form a strong identification with the group and may opt to exit to evade stressors. Conversely, if group boundaries are viewed as impermeable, members feel

compelled to confront stressors and are more likely to foster a strong group identity. This may lead to the emergence of collectivistic strategies, such as social creativity (e.g., denying inequalities) or social competition (e.g., confronting the outgroup), thereby fostering high levels of ingroup support and promoting positive secondary appraisal. In essence, the integrated social identity model of stress highlights the complexity of stress experiences within group settings (Wakefield et al., 2019). While groups can provide crucial support when members collaborate effectively to address stressors, they can also intensify stress when such collective efforts falter, leading to feelings of distress and incapability. Even with social support available, Social Curse processes may still emerge if individuals perceive negative consequences for group members. This underscores the importance of considering both primary (severity perception) and secondary (coping strategies) appraisal in times of distress. Additionally, groups may negatively impact members through the promotion of "unhealthy" norms, which strongly identifying individuals may feel compelled to adhere to despite their potential to contribute to ill health and heightened vulnerability to stressors. These norms can adversely affect both primary and secondary stress appraisals, thereby heightening the risk of experiencing poor health and diminished well-being within the group (Stevenson et al., 2023). In the current scenario, GBM individuals may encounter situations where their GBM identity poses internal challenges, necessitating interventions aimed at reshaping their self-concept. This process may involve transitioning from a stigmatized identity that fosters concealment to a recovery identity that encourages openness and engagement with healthcare services (McNamara & Parsons, 2016). Consequently, individuals may opt to disassociate from groups incongruent with their new identity and seek support from more aligned groups (McNamara et al., 2024). As part of this transition, it's expected that individuals will adjust their social networks accordingly, which may entail gradually withdrawing from gay communities.

While the social cure theory provides valuable insights into identity-based group dynamics and health outcomes, its application in the context of GBM in Lebanon faces unique challenges. The Lebanese socio-cultural landscape is characterized by conservative norms and legal frameworks that criminalize same-sex relationships. Consequently, the dynamics of community identification and social support among GBM in Lebanon differ significantly from contexts where acceptance and legal protection exist.

As such, the potential application of this theory in Lebanon is hindered by the pervasive social stigma and discrimination against the LGBTQ community. In a setting where social exclusion is institutionalized, the positive aspects of community identification might be overshadowed

by the detrimental effects of discrimination, impacting mental and sexual health outcomes. Therefore, the theory's efficacy in predicting and explaining the health dynamics of GBM in Lebanon is limited, emphasizing the need for culturally sensitive approaches to understand and address the unique challenges faced by this population such as the *identity process theory* presented in the next section.

Identity process theory

According to Jaspal and Breakwell (2014), *identity process theory* is a model that explains how people construct their identities and how they respond to any threat to these identities. This theory is characterized by two processes, the first is a process of assimilation (where the individual absorbs the information and would come out) and accommodation (where changes in the identity structure make room for the new gay identity). A gay man, for instance, who initially does not identify as gay, might later incorporate this new information about himself into the identity structure (assimilation). Therefore, if his new sexual identity conflicts with his religious identity, he may question the significance of both (accommodation).

The second process is an evaluation of the tolerance of society, which can lead to pride (if the society is tolerant) or shame (if the society is not tolerant). These steps are guided by motivation and coping strategies.

Psychological research from various branches, including developmental, social, clinical, and cognitive, often reveals four identity principles through a variety of investigation methods, ranging from qualitative to quantitative and non-intrusive observation to structured experimentation. Jaspal and Breakwell (2014) provide an overview of this research. The commonly identified identity principles include self-esteem, self-efficacy, positive distinctiveness, and continuity, each of which is a multifaceted concept.

• According to Rosenberg et al. (1995), *self-esteem* refers to an individual's personal assessment of their own value. This evaluation can pertain to a particular aspect of the self (specific self-esteem) or to the entire self (global self-esteem). These two types of self-esteem have varying implications, with global self-esteem more closely linked to overall psychological well-being and specific self-esteem tied to specific domains of activity, such as athletic accomplishments. Although global self-esteem is typically the focus of measurement in *identity process theory*, the theory recognizes that specific self-esteem is a crucial foundation for establishing and sustaining more general global self-esteem. *Identity process theory* research indicates that maintaining self-esteem is one factor that affects an

individual's choice of coping strategies when facing unpleasant situations (Vignoles et al., 2006).

- Bandura (1977) explains that *self-efficacy* is an individual's self-assessment of their ability to handle a given situation based on their skills and circumstances. Bandura (1978) further suggests that perceived efficacy can influence one's selection of activities and environmental settings, thereby having significant implications for personal development. Individuals with lower self-efficacy may avoid experiences that would provide opportunities to enhance their potential or improve their self-assessment of their abilities. Additionally, one's estimation of self-efficacy impacts the amount of effort they exert and their persistence in the face of obstacles or negative experiences, as knowledge and competencies are typically acquired through sustained effort. Bandura emphasizes that although self-efficacy is regarded as one of the determinants of decision-making and action, particularly in situations of uncertainty and insecurity where the choice of coping strategies is essential. Furthermore, situations that challenge an individual's perception of self-efficacy will trigger particular resistance, as it is a motive for coping in its own right.
- *Positive distinctiveness* is centered around establishing uniqueness by emphasizing differences based on valued criteria between oneself and others. This principle motivates individuals to seek ways to differentiate themselves, ways that are accepted within their culture or sub-culture (Vignoles et al., 2006). While some suggest that the desire for a distinctive identity is stronger or even specific to individuals socialized in individualistic cultures, Becker et al. (2012) found that culture does not influence the strength of motivation to be distinctive, but rather the ways in which people achieve feelings of distinctiveness. In individualistic cultures, it is associated with social position. In *identity process theory*, positive distinctiveness is considered a primary goal for identity processes and a crucial factor in shaping coping strategy choices. Coping mechanisms that maintain or achieve positive distinctiveness are preferred when dealing with aversive situations.
- *Continuity* refers to the importance of achieving consistency between one's past, present, and future identity. The goal of continuity is to perceive oneself as internally consistent over time, even as changes occur. Continuity is not about staying the same, but rather creating a narrative that makes sense to oneself, and sometimes, not to others. The role of

identity continuity has been explored in the context of intergroup relations (Smeekes & Verkuyten, 2015) and other fields.

Coherence pertains to the sense of relevant identity aspects being consistent and compatible. In a study conducted by Jaspal and Cinnerella (2010), researchers explored the tensions arising from the coexistence of sexual and religious identities among British Pakistani men who identify as Muslim and gay, shedding light on the importance of psychological coherence. Coherence, in this context, refers to the need for compatibility and consistency between pre-existing identities within an individual's self-concept. Participants in the study grappled with the challenge of reconciling their sexual identity as gay with their religious identity as Muslim. The struggle was not merely to maintain continuity within each identity but rather to achieve coherence between seemingly incompatible aspects of the self. The psychological coherence principle emerged as a distinct concept, differing from the continuity principle, as it emphasized the need for compatibility between existing identities. The study found that individuals perceived certain identities as interconnected, guiding their evaluation process of identity. Notably, participants tended to devalue one identity to maintain psychological coherence, reflecting the subjective nature of this principle. Some participants even employed external attributions, such as being tempted by Satan, to reduce the perceived psychological costs of conflicting identities. The study argues that achieving coherence involves both intrapsychic coping strategies and an awareness of broader intergroup issues, acknowledging that individuals can form their own conclusions about the compatibility of their identities, transcending societal representations. The concept of psychological coherence, as explored in this study, provides valuable insights for understanding the complex dynamics of identity and the strategies individuals employ to navigate tensions between different aspects of themselves.

Thus, motivation relies on *self-esteem* (personal and social worth), *self-efficacy* (one's belief in own competence and control), *distinctiveness* (feelings of differentiation from others), *continuity* (psychological thread between past, present and future), and *coherence* (perception of compatibility within identity). When any change of social context happens, these principles can be compromised thus threatening the identity, or validated thus affirming identity. Research suggests that each of the four identity principles – self-esteem, self-efficacy, positive distinctiveness, and continuity – is related to the use of adaptive coping strategies in aversive conditions and the ability to avoid threatening situations. Each principle has the potential to contribute to identity resilience, as individuals are motivated to create and maintain an identity structure that fosters high levels of self-esteem, self-efficacy, positive distinctiveness, and continuity. By developing such an identity structure, individuals are more likely to retain it and to select and use effective coping strategies that help to protect it, thus increasing their identity resilience.

Identity process theory suggests that individuals respond to identity threat by engaging in coping strategies. Coping strategies are defined as actions taken to remove or modify a threat to identity, whether in thought or deed (Breakwell, 1986, p. 78). These strategies function at three levels of interaction:

- *Intrapsychic strategies* are focused on individual psychological processes. Some of these strategies can be seen as **deflection strategies**, which allow the individual to deny or reconceptualize the threat or the reasons for being in a threatening situation. Others are **acceptance strategies**, which involve some form of cognitive restructuring to prepare for the threat. As an example, prior to coming out as gay or bisexual, an individual may anticipate adverse reactions from certain individuals and proactively create distance from them in order to mitigate the negative consequences of losing those relationships.
- Interpersonal strategies aim to modify relationships with others. Unfortunately, many of these strategies are maladaptive. For instance, an individual who feels threatened may isolate themselves from others or pretend to belong to a group or network that they are not actually a part of in order to avoid being exposed to stigma. This strategy aligns with the **denial strategy** since denial operates on a psychological level, whereas passing (or pretending to belong to another group) is an interpersonal strategy. A gay man may show his identity and present as heterosexual in social situations where revealing his authentic self as gay may be too dangerous for his identity. Individuals may fear experiencing stigma, hostility, or even violence, all of which could jeopardize their identity. An example of a proactive interpersonal strategy is **self-disclosure** since it can enable individuals to obtain support from others.
- *Intergroup strategies* aim to modify relationships with groups. Most of these strategies are proactive. People may seek out groups of individuals who share their experiences and can provide social support. They may even create new social groups or pressure groups to influence how their group is represented in society. This is the example of gay-affirmative advocacy groups in the world that have helped empower gay individuals who were

struggling to construct their identity. The creation of gay-affirmative spaces where individuals can receive effective healthcare has had a similarly empowering effect, allowing them to redefine their relationship with their gay identity that may have been stigmatized in other contexts. By feeling like a member of a group, supported by others who share their experiences, individuals are more likely to cope effectively.

Jaspal (2018) reviewed the coping mechanisms that could be employed by gay men who experience identity threat. Personality characteristics and the availability of coping mechanisms in a particular social situation will both affect the coping strategy chosen by the threatened individual. Moreover, the evaluation of particular coping strategies will be determined based on social representations. This theory is directly linked to mental and sexual health outcomes of homosexual men. In fact, effective coping (whether intrapsychic, interpersonal or intergroup) will lead to mental and sexual health well-being.

Social identity theory defines the primary mode of self at group level, whereas *identity process theory* defines identity within social and threatening context at individual level. This is why the *identity process theory* will be used as a main theory frame for this project, taking into consideration the social and threatening Lebanese context, and allowing a better contextualization of findings, which might be different than those reported in the Western societies. A summary of this theory's schemata is provided in **Figure 1**.

Identity process theory has recently integrated identity resilience into its framework (Breakwell & Jaspal, 2021). Identity resilience is achieved when an individual perceives their identity as having a high overall rating of self-efficacy, self-esteem, continuity, and distinctiveness. This reflects an individual's belief in their ability to overcome challenges, their self-worth and value, their certainty of who they are despite changes, and their positive sense of self in relation to others. Identity resilience is not specific to a single domain, but rather it encompasses an individual's overall identity across their lifetime. The *Identity process theory* views identity resilience as an ability that is developed over the course of an individual's life, and is influenced by social phenomena and experiences, such as group memberships, education, exposure to cultures, and religion, as well as individual characteristics like personality traits, intellectual capacity, and physical abilities (Breakwell & Jaspal, 2021).

The level of identity resilience that an individual possesses significantly affects their ability to cope with stressors that threaten their identity, such as negative experiences related to their stigmatized sexual identity. The concept has been applied in various empirical contexts, such

as recalling negative memories, and disclosing a stigmatized identity like being gay, where identity resilience has been proven to lessen negative emotions (Breakwell & Jaspal, 2021).

Finally, the *Identity process theory* offers a conceptual framework for understanding the role of social representations in various aspects of identity, including development, management, threat, and resilience.

These representations play a crucial role in identity development by influencing how individuals perceive and interpret their social environment. In fact, individuals integrate social representations into their self-concept, contributing to the formation and evolution of their identity. The theory suggests that the ongoing negotiation and interaction with social representations are integral to the dynamic process of identity construction. Furthermore, social representations are used by individuals to manage their identity in social contexts. People may align their behavior, attitudes, and self-perception with the prevailing social representations can also pose a threat to one's identity. When an individual's identity deviates from or is perceived as conflicting with the established social representations, it may lead to identity threat. This threat can manifest as social exclusion, discrimination, or feelings of alienation.

The theory also explores the concept of resilience in the face of identity threats (Breakwell & Jaspal, 2021). It suggests that individuals can develop resilience by adapting and renegotiating their relationship with social representations. This may involve finding new ways to integrate personal identity with the existing social norms or challenging and reshaping prevailing social representations.

In the exploration of mental and sexual health outcomes of GBM in Lebanon, the choice of the *identity process theory* serves as a comprehensive framework that aligns with the unique sociocultural context of Lebanon. The intricate fabric of the Lebanese society, characterized by diverse religions, familial pressures, and a patriarchal structure, necessitates a theory that delves into the intersections of sexual identity, religious identity, and family identity. The *identity process theory*, as proposed by Jaspal and Breakwell (2014), precisely addresses the dynamics of threat and coping mechanisms within these intersecting identities. Considering Lebanon's varying societal tolerance, assessing the impact of identity threats on the well-being of GBM becomes paramount. The *identity process theory* 's exploration of motivating and coping strategies, tied to principles like self-esteem, self-efficacy, positive distinctiveness, and continuity, provides a robust framework for understanding identity dynamics in this specific context.

Moreover, this theory recognizes the subjective and context-dependent nature of identity processes, aligning well with Lebanon's diverse social landscape. By employing the *identity process theory* in this study, it is crucial to emphasize that our study is not about uncovering a universal truth but aims to identify correlates, contributing valuable insights to the existing literature on mental and sexual health outcomes for GBM in Lebanon.

As such, this research leverages the *identity process theory* to unravel coping mechanisms, examining the four identity principles and the recent integration of identity resilience which became crucial in understanding how individuals withstand identity threats in Lebanon. Additionally, it considers the role of social representations in shaping identity dynamics within Lebanon's socio-cultural context. The inclusion of social representations underscores their influence on identity development, management, threat, and resilience.

In summary, the selection of the *identity process theory* as the main theoretical framework is grounded in its capacity to explore the intricate intersections of sexual, religious, and familial identities within Lebanon's specific socio-cultural context. This research seeks to contribute nuanced insights into the mental and sexual health outcomes of GBM men, acknowledging the multifaceted nature of identity processes and coping strategies in this diverse and complex societal landscape.

2. Theories about the "invisible" bisexuals

Many uncertainties often surround bisexuality because of the scarcity of studies invested on this minority. Bisexuality has had a problematic history. Krafft-Ebing (1886) considered it a disease called "psychosexual hermaphrodism" (Elia et al., 2018). Freud had another theory and considered it as a path to heterosexuality or homosexuality. Kinsey through his scale left a place for bisexuality but did not mention it, thus further erasing this identity. While the term "bisexuality" was used for the first time a century ago (1915), bisexuality is still debated at very basic levels. It is not known if it is a connection level in the spectrum of the fluid sexual orientation or if it is a sexual orientation per se. Other authors found that men are not actually bisexual (orientation) but rather that they self-identify as bisexual (identity). Due to the relative paucity of research on bisexuality, many holes exist in understanding this identity and common theories are not empirically validated (Elia et al., 2018).

Interesting work was conducted by Weinberg (1994) who tried to develop a model of 4 stages of bisexual identity: initial confusion, search for a self-label, self-acceptance of the new identity, continued uncertainty (Elia et al., 2018). However, this model uses bisexual identity as an uncertainty rather than an identity acceptance (Maatouk & Jaspal, 2020). Brown (2002) proposed another model which he describes as "an expansion of Weinberg et al.'s" (1994) original model, and is theoretical in nature. The three first stages he proposed are similar to Weinberg but the fourth is different. Instead of "continued uncertainty", Brown called it "the Identity Maintenance stage" to better describe the behavioral features of this final stage as they have been identified in the literature. The author argued that 75% of Weinberg's participants were found to have continued self-labeling as bisexual despite occasional emotional or cognitive uncertainty. Identity process theory has not been explored in bisexual men. Based on the specific Lebanese context where social representations and religion play important role in one's identity, it would be interesting to investigate the theory frame of *identity process theory* in bisexual men. As such, one can draw on general principles and available evidence to provide some interpretations. Regarding self-esteem, this principle is crucial in the context of bisexual identity, as individuals may face challenges related to biphobia and negative social attitudes. Maintaining positive self-esteem becomes a coping mechanism, and bisexual individuals may employ strategies to enhance their self-esteem, such as seeking positive social comparisons within their bisexual community. As for self-efficacy in the context of bisexual identity development, it could manifest in the ability to assert one's identity despite societal pressures. This might include navigating relationships, advocating for visibility, and countering biphobic attitudes. Brown's (2002) concept of "Identity Maintenance" may involve a strong sense of selfefficacy in sustaining a bisexual identity despite external uncertainties. Moreover, positive distinctiveness could be reflected in embracing the unique aspects of bisexuality. Strategies such as pride, community involvement, and challenging stereotypes may contribute to positive distinctiveness. This is particularly important given the societal challenges and negative attitudes that bisexual individuals often face. In addition, bisexual identity may involve an ongoing process of maintaining continuity and coherence despite societal pressures. This could be reflected in the ability to integrate one's identity into a cohesive sense of self over time. Brown's (2002) notion of "Identity Maintenance" aligns with the need for continuity and coherence, suggesting that despite uncertainties, bisexual individuals maintain a stable selfconcept. Regarding coping strategies, Gómez and Arenas (2019) identified both positive (pride) and negative (shame) coping mechanisms during the stages of bisexual identity development. These coping strategies likely influence mental and sexual health outcomes.

Positive coping, such as pride, may contribute to better mental health, while negative coping, such as shame, may have adverse effects. The challenges bisexual individuals face in societal, interpersonal, and individual domains (Hertlein et al., 2016) highlight the importance of effective coping strategies for their well-being. In summary, while specific literature on applying the *Identity process theory* to bisexual men may be limited, the principles of this theory can be extended to interpret how bisexual individuals navigate their identity development.

Some aspect of the fact that gay men might self-identify as bisexual is true. In fact, selfidentifying as bisexual may be less stigmatized than self-identifying as a gay man (Maatouk and Jaspal 2020a). This is independent from the final identity path because this sort of protection that individuals try to get by self-identifying as bisexual men could lead to less experiences of homonegativity.

Social representations theory can be useful to understand perception of bisexuality. Maatouk and Jaspal (2020a) argued how social, political, and religious factors may play a crucial role in the Lebanese society (conservative, unstable politically, multi-religious) and are central to the formation of social representations. These factors modulate the social context in which bisexual identity is constructed in such contact. Gómez and Arenas (2019) conducted a study based on in-depths interviews and obtained data about the development of bisexual identity. They argue that this identity goes through 6 phases modulated by social representations. The first three phases are linked: curiosity to experiment followed by obstacles then confusion in the development of the bisexual identity. Thus, during the first 3 stages, the attraction for both sexes emerges and lead to the secondary self-questioning than to the different coping mechanisms, that can be positive (pride) or negative (shame). The following 3 stages are: partial commodity, acknowledgement of bisexuality as a sexual orientation and integration. Emotional experiences accompany the development of the 6 stages and can impact the physical, emotional and psychological state of the individual. These emotional experiences are linked to the surrounding environment. Thus, similar to the theories of gay identity where individual, social and structural factors modulate individuals' answers, one can postulate that similar path is taken by bisexual men during their identity development.

Moving to relationships, previous findings reported that individuals who are heterosexual tend to have more negative attitudes (named biphobic or binegative attitudes) towards bisexuality than do individuals who are gay/lesbian or bisexual (Alarie & Gaudet, 2013; Hertlein et al., 2016). Such attitudes include believing bisexual individuals are unacceptable and are untrustworthy. On the other hand, studies have reported less in-group negativity among bisexuals compared with other sexual orientations (Hertlein et al., 2016). People who are bisexual identify multilevel barriers to emotional well-being: societal, interpersonal, and individual (Hertlein et al., 2016). The dichotomy of gay and heterosexual is the basis of biphobia and leads to societal stigma. The latter is expressed by discrediting and devaluing bisexuality as a sexual orientation, invisibility from the larger LGB community, and disseminating various myths about bisexual persons such as stereotypes portrayed in the media, and common social assumptions (bisexuality assumed to be a phase between heterosexuality and homosexuality). Interpersonal stigma is experienced through unsupportive relationships with romantic partners, friends, family members, coworkers, and those seen as part of one's LGB community (Morrison et al., 2019).

As for sexual health outcomes, reports are scarce, recent and give some insightful information. Findings report that discrimination, labeled "binegativity", has the potential to compromise bisexual individuals' mental and physical health. Binegativity reflects low self-acceptance and a lack of acceptance from heterosexual partners, along with negative support from friends and family, and might lead to a poor overall mental health (Feinstein & Dyar. 2017). Illegal drug use (Green & Feinstein 2012), anxiety and depression (Gruskin & Gordon, 2006) and riskier sexual behavior (Ross et al., 2010) were reported in this community. The minimal number of studies conducted in this field compared to those reported in gay men is noteworthy in mental and sexual health outcomes as well.

3. Mental and sexual health outcomes

3.1. Mental health

Sandfort et al. (2014) presented evidence that gay men experience poorer mental health outcomes compared with the general population (Jaspal, 2019). Several theories try to explore the link between poor mental health outcomes and gay identity.

Years prior, in 1995, Meyer has shown that poor mental health outcomes are predicted by prejudice, rejection, discrimination, dysfunctional sexual identity, internalized homophobia and other factors (Meyer, 1995). This is what has been referred to as "the minority stress

model". The risk factors for poor mental health outcomes depend on situational stressors and psychological self-schemata¹. According to Jaspal et al. (2017)'s discussion, these two elements are interconnected. For instance, exposure to homophobia may lead to internalized homophobia and low self-esteem leads to acceptance of victimization from others. Consequently, people experiencing poor mental health may adapt in a positive or negative behavior. The latter can lead to substance use which may further decrease mental health and wellbeing. Evidence also shows that rejection from the gay community itself based on HIV status, physical appearance, or other criteria may result in similar outcomes. Other non-psychological factors include lower income and lower socio-economic backgrounds (Jaspal et al., 2019).

Identity Process Theory also explores the link between gay identity and poor mental health outcomes, in the context of identity processing. When individuals experience identity threat, it can lead to various psychological challenges that may manifest as poor mental health outcomes. For instance, identity threats can overwhelm individuals, leading to a sense of insecurity and distress. This could be the case in Lebanon, when a gay man experiences family pressure for instance to have a heterosexual marriage. Another example is a threat between religious and sexual identity in one individual. In the context of identity processing, individuals may attempt to cope with this threat through various strategies, such as denial, avoidance, or conformity to societal norms. If these coping mechanisms are unsuccessful in alleviating the identity threat, it can contribute to negative mental health outcomes. In terms of implications, identity threats can have significant implications for an individual's resilience, self-efficacy, and overall psychological well-being. When individuals experience identity threats, they may question their self-worth, experience self-doubt, and face challenges in maintaining a positive selfconcept. This can erode their resilience in dealing with life stressors and negatively affect their sense of self-efficacy, which is the belief in their ability to handle challenges effectively. The link between identity threat, diminished resilience, reduced self-efficacy, and poor mental health outcomes is multifaceted. When individuals struggle to cope with identity threats and experience ongoing stress related to their identity, it can lead to increased levels of anxiety, depression, and psychological distress. The chronic nature of identity threat can contribute to a long-term impact on mental health, affecting overall well-being.

¹ The American Psychological Association defines self-schema as a cognitive framework of beliefs and information about the self that guides and influences a person's perceptions and attention

In summary, the *Identity process theory* helps understand how identity threat can lead to negative mental health outcomes by examining the coping mechanisms individuals employ, the implications of identity threat on resilience and self-efficacy, and the link between these factors and poor mental health. Identity threat challenges an individual's ability to maintain a positive and resilient sense of self, potentially resulting in psychological distress and mental health challenges.

3.2. Sexual health

One of the main consequences of poor mental health is poor sexual health. In fact, an individual who self-identifies as a gay man and who has a lack of wellbeing at the psychological level can directly (depression, anxiety, etc.), or indirectly (drug usage) live a situation of poor sexual health.

This has been reported empirically where gay men usually experience poorer sexual health outcomes compared to the general population.

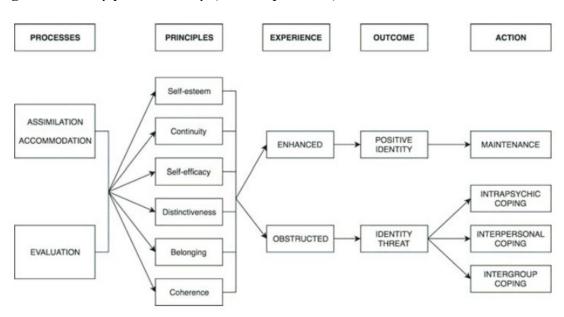
The most important factor in sexual health is HIV status. Indeed, the HIV epidemic has disproportionately affected gay men (Jaspal, 2019). Moreover, sexually transmitted infections are empirically more prevalent among gay men. These high incidences can be attributed to the higher number of sex partners, to the inconsistent condom use, growing prevalence of drug usage followed by unprotected sex (known as chemsex) and decreased awareness in the sexual health field (Jaspal, 2019). There is also evidence of the low rate of knowledge about sexual risk and protentional tools consistent in the majority of empirical studies. In some contexts of stigma and discrimination, the first step of prevention-testing-shows low rates because of the lack of accessibility to sexual health services (Maatouk & Jaspal 2019).

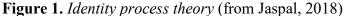
The link between mental health and sexual health outcomes is inevitable. There is a close reciprocal link between poor mental health and poor sexual health outcomes. For instance, individuals with poor mental health are at increased risk of engaging in sexual risk behaviors, and thus in increased risk of acquiring HIV. These behaviors may represent maladaptive strategies following threats to self-identity (Jaspal et al. 2017). Reciprocally, an individual living with HIV can develop mental health disorder which represents a coping deficit to HIV diagnosis. Other situations include lack of self-acceptance, hopelessness, lack of self-esteem, serostatus disclosure, lack of social and economic support which might lead to deflective intrapsychic strategy. A lack in any of these two health components illustrates the pathway

through which social stressors can threaten identity processes, thus inducing negative effect and challenges.

4. Conclusion

This chapter focused on the theory behind sexual identity, sexual orientation, and their psychosocial factors. It is clear that each theory can explain one particular aspect of bisexuality and homosexuality in Lebanon. However, a theory that is validated in a specific (Western) cultural context might not be applicable in a different socio-cultural background (Lebanon). I also exposed the theory of the link between these identity processes and the outcomes on two major components of health: mental and sexual statuses. It would be important to understand, for instance, the mechanisms and processes by which a gay or a bisexual man experiencing a threat related to family (pressure to have a heterosexual marriage), or to religiosity (threat between gay and religious identities), cope with these threats.





Chapter 5: Methodological overview

This chapter will focus on methodologies and provide comments for the 3 methods of the studies in the thesis.

Methodological approaches in psychology

Given the wide range of specific methodological approaches in psychology, this section explains use of particular methods in the present series of studies.

At the very beginnings of studies conducted in psychology, the importance of methods can be seen in mentalism/subjectivity/belief and behaviorism/objectivity/evidence (Hall & Preissle, 2015). The consequent favor behaviorism/objectivity/evidence trend to over mentalism/subjectivity/belief led to a dominance of quantitative research. In fact, the adequate usage of quantitative methods in the physical sciences led to an attempt to extend them into other areas of enquiry. Dealing with matters of fact that is, things that people are "positively" certain about, is the main generator of quantitative methods (*positivism*) (Sansone et al., 2003). Based on the social changes and challenges of the 1960s, a recognition was made that psychology simply about describing behavior but also was not about shaping and informing behavior which created a need to develop ways to understand how people interact with and understand their environment and those around them (social construction or interpretivism). Consequently, in the years 1980s, qualitative approaches reemerged (Willig & Stainton-Rogers, 2008). The broad range of the new qualitative methods allowed focus on the interpretation and understanding of what human actions mean and promotes exploration of unique perspectives of individuals, social institutions, and constructs (Hall & Preissle, 2015).

However, the reasons of choosing quantitative versus qualitative methods may lie in epistemology and the researchers' own assumptions about what knowledge is and how they view the world, or the theory that they seek to explore, rather than in the theory underlying the research question. For instance, psychologists using quantitative methods came to regard the qualitative methods as a derogation of psychology as a science. On the other hand, psychologists keen to adopt qualitative methods saw the traditional natural scientific positivist paradigm and its associated quantitative methods as displacing the human individual from the focus of the research. This debate between the two groups of methods became wide and popular among psychology researchers and led to the emergence of new concepts such as multimethod approach and mixed method approach.

For research that pursues combinations of purposes not fitting with the traditional boundaries of qualitative and quantitative research, mixed methods are used to answer research questions. This is the case in this overall project where abiding by one method would be risky and would negatively affect the research aim and objectives. For instance, this is a study in a "delicate" group of GBM in a religiously diverse but relatively conservative society in Lebanon. Thus, one universal method would limit the findings. Second, a "ready-made" method that applies to a context where GBM have a relative more freedom and where societies are not as religiously diverse as Lebanon would not necessarily fit into the Lebanese context. This is why the choice to include wide methods aimed at widening the options to explore findings and answer the research questions. Consistently, the aim of adding three different methods was to use the strengths of these different methods and their respective sources of techniques in order to reach the project's general aim. As such, a mixed-methods approach was deemed necessary to address the complex nature of studying GBM in a religiously diverse and conservative society like Lebanon.

A mixed-methods approach, defined as an approach where the investigator combines statistical trends (quantitative data) with narratives and lived experiences (qualitative data), provides in this specific context a better understanding of the research problem (Creswell, 2021). Creswell defined the mixed methods research as "a methodology and method to research in the social, behavioral, and health sciences in which the investigator gathers both quantitative (closed-ended) and qualitative (open-ended) data, integrates or combines the two, and then draws inferences (called "metainferences") from the integration that provides insight beyond what can be learned from the quantitative and qualitative data (Creswell, 2021, Chapter 1). In fact, this approach was followed because, as Creswell defined, it was thought that a qualitative study alone, or a quantitative study alone, would not allow to explore patterns of correlation and prediction within the target population. However, it would be more solid to have conclusion based on collecting and analyzing quantitative and qualitative methods, integrating findings for interpretation of results, and framing the design within the theory (*Identity process theory*).

The first study was cross-sectional and quantitative and aimed at having a "preliminary" image of the findings to get a sense of the relationships between family context, religiosity, sexual identity, mental health outcomes in a sample of Lebanese MSM. Starting with a quantitative study was explained by the need to explore patterns of correlation and prediction within the target population, to test whether the hypotheses (numbered 1 to 5) are valid, examine probable causes and effects, control the bias of the "clinical background" of the investigator and whether the hypotheses drawn based on the clinical background are valid or not. It is assumed however that this method will be limiting the understanding of the context of the participants, and will miss the experience of the communities in this research. Consequently, based on the findings from study 1 and validation of the initial set of hypotheses (numbered 1 to 5), more in-depth exploration relied on the qualitative study where the semi-structured interview protocol was based on the results from the psychometric cross-sectional study. It is assumed that this second method will provide detailed perspectives and capture the voices of participants, allowing their experiences to be understood in context. This method is also limited by the fact that it does not provide numbers, is highly subjective, and has limited generalizability (Creswell, 2021). However, interpretation of results based on the two methods, through explanatory sequential design was preferred: this way, the intent was to first explore use the quantitative design findings, then to explain them using the qualitative design. Based on the interpretation provided by study 1 and 2 combined, the intervention design was used with an experimental framework. This integration, or triangulation of findings, will allow us to build our conclusions on strong methods, amid a very complicated cultural context. This is why the third study aimed at cross validating the results, but also at manipulating the determination of causal antecedents of mental outcomes derived from studies 1 and 2.

Informed by the diverse approaches to sequential designs, the candidate strategically employed a mixed-method explanatory sequential design, opting for a sequential progression from quantitative to qualitative methods. Recognizing the absence of a universally correct methodology, this strategic decision was guided by the understanding that initial quantitative analysis could provide a general understanding, while subsequent qualitative exploration refines and explains statistical results, aligning with the rationale highlighted in the literature (Walker & Baxter, 2019). The rationale for this sequence stems from the candidate extensive eight-year background in clinical work, which served as a solid foundation for qualitative information. Given the complexity of the variables involved, a quantitative study was deemed essential for the initial phase. This allowed me to identify and narrow down the most significant variables, addressing the multitude of factors inherent in the candidate's personal experience. Following the completion of the quantitative phase, Study 1, I chose the most crucial variables and proceeded to implement a structured questionnaire for Study 2. The culmination of these two studies provided insightful conclusions, highlighting the pivotal role of family, religion, internalized sexual orientation stigma, and psychological distress in the mental and health outcomes of GBM in Lebanon. Recognizing the paramount importance of these variables, I opted for an experimental study as the logical next step. The chosen sequence, therefore, reflects a strategic decision to employ quantitative methods initially for variable selection, followed by a qualitative assessment to delve deeper into the identified variables. The experimental study serves as the final phase, building upon the insights gained from the previous two studies. It enhances the rigor of hypothesis-testing research, allowing for the investigation of causal relationships between identified variables in the previous studies with minimized bias and increased reliability, aligning with the preferred approach for achieving methodological rigor in experimental designs (Ali Khan et al., 2023). It is crucial to note that while this order was the most suitable for our specific research questions, the mixed methods approach remains inherently flexible, with no rigid rules or right/wrong sequences. Accordingly, this decision aligns with the understanding that there is no universally correct methodology, and the order was tailored to the research objectives, allowing the quantitative findings to guide and refine subsequent qualitative exploration. This adaptability underscores the versatility of the mixed methods approach, allowing researchers to tailor their methodology based on the unique demands of their hypotheses, and contributing to a nuanced understanding of the challenges faced by GBM in Lebanon along with understanding this underexplored field and providing valuable insights for future research.

It is worth mentioning that due to the scarce studies in this community and field in Lebanon, the methods perspective is that the current research aims at answering questions, rather than searching for the "truth". Therefore, by the end of the project, individuals should be able to determine whether the research will significantly contribute to their understanding of this field or not.

Having said this, the research uses the following research methods:

Quantitative study (methods explained in study 1)

Qualitative study (methods explained in study 2)

Experimental study (methods explained in study 3)

Navigating the potential limitations and pitfalls of the mixed-method approach is crucial in interpreting the findings of the three studies. Study 1 faced challenges in assessing the

correctness of the scales used, opting for simplicity to maintain a brief questionnaire during Lebanon's overlapping crisis. This crisis-induced stress and disinterest posed constraints on study length. Moreover, the attempt to quantify a super-complex field in Study 1 introduced inherent difficulties. Study 2, relying on participants' subjective memories and experiences, inherently lacked objectivity and generalisability due to varied interpretations of lived experiences and emotions. Similarly, Study 3, based on the recall of experiences, presented limitations in understanding the full impact and emotions associated with those memories, despite being the most practical option in the absence of comprehensive studies in the field in Lebanon.

Given the substantial gap in the literature demonstrated in the examination of studies in Lebanon and the absence of existing correlates, these studies hold significant value as a baseline for future research. Despite the inherent positivity and limitations in each study type, their collective contribution aids in reaching nuanced conclusions. Notably, despite differing methodologies and limitations, the conclusions drawn from Study 1 and Study 2 often align, illustrating the robustness of the findings.

In the sampling processes of Study 1 and Study 3, convenience sampling was employed due to challenges in recruiting sexual minorities amidst multiple crises; however, this wasn't backed by power analysis. Given the constraints, this approach was deemed the most practical. It is essential to underline that the chosen methods represent the best solutions to address the research questions within this unique context, rather than a definitive right or wrong approach. The primary objective is not to unveil an absolute truth but to offer meaningful answers within the complexities of this study's circumstances.

Detailed methods and tools used will be explored in the corresponding study chapter.

Chapter 6: Internalized sexual orientation stigma and mental health in a religiously diverse sample of gay and bisexual men in Lebanon (Study 1)

1. Reference of the article

Maatouk, I., & Jaspal, R. (2022). Internalized sexual orientation stigma and mental health in a religiously diverse sample of GBM in Lebanon. Journal of Homosexuality, 1-20.

2. Objective and hypotheses

The purpose of this study was to examine, in a sample of Lebanese GBM representing a variety of religious backgrounds, the determinants of internalized sexual orientation stigmas and mental health outcomes (i.e., depression and psychological distress).

In laying the groundwork for this study, the hypotheses were meticulously crafted based on insights derived from the *identity process theory* and Meyer's theoretical framework. These frameworks provided a conceptual lens through which certain patterns in GBM's experiences could be anticipated. From this theoretical groundwork, hypothesis 1 emerged, postulating that bisexual men, confronting the unique challenges of societal invisibility in Lebanon and influenced by the country's family and religious pressures, would exhibit higher levels of internalized sexual orientation stigma. This hypothesis was meticulously crafted to capture not only the anticipated internalized stigma but also the potential impact on outness and reported family pressure among bisexual men to adhere to heterosexual marriage expectations.

Subsequently, hypothesis 2 was conceived, acknowledging that individuals of no religion might experience higher outness but, simultaneously, report poorer mental health outcomes compared to their Christian and Muslim counterparts. This hypothesis, born from the context of Lebanon's diverse religious landscape, reflects the intricate interplay of religious identity, societal norms and disclosure, and mental health outcomes.

Building on the *identity process theory*'s insights into coping mechanisms in the face of identity threats, hypothesis 3 explored the intricate associations between religiosity, bisexuality, outness, and internalized sexual orientation stigma, offering a nuanced understanding of how these factors intersect in shaping GBM's experiences.

Hypotheses 4 and 5 integrated expectations about marriage, self-harm history, and religious practices, painting a comprehensive picture of the intricate interplay between identity, societal

expectations, and mental health outcomes within the Lebanese context. In this way, the hypotheses in this study were not merely formulated in isolation but were deeply rooted in theoretical frameworks, contextual considerations, and the cumulative insights from prior research, laying the foundation for a comprehensive understanding of the studied variables.

Accordingly, the following hypotheses were tested in this study:

- *Hypothesis 1*: Bisexual men will exhibit higher internalized stigma, less outness, and be more likely to report family pressure to have a heterosexual marriage than gay men.
- *Hypothesis 2*: People of no religion will report higher outness and will be less likely to report family pressure to have a heterosexual marriage but will also report poorer mental health than Christians and Muslims.
- *Hypothesis 3*: Religiosity and being bisexual will be positively associated with internalized sexual orientation stigma while outness will be negatively associated with internalized sexual orientation stigma.
- *Hypothesis 4*: More individuals expected to get married reported a history of self-harm.
- *Hypothesis 5*: Frequency of attending one's place of worship will be negatively associated with psychological distress and depression.

3. Methods

3.1. Design

A survey was administered to service users attending one large private dermatology and STIs clinic serving as a checkpoint for HIV and STIs in Beirut. An online questionnaire platform (Qualtrics) was used to allow faster data collection and better access to specific populations, such as GBM, which may otherwise be difficult to reach (Wright, 2005).

3.2. Sampling and inclusion/exclusion criteria

The survey followed a convenience/purposive sampling. A poster with contact details was present in the clinic as an announcement and during the study time frame. Similar posters were distributed to the NGOs that collaborate with the clinic. Social media accounts of the clinic disseminated announcements about the study with contact details.

Were included in the study all men aged ≥ 18 years, and self-identifying as GBM. The time frame of the study was October 2019 – September 2020.

3.3. Measures

Before listing the scales used in this study, it is essential to mention that careful consideration was given to selecting scales that address the research questions, are validated in related studies concerning sexual minorities, align with the context, and maintain brevity in the questionnaire. Thus, because of the situation in Lebanon (economic crisis, political instability, social unrest), and based on feedback from previous studies in this field, scales capturing certain variables were selected based on their validation and brevity. Although these scales had been utilised in the Lebanese (Arabic-speaking) context, they had been extensively used in studies using *Identity Process Theory* and *Social Identity Theory*, which have played a role in their selection. Accordingly, the reliability and validity considerations will be discussed in the Limitations in Chapter 10.3).

Socio-demographic questions included age (years), nationality, governorate of residence (Beirut, Mount Lebanon, Bekaa, South, North), highest qualification (primary school, secondary school, under-graduate, post-graduate, no qualification, other), with whom do participants live (alone; with co-workers/students; with employer; with parents; with a friend; with spouse/live-in partner; other), economic status (indirectly assessed with the household crowding index by dividing the number of persons who live in the house by the number of rooms in the house excluding bathroom(s) and kitchen (Melki et al., 2004). The economic status is considered low if the household crowding index is below 1; intermediate if between 1 and 2; and high if 2 and upper). Were also assessed relationship status (single; in a monogamous relationship; civil partnership; married; in an open relationship; in a monogamous relationship but I have had other partners in the last year without my partner knowing; other), marital status (currently married living with female spouse; currently married living with another female sexual partner; currently married, not living with spouse or any other female sexual partner; not married, living with female sexual partner; not married, not living with female sexual partner; no response) and religion (Maronite Catholicism; Greek Orthodox; Greek Catholicism; Armenian Orthodox; Armenian Catholicism; Syriac Orthodox; Syriac Catholicism; Protestantism; Chaldean Orthodox; Chaldean Catholicism; Sunni Islam; Shia Islam; Alawi Islam; Druzism; Judaism; No religion; Any other religion).

Gender identity, sexual orientation, sexual behavior and sexual attraction:

- Gender identity was measured with the following question: "To what extent do you identify with each of the following genders?" (Ho F and Mussap A.J 2019). Three items were included: "Man", "Women" and "Other gender" and were measured on a 0-100 scale (0= I do not identify at all, 100= I totally identify).
- Sexual orientation was captured using the following question: "People are different in their sexual attraction to other people. Which best describes your feelings?" with six possible answers: Heterosexual/straight; gay; bisexual; other (Copen, Chandra & Febo-Vasquez, 2016).
- Sexual behavior was measured with the following question: "During the past 12 months, have you had sex with only males, only females, or both males and females?" with 3 possible answers (1=only males, 2= only females; 3=both males and females) (Keyes, Rothman & Zhang, 2007).
- Sexual attraction was measured with the following question: "People are different in their sexual attraction to other people. Which best describes your feelings?" with 6 possible answers (1=only attracted to females; 2=mostly attracted to females; 3=mostly attracted to males; 4=equally attracted to females and males; 5=only attracted to males; 6=not sure) (Copen, Chandra & Febo-Vasquez, 2016). According to the National Survey of Family Growth, 1 and 2 and 4 can be summed and grouped as "bisexual" whereas 3 and 5 can be summed and grouped as "gay".

Sexual attraction will be used to categorize the sample into GBM. In fact, sexual attraction provides a wider range of attraction reported among bisexual men and women, providing further evidence that bisexuality is not a "binary" sexual identity and would be better understood as attraction to "more than one gender" (Fu et al., 2019).

Mental health variables:

• **Religiosity** was assessed using the 5-item Abbreviated Santa Clara Strength of Religious Faith Scale (Plante, 2010). A sum score provided an overall score of religiosity – the higher the score, the higher the level of religiosity. The scale included items such as "I pray daily" and "I consider myself active in my faith or place of worship" and were measured on a 5-point scale (1=totally disagree, 5= totally agree). The scale exhibited very good reliability (α =.89).

- Frequency of attending a place of worship was measured with the following item: "How regularly to you attend a place of worship?" with 5 possible answers (1=never, 5=very regularly).
- Outness was assessed using the 11-item Outness Inventory (Mohr & Fassinger, 2000). The scale measures the extent to which an individual's sexual orientation is known by and openly discussed with people, such as "new straight friends", "work peers", "mother", "father", "leaders of religious community". Answers were measured on an 8-point scale (0=not applicable; 1=person definitely does not know about sexual orientation status, 7= person definitely knows about sexual orientation status, and it is openly talked about). The scale has three subscales: outness to family (items 1,2,3 and 4; α=.80), outness to world which includes friends and co-workers (items 5,6,7 and 11; α=.77) and outness in one's religious institution (items 8, 9 and 10; α=.68). A sum score provides an overall score of outness the higher the score, the higher the level of outness. The overall scale exhibited very good reliability (α=.84).
- Family expectation to have a heterosexual marriage was measured using the following item: "Does your family expect you to marry a woman?" ("yes" vs "no").
- Internalized sexual orientation stigma was assessed using the 9-item Internalized Homophobia Scale (Martin & Dean, 1987). The scale included items such as "I have tried to stop being attracted to same-sex people in general" and "I wish I weren't gay/bisexual" and were measured on a 5-point scale (1=totally disagree, 5= totally agree). A sum score provides an overall score of internalized sexual orientation stigma the higher the score, the higher the level of internalized sexual orientation stigma. The scale exhibited very good reliability (α =.87).
- Psychological distress was assessed using the 18-item The Brief Symptom Inventory-18 (Derogatis, 2001). The scale included items such as "feeling no interest in things" and "feeling hopeless about the future" which were measured on a 5-point scale (1=not at all; 5=extremely). A sum score provides an overall score of psychological distress the higher the score, the higher the level of psychological distress. The scale exhibited very good reliability (α=.93).
- Depression was assessed using the 10-item Center for Epidemiological Studies Depression 10 (CES-D10) Self-Report Depression Scale (Björgvinsson et al., 2013). The scale included items such as "During the past week, I felt depressed" and "During the past week, I felt hopeful about the future" and were measured on a 4-point scale (0=rarely/never; 3=all

of the time). Specific items were reverse scored so that the mean score provides an overall score of depression –the higher the score, the higher the level of depression. The scale exhibited very good reliability (α =.83).

- Self-harm was measured with the following item: "Have you ever deliberately harmed yourself in any way but not with the intention of killing yourself?" with 2 possible answers (Yes/No).
- Suicide was measured with the following item: "Have you ever actually harmed yourself (e.g. taking pills, cutting your wrists)?" with 2 possible answers (Yes/No).

3.4. Ethics

Ethical approval was obtained from the De Montfort University Faculty of Health and Life Sciences Research Ethics Committee. Prior to data collection participants were provided with an informed consent form, which informed them about the research objectives, any possible risks that may be involved, and their right to withdraw or stop at any time. They were reminded that any withdraw, or refusal of participation would definitely not affect the quality of care that participants receive in the clinic of the civil organization clinic. Participants only proceeded with the questionnaire, once they had provided informed consent. All data gathered was confidential and anonymous, participants were not asked to provide any identifying information such as their name or address, instead creating a unique ID to use should they wish to withdraw. Throughout the questionnaire participants were consistently reminded to pause or stop if they felt distressed and were provided relevant sources of help and support should they need it. During the debrief session, participants were proactively asked if any aspect of the study process have affected them in any way and would be offered the necessary support: in the STI clinic run by the primary investigator, there is a consultation service by a psychologist who comes on a daily basis and who can be asked to follow-up on participants in need of support for free. Moreover, if completing the questionnaire made any participant feel worried about a possible sexual risk event, he would be offered sexual health services as appropriate. If a participant discloses sexual assault, he would be signposted to the appropriate services and will be linked to these services for free.

3.5. Statistical analyses

Analyses were conducted on SPSS version 25. Independent samples *t*-tests bootstrapped at 1000 samples to control for statistical power were used to analyze differences between the main groups in the sample for the key variables. The decision to use bootstrapping was influenced

by the need to make robust inference about the tested regression coefficients (Streukens & Leroi-Werelds, 2016). Cohen's ds and 95% Confidence Intervals (Cis) are reported to control for the strength of between groups' mean differences for the key variables. Associations between continuous variables were detected based on correlational matrices bootstrapped at 1000 samples whereas Chi-squared tests bootstrapped at 1000 samples were used for categorical variables. The Phi values are reported to examine effect sizes of chi-squared relationships. Stepwise multiple regressions were conducted with a bootstrap set at 1000 samples to test which variables predict internalized sexual orientation stigma, depression and psychological distress, respectively.

4. Results

Baseline sociodemographic characteristics of participants

In total, 296 participants responded to the questionnaire. Among them, 19 had incomplete data and were excluded from the analysis.

A convenience sample of 277 gay and bisexual male service users completely answered the questionnaire of the study and were included.

Concerning age, participants (n=275; missing=2) were between 18 and 50; with a mean age of 29.82 (SD=6.40) and Skewness 0.84 (SD 0.14).

Regarding **religion**, participants (n=275; missing=2) were mostly Christians (125 or 45.1%): Maronite Catholicism (74 or 26.9%); Greek Orthodox (25 or 9.1%); Greek Catholicism (14 or 5.1%); Armenian Orthodox (4 or 1.5%); Chaldean Catholicism (3 or 1.1%); Protestantism (2 or 0.7%); Syriac Catholicism (2 or 0.7%) and Syriac Orthodox (1 or 0.4%). A total of 88 (31.7%) were Muslims: Sunni Islam (39 or 14.2%); Shia Islam (37 or 13.5%) and Druzism (12 or 4.4%). A total of 62 (22.3%) said they had no religion. Skewness -0.05 (SD 0.14).

Table 1 summarizes baseline characteristics of participants and shows other variable findings such as **nationality**, **city or governorate of residence**, **highest qualification**, **with whom they live**, **economic status**, **relationship and marital status**.

N=277							
Quantitative variable							
Variable N Mean SD Minimum Maximum Skewness							
Age	275	29.82	6.40	18	50	0.84	
Qualitative variable							
Variables			Freque	ncy	Percentage		

Nationality		
Lebanese	259	93.5%
Svrian	7	2.5%
Palestinian	2	0.7%
No nationality	9	3.2%
City/Governorate of residence	,	
Beirut	132	48%
South	42	15.3%
Mount Lebanon	39	14.2%
Bekaa	34	12.4%
North	11	4%
No fixed governorate	17	6.2%
Highest qualification		
Primary school	7	2.5%
Secondary school	12	4.4%
Undergraduate degree	72	26.2%
Post graduate degree	163	59.3%
No qualification	3	1.1%
Other	18	6.5%
With whom do you live?		
Alone	56	20.2%
with co-workers/students	27	9.7%
With other relatives	19	6.9%
with employer	8	2.9%
with parents	5	1.8%
with a friend	1	0.4%
with spouse/live-in partner	155	56%
Other	6	2.1%
Economic status		
Low	158	57%
Moderate	108	39%
High	11	4%
Relationship status		
single	191	69.2%
in a monogamous relationship	8	2.9%
civil partnership	4	1.4%
Married	35	12.7%
in an open relationship	24	8.7%
in a monogamous relationship but I have had other	11	4%
partners in the last year without my partner knowing		
other	3	1.1%
Marital status	5	1.170
currently married living with female spouse	3	1.1%
currently married living with another female sexual		1.1.7.0
partner		
currently married, not living with spouse or any	8	3%
other female sexual partner	-	
not married, living with female sexual partner	7	2.6%
not married, not living with female sexual partner	176	64.9%
No response	77	28.4%
Religion		
Maronite Catholicism	74	26.9%
Greek Orthodox	25	9.1%
Greek Catholicism	14	5.1%
Armenian Orthodox	4	1.5%
Armenian Catholicism	0	0%
Syriac Orthodox	1	0.4%

Syriac Catholicism	2	0.7%
Protestantism	2	0.7%
Chaldean Orthodox	0	0%
Chaldean Catholicism	3	1.1%
Sunni Islam	39	14.2%
Shia Islam	37	13.5%
Alawi Islam	0	0%
Druzism	12	4.4%
Judaism	0	0%
Any other religion	0	0%
No religion	62	22.3%
Total Christians	125	45.1%
Total Muslims	88	31.7

Table 1: Sociodemographic findings of participants

Descriptive statistics: Gender identity, sexual orientation, sexual behavior and sexual attraction

Regarding **gender identity**, the mean male identity among participants (n=275; missing=2) of 88.07 (SD=20.64); minimum 0; maximum 100; and Skewness -2.16 (SD 0.14). The mean female identity among participants (n=193; missing=84) was 27.34 (SD=28.71); minimum 0; maximum 100; and Skewness 1.00 (SD 0.17).

Regarding **sexual orientation**, participants (n=276; missing=1) mostly responded "gay" (n=203 or 73.6%). A total of 59 (21.4%) said they were bisexual whereas 14 (5%) said "other". Skewness 1.38 (SD 0.14).

Regarding **sexual behavior**, participants (n=275; missing=2) mostly reported having had sex during the past 12 months with males only (n=241 or 87.6%). A total of 26 (9.5%) said they had sex with both males and females whereas 8 (2.9%) said they had sex with females only. Skewness 2.51 (SD 0.14).

Regarding **sexual attraction**, participants (n=277; missing=0) said they were attracted to males only (n=147 or 53.3%) and 11 (4%) said they were attracted mostly to males. They were summed and grouped as gay men (n= 158; 57%). Other participants said they were attracted equally to males and females (119; 43%) and were labelled as bisexual men. Skewness 0.28 (SD 0.14).

Table 2 summarizes findings of gender identity, sexual orientation, sexual behavior and sexual attraction.

Gender identity	Female	Mean: 27.34 (SD 28.71)	
	Male	Mean: 88.07 (SD 20.64)	
Variable		Frequency (N) Percentage	(%)
Sexual orientation			

Heterosexual	0	0
Gay	203	73.6%
Bisexual	59	21.4%
Other	14	5%
Sexual behavior		
Having had sex with males only	241	87.6%
Having had sex with males and females	26	9.5%
Having had sex with females only	8	2.9%
Sexual attraction		
Equally attracted to males and females – labelled as	119	43%
"bisexual"		
Males only	147	53.3%
Mostly to males	11	4%
Total attracted to males – labelled as "gay"	158	57%

Table 2: Findings on gender identity, sexual orientation, sexual behavior and sexual attraction.

Descriptive statistics: Mental health related variables

Religiosity score among participants (n=271; missing=6) had a mean of 12.39 (*SD*=5.54); minimum 5; maximum 25; and Skewness 0.19 (SD 0.14).

Regarding **family expectation to get married**, participants (n=275; missing=2) mostly responded "yes" (n=195 or 70.9%). A total of 80 (29.1%) reported no such expectations. Skewness 0.92 (SD 0.14).

Outness score among participants (n=230; missing=47) had a mean of 19.54 (SD=12.48); minimum 0; maximum 56; and Skewness 0.82 (SD 0.16). **Outness to family** had a mean of 10.66 (SD=7.23); minimum 0; maximum 28; and Skewness 0.84 (SD 0.19). **Outness to world** had a mean of 8.48 (SD=6.35); minimum 0; maximum 28; and Skewness 1.11 (SD 0.20). **Outness in one's religious institution** had a mean of 3.04 (SD=2.64); minimum 0; maximum 14; and Skewness 2.02 (SD 0.20).

Regarding **frequency of attending a place of worship**, participants (n=275; missing=2) had mostly responded "rarely" (n=96 or 34.9%) and "never" (n=93 or 33.8%). Other responses included "Sometimes" (62 or 22.5%); "Regularly" (19 or 6.9%) and "Very regularly" (5 or 1.8%). Skewness 0.69 (SD 0.14).

Internalized sexual orientation stigma among participants (n=267; missing=10) had a mean of 20.38 (*SD*=7.96); minimum 9; maximum 43; and Skewness 0.59 (SD 0.14).

Psychological distress scale among participants (n=270; missing=7) had a mean of 35.49 (*SD*=13.72); minimum 18; maximum 80; and Skewness 13.72 (SD 0.91).

Depression scale among participants (n=270; missing=7) had a mean of 21.64 (*SD*=5.72); minimum 11; maximum 38; and Skewness 5.72 (SD 0.46).

Self-harm among participants (n=263; missing 14) was reported by 54 (20.5%) whereas **suicide** (n=277; no missing) was reported by 38 (13.7%). Table 3 shows findings of the mental health variables.

Variables	Mean	SD	Minimum	Maximum
Religiosity	12.39	5.54	5	25
Overall outness	19.54	12.48	0	56
Outness to family	10.66	7.23	0	28
Outness to world	8.48	6.35	0	28
Outness in one's religious institution	3.04	2.64	0	14
Internalized sexual orientation stigma	20.38	7.96	9	43
Psychological distress scale	35.49	13.72	18	80
Depression scale	21.64	5.72	11	38
	Frequ	ency	Perce	entage
Family expectation to get married	•			
Yes	19	5	70.	.9%
No	80)	29.	.1%
Frequency of attending a place of worship	•			
Never	93	3	33.	.8%
Rarely	90	5	34.	.9%
Sometimes	62	2	22.	.5%
Regularly	19)	6.	9%
Very regularly	5		1.8%	
Self-harm				
Yes	54	1	20	.5%
No	20	9	79	.5%
Suicide				
Yes	38	8	13	.7%
No	23	9	86.	.3%

Table 3: Mean, SD, minimum and maximum values of key variables, frequency of attending a place of worship, suicide and self-harm frequencies and percentages.

Differences between gay (n=158) and bisexual men (n=119)

Analyzing the data reveals a discrepancy between sexual orientation self-statement and sexual attraction in both gay and bisexual men. For gay men, there were more individuals self-categorizing as gay men (73.6%) whereas sexual attraction to men (exclusively) was 57%. On the other hand, for bisexual men, there were more people attracted to both men and women (43%) whereas self-categorization as bisexual was only 21.4%.

Table 4 presents the results of a cross-tabulation analysis revealing the distribution of sexual attraction and sexual orientation among GBM.

Gay men	Bisexual men

Sexual attraction	57%	43%
Sexual orientation	73.6%	21.4%

Table 4: Cross-tabulation of sexual attraction and sexual orientation among GBM.

More bisexual men (93 out of 119; or 78.1%) were expected to marry a woman compared with gay men (102 out of 158; or 64.5%) according to the Chi-squared tests results [$\chi 2(1, 275) = 7.264, p < .01$; *Phi*=-.163, *p*<.01].

Bisexuals exhibited higher internalized sexual orientation stigma (M=23.16, SD=7.79) compared to gay men (M=18.31, SD=7.46) according to an independent samples [t(265)=-4.84, p<.001; Cohen's d=.63; 95% Cis (-6.697, -2.991)]. Bisexual men had more female sex partners in the past 12 months (M=0.95, SD=4.79) compared to gay men (M=0.08, SD=.38) [t(273)=-.873, p<.05; Cohen's d=.25; 95% Cis (-1.628, -.117)]. Moreover, bisexuals reported lower outness to family (M=9.33, SD=6.96) compared to gay men (M=11.69, SD=7.30) [t(161)=2.35, p<.05; Cohen's d=.32; 95% Cis (.124, 4.590)].

There was no statistical difference between GBM regarding the other variables.

These results confirmed *Hypothesis 1*. Table 5 shows the comparison between gay and bisexual men on significantly different variables such as expectations to get married, internalized sexual orientation stigma, and outness to family.

Variables	Gay men	Bisexual men	Test	Value	p
Expectations to get married	64.5%	78.1%	χ2	7.264	<.01
Internalized sexual orientation stigma	18.31	23.16	t	-4.84	<.001
Number of female sex partners in the	0.08	0.95	t	-0.873	<.05
last 12 months					
Outness to family	7.30	6.96	t	2.35	<.05

Table 5: Comparison between gay and bisexual men on significantly different variables.

Differences between Muslims (n=88), Christians (n=123) and people of no religion (n=62) One-way ANOVA tests were used to compare variables between Muslims, Christians, and people of no religion. Attending a place of worship was the highest among Christians (M=2.51, SD=1.03) followed by Muslims (M=2.03, SD=0.89) and people of no religion (M=1.29, SD=.55) [F(2, 270)=39.667, p<.001]. Post hoc comparisons using the Tukey HSD test indicated that the frequency of attending a place of worship was significantly different between Christians, Muslims, and people of no religion (p<0.001) respectively. Furthermore, outness was the highest among people of no religion (M=26.10, SD=12.85) followed by Christians (M=18.48, SD=11.55) and Muslims (M=16.41, SD=11.95) [F(2, 229)=10.686, p<.001]. Post hoc comparisons using the Tukey HSD test indicated that the mean outness score was significantly different between Muslims (p<0.001) and Christians (p=0.01) respectively with people of no religion. Of the 3 subscales of the Outness Inventory (family; world; religious leader), only the subscale of outness to one's family was significantly different for people of no religion (M=13.81, SD=7.47) followed by Muslims (M=10.00, SD=7.48) and Christians (M=9.58, SD=6.59) [F(2, 162)=4.778, p=.01]. Post hoc comparisons using the Tukey HSD test indicated that outness to one's family was different between people of no religion and Christians (p<0.01) and Muslims (p=0.03) respectively.

Religiosity score was higher among Christians (M=13.88, SD=5.56) followed by Muslims (M=13.34, SD=5.12) and people of no religion (M=8.08, SD=3.69) [F(2, 268)=28.962, p<.001]. Post hoc comparisons using the Tukey HSD test indicated that religiosity score was different between people of no religion and Christians (p<0.001) and Muslims (p<0.001) respectively.

Internalized sexual orientation stigma score was higher among Muslims (M=22.11, SD=7.84) followed by Christians (M=20.43, SD=8.22) and people of no religion (M=17.71, SD=6.97) [F(2, 264)=5.410, p=.005]. Post hoc comparisons using the Tukey HSD test indicated that religiosity score was different between people of no religion and Muslims (p=.003).

Psychological distress score was higher among people of no religion (M=38.80, SD=15.69) followed by Muslims (M=36.95, SD=14.22) and Christians (M=32.82, SD=11.79) [F(2, 269)=4.704, p=.01]. Post hoc comparisons using the Tukey HSD test indicated that psychological distress score was different between people of no religion and Christians (p=.01). HIV knowledge was higher among people of no religion (M=10.87, SD=1.92) followed by Christians (M=10.69, SD=2.26) and Muslims (M=9.95, SD=2.59) [F(2, 265)=3.597, p=.02]. Post hoc comparisons using the Tukey HSD test indicated that religiosity score was different between people of no religion and Christians (m=0.01).

Table 6 provides a description of religion differences for key variables of interest.

	Christians		Muslims	Muslims		ion	F	df	р
	Μ	SD	Μ	SD	М	SD			
1 5	2.51	1.03	2.03	0.89	1.29	0.55	39.667	2,270	< 0.001
attending a place									
of worship									

Outness score	18.48	11.55	16.41	11.95	26.10	12.85	10.686	2,229	< 0.001
Outness to one's	9.58	6.59	10.00	7.48	13.81	7.47	4.778	2,162	0.01
family									
Religiosity	13.88	5.56	13.34	5.12	8.08	3.69	28.962	2,268	< 0.001
Internalized	20.43	8.22	22.11	7.84	17.71	6.97	5.410	2,264	0.005
sexual orientation									
stigma									
Psychological	32.82	11.79	36.95	14.22	38.80	15.96	4.704	2,269	0.01
distress									
HIV knowledge	10.69	2.26	9.95	2.59	10.87	1.92	3.597	2,265	0.02

Table 6: Comparison between religious groups on significantly different variables. The table also shows the one-way ANOVA test result and significance.

On the other hand, comparison of family pressure to get a heterosexual marriage among different faith groups (chi-squared test) showed that more Christians (44.3%) were expected to have a heterosexual marriage than Muslims (39.1%) and people of no religion (16.4%) [χ 2(2, 274) = 21.478, *p*<.001; *Phi*=.280, *p*<.001].

Regarding self-harm, more people of no religion (32.8%) reported self-harm than Christians (15.1%) and Muslims (20.2%) according to a chi-squared test [$\chi 2(2, 261) = 7.404$, p=.01; *Phi=.168*, p=.02].

Table 7 summarizes these statistical findings.

Variables	Christians	Muslims	People of	Test	p
			no		
			religion		
Family pressure to have a heterosexual	44.3%	39.1%	16.4%	χ2	<.001
marriage					
Vaccinated for Hepatitis B	50%	24.3%	25.7%	χ2	.02
Self-harm history	15.1%	20.2%	32.8%	χ2	.01

Table 7: Table showing the percentage, test and statistical significance of the result of family pressure to get married, vaccination for Hepatitis B and self-harm history between Christians, Muslims and People of no religion.

These results put together confirmed that people of no religion reported higher outness and were less likely to report family pressure to have a heterosexual marriage but also reported poorer mental health than Christians and Muslims. This confirms *Hypothesis 2*.

Differences between those who face family pressure to get married (n=195) and those who do not (n=80)

An independent samples *t*-test showed that those who reported family pressure to have a heterosexual marriage exhibited higher internalized sexual orientation stigma (M=22.21, SD=7.79) compared to those who reported no such family pressure (M=15.96, SD=6.58) [t(263)=4.13, p<.001; Cohen's d=.86; 95% Cis (4.277, 8.219)].

Similarly, those who reported family pressure to have a heterosexual marriage exhibited higher religiosity score (M=13.02, SD=5.61) compared to those who reported no such family pressure (M=10.67, SD=4.95) [t(267)=2.62, p<.001; Cohen's d=.44; 95% Cis (0.917, 3.792)].

Similarly, those who reported family pressure to have a heterosexual marriage exhibited higher number of condomless insertive anal sex (as a top) (M=2.58, SD=1.40) compared to those who reported no such family pressure (M=2.00, SD=1.14) [t(266)=13.34, p<.001; Cohen's d=.45; 95% Cis (0.231, 0.938)].

Similarly, those who reported family pressure to have a heterosexual marriage exhibited lower HIV knowledge (M=10.30, SD=2.38) compared to those who reported no such family pressure (M=11.00, SD=2.08) [t(264)=0.90, p=.02; Cohen's d=.31; 95% Cis (-1.314, -0.091)].

Those who reported family pressure to have a heterosexual marriage exhibited lower outness to family (M=9.20, SD=6.63) compared to those who reported no such pressure (M=14.95, SD=7.29) [t(160)=-4.70, p<.001; Cohen's d=.82; 95% Cis (-8.156, -3.331)]; lower outness to world (M=7.00, SD=5.15) compared to M=14.15, SD=7.22 [t(31.34)=-4.77, p<.001; Cohen's d=1.14; 95% Cis (-10.211, -4.096)] and lower outness in one's religious institution (M=2.56, SD=2.13) compared to M=4.67, SD=3.51 [t(36.15)=-3.19, p<.01; Cohen's d=.72; 95% Cis (-3.454, -.769)].

Table 8 provides a description of differences between high and low family pressure to get married for key variables of interest.

Variables	bles Family pressure to get married				
	High		Low		
	М	SD	М	SD	
Internalized sexual orientation stigma	22.21	7.79	15.96	6.58	< 0.001
Religiosity score	13.02	5.61	10.67	4.95	< 0.001
Number of condomless insertive sex (as a top)	2.58	1.40	2.00	1.14	< 0.001
HIV knowledge	10.30	2.38	11.00	2.08	0.02
Outness to family	9.20	6.63	14.95	7.29	< 0.001
Outness to world	7.00	5.15	14.15	7.22	< 0.001
Outness in one's religious institution	2.56	2.13	4.67	3.51	< 0.01

Table 8: Differences between high and low family pressure to get married for key variables of interest.

Differences between those with history of self-harm (n=54) and those without a history of self-harm (n=209)

An independent samples *t*-test showed that those who reported a history of self-harm exhibited higher outness to world (M=10.77, SD=7.48) compared to those who have not reported self-harm history (M=7.65, SD=5.88) [t(125)=2.308, p<.05; Cohen's d=.46; 95% Cis (0.445, 5.810)]. Similarly, they reported higher psychological distress (M=46.61, SD=15.30) compared to those who have not reported self-harm history (M=32.14, SD=11.33) [t(256)=7.707, p<.001; Cohen's d=1.07; 95% Cis (10.768, 18.159)]. They also reported higher depression (M=24.47, SD=5.76) compared to those who have not reported self-harm history (M=20.68, SD=5.21) [t(255)=4.607, p<.001; Cohen's d=.69; 95% Cis (2.167, 5.403)]. Furthermore, they reported higher practice of chemsex (M=2.33, SD=1.36) compared to those who have not reported self-harm history (M=2.46; 95% Cis (0.237, 0.912)].

A chi-squared test showed that fewer people expected to get married (16.8%) reported selfharm than those not expected to get married (30.3%) [$\chi 2(1, 261) = 5.989, p=.01; Phi=.151, p=.01$].

Table 9 provides a description of differences between those who have and those who have not a history of self-harm for key variables of interest.

Variables	History of self-harm					р
	Ye	Yes		No		
	Μ	SD	М	SD		
Outness to world	10.77	7.48	7.65	5.88	χ2	< 0.05
Psychological distress	46.61	15.30	32.14	11.33	χ2	< 0.001
Depression	24.47	5.76	20.68	5.21	χ2	< 0.001
Chemsex practice	2.33	1.36	1.76	1.05	χ2	< 0.001
	Percentage	Percentage		ge		
Family expectations to get married	16.8%		30.3%		t	0.01

Table 9: Differences between those who have and those who have not a history of self-harm for key variables of interest.

Differences between those with history of suicide (n=38) and those without a history of suicide (n=239)

An independent samples *t*-test showed that those who reported a history of suicide exhibited higher outness to world (M=11.04, SD=7.20) compared to those who have not reported suicide history (M=8.01, SD=6.11) [t(134)=1.254, p<.05; Cohen's d=.45; 95% Cis (0.079, 5.981)].

Similarly, they reported higher psychological distress (M=48.63, SD=15.65) compared to those who have not reported suicide history (M=33.34, SD=12.12) [t(268)=6.895, p<.001; Cohen's d=1.04; 95% Cis (10.924, 19.657)]. They also reported higher depression (M=26.02, SD=5.60) compared to those who have not reported suicide history (M=20.94, SD=5.43) [t(268)=5.262, p<.001; Cohen's d=.92; 95% Cis (3.181, 6.984)].

There were no differences in family expectations to get married between those who attempted a suicide and those who did not. These findings confirm *Hypothesis 4*.

Correlations between key variables

Frequency of attending a place of worship

This variable correlated positively with economic status, internalized sexual orientation stigma, and religiosity score. It correlated negatively with having sex under the influence of alcohol, chemsex, depression, psychological distress, HIV knowledge, outness score, and outness to family.

Internalized sexual orientation stigma

This variable correlated positively with frequency of attending a place of worship, religiosity score, number of female sex partners in the past 12 months, having sex under the influence of alcohol, and perceived HIV risk. This variable correlated negatively with frequency of talking with someone about HIV before sex, chemsex, outness score, outness to family, outness to world and outness in one's religious institution.

Religiosity score

This variable correlated positively with age, economic status, internalized sexual orientation stigma, and having vaginal sex without condom. It correlated negatively with depression score, psychological distress score, HIV knowledge, outness score and outness to family.

Depression score

This variable correlated positively with psychological distress and perceived HIV risk. It correlated negatively with age, frequency of attending a place of worship and religiosity score.

Psychological distress

This variable correlated positively with having receptive sex (as a "bottom") without condom, chemsex, depression scale and perceived HIV risk.

It correlated negatively with age, frequency of attending a place of worship, religiosity score and using a condom with a female in the past 12 months.

Outness

This variable correlated positively with HIV knowledge and having receptive sex (as a "bottom") without condom. It correlated negatively with frequency of HIV testing, frequency of attending a place of worship, internalized sexual orientation stigma and religiosity score.

• Outness to family

This variable correlated positively with chemsex and negatively with frequency of HIV testing, frequency of attending a place of worship, internalized sexual orientation stigma and religiosity score.

• Outness to world

This variable correlated positively with having receptive sex (as a "bottom") without condom and negatively with internalized sexual orientation stigma.

• Outness in one's religious institution

This variable correlated negatively with internalized sexual orientation stigma.

	1	2	3	4	5	6	7	8
How regularly do you attend a place of worship?	1							
Internalized sexual orientation stigma score	.210**	1						
Religiosity score	.703**	.351**	1					
Depression score	248**	.0.90	168**	1				
Psychological distress	241**	.036	181**	.779**	1			
Outness to family	270**	405**	290**	.044	.123	1		
Outness to world	008	201*	019	046	.036	.508**	1	
Outness to religion	.128	196*	.123	110	012	.411**	.665**	1

Table 10 provides a full description of the correlations.

*p<.050; **p<.010

Multiple regression model predicting internalized sexual orientation stigma

A multiple linear regression was conducted to examine which variables predicted the variance of internalized sexual orientation stigma. The continuous variables of outness to family, outness to world, outness in one's religious institution, religiosity, number of female sex partners in the past 12 months, frequency of having sex under the influence of alcohol, perceived HIV risk, frequency of talking with someone about HIV before sex and frequency

Table 10: Table showing the correlations between the variables.

of attending one's place of worship, as well as the categorical variables of sexual attraction (1=gay; 2= bisexual men) and family pressure to have a heterosexual marriage were inserted as predictors; and internalized sexual orientation stigma was inserted as the dependent variable. Religiosity was entered into Step 1 and explained 14.8% of the variance in internalized sexual orientation stigma.

At step 2, religiosity and sexual attraction explained 25% of the variance in internalized sexual orientation stigma. R-square change was 0.108 and F-change was 16.241 (p<0.001).

At step 3, religiosity, sexual attraction and outness to family explained 30.1% of the variance in internalized sexual orientation stigma. R-square change was 0.056 and F-change was 9.047 (p<0.001).

At step 4, religiosity, sexual attraction, outness to family and perceived HIV risk explained 33.5% of the variance in internalized sexual orientation stigma. R-square change was 0.039 and F-change was 6.677 (p=0.01).

At step 5, religiosity, sexual attraction, outness to family, perceived HIV risk and frequency of having sex under the influence of alcohol explained 36.6% of the variance in internalized sexual orientation stigma. R-square change was 0.035 and F-change was 6.256 (p=0.01).

The regression model was statistically significant for internalized sexual orientation stigma $[F(5, 108)=14.028, p<.001; R^2=.366]$. Of the 11 predictors, religiosity with a β =.319 S.E.=.112, 95% Cis (.237,.679) (t=4.106, p<.001) was the most powerful followed by sexual attraction with a β =.233 S.E.=1.286, 95% Cis (1.313, 6.413) (t=-3.046, p=.003); perceived HIV risk with a β =.232 S.E.=0.135, 95% Cis (0.139, 0.673) (t=3.011, p=.003); having sex under the influence of alcohol with a β =-.192 S.E.=0.499, 95% Cis (-2.238, -0.259) (t=-2.501, p=.01) and outness to family with a β =-.240 S.E.=0.092, 95% Cis (-0.464, -0.098) (t=-3.046, p=.003) all had significant effects on the variance of internalized sexual orientation stigma. The variables of frequency of attending a place of worship, number of female sex partners in the past 12 months, frequency of talking to someone about HIV before sex, family expectation to have a heterosexual marriage, outness to world and outness in one's religious institution were all excluded from the model in the first step.

The results of this model related to the fact that religiosity and being bisexual were positively associated with internalized sexual orientation stigma while outness will be negatively associated with internalized sexual orientation stigma confirm *Hypothesis 3*.

Multiple regression model predicting depression

A multiple linear regression was conducted to examine which variables predicted the variance of depression. The categorical variable of age, religiosity, perceived HIV risk and frequency of attending one's place of worship were inserted as predictors, and depression was inserted as the dependent variable.

Frequency of attending one's place of worship was entered into Step 1 and explained 7.4% of the variance in depression.

At step 2, frequency of attending one's place of worship and perceived HIV risk explained 10.3% of the variance in depression. R-square change was 0.034 and F-change was 6.571 (p=0.01).

The regression model was statistically significant for depression $[F(1, 173)=10.965, p<.001; R^2=.034]$. Of the 4 predictors, frequency of attending one's place of worship with a β =-.270 S.E.=.401, 95% Cis (-2.296, -.711) (t=-3.744, p<.001) was the most powerful followed by perceived HIV risk with a β =0.185 S.E.=.087, 95% Cis (0.051, 0.395) (t=2.563, p=.01) and both had significant effects on the variance of depression. The variables of age and religiosity were excluded from the model in the first step.

Multiple regression model predicting psychological distress

A multiple linear regression was conducted to examine which variables predicted the variance of psychological distress. The categorical variable of religion (Christian vs Muslim vs no religion) was recoded (dummy coding). The generated three new dichotomous variables and the continuous variables of perceived HIV risk, having receptive sex (as a "bottom") without a condom, age, religiosity, having sex with a female partner and frequency of attending one's place of worship were inserted as predictors, and psychological distress was inserted as the dependent variable.

Frequency of attending a place of worship was entered into Step 1 and explained 5.8% of the variance in psychological distress.

At step 2, frequency of attending a place of worship and perceived HIV risk explained 8.9% of the variance in psychological distress. R-square change was 0.037 and F-change was 7.029 (p<0.01).

The regression model was statistically significant for psychological distress [F(2, 174)=9.551, p<.001; R²=.037]. Of the 7 predictors, frequency of attending one's place of worship with a β =-.237 S.E.=.981, 95% Cis (-5.142, -1.269) (t=-3.268, p=.009) was the most powerful followed by perceived HIV risk with a β =.192 S.E.=.212, 95% Cis (.143, .978) (t=2.651,

p=.001) which had significant effects on the variance of psychological distress. The variables of having receptive sex (as a "bottom") without a condom, chemsex, age, religiosity were excluded from the model in the first step.

Table 11 summarizes ke	v variables that	predict main	variables	based on	the models'	findings.

Dependent variable	Independent variables	β
Internalized sexual orientation stigma	Religiosity	0.319
	Sexual attraction (1=gay; 2=bisexual)	0.233
	Perceived HIV risk	0.232
	Having sex under the influence of alcohol	-0.192
	Outness to family	-0.240
Depression	Perceived HIV risk	0.185
	Frequency of attending one's place of worship	-0.270
Psychological distress	Perceived HIV risk	0.192
	Frequency of attending one's place of worship	-0.237

Table 11: Table showing the main independent variables retained in the models with their corresponding β .

Results of the multiple regression models predicting psychological distress and depression respectively confirm *Hypothesis 5* that frequency of attending one's place of worship will be negatively associated with psychological distress and depression.

Models regarding other variables

Other models predicting mental and sexual health variables such as self-harm, suicide, number of male sex partners in the last 12 months, having sex while under the influence of alcohol, mobile dating applications usage, PEP usage, frequency of HIV testing, HIV status, HIV knowledge, perceived HIV risk did not have any significance.

5. Discussion

The purpose of this first study was to examine the determinants of internalized sexual orientation stigma and mental health outcomes (i.e. depression and psychological distress) in a sample of Lebanese GBM representing a variety of religious backgrounds. Five hypotheses were tested and confirmed in this study.

Results from this study showed that bisexuals expressed higher levels of internalized sexual orientation stigma, less outness, and greater familial pressure to enter a heterosexual union. Bisexual men in Lebanon encounter a number of stressors. Social stigma is brought on by patriarchal and societal circumstances where bisexual men are expected to adhere to heteronormative norms while still engaging in relationships with stigmatized same-sex partners (Maatouk & Jaspal, 2020a). This explains why some bisexual men have a propensity to view their same-sex relationship unfavorably, raising the possibility of internalized stigma related to sexual orientation. Moreover, having a bisexual identity signifies a partial-to-complete absence from gay-affirming social contexts and representations. The outcome is a reinforcement of bisexual men's negative assessment of same-sex relationships. In addition, lower level of outness and a rise in family expectations for heterosexual marriage can be a threat to bisexual identity. In Lebanon, parental stigma was reportedly linked to greater internalized sexual orientation stigma (Michli & El Jamil, 2020). Based on previous and current findings, this study suggests that factors such as decreased outness and increased familial pressure to get married may contribute to bisexual men having an unfavorable opinion of same-sex partnerships, thus reinforcing the negative evaluation of the same-sex relationships.

Additionally, under the comparison between GBM, it's noteworthy that there was less agreement between sexual attraction and sexual orientation among bisexual men compared to gay men. This implies that more bisexual men identified themselves as "gay" in this study, despite not being attracted to men exclusively. This divergence may stem from biphobia or binegativity, where bisexual individuals encounter negative perceptions or stereotypes about their orientation. In line with the *identity process theory*, bisexual men facing conflicts between their sexual orientation and other aspects of identity may opt to align themselves with the gay umbrella term as a means of coping with societal pressures or seeking acceptance within a perceived safer identity category.

Another objective was to explore the role of important social representations such as religion and family relationships. A key finding in this study is that religion plays a paradoxical effect by being a source of threat (because of the negative image of gay identity in religious groups) but serving as an essential tool for positive coping.

This paradoxical role was consistent across different subgroups of the study. Due to the adverse societal perceptions associated with homosexuality within certain religious contexts, some GBM declined to identify as members of a particular religion in this survey and reported greater outness and lower family expectations for a heterosexual marriage than those who identified as Muslims or Christians. These participants are not held to the same religiously based societal

norms as individuals who identify as Muslims or Christians. As a result, these individuals could feel more comfortable telling people about their sexual orientation and may also feel less pressure from their relatives to be married (heterosexual marriage). This sub-sample may elect the strategy of departure from specific groups posing threats to one's identity, in order to maintain the coherence principle of identity. In line with the *identity process theory*, GBM who are prone to a stressor due to the conflict between religious and sexual identities may renounce their religion. This "exit option" (Ellemers et al., 1997) empowers them to assimilate and accommodate their sexual orientation in identity while averting the need to evaluate this identity element negatively (Jaspal & Cinnirella, 2010). However, this subgroup reported higher psychological distress, depression, and history of self-harm. Thus, while the exit option related to religion may enhance the assimilation-accommodation of sexual orientation in identity and obviate the need to negatively evaluate homosexuality, this strategy appears to be dealing with only one dimension of a complex identity structure and does not secure a positive coping outcome.

On the other hand, religion plays a key role in coping. In fact, many social and political institutions and groups in Lebanon are organized in accordance with religious affiliation, leading to a significant social group dimension of religion (Afifi et al., 2020; Harb et al., 2020). This could be reflected in this sample by the fact that religiosity predicted internalized sexual orientation stigma. Therefore, it is possible that religion plays a role as a coping mechanism for these GBM. In fact, the negative association between religiosity and internalized sexual orientation stigma suggests that, while religiosity may be fostering and maintaining a negative evaluation of homosexuality, internalized sexual orientation stigma may be leading some people to turn to religion as a mean of distancing themselves from their sexual orientation, by compartmentalizing sexual religious identities, to maintain sense of self, thereby allowing a better coping.

Having a closer look at the role of religiosity, the multiple regression models could not determine a strong and significant predictor role between religiosity and mental health outcomes (i.e., psychological distress, depression) given that the religiosity scale used in this survey addressed individual religious conviction and spirituality. Accordingly, these latter defining religiosity, which was determined as a non-significant predictor, may not be considered as protective factors against poor mental health.

A remarkable and new finding was reflected by the role of the frequency of attending religious services as a significant predictor of depression and psychological distress. This suggests that institutionalized religious practices like participating in rituals or attending services may have a negative association with both depression and psychological distress. These results align with previous research by Barnes and Meyer (2012) and Wilkerson et al. (2012), as well as the social cure perspective proposed by Jetten et al. (2012), which suggests that meaningful social organizations like religious rituals can be crucial in effective coping. Viewing these findings through the lens of *identity process theory*, it can be argued that perceiving one's sexual orientation as a threat may prompt various coping strategies, including intergroup coping, which is consistent with the social cure perspective.

Family identity holds significant importance in Lebanon, and family support, acceptance, and knowledge play a pivotal role in shaping the identity adjustment and functioning of gay men. Through 2 key variables (outness to family and family pressure to have a heterosexual marriage), it was found that those who reported family pressure to have a heterosexual marriage exhibited higher internalized sexual orientation stigma, exhibited higher religiosity score, had lower outness to family and lower outness in one's religious institution. However, findings showed that fewer people expected to get married reported self-harm than those not expected to get married. The outcomes of coping strategies were contradictory because whereas some expressed higher number of condomless insertive anal sex and lower HIV knowledge, fewer reported self-harm. Moreover, there were no differences in family expectations to get married between those who attempted a suicide and those who did not.

Thus, the results highlight that individuals may encounter difficulties in reconciling their sexuality and the pressure from family to have a heterosexual marriage, leading them to compartmentalize their sexual and family identities to maintain their sense of self. This observation aligns with the minority stress theory, which emphasizes the additional stress faced by individuals belonging to stigmatized social categories, often in a minority position (Meyer, 2003). Stressors like homonegativity, rejection, and persecution can make it challenging for GBM to live with a minority gay identity. However, a clearer understanding on the stressors created by the conflict between sexual identity and family identity, as well as the role of religiosity in this context, could not be achieved. A significant finding also needs to be explored: people who expressed higher outness to world had more experiences of self-harm. This leads us to question whether experiences of coming out in Lebanese context is a threat, rather than being a positive experience.

6. Limitations

This study has several limitations which should be addressed in future research.

First, a cross-sectional study is limited to studying determinants of a certain outcome and does not have the ability to make any causal inferences. Accordingly, the results of this study could not entail any causal relationship between religiosity and internalized sexual orientation or religiosity and mental health outcomes. As such, it is recommended to build upon the beforementioned findings with an experimental research design. This latter will allow us to assess and test the suggested assumptions of this study that religiosity is positively associated with internalized sexual orientation stigma, in addition to being a protective factor in mental health.

Second, this study did not measure the strength of sexual identification as gay or bisexual, nor did it assess its relationship with or possible impact on internalized sexual orientation stigma and mental health outcomes. Accordingly, this variable/determinant should be addressed in future research. Likewise, this study did not delve into experiences of outness, if any, which could have helped gaining better understanding about the relationship between outness and chemsex parties; this as well should be taken into consideration in future studies.

Third, this study focused on collecting data limited to a convenience sample of GBM in Lebanon as per the proposed hypothesis. In order to further validate the findings of this study, it would be interesting to replicate these findings with additional samples of GBM and other sexual minority groups, such as lesbian and bisexual women.

Finally, some variables in this research such as family's expectation of a heterosexual marriage are based on the participant's beliefs and more sophisticated measures should be used in future studies to address such variables. Some other sexual health variables should use more sophisticated measures or other type of research (qualitative and/or experimental) because they failed to predict models and had low reliability (i.e., perceived HIV risk).

7. Conclusion

The findings of this study contribute to exploring how sexual orientation and religion can impact the processes of assimilation-accommodation and evaluation among this sample of GBM in Lebanon. In effect, sexual identity suppression, family pressure to get married and a negative evaluation of sexual identity (internalized sexual orientation stigma) appear to prevail more among bisexual men than gay men. Besides, being against religious affiliation appear to be correlated with a greater risk of psychological distress and depression, including self-harm experiences as compared to being religious.

Conversely, even though religion creates a source of negative perception of the sexual orientation of GBM in Lebanon, these latter tend to compartmentalize their religious and sexual identities. This defense mechanism / coping strategy might also explain why there was no correlation between internalized sexual orientation stigma and the mental health variables (Newcomb & Mustanski, 2010).

On one hand, the compartmentalization coping strategy may be enabling GBM of religious faith to assimilate and protect their sexual identity from any potential threat, and on the other hand to use religious coping when needed to mitigate daily social psychological stressors in the Lebanese context.

Findings from this first study were innovative and important. However, several aspects remain unanswered. The relation between religiosity and mental health outcomes and the role of the frequency of attending religious services as a significant predictor of depression and psychological distress still need to be confirmed. The role of family pressure to have a heterosexual marriage in being a source of identity threat leading to negative mental health outcomes (as suggested by the findings of study 1) and the role of religiosity in this triangle need to be further explored. Touching base on whether experiences of coming out in Lebanese context are lived as a threat, rather than being a positive experience would also enhance how one understands identity management in GBM in this context. These aspects will be explored in study 2 and 3.

Chapter 7: Internalized sexual orientation stigma, coming out, selfacceptance, religiosity and sexual behavior among bisexual and gay men: qualitative findings (Study 2)

1. Introduction

The findings of study 1 laid the groundwork for Study 2 by highlighting specific areas that required further exploration and validation through qualitative methods. As such the focus of study 2 was shaped by gaps and unanswered questions identified in study 1.

The results of study 1 shed light on how the interplay between sexual orientation and religion influences the assimilation-accommodation and evaluation processes among GBM in Lebanon. Specifically, bisexual men appear to experience more sexual identity suppression, family pressure, and internalized sexual orientation stigma than gay men. Interestingly, despite the negative social attitudes towards homosexuality in religious communities in Lebanon, some GBM tend to compartmentalize their religious and sexual identities as a way to cope with these attitudes. This coping mechanism may allow them to integrate their sexual identity and protect it from potential threats, while using religious coping strategies to deal with daily stressors in their social context. Some others might cope by rejecting religious affiliation but are more likely to suffer from psychological distress, depression, and self-harm. On that matter, study 2 aimed to explore these coping strategies through examining how compartmentalization manifests in the lived experiences of GBM individuals and how it influences their interactions with their families, religious and social context, and finally impact their identity construction.

The dynamic between religiosity, mental health outcomes and the role of the frequency of attending religious services, identified in study 1, as a significant predictor of depression and psychological distress still need to be confirmed. Therefore, study 2 was carried out to delve deeper into the qualitative dimensions of participants' experiences, exploring how these factors play out in the context of GBM's mental, sexual, and identity-related well-being. Moreover, the role of family pressure to have a heterosexual marriage in being a source of identity threat leading to negative mental health outcomes (as suggested by the findings of study 1) and the role of religiosity in this triangle need to be further explored. This is why study 2, through a qualitative approach, aimed to shed light on how family pressure intersects with religiosity and impacts the identity management of GBM in Lebanon. Finally, study 1 suggested the need to explore some aspects of the coming out experiences and whether they consist of a threat rather than a positive experience. As such, study 2 addressed this aspect qualitatively providing

insights into the nuanced ways in which GBM navigate the process of coming out in Lebanon and how it shapes their identity management. Finally, by addressing these specific aspects, study 2 not only builds upon the quantitative findings of study 1 but also provides a richer and qualitative understanding of the complex interplay between religiosity, family dynamics, identity managements and mental health outcomes among GBM in Lebanon.

This chapter presents the findings of a qualitative investigation that delves into the mental, sexual, and identity-related consequences experienced by GBM in Lebanon. The initial section outlines the key methods utilized for the study, including the process of participant recruitment, the design of the interview schedule, and the data collection and analysis procedures. The subsequent part of the chapter sheds light on various aspects of the participants' experiences, including how they manage their sexual identities, their encounters with bullying and outing, the dynamics of their relationships with their families and religious institutions, and the qualitative dimensions of their experiences with HIV, dating apps, and sexual risks. Collectively, these sections provide a comprehensive overview of how GBM construct and navigate their sexual identities.

2. Methods

2.1. Participant recruitment and sampling

For this study, a group of 15 participants who identified as GBM were recruited from a private clinic specializing in dermatology and sexually transmitted infections (STIs) in Beirut. All 15 participants were Lebanese and had a mean age of 29.2 years (SD 2.9). Eleven identified as gay men, while the remaining four identified as bisexual men. Of the 15 participants, three were living with HIV, and all three identified as gay. Additionally, five of the participants reported being in a relationship, with two in monogamous relationships and three in polygamous relationships. To ensure anonymity, pseudonyms such as participant "A" and "B" were used in place of the participants' real names in this thesis.

2.2. Interview schedule

The interviews were conducted using a semi-structured interview schedule containing 12 exploratory, open-ended questions (see interview schedule provided at the end of this chapter). These questions covered a range of topics, including sexual identity and well-being,

relationships with family and peers, religious identity, romantic and sexual relationships, experiences with coming out, sexual health issues such as HIV, HIV testing, reported behavior to prevent HIV (if HIV-negative), and dating app usage.

The interview schedule was developed with the research questions in mind and was informed by a thorough review of existing social science research on sexual identities among GBM, as well as the researcher's previous experience working on similar projects in Lebanon. Questions were also based on the results of the previous study presented in this thesis. This approach allowed for the inclusion of questions that were crucial for generating data. To facilitate participants' expression of their opinions and experiences, open-ended questions were preferred over closed-ended ones. However, rather than being used as a rigid method for data collection, the semi-structured interview schedule served as a flexible framework for the interviews.

To ensure that the interview schedule was appropriate for addressing the study's research topics, the first five interviews were transcribed and reviewed. This process led to the inclusion of additional probes to explore some of the more abstract identity-related topics (Lyons & Coyle, 2007).

2.3. Data generation

Individual interviews were preferred over focus group discussions because the discussion topics were sensitive and personal in nature (such as sexual relationships, HIV status, expectations to have a heterosexual marriage, bullying, and coming out experiences). This allowed participants to discuss these topics in a confidential one-to-one setting.

Due to the COVID-19 situation in Lebanon, the interviews were conducted online to provide a comfortable and safe environment for participants to discuss potentially sensitive topics. In accordance with ethical guidelines, participants were informed of the study's aims and provided with the option to seek clarification on any issues they did not understand. Participants were assured of the confidentiality of their answers and their right to withdraw from the study or have their data removed without affecting the quality of medical services they receive at the STIs clinic. Participants were also given the choice to answer in English or Arabic. Eight interviews were conducted in English, and the remaining seven were conducted in Arabic. The researcher was able to conduct interviews in Arabic using the English-language interview schedule because he is fluent in both languages. The interviews lasted between 45 to 90 minutes

and were digitally recorded and transcribed verbatim by the researcher (translated into English if conducted in Arabic).

2.4. Analytical procedure

Jaspal (2020) outlined the key stages involved in conducting a qualitative empirical study, with particular emphasis on the thematic analysis process. The adoption of thematic analysis as the qualitative method of choice was driven by several key considerations. Unlike some other qualitative methodologies, thematic analysis provides a structured yet adaptable framework, allowing for a comprehensive exploration of complex variables without overly focusing on participants' subjective experiences. Additionally, its structured approach provides depth and allows for reproducibility across studies, enhancing the theoretical framework analysis.

In conducting thematic analysis, an epistemological approach was embraced that integrated both inductive and deductive reasoning. This hybrid approach allowed for the emergence of themes from the data while also grounding the analysis within established theoretical frameworks, notably *the identity process theory*. By adopting this stance, the aim was to strike a balance between allowing themes to emerge progressively from the data and leveraging existing theoretical constructs to guide the analysis.

Acknowledging the limitations inherent in any methodological approach, thematic analysis might not be universally applicable. However, within this specific research context, characterized by its focus on complex variables and theoretical integration, thematic analysis emerged as the most pragmatic choice.

The process of thematic analysis unfolded through a systematic and iterative approach, consisting of six key stages, as outlined by Braune and Clarke (2006):

- Familiarizing with data: The interviews were transcribed verbatim, then the transcribed data underwent thorough readings to immerse in the content and gain a comprehensive understanding. Initial thoughts, observations, and potential patterns were documented to guide subsequent analysis.
- 2. Generating initial codes: The transcripts were read at least three times to understand the language use, phenomenological interpretations, and associations that were relevant to the research questions. Using systematic coding and a coding scheme developed based on the research questions and initial observations made during the transcription process, significant features within the data were identified and labeled as codes. To ensure the analytical interpretations and the raw interview data were consistent, several meetings

were held with the direct supervisor (Rusi Jaspal) of this project to clarify any unusual interpretations. Meetings were held once per week to review the initial codes.

- 3. Searching for themes: The coding schemes were then combined to develop overarching themes that addressed the research questions, focusing on recurring patterns, concepts, or topics within the data. Codes and potential themes were continuously compared across the dataset to refine and consolidate emerging themes. Some of the original themes were disregarded because they did not properly align with the study objectives. Throughout the analysis, it was important to maintain detachment from the data and focus on the generated codes, while ensuring the accuracy of the analysis through multiple reviews. Through four meetings with the direct supervisor (Rusi Jaspal), themes were identified and discussed, those that were considered irrelevant were disregarded.
- 4. Reviewing themes: After analyzing the patterns across the entire dataset, "superordinate" themes were created to represent the fifteen accounts. A consistent comparison was conducted between the superordinate themes and the dataset to ensure coherence. This review process occurred at two levels: checking the alignment of themes with coded extracts and evaluating their consistency across the entire dataset to ensure they encapsulated the breadth and depth of the research topic and generate a thematic "map" of the analysis. A meeting with the direct supervisor (Rusi Jaspal) allowed to review and create the themes.
- 5. Defining and naming themes: As themes emerged more clearly, they underwent further refinement and were assigned appropriate names. This step involved ongoing analysis to ensure the specificity and clarity of each theme, thereby facilitating their interpretation within the broader context of the study. The names of the themes were reviewed with the direct supervisor, and the two supervisors of the PhD project (Emanuele Fino and Sarah Seymour-Smith).
- 6. Producing the report: The new themes were then ordered into a logical and coherent narrative structure, and the coherence of the story was assessed in line with the *identity process theory* framework and the chronological order of the interview guide. Vivid and compelling extracts were selected to illustrate each theme, providing concrete examples to support the analysis. The analysis was tied back to the research questions and literature, demonstrating how the identified themes addressed key aspects of the research inquiry. The final report presented the thematic analysis findings in a scholarly manner, adhering to academic practices and standards of rigor.

Throughout the analysis, the *identity process theory* played a crucial role in guiding interpretation. The themes identified were mapped onto the *identity process theory* variables, facilitating a deeper understanding of underlying theoretical constructs. This integration of thematic analysis with the *identity process theory* not only enhanced the theoretical robustness of findings but also provided a comprehensive framework for interpreting and contextualizing results.

Finally, the adherence to quality criteria, as outlined by Braune and Clarke (2006), underpinned the robustness of the employed thematic analysis methodology. Rigorous attention to detail, transparency in the analytical process, and ongoing reflection on the validity of interpretations ensured credibility and trustworthiness of findings. Integration of theoretical frameworks further validated the analysis, reinforcing theoretical coherence and relevance of identified themes. Overall, meticulous application of quality criteria, coupled with integration of theoretical perspectives, substantiates the rigor and robustness of the thematic analysis approach.

2.5. Ethics

Ethical approval was obtained from the Nottingham Trent University Schools of Business, Law and Social Sciences Research Ethics Committee (BLSS REC) (request 2021/357). Prior to data collection participants were provided with an oral informed consent form, which informed them about the research objectives, any possible risks that may be involved, and their right to withdraw or stop at any time. They were reminded that any withdraw, or refusal of participation would definitely not affect the quality of care that participants receive in the clinic. Participants only proceeded with the interview, once they had provided informed consent. All data gathered was confidential and anonymous, participants were not asked to provide any identifying information such as their name or address. Throughout the interview, participants were consistently reminded to pause or stop if they felt distressed and were provided relevant sources of help and support should they need it. During the debrief session, participants were proactively asked if any aspect of the study process have affected them in any way and would be offered the necessary support: in the STI clinic run by the primary investigator, there is a consultation service by a psychologist who comes on a daily basis and who can be asked to follow-up on participants in need of support for free. Moreover, if completing the interview made any participant feel worried about a possible sexual risk event, he would be offered sexual health services as appropriate.

3. Results

Experiences of stigma, outness, relationship dynamics, and family pressures among GBM Across the interviewed sample of participants, internalized sexual orientation stigma was particularly apparent among bisexuals as compared to gay men. In fact, bisexuals in heteronormative societies like Lebanon, tend to be in a "one step forward, two steps back" situation in terms of accommodating their same sex-orientation identity, given that they haven't fully come to terms in regard to their homosexual behavior. From an *identity process theory* perspective, this could be attributed to the salience of identity principles in favor of conforming to heteronormativity among bisexuals, such as sense of belonging to social norms. On that matter, qualitative findings of this study indicate that bisexuals tend to have a high sense of belonging to social and family norms along with a sense of continuity of family lineage, furthering hindering positive evaluation of their sexual identity. As such, they live in a double life whereby they adhere to the patriarchal cultural, social and religious norms of heterosexuality, on one hand, while engaging in stigmatized relationships with men, on the other hand. Accordingly, occupying a dual space make bisexuals more prone to negatively evaluating their men-to-men relationships further intensifying internalized sexual orientation stigma, an identified theme in this qualitative finding.

The discussion revealed intriguing insights into the negative perception of gay people held by bisexual participants. Participant E, identifying as bisexual, emphasized the struggle with trust regarding their gay partner, as portrayed in the below statement:

"Yes. I'm always making sure that my guy is always exclusive for me, but I don't trust him at the end of the day, he is gay, so I do not trust him of course." (Participant E, bisexual)

Participant F, also identifying as bisexual, discussed the perceived difference in sexual behavior between gay individuals and themselves, stating:

"Usually, gay people have a lot of fun, they mess around a lot, they are just looking for sex. And they can have sex with like three to four guys per day. But we, as bisexuals or straight men, we don't have this kind of need, as much as they are." (Participant F, bisexual)

Similarly, participant G, expressing bisexuality, shared sentiments about femininity in men affecting their perception, saying:

"When a guy is feminine, I feel like his identity is not clear, that's how I feel [...] I don't like them." (Participant G, bisexual)

On the other hand, participant A, proudly identifying as gay, emphasized self-acceptance and pride in his sexual identity, stating:

"Makes no sense to try to change it because I have tried before when I was still pushing my homosexual self away. But it didn't work so I gave up on trying to change it. It's simply who I am and I'm proud to be a gay man." (Participant A, gay)

The abovementioned statements convey the negative perception of gay people held by these bisexual participants. In fact, these latter stress on the fact that they would rather be labeled as belonging to the bisexual community rather than to the gay one. Based on these findings, this attitude was associated to the social stigma toward gay people generating stereotypes about them as being "untrustworthy", and mainly "sex-oriented". While bisexuals refuse to be referred to as "gays", interviewees like participant A, value their sexual identity and proudly announce their belonging to the gay community. As such, in this study, participants who showed enhanced sense of self-esteem and enhanced belonging to one's sexual identity expressed little statements of internalized sexual orientation stigma.

In fact, participants who showed internalized sexual orientation stigma also stated absence of outness. This was mainly the case of bisexual participants as compared to gay participants. Their discretion in appearance and behaviors was reported to be linked to their fear of being exposed and facing family discrimination and rejection, jeopardizing their sense of social continuity, and belonging.

Participant I, a bisexual, expressed reluctance towards involvement in the gay scene, stating: "I cannot meet his friends; I prefer not to get involved with this whole scene and especially that gays in Lebanon are more like Queens and Divas. They are like they're, to an extent they might have the flag with them whenever they go out. So, I'm not into this at all" (Participant I, bisexual)

Participant M, also identifying as bisexual, discussed the challenges of coming out, particularly due to societal and familial pressures, saying:

"No, actually I didn't share this with anyone due to many reasons, actually, the society, religion, the family, especially that I'm married. Back then I had a girlfriend, now I'm married with kids. It's not that easy to come out of the closet." (Participant M, bisexual)

Participant F, describing himself as masculine, highlighted the concealment of his bisexuality behind his appearance, explaining:

"So, I'm someone very masculine look wise. So, you will never know unless I tell you, I mean, that I'm bisexual, interested in men as well as women." (Participant F, bisexual)

On the other hand, participant B, openly gay, embraced his sexuality without reservation, as portrayed by the following statement:

"I'm openly, openly and openly gay [...] I used to easily act the way I want, even until this day, I act the way I want" (Participant B, gay)

Accordingly, bisexual participants were hiding behind a masculine appearance that would not jeopardize their self-esteem through preventing their exposure. Therefore, they tended to disapprove the proud openness of gay men and their flagrant behavior in a heteronormative society. They were indirectly justifying their discretion and further intensifying internalized sexual orientation stigma. As abovementioned, from an *identity process theory* perspective, participant B's high self-esteem and belonging to his homosexuality facilitate his disclosure despite social identity threats. Conversely, participant E's sexual identity suppression is associated with his marital status and internalized sexual orientation stigma that is further shaped and worsened by social and religious constraints, hindering any possibility for coming out and subsequent exposure to positive social representations of his sexual orientation.

The above discussed statements showing internalized sexual orientation stigma among bisexual participants refrain them from committing and being involved in romantic relationships with men. Having relationships with men would associate them to the gay community and further detach them from heteronormative norms. As such, bisexual participants affirmed their tendency to have purely sexual relationships with men while being romantically involved with women. Accordingly, bisexuals (like participant E) who are not able to derive full pleasure from their heterosexual relations, might seek self-efficacy enhancement through performing what is otherwise religiously forbidden between a man and his wife ("blowjob" or oral sex). In addition, bisexual participants reported their inability to fall in love with men, given that their bisexuality is solely sexual, and pleasure driven. Participant E, expressing his perspective, stated:

"Yeah, look, it's always a pleasure with him. If I don't get the pleasure, why keep him at the end of the day? I do have my wife. If I'm not having the pleasure with him, what will I have. And as I told you before, he do[es] suck me better than my wife [...] It's not like really common in the Muslim community sucking and blow jobs between wife and husband. So, I'm permitting myself to do it with my guy." (Participant E, bisexual)

On the emotional aspect, participant E further emphasized the distinction between sexual encounters with men and the emotional connection within familial relationships, as conveyed by the following statement:

"Yes, no deep feelings. Yes, of course, we're all humans, but it's very limited and it's not the same when you have families when you have a family and kids, so it's definitely not the same." (Participant E, bisexual)

In addition, one bisexual participant reported that he doesn't have a "threesome" encounter without his girlfriend, which might portray his emotional attachment to the female figure. However, this behavior might as well be linked to his fear of getting driven by his homosexuality. In fact, some bisexuals might experience a sense of fear when they are about to acknowledge a sense of pure gay identity.

Adding to that, findings showed that bisexuals participants tend to have protected sexual intercourse with their men partners while being unprotected with their wives/girlfriends.

Bisexual participants in the study aimed at getting a heterosexual marriage and at building a family. This is why some of them probably expressed internalized sexual orientation stigma through adopting more "sexual cautions" (no unprotected sex with men). They believe that the gay community is sexually reckless and highly exposed to HIV and other sexually transmitted infections. Participant E, reflecting on the issue, stated:

"But not all men, let's face this, not all gay men, they would go and get tested, some of them are like not educated, they don't know what it is, they don't know even what is STIs. So, I don't

*believe that's a lot of accurate data." (Participant E, bisexual)*Participant F also emphasized the cautious approach of bisexual individuals towards sexual activities, linking it to their desire for a traditional family structure, saying:

"So, I feel that we are responsible, most of the bisexuals at the end of the day, they like to have family, kids, a wife, despite this the sexual life. But, you know, and if you want to build a family, it's not easy if you have HIV or something like STD. So, normally bisexual, they are very cautious concerning sexual activities." (Participant F, bisexual)

Therefore, as per the *identity process theory*, bisexuals in this study appeared to be sexually protected at all times, hence behaving in a way to protect their sense of social continuity and belonging, given that exposure to HIV might eliminate their chances of conforming to heterosexual social and cultural norms.

Determinants of self-acceptance

Identity principles and conducive environment

The period for acceptance of one's sexual identity stretches across different period of times among GBM because each goes through a period of sexual questioning, experimentation, and conflict before truly assimilating and accommodating his sexual orientation into the overall identity structure. This integration and evaluation process were felt in this study to be highly affected by: (i) time factor, (ii) the salience of identity principles and increased resilience in the face of identity threats, (iii) the presence of a conducive environment coupled with positive disclosure experiences, (iv) and finally by religion or atheism used as coping factors to enhance self-acceptance and prioritized identity principles, in turn minimizing internalized sexual orientation stigma.

According to *identity process theory*, qualitative findings of this study indicate that GBM behave in ways that provide them with adequate levels of the identity principles, keeping in mind that these latter are not of equal value and importance for different individuals. On that matter, bisexual participants of this study conveyed a prioritized sense of belonging and continuity to family, social and religious norms over their belonging to their sexual identity. Accordingly, their struggle to assimilate their homosexual identity in a heteronormative context like Lebanon led to their inability to fully accommodate their homosexuality as a new identity element.

Participant E clearly portrays the effect of his social belonging on his self-acceptance paving the way for a double life with a sexual identity struggle to this day. He expressed:

"I was lost between this community, the gay community and the straight community. So, I decided to be stuck in the middle, and I found a way to be to live in an alternative way, if we can say that, between both. So I was juggling, I was leading a double life." (Participant E, bisexual)

Participant F on the other hand reported that his progressive self-acceptance was enhanced by the factor of time, whereby his sense of self-esteem and self-efficacy are derived from a "threesome" relationship rather than only with women:

"[...]and definitely, it's not easy to accept this especially that we live in a kind of a religious, closed society in Lebanon. So, it's not easy even to experience your orientation alone or to accept it. It's always a taboo in a third country like Lebanon. So, it took me time to accept my sexuality. [...] To admit to myself that I'm bisexual, that I get excited when I'm with men, so not only when I'm with women. Actually, I'm more excited when in a threesome than having only a relation with a woman." (Participant F, bisexual)

Thus, the salience of these identity principles contributed to achieving self-acceptance over time in this particular case, yet with a discrete heteronormative identity in society.

Conversely, gay men across the studied sample conveyed high self-acceptance, acquired either instantly upon sexual orientation discovery or over time. From an *identity process theory* perspective, re-defining identity principles whereby early focus on conformity and belonging to social norms shifts towards enhancing self-esteem, self-efficacy and belonging to the new identity element is paralleled with sexual identity acceptance.

A low sense of belonging to the Lebanese heteronormative society and social expectations is crucial for the accommodation of a homosexual identity. Accordingly, participant A was able to prioritize the principles of self-esteem, self-efficacy, continuity, and distinctiveness over conformity and pleasing his family, through his enhanced belonging to his sexual identity and increased resilience in the face of social threats and rejections, over time. As such, selfdetermination in his case was shown to be a key for self-acceptance, as conveyed by the below statement:

"So yeah know, I came to terms with it on my own. I was like, it's either now or never because I already wasted 25 years trying to be someone that I'm not. So, I need to live my life for myself, not for other people [...] Makes no sense to try to change it because I have tried before when I was still pushing my homosexual self away. But it didn't work so I gave up on trying to change it. It's simply who I am and I'm proud to be a gay man." (Participant A, gay)

Likewise, the factor of time played an essential role for participant D's self-acceptance after years of struggle with his sexual orientation, finally leading to his increased resilience in the face of his homophobic family, as shown by the following statement:

"It took me a while, the sexual experience started before I actually learned the term if you like, and it took me a while to accept where I am in, where I am mentally, and with the society basically, it took a while, basically [...] That's the difference. Right now, I would love to tell them, but whether they're positive or negative, that won't affect my life" (Participant D, gay)

Moreover, social and financial independence were shown to have an enhancing effect on the salience of identity principles that are crucial for self-acceptance. On that note, participant B reported that he was never affected by family and social norms; his below statement showing high levels of self-esteem, self-efficacy and belonging to his sexual identity are derived from his independent status, enabling his sexual identity acceptance:

"I don't have any doubts about it [...] I'm an independent person. So, my parents have nothing on me. At all. Money wise and like I paid for my university, I got my own cars, I make my own money and travel and so on. So, I'm independent from my parents." (Participant B, gay)

In addition, he positively re-construed social stressors as a motive for continuity and selfacceptance which is driven by his enhanced resilience in the face of identity threats. Another gay man (participant C) distances himself from social threats to be able to better accommodate his sexual identity into overall identity structure.

Aside from the role of the identity principles in shaping self-acceptance, the findings shed light on the impact of a conducive environment coupled with positive disclosure experiences on facilitating and accelerating the process of sexual identity acceptance and integration. Accordingly, sexual identity in the studied sample appeared not to be only mediated by social representations affecting the identity principles, but also by the individual's social environment and individual's experiences. The crucial role of a supportive environment on the process of assimilation and accommodation and positive evaluation of a homosexual identity among the participants is evident in the experiences shared. On that matter, participant D who initially struggled to accept his sexual identity due to social and religious stigmatized representations and anticipated family rejection, has finally been able to reach self-acceptance following positive disclosure experiences. He recounted his journey, stating:

"Before you share it with your friends and with your close society, you always think that nobody would accept you. And you always think that the first answer that you will get is rejection. And you prepare yourself to that rejection, basically, you start rejecting yourself on behalf of the society and on behalf of your friends before you actually discuss the topic [...] the first person that I shared it with was my best friend at the time. And surprisingly, he was super supportive so that was really fun. After that, it started to be I had a serial coming out here, basically, when I shared it with most of my close friends at the time, so it was still a guarded secret, but still I made me it became easier to share it with close friends" (Participant D, gay)

Participant A also reflected on his experience, acknowledging the difference between his expectations and reality, stating:

"Oh, sorry the rejection that I was expecting before coming out was honestly much, much bigger in my head than what actually happened [...] He was there to listen to the fallout, the reactions. And he was always there to listen to me when I needed to talk like, how did things go when I came out to that person or that person?" (Participant A, gay)

In fact, participant D initially anticipated rejection from his social circle of friends leading to a negative evaluation of his homosexuality. However, an unexpected acceptance from his social and work environment increased his self-acceptance, in turn enhancing his self-esteem and belonging to his sexual identity. He affirmed that even though he still can't disclose himself to his family, with self-acceptance, this "secret" is no longer identity threatening.

Participant A further elaborated on familial support, saying:

"My brother was very supportive, even though he was homophobic, but he was very supportive. He understood that I'm his brother so there's no ifs and buts about it." (Participant A, gay)

Accordingly, participant A's self-acceptance was reinforced by the positive reactions received upon disclosure to a homophobic brother and an unexpected supportive social circle. He affirmed that he intentionally disclosed himself in order to finally be able to openly experience his homosexual life, revealing an increased resilience in the face of social threats.

Other participants like participant B and C have reached early self-acceptance since sexual orientation discovery. However, the below statements show that sexual identity expression in these participants might depend on the surrounding family environment as well.

"And I try as much as I can to hide it, so it doesn't bring up any fights, or any questions. I don't want to get into that again." (Participant C, gay)

"Yes, they helped her by talking to her and telling her it's not a disease, you know? They told her that she should accept him." (Participant B, gay)

These statements highlight that sexual identity expression in these participants might be influenced by the family environment. They either pass as heterosexuals to avoid social stressors in case of a homophobic family (participant C), or express themselves openly when the family is supportive (participant B). On the other hand, these findings suggest that the reported lack of a conducive environment among the participants could have negatively affected their own self-perception and self-evaluation.

Accordingly, participants, namely bisexual participants, who reported their inability to selfdisclose to most of their social surrounding tend to suppress their sexual orientation leading to threats to their identity and subsequent adverse feelings of anxiety, negatively affecting their self-acceptance. Participant G reflected on the challenges, stating:

"There are people that really really are like they drive you to a to a certain extent that you don't feel comfortable with, and I think it's because of the family like you can't bring them to your family." (Participant G, bisexual)

Participant F shared similar sentiments, mentioning:

"So for them, it's something, unnegotiable and unaccepted at all. So, definitely, you can never be out in Lebanon, walking on the streets saying that you're bisexual, some of your friends would accept your orientation, but many will not. So, it's not something you can talk about [...] So this is something they will never talk about, and I will never mention it. So, it's a toxic subject that may affect a better relation for years and years. So, we avoid talking about it and we don't discuss, of we don't discuss marriage, we don't discuss anything related to this." (Participant F, bisexual) In a nutshell, several determinants of self-acceptance were identified from the current interviews: (i) the time factor, (ii) the salience of identity principles in favor for sexual identity assimilation and accommodation (such as the sense of belonging and continuity to their sexual identity), (iii) the sense of self-esteem and self-efficacy derived from identity expression, (iv) and the presence of a supportive environment favoring positive disclosure experiences and self-evaluation.

Role of religion in self-acceptance and internalized sexual orientation stigma

Looking into the depth of the conducted interviews, findings were in line with study 1 conclusions as they depicted a paradoxical relationship with religion. On one hand, some GBM reported atheism as a way to cope and distance themselves from negative social and religious representations of their sexual orientation, and on the other hand, religion and/or spirituality were referred by some GBM to be important coping factors in the face of identity threats by others.

Participant B provided insights into this paradoxical relationship, stating:

"So, I believe these things don't relate to each other. Like I can be whatever I want to be, but still pray. Like I'm a believer [...] I didn't have this problem, at all. At all. Till this day I make it a point to go to religious places, and religious events. But that doesn't mean I shouldn't be gay." (Participant B, gay)

He further elaborated on the significance of religion in his life, expressing:

"Having Virgin Mary in my life on its own is something soothing for me. Like the only place I can rest after being stressed and feeling a heavy load on my back, I go to Harissa and I sit, and talk with Virgin Mary, just me and her. And I instantly feel relieved and feel like wow." (Participant B, gay)

Accordingly, from an *identity process theory* perspective, compartmentalization may enable the interviewed GBM to use religion as a potential coping strategy against social psychological stressors in the Lebanese society to be able to maintain their self-acceptance. On that note, participant B reported a high sense of psychological coherence enabling him to accept his "socially frowned upon" sexual identity. He affirmed making a clear distinction between his spirituality and belief in God from religious figures and clerks as he rejects the latter's applications and imposing of religious values. That way, participant B resorts to religion to cope with stressful life events through reconciling his conflicting religious and sexual identities. Similarly, participant G, a bisexual Lebanese man, reported having a one-on-one connection with God that makes him cope with social stressors.

For some participants, however, religion appeared to be decelerating self-acceptance when one lives in a moral dissonance due to perceived conflicting religious and sexual identities. In fact, participant E's struggle to achieve self-acceptance is affected by his religious identity. He admitted being sinning, and to cope through ceasing any bisexual activity whenever religion is involved; this was conveyed by the below statement:

"Sure, I do fast. It's a must in our religion, it's not even an option. All my family do fast, and actually whenever I'm fasting, of course, I cut all my bisexuality side and I'm just straight with my wife and kids, family, religion, meeting gathering." (Participant E, bisexual)

He further explained his coping mechanisms, stating:

"I do wash my genitals and pray after just to keep my, to have my, if you want to be relieved [...] I showered right away, and the second day I prayed all day. I was a bit, I don't even like to remember that, but yeah, I kept praying and it was like a sin that I did, but back then, so I kept washing and praying, washing, and praying [...] Yeah, whenever we wash before praying it is like a symbol to push our sins. So, I kept doing this, I kept repeating this to wash my sins that I did the previous day." (Participant E, bisexual)

Participant E thus resorts to religion through washing and praying to overcome and get rid of his "sinful" behavior, adversely affecting his level of accepting his bisexuality. Consequently, as it was suggested by the general conclusions from study 1, religion might be, in this particular case, positively associated with internalized sexual orientation stigma, in turn negatively affecting self-acceptance. Inversely, poor self-acceptance could have led to internalized sexual orientation stigma in this participant.

Moreover, matching the results of study 1, qualitative findings indicated that some participants with no religion reported a high sense of self-acceptance and outness along with low aspects of internalized sexual orientation stigma. Participant A, gay, expressed his views on religion, stating:

"I just found religion to be a bunch of hypocrisy bundled up together so never made any never, never, never affected my life in any way. And as for spirituality, I'm not even spiritual. Not in the slightest." (Participant A, gay) Similarly, participant D, gay, shared his perspective on religion, saying:

"But then again, religion was always, especially in Lebanon was always a way to control your personal life, to control your life, to control your social setting, to control your behavior just for the sake of political power, because religion and politics in Lebanon is kind of technically synonymous." (Participant D, gay)

Both participants A and D reported being atheists, affirming that religion never affected the evaluation of their sexual identity. Consequently, these participants might have chosen to "disidentify" with their religion in order to maintain psychological coherence in identity. This will eventually accelerate the assimilation and accommodation of their sexual orientation into the overall identity structure by obviating the need to negatively evaluate this identity element.

Internalized HIV phobia: negative coping strategy associated with a positive health outcome

Across the sample of GBM participants in this study, phobia from HIV was highly emerging, namely among bisexual participants. In fact, sexual health concerns in general range and encompass physical, mental, and emotional considerations. They arise from the fact that GBM in Lebanon are exposed to social stigmatization and discrimination that escalate in the case of HIV transmission. For that matter, the participants' extreme fear of getting HIV appeared to be correlated with HIV-associated broader social negative repercussions, rather than fearing the virus itself. Such phobic attitude led to a negative coping in some participants, expressed through being overly anxious about HIV.

As portrayed by the below statements, HIV can be a huge stressor and a source of adverse mental health outcomes (participant F). Participant C, gay, expressed his fears vividly, stating: "A nightmare. Nightmare. Honestly, this is my worst nightmare. Like I'd catch anything but not HIV [...] Mentally I don't think I can handle HIV, like I think it'd be easier if I die." (Participant C, gay)

Participant D, gay, shared his traumatic experience with sex education, saying:

"As I said, due to some sex education courses in my school basically, I was traumatized about the topic. I reached moments where there's like a movie where they talk about HIV, I just leave the movie or just don't watch it. Pretty much a trauma, you start to have a phobia from HIV, and even speaking about it." (Participant D, gay) Moreover, HIV threat was even more intensified among the bisexual participants. Participant F, bisexual, revealed his struggle with anxiety related to HIV, mentioning:

"Back at the time I went to a psychologist to improve my anxiety, to heal from anxiety. It worked but not in a level where I can have fun without thinking in the background of HIV." (Participant F, bisexual)

Moreover, participants E and F, two Lebanese bisexuals, reported threats to their belonging, continuity, self-esteem, and self-efficacy principles if they ever get infected with HIV due to its negative repercussions on their social lives. Participant E expressed his fear, stating: *"I'm actually always afraid about this idea. So, it's like I cannot even imagine bearing this consequence on my family, my wife, my kids it's like in burden if we ever faced this issue." (Participant E, bisexual)*

Similarly, participant F echoed similar sentiments, emphasizing the societal stigma and lifealtering implications of HIV, saying:

"This is a disease, you must hide very well, and definitely you will not be able to have family and to live a normal life, you have a disease that will live with you till your death. It's not something easy [...] It's a disease. It's something unacceptable society-wise and it will complicate your life. If you can skip this, why take the risk? [...] But, you know, and if you want to build a family, it's not easy if you have HIV or something like STD. So, normally bisexual, they are very cautious concerning sexual activities." (Participant F, bisexual)

As such, participant F clearly shared his concerns about the impact of HIV on his inability to procreate and build a family in a heteronormative and homophobic society. Furthermore, his high fear of having HIV inhibited him from getting his full sexual desires by always having protected sexual intercourse.

Likewise, participant L expressed his cautious approach to sexual encounters due to the high risk of HIV exposure, stating:

"So, this makes them exposed a lot to HIV, which is something that made me always, careful but anxious at the same time. So, you can get, you can never get real fun without thinking of taking high precautions [...] To have more, more fun, to enjoy more, to feel more. It's better without condom, let's face it, without it it's, but when it comes to a full sex relation intercourse with a man definitely, I use a condom." (Participant L, bisexual) Participant O shared a different perspective, mentioning his use of PrEP as a preventive measure against HIV transmission, portrayed by the below statement:

"Yeah, I was on PrEP, and in my mind, it's a fantasy of mine, like I'm turned on if we don't use a condom." (Participant O, bisexual)

Thus, despite that it might affect some of the GBM participants' level of self-efficacy, such HIV phobic attitude protects and enhances their other prioritized identity principles.

On a similar note, some participants acknowledged feeling anxiety about HIV due to societal perceptions and personal concerns about health. Participant A expressed:

"It does cause anxiety to be honest because it's something that I believe no one wants, even though it is treatable at the moment, I mean, not treatable, I mean, where people can live with normally and have a normal life, they just take the medicine and live normally as people. Still a little I believe that something that no one wants, so it gives me anxiety because I am what you call a hypochondriac." (Participant A, gay)

Participant C echoed similar sentiments, highlighting the reluctance to even mention the word "HIV" due to its association with fear and stigma, stating:

"Just like we hear about cancer when they refer to it as 'that disease, they don't like to talk about it, sometimes I don't even like saying that word (HIV). So, I'm very scared of it." (Participant C, gay)

As above stated, participants A and C's HIV phobia is shaped by social stigmatized representations of HIV for fear of being marginalized and discriminated against. In fact, some participants attributed their fear of having HIV to their hypochondriac state (participant A), in order to attenuate the toll of social pressure. This latter encompasses rejection from their social environment as well as professional limitations, as conveyed by the following statement:

"Plus, you know we're in the middle east, and it's something very taboo, not acceptable. And if you ever get the opportunity to work in Dubai or Qatar, or any place in the region, if you're positive, you can never get a permit to work." (Participant C, gay)

Thus, phobia from HIV ("internalized HIV phobia") appears to be, in many interviews, related to the social stressors of GBM identity. For participants L, M and N, HIV can be a "punishment" for their sexual orientation. For others, this be lived negatively as an added

burden on top of their negative experiences regarding sexual identity and regarding the rejection that GBM expect from their families and peers regarding their sexual orientation. However, the reasons of HIV phobia for some other participants, is rather realistic and is linked with the professional limitations of being a person living with HIV (participant C). This includes fear from the threats to one's career and ability to earn a living. Accordingly, as conveyed by all the above, apart from the health risks, the social representations associated with HIV present the greatest threat to the participants, in turn affecting their overall wellbeing, and leading to a state of "internalized HIV phobia". This latter should be further explored through quantitative assessments in future studies.

Nonetheless, this highly anxious personal state has contributed to a positive outcome among this sample, which is a negative HIV status. Participants have shared their precaution measures taken against HIV infection; some brush their teeth three hours prior to any sexual intercourse with a man, and most of them always use condoms, even with their use of pre-exposure prophylaxis (PrEP), coupled with regular HIV testing, with the exception of some negotiating unprotected intercourse when they are in a trustworthy monogamous relationship with regular HIV testing.

Participant B emphasized his proactive approach to HIV prevention, regularly getting tested every three months despite practicing safe sex consistently. He described his meticulous precautions, stating:

"I used to go get tested every three months, even though I always practice safe sex, and I never take the condom off. But the paranoia plays its part [...] I don't brush my teeth three hours before, I use condoms of course, condoms are a necessity. And I limit the exchange of bodily fluids to a bare bare bare minimum. Like even if it doesn't exist, that's even better for me. Because again, hypochondriac." (Participant B, gay)

On another hand, participant C reflected on past experiences of unsafe sex despite being on PrEP, highlighting the subsequent anxiety that follows such encounters. He admitted:

"The one before was unsafe sex, I was on PrEP back then but still even if I'm on PRERP, on spot I'm okay but after it happens my consciousness eats me up. So yeah" (Participant C, gay)

Participant D outlined his approach to sexual relationships, emphasizing the importance of knowing his partner's sexual history and HIV status beforehand to ensure safe practices. He explained:

"I'm pretty much when it comes to sex it's more of a relationship topic, and before I have sex with anybody I know in a certain way or another what his sexual past it, if they're tested if they're not, so I kind of do a proactive preventing before I do the real preventing [...] so that's (unprotected sexual intercourse) a no no in my book." (Participant D, gay)

Hence, even though "internalized HIV phobia" might lead to mental health adverse outcomes among the participants, it however seems to lead to safe and protected sexual behavior, which is essential for a positive sexual health outcome.

Perceptions and motivations in sexual behavior and interactions among GBM in Lebanon

Regarding the use of online dating applications (apps), findings of the interviews portrayed differences in perceptions and contributing factors for use of apps among this studied sample of GBM. These latter highlighted the distinction between the types of dating apps whereby some are purely sexual (Grindr), and others are for romantic dating and social interaction (Tinder). On that matter, those who use sexual dating apps among the interviewees are those who prefer having sexual intercourse under the influence of drugs or alcohol. Those who use "classier" dating apps, as identified by one of the participants, or none, are those who prefer personal connection and more spontaneous ways of meeting partners.

As stated below by participant M, the choice among the different types of online dating apps depends on the end purpose along with social considerations:

"Let me put it that way, there are some apps that are pretty much sexual by definition, they are used for sex, and then there are the classier apps, let's say, that deals with relationships and stuff like that. It depends on your preference at the end of the day, if you want to find on these apps, you will find from very kinky to very mature. It's up to you to be awake on what you're selecting basically." (Participant M, bisexual)

In fact, most participants referred to Grindr app as a "toxic environment" that lacks transparency and commitment, and encourages objectification of the individual, categorization with exclusion criteria that further promote internalized sexual orientation stigma among the GBM community. They collectively reported that this app solely focuses on physical appearances and sexual needs. Participant B expressed his disillusionment with Grindr, stating: "But then I took a decision not to use it because the quality of the people there does not suit me, not like me. Like this is not what I want, there's no one there I want. So Grinder experience

from scale 1-10 I put zero [...] But the way they talk... I don't know but I feel like Grinder is dirty {weskha}. So, I don't use it. I don't trust people there." (Participant B, gay)

Participant A echoed similar sentiments, highlighting the prevalence of fake profiles and the toxicity of interactions on the app, ultimately leading him to delete it. He remarked:

"And the funny thing is that most people are hiding behind fake profiles in the country, which I don't blame but I mean, at least when you're about to meet someone, just tell me who you are. Yeah, but at the end I just deleted it completely because it was just too much of a hassle and pointless and a lot of fake people and a lot of fake profiles is very toxic." (Participant A, gay)

These experiences have driven many to stop using it and rather looked for deeper emotional connections whereby self-esteem and self-efficacy are more likely to be enhanced.

Nevertheless, it is interesting to report that even though some reported to be against Grindr, they still resorted to it for sexual purposes at certain period of time, probably due to stigmatized social representations in Lebanon.

As such, while some GBM among this sample like participant B prefer to meet sexual partners through existing social networks of friends or public places in order to avoid the beforementioned pressure and toxicity of dating apps, others like participants A and F resort to Grindr as a safer medium for interaction and sexual identity expression due to social public restrictions in Lebanon. Participant A highlighted this, stating:

"Because being in a homophobic country and homophobic society, you can't just go somewhere and pick someone up and then just maybe sex happens or doesn't happen. It's usually Grindr is usually just for sex." (Participant A, gay).

It is worth noting in this statement how the internalized sexual orientation stigma can also reflect in the virtual environment. In fact, online roles and behaviors reflect sex roles but also maladaptive behavior that is normally found in everyday life within the gay community.

Participant F also emphasized the convenience of these apps, noting:

"So, these apps are made for this, means someone on this app means is looking for the same thing you are looking for. So, it's easy, easy." (Participant F, bisexual)

However, participant B expressed a preference for spontaneous encounters, saying:

"Yeah, but I like spontaneous things more. To meet someone spontaneously like in a supermarket, now we're like in the movies, but you know. I like it spontaneously not like the

dating apps like Hi, how are you, where are you from, I don't like it [...] I don't use Grinder at all. I don't have it. I only use Tinder because I feel like it's "classier" than Grinder." (Participant B, gay)

Accordingly, despite acknowledging the fact that people on Grindr app hide behind "fake profiles", which is for participant A understandable given the social public restrictions and stigmatization, they still use it when in need for sexual encounters.

Finally, among the studied sample of GBM, the only ones who constantly use sexual dating apps appeared to be those who prefer to have sexual intercourses under the influence of drugs and alcohol. As such, these latter were depicted to be potential contributors for using Grindr app. Participant C described this dynamic stating:

"It's more like after the part when you get home at like 5 am, and you can't go asleep after it (taking MD such as Ecstasy) because you're still awake, but you'd be tired and it'd be wearing off, for me I start getting into that mood at that time. Like laying on the couch at 6am alone, I get this mood, so I go on the app and chat with some guys till it works out." (Participant C, gay)

It is worth noting here the reference to the use of the sex app in the context of drugs. This might be a self-medication or a coping mechanism against stigma and the derived feeling of anxiety, depression and negative mental health outcomes, some of which were detected in Study 1 (Chapter 6).

Similarly, participant F expressed a preference for engaging in sexual activity while under the influence drugs and/or alcohol, saying:

"So, mainly I like to have sex while high or tipsy [...] But normally I feel better when I'm under alcohol or drugs. Yes." (Participant F, bisexual)

In a nutshell, the use of online dating apps is considered to be prevalent in Lebanon given the social restrictions and misjudgments that GBM have to face in their daily lives (Maatouk, Assi & Jaspal, 2022). However, according to the conducted interviews in the current study, the type of online dating app used by the participants appeared to be associated with each individual's purpose and preferences. Moreover, refraining from using any type of dating app was associated to either preferring personal connection or fear from online exposure.

4. Discussion

The present qualitative study aimed at exploring the identity process, mental and sexual health outcomes among Lebanese GBM to further understand the construction and management of sexual identities among them. It also aimed to enhance comprehension of the connection between religiosity, mental health outcomes, and the frequency of attending religious services as a contributing factor to / an aspect influencing depression and psychological distress. Additionally, exploring various aspects of the coming out experience and whether it poses a threat to GBM's identity management in this context would enhance understanding of the topic. In the current study, findings showed that bisexual men appeared to exhibit internalized sexual orientation stigma and were not out. They haven't appeared to fully come to terms regarding their homosexual behavior and they tend to live a double life whereby they adhere to the patriarchal cultural, social and religious norms of heterosexuality, on one hand, while engaging in stigmatized relationships with men, on the other hand. Furthermore, they refrain being involved in romantic relationships with men to avoid being associated to the gay community and prefer being romantically involved with women. A key finding is that bisexual men in this sample were more sexually precautious. As per *identity process theory*, it could be hypothesized that protective sexual behavior may enable these bisexual men to protect their sense of social continuity and belonging as HIV might eliminate their chances of conforming to social norms through building a family. Such attitude was associated to an apparent "internalized HIV phobia" among this GBM sample, namely bisexuals, a negative coping strategy that appeared to lead to a positive sexual health outcome: a negative HIV status.

Moreover, drawing again on the *identity process theory*, all the participants were shown to behave in ways that provide them with adequate levels of the identity principles that are prioritized differently for each individual. Accordingly, bisexuals appeared to less report self-acceptance than gay men, as they prioritize their sense of belonging and continuity to family, social and religious norms over their sexual identity. As such, it is hypothesized that several aspects contribute to enhancing self-acceptance such as: the time factor, the salience of identity principles favoring sexual identity assimilation and accommodation, the presence of a supportive environment, and religion. This latter appeared to be either used as a potential coping strategy through compartmentalization to protect identity from social threats and maintain self-acceptance; or had a decelerating effect on self-acceptance through conflicting religious and sexual identities.

A third emerging finding related to religion could hypothesize that some GBM may choose to "dis-identify" with religion to maintain adequate levels of psychological coherence of their identity. Finally, the type of online dating apps used was associated to each GBM's purpose and preferences, whereby sexual app use was linked to drug and alcohol use.

5. Conclusion

GBM are subjected to a variety of social psychological stressors in the setting of Lebanon where economic and political instability go back to 1975. Some of them must deal with their sexual orientation as a stressor, but also with threats related to other aspects of their identity (such as religion and family).

Studies 1 and 2 were rich in findings on the role of religiosity in the process of identity construction. The results of both studies delve into how sexual orientation and religion intersect to influence the processes of assimilation-accommodation and evaluation among GBM in Lebanon. Bisexual men are more likely to experience sexual identity suppression, family pressure, and internalized sexual orientation stigma compared to gay men. Additionally, individuals who do not affiliate with a religion are more prone to experiencing psychological distress, depression, and self-harm. Despite the negative attitudes towards homosexuality in religious communities in Lebanon, GBM tend to compartmentalize their religious and sexual identity and safeguard it from potential threats, while also utilizing religious coping strategies to manage daily stressors in their social context.

Moreover, the sexual precautiousness among bisexual participants appeared to be a protective measure, demonstrating a complex relationship between identity preservation and sexual health outcomes, particularly in the context of HIV. Hence, while "internalized HIV phobia" may negatively impact mental health, it paradoxically appeared to promote safe and protected sexual behavior ultimately leading to a positive sexual health outcome.

The role of family in the process of identity construction among Lebanese GBM were drawn in study 1. It was shown that outness to family was a negative aspect contributing to internalized sexual orientation stigma. It was also shown, in study 2, that the presence of a supportive environment (family empowerment) contributes to enhancing self-acceptance. Thus, it is clear from findings in study 1 and 2 that the variables of identity threat, internalized sexual orientation stigma, religiosity and psychological distress play a crucial role in GBM's identity in Lebanon. It would be interesting to explore whether outness to family constitutes an identity threat and affects psychological distress among Lebanese GBM. This will be explored in study 3 which is reported in the next chapter.

Chapter 8: Impact of psychological stressors on the process of identity construction among Lebanese MSM and bisexual men (Study 3)

1. Introduction and hypotheses

In studies 1 and 2, insights were gained into how the compartmentalization strategy may be enabling GBM of religious faith to protect sexual identity from threat (such as family pressure to have a heterosexual marriage), on the one hand, and to retain the functionality of religion as a potential strategy for coping with social psychological stressors in the Lebanese context. Study 2 further supported the hypothesis on how religion appeared to be either used as a potential coping strategy through compartmentalization to protect identity from social threats and maintain self-acceptance; or had a decelerating effect on self-acceptance through conflicting religious and sexual identities.

However, fewer findings on the role of family in the process of identity construction among Lebanese GBM were drawn. Study 1 focused on two main variables, outness to family and family pressure to conform to heterosexual marriage norms. It was found that individuals who reported pressure from their families to conform to social heteronormative norms had higher levels of internalized sexual orientation stigma, scored higher on religiosity, were less open about their sexual orientation with their families and religious institutions. The outcomes of coping strategies were mixed; some participants reported engaging in riskier sexual behaviors, while fewer individuals reported self-harm. Additionally, differences in family expectations of marriage between those who had attempted suicide and those who had not, were not observed. It was also shown, in study 2, that the presence of a supportive environment (such as family empowerment) contributes to enhancing self-acceptance. In a country like Lebanon where religion and family both play crucial role in one's overall identity, it is expected that family acceptance or rejection can heavily impact the process of identity construction among Lebanese GBM. According to Wagner et al. (2012), GBM who have told their parents about their sexual orientation appeared to be more likely to consistently use condoms and to be tested for HIV. while these findings are not directly related to mental health, however one can argue that they might reflect a positive coping mechanism translated in their general sexual health behavior. In a nutshell, the findings from study 1 and study 2 have prompted a more in-depth exploration in study 3, specifically delving into the intricacies of family experiences and their potential role in generating identity threat and psychological distress, as well as the role of religiosity in this

complex relationship. It is important to note a significant finding from study 1 that individuals who expressed greater outness to the world reported more experiences of self-harm. This leads us to question whether coming out in the Lebanese context is experienced as a threat rather than a positive experience.

Consequently, this study was conceived to manipulate family experience by asking participants to recall a negative versus positive experience with their family.

The objective of this study was to investigate the impact of family experience toward sexuality on identity threat and psychological distress among Lebanese MSM and bisexual men.

Experimental design is used here in an attempt to understand the relationships between the different variables that might play a role in identity management among GBM, based on findings from study 1 and 2. This additional method was thought to complete or provide better understanding of the mixed quantitative and qualitative methods findings, amid a complex cultural context.

In this study, the hypotheses are built upon the foundation laid by the insights gained from studies 1 and 2. Having identified specific patterns and dynamics within the contexts of identity, family experiences, and mental health in the previous studies, this study serves as a crucial continuation of the exploration journey. Drawing on these findings, the below hypotheses seek to either confirm or propel our understanding further. Hypothesis 1 posits that participants exposed to the negative recall condition will exhibit higher levels of identity threat and distress compared to those in the positive recall condition, emphasizing the impact of recall experiences on psychological well-being.

Expanding the focus to family dynamics, hypothesis 2 delves into the nuanced relationship between family outness, negative family experiences related to sexuality, and psychological distress. The aim was to illuminate the intricate pathways through which family experiences impact distress, as uncovered in the earlier studies.

Informed by the cumulative insights from studies 1 and 2, hypothesis 3 explores the direct impact of internalized sexual orientation stigma on psychological distress, adding depth to our understanding of how internalized stigma influences mental health outcomes.

Lastly, hypothesis 4 takes a critical look at religiosity, a variable that emerged with multifaceted roles in our earlier studies. This hypothesis challenges conventional assumptions and suggests that religiosity may not have a direct effect on the quadripartite variables of family outness, internalized sexual orientation stigma, identity threat, and psychological distress. Instead, it may function either as a protective buffer or a source of conflict; this hypothesis

adds a nuanced perspective to the exploration of religious identity and its implications for mental health outcomes.

In this study, the hypotheses listed below serve as a bridge between the wealth of insights garnered from previous research and the ongoing exploration into the intricate relationships between identity processes, family dynamics, religiosity, and psychological distress. This iterative approach ensures that this research journey is guided by a comprehensive and evolving understanding of the nuanced interplay of variables within the studied population. Accordingly, the following hypothesis were tested:

- *Hypothesis 1*: When compared to participants exposed to the positive recall condition, those exposed to the negative recall condition will show higher levels of identity threat and distress.
- *Hypothesis 2*: Family outness (recalling a negative family experience related to sexuality) will have an effect on the independent variable of psychological distress through the mediation of identity threat.
- *Hypothesis 3*: Internalized sexual orientation stigma will have an effect on the independent variable of psychological distress through the mediation of identity threat.
- *Hypothesis 4*: Since religiosity appeared to be used either to protect identity from social threats or to play a threat through conflicting religious and sexual identities, religiosity will not have an effect on the quadripartite variables of family outness-internalized sexual orientation stigma-identity threat-psychological distress.

2. Methods

2.1. Design, sampling, and inclusion/exclusion criteria

A between-participants experimental study was conducted on the online questionnaire platform Qualtrics. The novel aspect of this approach lies in the integration of a mixed-method explanatory sequential design, coupled with the subsequent inclusion of an experimental method, to triangulate the findings comprehensively. In the initial stages, the focus was on exploring the intricate linkages between sexual identity and various mental and sexual health variables, grounded within a solid theoretical framework. Through meticulous examination in study 1, pivotal variables were identified, such as religiosity, internalized sexual orientation stigma, psychological distress, and familial pressure. However, to validate and further elaborate on these findings, I needed to proceed with study 2. Here, relationships were confirmed while also uncovering new insights. Crucially, I realized that the identified variables were interrelated, necessitating a deeper investigation into their causal connections. Therefore, the decision to undertake an experimental study was imperative, allowing to triangulate the data and confirm the hypotheses generated from both study 1 and study 2. This strategic progression not only enhances the robustness of the findings but also underscores the significance of this research in elucidating the challenges faced by GBM individuals in Lebanon. By making these distinctions explicit, the aim is to ensure a clearer understanding of the rationale behind the methodological choices employed, thereby contributing to the advancement of knowledge in this underexplored domain.

Participants were randomly allocated to either (1) recall a positive family experience related to sexuality (Group A) condition or (2) recall a negative family experience related to sexuality (Group B) condition. The manipulation questions were: "Can you recall an experience where your family had a pressure regarding any aspect of your sexuality?" (negative change condition) and "Can you recall an experience where your family had a positive attitude regarding any aspect of your sexuality?" (Stability condition or positive recall). The study included pre- and post-manipulation measures.

An online platform (Qualtrics) was used to create 2 links for the 2 groups with pre-manipulation and post-manipulation questions.

The primary investigator used the database of patients from his private dermatology and STIs clinic. This clinic serves as a large checkpoint for HIV and STIs care in Beirut. The clinic is affiliated to several community and non-governmental organizations which refer patients for any HIV/STIs testing, prevention, treatment, or any other aspect of sexual health care. The primary investigator is the only person who has access to the list of patients from the database. The latter is linked to the WhatsApp account of the clinic and each patient can be contacted through WhatsApp (from the WhatsApp account of the clinic to his own WhatsApp). Patients in the database can be selected according to several variables such as age, sexual orientation, date of visit, diagnosis, treatment received, etc. Thus, patients who were aged 18 and above and who had self-identified during their medical visit as gay or bisexual men were selected. Assuming that some will not have WhatsApp, others will not be responsive, and others might have changed their numbers, a total of 200 patients were chosen (first 200 in the list, provided based on the date of visit: the first name was the most recent one who visited the clinic out of the 200; the last name was the oldest one who visited the clinic from the 200 names). The list was exported to an Excel sheet and the names were randomly and evenly allocated to the group A or group B of the study (positive versus negative family experience toward sexuality). Based

on this random selection, each patient received the link through WhatsApp. In the message they received, they were asked if they would like to be part of the study, if so, they accessed the link without filling any identifiable information. The name of the participant was not recorded in any place and no other identifiable data was be collected. Participants were fully debriefed on the study, provided with a participant information sheet (explaining the purpose of the study) and consent form covering information about the study (online, provided before the questions), and were able to stop filling the questionnaire at any point.

2.2. Participants

A total of 122 answers were recorded, among which 26 had missing values on any of the variables. Thus, a convenience sample of 96 gay and bisexual male service users completely answered the questionnaire of the study and were included. Among the 96 participants, 48 (50%) were in group A and 48 others (50%) were in group B. Since the country is having a lot of challenges and strikes due to the economic crisis, and since the primary investigator left the country to work elsewhere, it was not possible to recruit more participants for this study.

2.3. Manipulation and measures

The manipulation was to recall a positive family experience related to sexuality (Group A) vs. negative family experience related to sexuality (Group B).

Pre-manipulation questions included *socio-demographic questions* related to age (years), nationality, governorate of residence, highest qualification. Were also assessed relationship status and religion. Other questions included **sexual orientation** captured using the following question: "How do you identify yourself?" with possible answers: Heterosexual/straight; gay; bisexual; non-binary.

A set of mental health variables was also used as pre-manipulation questions and included:

• **Religiosity** assessed using the validated 5-item Abbreviated Santa Clara Strength of Religious Faith Scale (Plante, 2010). The scale included items such as "I pray daily" and "I consider myself active in my faith or place of worship" and were measured on a 5-point scale (1=totally disagree, 5= totally agree). A sum score provided an overall score of religiosity – the higher the score, the higher the level of religiosity. The scale exhibited very good reliability (α =.91) in this sample.

- Frequency of attending a place of worship was measured with the following item: "How regularly do you attend a place of worship?" with 5 possible answers (1=never, 5=very regularly).
- Internalized sexual orientation stigma was assessed using the validated 9-item Internalized Homophobia Scale (Martin & Dean, 1987). The scale included items such as "I have tried to stop being attracted to same-sex people in general" and "I wish I weren't gay/bisexual" and were measured on a 5-point scale (1=totally disagree, 5= totally agree). A sum score provides an overall score of internalized sexual orientation stigma the higher the score, the higher the level of internalized sexual orientation stigma. The scale exhibited very good reliability (α=.90) in this sample.

Participants were then randomly and evenly exposed to recalling either a positive or a negative family experience related to their sexuality.

After being exposed to the recall of experience, participants were asked to complete the following measures while thinking about their experience:

- Identity threat was assessed using a validated 4-item questionnaire (Breakwell & Jaspal, 2022). The scale measures the individual's overall perceptions of self-efficacy, self-esteem, continuity, and distinctiveness (the identity principles). Items included "I feel my identity has changed" (continuity) and "It undermines my sense of self-worth" (self-esteem), which were measured on a 5-point scale (1=not at all; 5=extremely). A sum score provides an overall score of identity threat the higher the score, the higher the level of identity threat. The scale exhibited very good reliability (α=.90) in this sample.
- Psychological distress was assessed using the validated 18-item The Brief Symptom Inventory-18 (Derogatis, 2001). The scale included items such as "feeling no interest in things" and "feeling hopeless about the future" which were measured on a 5-point scale (1=not at all; 5=extremely). A sum score provides an overall score of psychological distress the higher the score, the higher the level of psychological distress. The scale exhibited very good reliability (α=.96) in this sample.

2.4. Ethics

Ethical approval was obtained from the Schools of Business, Law and Social Sciences Research Ethics Committee (BLSS REC) at Nottingham Trent University. Prior to data collection participants were provided with a participant information sheet and informed consent form, which informed them about the research objectives, any possible risks that may be involved, and their right to withdraw or stop at any time. They were reminded that any withdrawal or refusal of participation would definitely not affect the quality of care that participants receive in the clinic of the civil organization clinic. Participants only proceeded with the questionnaire, once they had provided informed consent. All data gathered was confidential and anonymous, participants were not asked to provide any identifying information such as their name or address, instead creating a unique ID to use should they wish to withdraw. During the debrief session, participants were asked if any aspect of the study process have affected them in any way and would be offered the necessary support: in the STI clinic run by the primary investigator, there is a consultation service by a psychologist who comes daily and who can be asked to follow-up on participants in need of support for free. Moreover, if completing the questionnaire made any participant feel worried about a possible sexual risk event, he would be offered sexual health services as appropriate. If a participant disclosed sexual assault, he would be signposted to the appropriate services and will be linked to these services for free.

2.5. Statistical analyses

SPSS version 28 was used to conduct the statistical analyses. The dependent variables of psychological distress and identity threat were not normally distributed. That is why Mann-Whitney tests with the Monte Carlo Method bootstrapped at 10,000 samples were conducted to examine the effects of the experimental conditions (positive recall vs. negative recall) on identity threat and psychological distress. The non-parametric common language effect sizes (CLES) and 95% confidence intervals for non-evenly sized groups were computed for the between-groups differences (McGraw & Wong, 1992). Spearman Rho's correlations were used to evaluate relationships between measures before and after the manipulation and the dependent variables.

A moderated serial mediation model was conducted to test the effects of the stressor factor of family outness (negative versus positive recall of a family experience) on psychological distress through a sequential mediation process involving internalized sexual orientation stigma and identity threat. Religiosity is included as a covariate, examining how its levels might influence the relationships within the model.

. PROCESS Macro for SPSS was used. Model number 6 was chosen with confidence intervals of 95%. Indirect effects were bootstrapped (5,000 repetitions).

3. Results

Normality check

One sample Kolgomorov-Smirnov tests (K-S) were performed to test normality of distributions. Results showed that religiosity D(96)=10.67, p<.001; internalized sexual orientation stigma D(96)=17.17, p<.001; identity threat D(96)=10.90, p<.001; and psychological distress D(96)=34.05, p<.001 were all non-normally distributed. Therefore, non-parametric tests were used.

Baseline sociodemographic characteristics of participants

Group A included people who were asked to recall a positive family experience related to sexuality whereas Group B included those who were asked to provide a negative family experience related to their sexuality.

The baseline sociodemographic characteristics of participants in Group A and B are provided in the table below.

		Group A		Group B			
Age		Mean: 33.14 (SD: 4.86)	Mean: 33.43	Mean: 33.43 (SD: 4.76)		
		Minimum 25; Maximum 45		Minimum 25	Minimum 25; Maximum 45		
Variable	Option	Frequency	Percentage	Number	Percentage		
Nationality	Lebanese	48	100%	48	100%		
	Non-Lebanese	0	0%	0	0%		
Governorate of	Beirut	20	41.67%	22	45.83%		
residence	Mount Lebanon	20	41.67%	18	37.5%		
	North	4	8.33%	2	4.16%		
	South	3	6.25%	5	10.41%		
	Bekaa	1	2.08%	1	2.08%		
Relationship	Single	40	83.33%	37	77.08%		
status In a relationship		8	16.67%	11	22.91%		
Religion							
Christian groups	Armenian Catholicism	0	0%	0	0%		
	Armenian Orthodox	1	2.1%	1	2.1%		
	Chaldean Catholicism	1	2.1%	1	2.1%		
	Chaldean Orthodox	0	0%	0	0%		
	Greek Catholicism	6	12.5%	5	10.4%		
	Greek Orthodox	5	10.4%	6	12.5%		
	Maronite Catholicism	12	25.0%	12	25%		
	Protestantism	0	0%	0	0%		
	Syriac Catholicism	1	2.1%	0	0%		
	Syriac Orthodox	0	0%	1	2.1%		
Muslim groups	Alawi Islam	0	0	0	0%		
<u> </u>	Shia Islam	5	10.4%	5	10.4%		

	Sunni Islam	7	14.6%	7	14.6%
Other religions	Druzism	4	8.3%	5	10.4%
	Judaism	0	0%	0	0%
	Any other religion	0	0%	0	0%
No religion		6	12.5%	5	10.4%
Sexual	Gay	42	87.5%	43	89.6%
orientation	Bisexual	6	12.5%	5	10.4%

Table 11: Comparison of sociodemographic findings in the negative versus positive condition groups.

Descriptive statistics: Mental health related variables before manipulation

The pre-manipulation variables in Group A and B are provided in the table below.

	Group A				Group B				
Variables	Mean	SD	Minimum	Maximum	Mean	SD	Minimum	Maximum	
Religiosity	9.95	4.49	5.00	24.00	13.43	5.20	5.00	25.00	
Internalized	17.33	7.83	9.00	35.00	20.00	6.81	9.00	35.00	
sexual									
orientation									
stigma									
			Frequency of at	ttending a place	of worshi	ip			
	N	N Percentage				Pe	ercentage		
Never	14	ŀ	29.2%		20		41.7%		
Rarely	17	1	35.4%		10	20.8%			
Sometimes	12	2	25.0%		13		27.1%		
Regularly	4		8.3%		3	6.3%			
Very regularly	1		2.1%		2	2 4.2%			

Table 12: Comparison of pre-manipulation variables in the negative versus positive condition groups.

Effect of manipulation on identity threat and psychological distress

A Mann-Whitney Test showed a statistically significant effect of experimental condition on identity threat [U(96)=747.500, p<.01; CLES=.67]. Participants in the negative recall condition experienced greater identity threat than those in the positive recall condition. The effect size for these differences was medium.

Similarly, there was a statistically significant effect of experimental condition on psychological distress [U(96)=833.500, p=.010; CLES=.63]. Participants who were in the negative recall condition experienced greater psychological distress than those in the positive recall condition.

Table 13 provides an overview of the Mann-Whitney Test.

With these two statistical significances, *Hypothesis 1* was confirmed.

Negative recall condition	Positive recall condition	Р	Common language effect
(N=48)	(N=48)		size (CLES)

	М	SD	М	SD		
Identity threat	12.12	4.56	9.67	3.66	<.01	.67
Psychological distress	37.14	16.40	30.95	15.82	.01	.63

Table 13: Comparison of identity threat and psychological distress in the negative versus positive condition groups.

Correlations between key variables

Table 14 provides an overview of the correlations between the continuous variables in this

study.

	1	2	3	4	5
Frequency of attending a place of worship	1	.458**	.429**	107	154
Internalized sexual orientation stigma		1	023	.333**	.125
Religiosity score			1	022	061
Psychological distress				1	.228
Identity threat					1

Table 14: Table showing the correlations between the variables. p < .050; **p < .005

Moderated serial mediation model for the impact of variables on psychological distress

A moderated serial mediation model was conducted to test the effects of the stressor factor of family outness (negative versus positive recall of a family experience) on psychological distress through the mediators of internalized sexual orientation stigma and identity threat with religiosity as a covariate. PROCESS was used, psychological distress was entered as an Y variable, outness to family (negative versus positive family experience recall) as an X variable, internalized sexual orientation stigma as a first mediator, identity threat as a second mediator and religiosity as a covariate. Model number 6 was chosen with confidence intervals of 95%. Indirect effects were bootstrapped (5,000 repetitions).

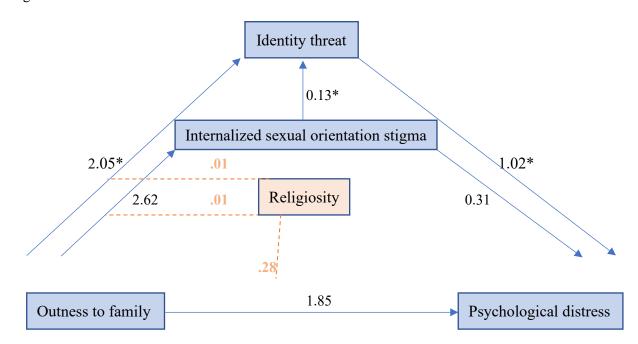
Assumptions check was based on linear regression between the dependent variable (psychological distress) and predictors:

- Uncorrelatedness of residuals was checked: Durbin-Watson-statistic was 2.46
- Homoscedasticity was checked and there was no plot with systematic pattern
- Linearity: the partial scatterplots did not show a nonlinear relationship.

The model showed statistically significant mediation pathways between family outness \rightarrow identity threat \rightarrow psychological distress (B=2.10, SE=1.19, Boot95%CI 0.19, 4.91). The model

was statistically significant for distress [F(4,91)=355.426, p<.001; R2=.188] (see Figure 2 below). The results (unstandardized coefficients B) indicated that outness to family did not directly predict psychological distress, but indirectly via the mediator of identity threat (see Figure 2 and Table 15 below). Thus, *Hypothesis 2* was confirmed. Moreover, internalized sexual orientation stigma had an effect on the independent variable of psychological distress through the mediation of identity threat, which confirmed *Hypothesis 3*. Finally, religiosity did not have an effect on the quadripartite variables of family outness-internalized sexual orientation stigma-identity threat-psychological distress, which confirmed *Hypothesis 4*.

Figure 2. Summary of the moderated serial mediation model for the impact of variables on psychological distress



Pathway	Unstandardized Coefficient	95% CI	Р
Direct effect			
Outness to family \rightarrow Psychological distress	1.85	-4.671;8.381	0.57
Outness to family \rightarrow Internalized sexual orientation stigma	2.62	639;5.886	0.11
Outness to family \rightarrow Identity threat	2.05	.309;3.799	0.02*
Identity threat \rightarrow Psychological distress	1.02	.389;1.658	0.001*
Internalized sexual orientation stigma \rightarrow Psychological distress	0.31	095;.725	0.13
Internalized sexual orientation stigma \rightarrow Identity threat	0.13	.027244	0.01*
Indirect effect			

Outness to family \rightarrow Internalized sexual orientation stigma \rightarrow	0.82	416-2.862	>0.05
Psychological distress			
Outness to family \rightarrow Identity threat \rightarrow Psychological distress	2.10	.192;4.915	>0.05
Outness to family \rightarrow Internalized sexual orientation stigma \rightarrow	0.364	106;1.178	>0.05
Identity threat \rightarrow Psychological distress			
Covariance effect: Religiosity			
Outness to family \rightarrow Psychological distress	0.280	412;.973	0.42
Outness to family \rightarrow Internalized sexual orientation stigma	0.012	3262;.3511	0.94
Outness to family \rightarrow Identity threat	0.012	1656;.1898	0.89

Table 15. Summary of the moderated serial mediation model for the impact of variables on

psychological distress

4. Discussion

Sexual minority individuals are more likely to have positive psychological outcomes when they receive support for their authentic identity, while hostility or silence from family members can negatively affect gay men who contemplate coming out to their families. A negative family experience related to one's sexuality may lead to changes in relationships with others, disruptions to self-esteem and continuity, and feelings of identity threat.

The aim of this study was to understand the stressors created by the conflict between one's sexual identity and family identity, as well as the role of religiosity in this complex relationship. It was conceived to manipulate family experience by asking participants to recall a negative (including coming out) versus positive experience with their family, which would allow us to understand whether coming out in the Lebanese context is experienced as a threat rather than a positive experience. Thus, the aim was to understand the impact of family experience toward sexuality on identity threat and psychological distress among Lebanese MSM and bisexual men.

Recalling a significant negative family experience (including coming out) was associated with greater internalized sexual orientation stigma and psychological distress. This implies that these unpleasant family experiences, which include outness to family, may eventually lead to a poor assessment of one's sexual identity. Conversely, a good outness experience was inversely related to internalized stigma, suggesting that GBM may be exposed to more favorable social representations of their sexual orientation by disclosing their sexual identity to others who are more understanding and accepting. This is believed to enable a more favorable evaluation of one's sexual identity.

Moreover, outness to family indirectly predicted psychological distress via the mediator of identity threat. In Lebanon, family (among other variables) plays a key role in one's overall

identity and it is expected that family acceptance or rejection can heavily impact the process of identity construction among Lebanese GBM. The impact of family experience on identity and mental health outcomes has not been the topic of a dedicated publication in the Lebanese context. However, a general argument can be made based on the findings of Wagner et al. (2012) who reported that those who are out are more likely to have protected sex and to be tested for HIV, interpreting this result as an overall better coping. Moreover, in Study 1, outness to family consisted of a negative predictor of internalized sexual orientation stigma. It was also shown, in study 2, that family empowerment contributes to enhancing self-acceptance and that the lack of such empowering environment would lead to decreased self-acceptance. With the current findings, it can be confirmed that outness to family significantly enhances the threat to identity. This result aligns with Meyer's minority stress theory (2003), which suggests that GBM may experience stress due to factors such as homonegativity, rejection, and victimization, resulting in a threatening experience of having a minority gay identity. This may worsen the psychological impact of recalling a negative coming out experience, as seen in the current study and also in the research conducted by Breakwell and Jaspal (2022). In line with the *identity process theory*, coming out may increase exposure to unfavourable representations of one's sexual orientation, leading to greater feelings of identity threat, fear of rejection, and internalized sexual orientation stigma. The latter indicates that the processes of assimilationaccommodation and evaluation of identity fail to meet the principles of self-esteem, selfefficacy, continuity, and positive distinctiveness. The presence of negative self-schema from internalized sexual orientation stigma suggests that the processes of assimilationaccommodation and evaluation of being gay cannot satisfy the identity principles, ultimately leading to identity threat. Consequently, GBM may be hesitant to come out if they perceive negative social representations of gay men, which is the case in Lebanon. The decision to conceal their identity may serve as a self-protective measure against exposure to negative social representations and the discriminatory behaviours resulting from them. The schema of outness enhancing identity threat can lead to negative mental health outcomes, such as psychological distress, making it a negative coping strategy. Moreover, internalized sexual orientation stigma also constituting a threat to identity leads to the similar outcome of psychological distress.

It is important not to underestimate the significant role of internalized sexual orientation stigma (which focuses on feelings of dissatisfaction with being gay) in this study's model. Previous research has demonstrated that various factors can increase the risk of internalized homonegativity, such as prejudice, shame, and group memberships that are perceived to be incompatible with one's sexuality (Jaspal, 2019). Internalized sexual orientation stigma may

reflect ambivalence about gay identity, which could intensify negative emotions (such as psychological distress) and threat to current identity when recalling a negative coming out experience. The experiment's effectiveness in eliciting perceived contemporary identity threat is noteworthy. Merely recalling and recounting a negative experience related to family triggers feelings of identity threat. The magnitude of this effect is intensified by the negative emotion associated with the memory and the degree of pre-existing internalized sexual orientation stigma. The latter is more prevalent in individuals who struggle to assimilate and accommodate their sexual orientation into their identity.

In this study, there was no inclusion of sexual health variables to assess the outcomes of coping strategies in terms of condomless sex (study 1 had shown higher number of condomless insertive anal sex and lower HIV knowledge in individuals who had family pressure to have a heterosexual marriage). Moreover, other mental health variables were not included, such as suicide (study 1 had shown that those who had more outness to the world experienced more suicide attempts). This variable may be included in other research projects in the future.

Interestingly, consistent with findings in study 1 and study 2, religiosity plays here too a paradoxical role in the process of identity construction. Studies 1 and 2 revealed how the compartmentalization strategy may be enabling GBM of religious faith to protect sexual identity from threat (such as family pressure to have a heterosexual marriage), on the one hand, and to retain the functionality of religion as a potential strategy for coping with social psychological stressors in the Lebanese context. In the current study, religiosity did not have an effect on the on the relationships between family outness and the psychological variables of psychological distress, internalized sexual orientation stigma, and identity threat. In line with the *identity process theory*, these findings support the hypothesis on how religion appeared to be either used as a potential coping strategy through compartmentalization to protect identity from social threats and maintain self-acceptance; or had a decelerating effect on selfacceptance through conflicting religious and sexual identities. This ambivalent role across participants most probably lead to the absence of effect of religiosity as a covariate on the several other variables. On the other hand, it might be that the other effects in the model were still significant after controlling for religiosity. In both cases, given the complex and mutifaceted nature of religiosity in the Lebanese complex, the measure used in this study might not have captured all the nuanced coping mechanisms implied in it, which might differ across religious groups and traditions.

Other perspectives on religiosity's role extend beyond its perceived paradoxical nature to offer two alternative explanations.

Firstly, while religiosity may demonstrate a paradoxical effect, encompassing both positive and negative aspects, the limited sample size of 100 participants might have constrained the understanding of its role. It's plausible that further studies with larger samples employing similar methodologies are needed to comprehensively capture the nuances of religiosity's impact.

Secondly, religiosity's influence may diminish in the face of familial pressure, aligned with the compartmentalization process and coherence identity principle. Study 1 delved into compartmentalization, where individuals reconcile their religious identity despite conflicts with their sexual orientation, prioritizing coherence albeit against this threat. Despite these tensions, GBM individuals may prioritize coherence across various identity facets, potentially diminishing the impact of religiosity compared to identity threats and family pressures. At a macro level, considering the broader spectrum of human identity encompassing religious, sexual and socioeconomic facets, religiosity may lose significance in maintaining overall coherence. This explanation posits that individuals prioritize coherence in their identity construction, potentially overshadowing the influence of religiosity. This interpretation is supported by study conducted by Jaspal and Cinnerella (2010), which explored tensions between sexual and religious identities among British Pakistani men identifying as Muslim and gay. The study introduced the concept of psychological coherence, highlighting the need for compatibility between existing identities within an individual's self-concept. Participants grappled with reconciling conflicting identities, often devaluing one to maintain psychological coherence. The study suggests that achieving coherence involves both intra-psychic coping strategies and an awareness of broader intergroup issues, shedding light on the nuanced dynamics of identity negotiation. Thus, considering the coherence principle elucidates the negligible role of religiosity in preserving overall coherence amidst identity tensions.

Finally, a suggestion for future research might be to use the research from the previous and further qualitative studies to develop a measure of religiosity-based coping in the Lebanese context. This would allow for more targeted testing of the hypotheses.

5. Limitations

This study has several limitations which should be addressed in future research.

First, a power analysis was not conducted, hindering the ability to precisely interpret the meaningfulness of the observed effects; the final sample size was relatively small and larger samples should be recruited in future work replicating this study while prioritizing such analyses to ensure robust statistical power. However, recruiting participants for a research project in the current chaotic situation in Lebanon was a big challenge. Second, it is possible that the experimental condition was not sufficiently impactful on the dependent variables, given that recalling a personal experience with family is biased (Schmier & Halpern, 2004). Future research ought to validate a more solid manipulation (including visuals) than that used (recall) in this study. Third, most participants are Lebanese residing in Lebanon, where a critical economic crisis has been experienced for the last years. Thus, the aim was to have a short questionnaire to allow maximum responsiveness (having more variables would have led to longer questionnaire and less responsiveness from participants). Fourth, the way religiosity was operationalized in this study may not sufficiently encompass its multifaceted nature. Religiosity, with its diverse dimensions such as supernatural beliefs, community involvement, adherence to dogma, and individual variations in interpretation influenced by personality and cognitive flexibility, presents a complex construct. This diversity in expressions of religiosity emphasizes the need for thoughtful consideration in future research, aiming to construct more nuanced measures that better capture the intricate facets of this construct. Fifth, future research should assess the roles of other correlates of mental health outcomes, such as trait anxiety, stress, history of self-harm and suicidal attempts. It is possible that psychological distress is too overstretched to be captured, whereas stress and anxiety for instance could capture more correlations with the manipulation.

6. Conclusion

Coming out can be viewed as a continuum, with positive experiences having affirmative outcomes for identity, psychological wellbeing, and health, while negative experiences can have detrimental effects. Negative experiences can also have lasting effects and may influence decision-making and behavior related to coming out. Factors predicting the degree of identity threat resulting from recalling a negative coming-out experience were investigated. The theoretical model, which hypothesized that recalling a negative family experience related to sexuality can induce identity threat, was supported by the results. Although no difference in psychological distress was found between groups A and B, the findings indicated a positive correlation between identity threat and psychological distress, consistent with the minority

stress theory (Meyer, 2003, p. 675). This theory highlights the heightened stress faced by individuals from stigmatized social categories, often minorities. GBM may encounter various stressors, such as homonegativity, rejection, and victimization, which can make having a (minority) gay identity a threatening experience (Breakwell & Jaspal, 2022). Recalling a negative family experience related to sexuality may exacerbate the negative psychological effects of this identity threat through the enhanced internalized sexual orientation stigma.

Chapter 9: Discussion

Note: Hypotheses in this section refer to the list of hypotheses present in page 14

The aim of this project was to address certain deficiencies in the field of research pertaining to the mental and sexual health outcomes and the factors (family, religion, peer support) that contribute to them in GBM in Lebanon. The project tested nine hypotheses (as outlined in Chapter 1), which were supported, and additional findings were also uncovered. The theoretical framework employed was the *identity process theory*, which can elucidate, at the individual level, how identity is shaped by social and threatening circumstances, as is the case in Lebanon. In fact, in exploring the mental and sexual health outcomes of GBM in Lebanon, the adoption of the *identity process theory* offers a robust framework that resonates with the socio-cultural nuances of the region.

Lebanon's complex societal fabric, characterized by religious diversity, familial expectations, and patriarchal structures, demands a theory that delves into the intersections of sexual, religious, and familial identities. The *identity process theory*, as conceptualized by Jaspal and Breakwell (2014), expertly addresses these dynamics by scrutinizing threat perceptions and coping mechanisms within these intersecting identities. Given Lebanon's varying levels of societal acceptance, understanding the impact of identity threats on the well-being of GBM becomes imperative.

The application of the *identity process theory* in this study underscores a recognition of the subjective and context-dependent nature of identity processes, aligning seamlessly with Lebanon's diverse social milieu. By employing the *identity process theory*, this research sought to identify correlational and causal paths, thus enriching the literature on mental and sexual health outcomes for GBM in Lebanon. Leveraging the *identity process theory* facilitates an examination of coping mechanisms, encompassing the four identity principles alongside the integration of identity resilience, crucial for comprehending how individuals navigate identity threats in Lebanon.

Furthermore, the study considers the role of social representations in shaping identity dynamics within Lebanon's socio-cultural context, emphasizing their influence on identity development, management, threat perception, and resilience. Thus, the selection of this theory as the primary theoretical framework is rooted in its ability to navigate the intricate intersections of sexual, religious, and familial identities within Lebanon's specific socio-cultural landscape.

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Linking to the findings of Jaspal and Cinnirella's (2010) study with British Pakistani men who identify as Muslim and gay in the UK employing the *identity process theory*, it is evident that the experiences of GBM in non-gay affirmative religious contexts resonate with the themes of identity threat, coping strategies, and the complex interplay of religious, ethnic, and sexual identities. The study suggests that identity coherence, along with the six *identity process theory* principles, may guide identity processes and coping strategies among GBM. However, it is crucial to extend and validate these theoretical developments through diverse methodologies and cultural contexts, highlighting the need for further research in this area.

The results attempted to gain understanding about the distinctions between gay and bisexual men with regards to identity, stressors, evaluation process, mental and sexual health outcomes. Additionally, insights into the impact of several crucial social representations in people's lives in Lebanon, such as religion and the role of family and peers, on identity management and coming-out experiences were inferred. Lastly, understanding how a sense of identity threat affects the mental health of GBM and the development of resilience versus concealment models was gained. All these conclusions were built up through and across the three studies implemented in the project, that followed three different methodological frames.

Regarding the generalizability and transferability of the findings, the employed mixed method approach (quantitative, qualitative, and experimental) within the *identity process theory* framework can be generalized and transferred to similar contexts of complex diversity. They can fit into contexts where there are differences and various layers of minorities or identities, such as other nations with similar complexities. For example, this framework would apply to any country where various identity layers exist, such religious and sexual identities, with a background of social and legal stigma, and with a history of multiple conflicts (such as the case of Lebanon, but also Serbia, Ukraine, and similar settings).

Bisexual men: stressors, evaluation process, sexual and mental health outcomes

Bisexuals may be viewed as a minority despite several reports from Western societies stating the opposite (Copen et al., 2016 and Zaza et al., 2016). Yet, the population of bisexuals is not visible and understudied. Many challenges faced by bisexuals have been reported in Western societies literature: disregard of their sexual orientation; internalized and external homonegativity and binegativity with lack of acceptance from heterosexual and nonheterosexual partners; negative support from friends and family; poor overall physical and mental health outcomes (see Chapter 1 Introduction). This literature has indicated that bisexual men are at a higher risk for illegal drug use, depression, and contracting HIV and other STIs. Research on identity among bisexual men in Lebanon is inexistent and this project is the first of its kind to comprehensively explore this population in Lebanon.

It is noteworthy to mention that there was less consensus between sexual attraction and sexual orientation among bisexual men compared to gay men, as indicated by the results of study 1 (refer to Chapter 6). This indicates that a greater proportion of bisexual men identified themselves as "gay" in the study sample, despite not being exclusively attracted to men. In alignment with the *identity process theory*, bisexual men facing conflicts between their sexual orientation and other aspects of identity may struggle to assimilate and consolidate their sexual orientation, instead choosing to adopt the label of "gay" or "homosexual" as a coping mechanism, most probably due to binegativity. Furthermore, from a methodological perspective, prior research indicates that sexual attraction may offer a more comprehensive understanding of the spectrum of attraction reported among bisexual men. and should be prioritized in stigmatized contexts, rather than solely relying on sexual orientation to categorize the assessment of sexual attraction rather than solely relying on sexual orientation to categorize sampled populations into GBM. As such, definitive conclusions cannot be drawn without further research to explore this point thoroughly.

Moving further into the negative evaluation of the same-sex relationships in bisexual men, several stressors were identified in the sample of study 1.

The first group of psychological stressors is due to the *social stigma* despite an aspect of tolerance of this group in some societies in the Middle East (Hunter, 2007). This stigma is due to the fact that in patriarchal and collective contexts, a bisexual man is invited to socially follow the heteronormative rules while also engaging in stigmatized same-sex relationships (Maatouk & Jaspal, 2020a). Consequently, some bisexual men tend to negatively evaluate their same-sex relationship and thus increase the risk of internalized sexual orientation stigma (*Hypothesis 1*). The second group of psychological stressors is led by the *relationship with family*: decreased level of outness and increased family expectations to have a heterosexual marriage as reported in the sample (*Hypothesis 1*). These factors have been reported to reinforce the limited exposure to positive social representations of sexual orientation diversity (Brewster et al., 2013; Feinstein et al., 2018; Feldman, 2012). In Lebanon, parental stigma was reported to be associated with higher internalized sexual orientation stigma (Michli & El Jamil, 2020). Building on previous and current work, this study suggests that the stressors related to

decreased outness and higher family pressure to get married may reinforce the negative evaluation of the same-sex relationships in bisexual men in the sample (*Hypothesis 3*). Yet it also showed that more people expected to get married reported self-harm than those who were not (*Hypothesis 4*).

The third group of stressors faced by bisexual men is due to *stigma from gay communities*. In fact, being bisexual reflects a partial-to-complete absence in gay affirmative social contexts and representations. The outcome is a reinforcement of the negative evaluation of the same-sex relationships in bisexual men in the sample.

Put together, findings show that bisexual men convey a prioritized sense of belonging and continuity to family, social and religious norms (being under pressure to have a heterosexual marriage) over their belonging to their sexual identity. The significance of male relationships in identity may be downplayed and perceived solely as a "source of pleasure". Accordingly, they struggled to positively evaluate their homosexual identity in a heteronormative context like Lebanon and were unable to fully incorporate their male-to-male sexual relationships as a new identity element. From an *identity process theory* perspective, there is a re-defining of identity principles whereby focus on conformity and belonging to social norms weighs over enhancing self-esteem, self-efficacy and belonging to the new identity element. This is an example of identity concealment.

These findings about bisexual men in the frame of *identity process theory* are novel. Although Weinberg (1994) and Brown (2002) had tried to look into theories of bisexual identity's stages, their respective models use bisexual identity as an uncertainty and remain more theoretical (Elia et al., 2018). However, social representations theory can be useful to understand perception of bisexuality. Maatouk and Jaspal (2020a) argued how social, political, and religious factors may play a crucial role in the Lebanese society (conservative, unstable politically, multi-religious) and are central to the formation of social representations. These factors modulate the social context in which bisexual identity develops and how these phases are modulated by social representations (Gómez & Arenas, 2019; Hertlein et al., 2016; Morrison et al., 2019). Other authors also tried to draw phases through which bisexual men identity develops and how these phases are modulated by social representations (Gómez & Arenas, 2019). However, they rely specifically on emotional and inter-personal romantic experiences rather than other aspects of social representations such as religiosity, family pressure to have a heterosexual marriage, and internalized sexual orientation stigma. Findings in the frame of *identity process theory* fit better the social context and aspect of the collective society of Lebanon.

One would expect that, consistent with several empirical findings regarding bisexual men in the Western literature, the consequent mental and sexual health outcomes would be deleterious in bisexual men in Lebanon too. However, surprisingly, this was not the case in this project for both mental and sexual health.

In fact, two novel findings in bisexual men emerged based on study 1 and study 2.

First, in heteronormative societies like Lebanon, bisexual men showed a tendency to be in a "one step forward, two steps back" situation in terms of accommodating their same sexorientation identity, given that they haven't fully come to terms in regard to their same-sex behavior.

From an *identity process theory* perspective, this could be attributed to the salience of identity principles in favor of conforming to heteronormativity among bisexuals, such as sense of belonging to social norms. On that matter, qualitative findings of study 2 indicated that bisexuals tend to have a high sense of belonging to social and family norms along with a sense of continuity of family lineage, further hindering positive evaluation of their sexual identity. As such, they live in a double life whereby they adhere to the patriarchal cultural, social and religious norms of heterosexuality, on one hand, while engaging in stigmatized relationships with men, on the other hand. Accordingly, occupying a dual space make bisexuals more prone to negatively evaluating their men-to-men relationships further intensifying internalized sexual orientation stigma, an identified theme in the qualitative findings.

Moreover, bisexual participants refrained from committing and being involved in romantic relationships with men. Having relationships with men would associate them to the gay community and further detach them from heteronormative norms. As such, bisexual participants affirmed their tendency to have purely sexual relationships (pleasure driven) with men while being romantically involved with women. They also aimed at having heterosexual marriage and a family. Consequently, they were more sexually precautious when compared with gay men. The fear of HIV or what was discussed as "internalized HIV phobia" has been reported in the gay literature as a driving force for HIV testing (see chapter 2 on sexual health). It has also been cited as an ingroup relationships independent factor associated with flourishing mental health outcomes. It can be hypothesized that bisexual community connectedness (which appears to be low in the Lebanese context) is associated with higher internalizing symptoms. Since HIV in Lebanon is concentrated in gay men, it could be that bisexual men who try to be conform to the heterosexual norms tend to see HIV as a "gay infection" and thus follow protective sex rules (with men) to avoid having HIV. As per the *identity process theory*, it could be hypothesized that protective sexual men to protect their

sense of social continuity and belonging as HIV might eliminate their chances of conforming to social norms through building a family.

Second, bisexual men did not experience worse mental health outcomes compared to gay men. This finding is remarkably different from previous report in the Western literature, including a meta-analysis (Semlyen et al., 2016) showing that symptoms of common mental disorder were 26.2% among lesbian/gay, and 34% among bisexuals. Similarly, Ross et al., (2018) indicated that across depression and anxiety outcomes, there is consistently a pattern of higher rates of depression and anxiety among bisexual people compared to other subgroups. In the sample, bisexual men appeared to be more vulnerable compared with gay men in terms of less outness, having a double life, seeking heterosexual marriage to stay conform with heteronormativity. They appeared to experience multilevel barriers to emotional well-being: societal, interpersonal, and individual (Hertlein et al., 2016) and had unsupportive relationships. Yet, they did not report negative mental health outcomes compared to gay men. How are bisexual men coping to overcome the consequences of their vulnerability? In a heteronormative and religiously diverse context, such as the case of Lebanon, religiosity plays a key role.

The paradoxical effect of religion

A key finding in this project is that religion plays a paradoxical effect by being a source of negative social representations of sexual orientation, but also an important positive coping mechanism.

Religion is a key source of negative social representations concerning homosexuality as reported in Western societies and in Lebanon (Barnes & Meyer, 2012; Heiden-Rooteset al., 2018; Shilo & Savaya, 2012; Maatouk & Jaspal, 2020a). As a result of these negative social representations, GBM can experience conflict between their religious and sexual identities. Findings across this project are consistent with two main identity management options to solve the stressor of the conflict religion-sexual identity in Lebanon: leaving religion, or not.

In line with the *identity process theory*, some GBM resolve this stressor by renouncing their religion. In fact, 22.3% of the sample in study 1 (n=275; missing=2) and 22.9% of the sample in study 3 (n=96) reported to have no religious affiliation. This "exit option" (Ellemers et al., 1997) enables this sub-group to assimilate and accommodate their sexual orientation in identity while averting the need to evaluate this identity element negatively (Jaspal & Cinnirella, 2010). Consequently, one can understand how in study 1, GBM who rejected a religious affiliation

reported higher outness and lower family expectations to have a heterosexual marriage than those who identified as Muslims or Christians (*Hypothesis 2*). These participants are not subject to the same social norms associated with religion as those who wish to be recognized as Muslims or Christians. Therefore, they may be more confident about disclosing their sexual identity to others and perceive less pressure from their families to enter a heterosexual marriage. This sub-sample may elect the strategy of departure from specific groups posing threats to one's identity, in order to maintain the coherence principle of identity.

Surprisingly, the group of no religious affiliation who exhibited on the one hand higher outness and lower family expectations to have a heterosexual marriage, also exhibited on the other hand, higher psychological distress, depression and history of self-harm than those who identified as Muslims or Christians. One can argue that due to the lack of religious identification, these participants might find themselves less able to cope with other social psychological stressors in their lives. Thus, while the exit option related to religion may enhance the assimilation-accommodation of sexual orientation in identity and obviate the need to negatively evaluate homosexuality, this strategy appears to be dealing with only one dimension of a complex identity structure and does not secure a positive coping outcome.

These results lead us formulating a hypothesis that religion, which is a source of negative social representations (leading some individuals to reject any religious affiliation) paradoxically plays a key role in positive coping. To have a better understanding of this paradoxical effect, let us explore those who do not chose to leave or renounce their religion.

In Lebanon, many social and political institutions and groups are organized in accordance with religious affiliation, leading to a significant social group dimension of religion (Afifi et al., 2020; Harb et al., 2020). Moreover, the negative association between religiosity and internalized sexual orientation stigma suggests that, while religiosity may be engendering and sustaining a negative evaluation of homosexuality, internalized sexual orientation stigma may be leading some people to turn to religion as a mean of distancing themselves from their sexual orientation, thereby allowing a better coping. These individuals may be using compartmentalization where sex with men and religion are completely separated in their mind. Compartmentalizing identity elements that might cause tensions and disruption in the identity structure (defection strategies) allows homosexual relationships to be downplayed and perceived different than a threat. Although the compartmentalization (defection strategy) precludes identity "integration" by keeping their sexual identity separate from religious identity

in some contexts such as Lebanon, the person can still possess and assert a gay identity, and enjoy psychological wellness (through the support provided from religiosity).

To double check the hypothesis regarding the paradoxical role of religion, and looking specifically at the role of religiosity, the multiple regression models in study 1 could not establish a strong and significant predictor role (positive or negative) between religiosity and mental health outcomes (i.e., psychological distress, depression). In fact, the religiosity scale used in the survey focused more on individual religious conviction and spirituality. Thus, religiosity being a non-significant predictor may mean that religious conviction and spirituality are not protective against poor mental health. However, in this project, another religion-related dimension was introduced with significant outcomes. Frequency of attending one's place of religious worship was a significant predictor of both depression and psychological distress (study 1) (*Hypothesis 5*). Thus, it appears that participating in institutionalized religion such as engaging with other members of the religious congregation or being part of religious rituals is negatively associated with both depression and psychological distress. This result is consistent with some previous findings (Barnes & Meyer, 2012; Wilkerson et al., 2012) and is in line with the social cure perspective as defined by Jetten et al. (2012). The essence of the social cure theory, revolves around the idea that identity-based group dynamics play a pivotal role in fostering individual health and well-being. It emphasizes how being part of social groups contributes to a 'primary appraisal' process, helping individuals make sense of the world and interpret various aspects of their environment (Häusser et al., 2020). This foundational understanding, in turn, influences how individuals perceive and respond to potential threats and opportunities, shaping their overall stress and coping mechanisms. Moreover, the social cure theory posits that beyond mere identification, active engagement with these social groups, such as participating in religious rituals or communal activities, amplifies the health benefits derived from group membership. By actively participating in group activities, individuals reinforce their social connections, enhance their sense of belonging, and access additional resources for coping with stressors. Through this lens, the integration of social identities and their associated practices serves as can act as a "social cure" that facilitates adjustment, effective coping, and overall well-being for individuals who face various stressors.

From this point of view, engagement with relevant and meaningful social groups, such as religious rituals, can enhance individuals' self-esteem and have a positive impact on their physical and mental health. These social identities and their related factors (such as social

support and a sense of community) can act as a "social cure" that facilitates adjustment, effective coping, and overall well-being for individuals who face various stressors.

Study 2 findings confirmed these conclusions that some GBM may choose to "dis-identify" with religion to maintain adequate levels of psychological coherence of their identity, whereas others compartmentalize their religious and sexual identities and consider religion and/or spirituality to be important coping factors in the face of identity threats by others and to maintain self-acceptance.

More interestingly, while the experimental study 3 looked mainly into the effects of the stressor factor of family outness (negative versus positive recall of a family experience) on psychological distress through the mediators of internalized sexual orientation stigma and identity threat, it also reflected the paradoxical effect of religiosity. In fact, religiosity was entered as a covariate and did not have any significant effect on the relationships between family outness and the psychological variables of psychological distress, internalized sexual orientation stigma, and identity threat. (*Hypothesis 9*). This absence of effect can be a translation of the ambivalent role of religiosity as a source of threat but also a source of effective coping in individuals who use compartmentalization between religious and sexual identities. It might also be that the other effects in the model (internalized sexual orientation stigma and identity threat) were still significant after controlling for religiosity. However, given the complex and muti-faceted nature of religiosity in the Lebanese complex, the measure used in this study might not have captured all the nuanced coping mechanisms implied in it, which might differ across religious groups and traditions.

Finally, putting these findings in the frame of *identity process theory*, perception of sexual orientation as a threat may lead to different coping actions. For some, rejecting religion to preserve some of their identity principles (coherence, continuity) will allow them to experience more coming out and less family pressure to have a heterosexual marriage (thus less internalized sexual orientation stigma), but will lead to negative mental health outcomes. For others, compartmentalizing religious and sexual identities will allow them to experience better mental health outcomes (through being engaged in institutionalized religious ceremonies, which is in line with the social cure perspective) but will implicate less coming out and more family pressure to have a heterosexual marriage (thus, more internalized sexual orientation stigma). This is how religion plays a paradoxical effect in the overall identity of individuals in the context of Lebanon. In the latter, religion plays a key role in people's lives, but there is another variable that is also very impactful: family relationship.

It is however important to mention that in exploring religiosity's role, alternative perspectives may be considered, expanding beyond its perceived paradoxical nature. Firstly, while religiosity may exhibit both positive and negative effects, the limited sample size of 100 participants may have restricted the depth of understanding regarding its impact. Further studies with larger samples and similar methodologies are necessary to fully grasp the nuances of religiosity's influence.

Secondly, religiosity's sway may diminish in the face of familial pressure, in alignment with the compartmentalization process and coherence identity principle. This concept is exemplified by Study 1's exploration of compartmentalization, where individuals reconcile conflicting religious and sexual identities to prioritize coherence despite challenges. Despite tensions, individuals may prioritize coherence across various identity facets, potentially diminishing religiosity's impact compared to other identity threats and family pressures.

At a broader level encompassing diverse facets of human identity, such as religious, sexual, and socioeconomic dimensions, religiosity may lose significance in maintaining overall coherence. This notion suggests that individuals prioritize coherence in their identity construction, possibly overshadowing the influence of religiosity. This interpretation finds support in a study by Jaspal and Cinnerella (2010), which delved into tensions between sexual and religious identities among British Pakistani men identifying as Muslim and gay.

In summary, considering the coherence principle elucidates the marginal role of religiosity in preserving overall coherence amidst identity tensions. This nuanced understanding underscores the complex dynamics of identity negotiation and highlights the interplay between various identity facets in shaping individuals' experiences.

Role of family and group membership

In the Western literature, it was reported that individuals who face obstacles to come out, because of shame, guilt, or threat, usually follow a maladaptive coping called "identity concealment". The example of identity concealment in bisexual men was mentioned and discussed before in this chapter. This maladaptive coping depletes cognitive resources, represses expression, and interferes with interpersonal relationships, thus is burdensome (Critcher & Ferguson, 2014). Reciprocally, being open with others about one's sexual identity is inversely related to depression. Despite its difficulty, coming out can also lead to

opportunities for support, and coping (Meyer, 2007). If prejudice is dealt with negatively, it is reported to be a risk factor of mental health disorders.

As discussed in Chapter 2, parental responsiveness is a key modulator of the coming out process in a way where family support and acceptance of gay identity play a positive role in the life of gay men, even in societies with traditional family values. This was defined as "resiliency model".

In Lebanon, family (among other variables) plays a key role in one's overall identity and it is expected that family acceptance or rejection can heavily impact the process of identity construction among Lebanese GBM. The weight of family experience on identity and mental health outcomes has not been studied in the Lebanese context aside some reports (Wagner et al., 2012) showing that GBM who had disclosed their sexuality to family and parents tended to be more likely to use condoms consistently and be tested for HIV.

In this project, findings from study 1 showed that those who reported family pressure to have a heterosexual marriage exhibited higher internalized sexual orientation stigma (*Hypotheses 3*), exhibited higher religiosity score, had lower outness to family and lower outness in one's religious institution, and had reported more a history of self-harm (*Hypotheses 4*).

The outcomes of coping strategies were overall negative in mental (more psychological distress and more history of self-harm) and sexual (higher number reported condomless insertive anal sex and lower HIV knowledge) health. Moreover, outness to family consisted of a negative predictor of internalized sexual orientation stigma. It was also demonstrated, in study 2, that the presence of a supportive environment (such as family empowerment) contributes to enhancing self-acceptance (identity resilience). However, a clearer understanding of the stressor arising from the conflict between sexual and family identity, along with the role of religiosity in this dynamic, remains elusive. In study 3, results of the experiment indicated that outness to family did not directly predict psychological distress, but indirectly via the mediator of identity threat. This means that outness to family enhances identity threat which mediates psychological distress (Hypotheses 6 and 7). On the other hand, internalized sexual orientation stigma had an enhancing effect on identity threat which mediates psychological distress (*Hypothesis 8*). Thus, both outness to family and internalized sexual orientation stigma enhance threat to identity, and the latter predicts psychological distress. The significant role of internalized sexual orientation stigma (which focuses on feelings of dissatisfaction with being gay) in this study's model was highlighted. In fact, internalized sexual orientation stigma may reflect ambivalence about gay identity, which could intensify negative emotions (such as psychological distress) and threat to current identity when recalling a negative coming out experience. The noteworthy effectiveness of the experiment lies in its ability to surface perceived contemporary identity threat. The act of recalling and describing a negative experience related to family is sufficient to trigger feelings of identity threat. The extent of this effect is heightened by the negativity of the emotion evoked by the memory and the level of pre-existing internalized stigma towards one's sexual orientation. This stigma is more common among individuals who find it challenging to assimilate and accommodate their sexual orientation into their identity.

These results are in line with Meyer's minority stress theory (2003), which highlights that GBM may experience stress due to factors such as homonegativity, rejection, and victimization, making the experience of having a minority gay identity a threatening one. This may exacerbate the negative psychological impact of recalling a negative coming out experience, as demonstrated in the study conducted by Breakwell and Jaspal (2022).

Identity process theory attempts to explain how people proactively try to cope with stressors such as exposure to stigmatizing social representation. Being out may facilitate exposure to less favorable representations of one's sexual orientation. These representations may allow the individual to experience greater feelings of identity threat, fear of rejection and internalized sexual orientation stigma. The latter indicates that the assimilationaccommodation and evaluation processes of identity are currently incapable of meeting the identity principles (self-esteem, self-efficacy, continuity, and positive distinctiveness). The existence of negative self-schema from internalized sexual orientation stigma suggests that the assimilation-accommodation and evaluation of being gay are unlikely to satisfy the identity principles, ultimately leading to identity threat. As a result, GBM may be cautious about coming out if they believe negative social representations of gay men exist, which is the case in Lebanon. The decision to avoid coming out may serve as a self-protective measure against being exposed to negative social representations of their sexual orientation and the discriminatory behaviors that result from these representations. An extreme example of identity concealment is the one provided in the discussion above about bisexual men. This schema of outness enhancing identity threat can lead to negative mental health outcomes such as psychological distress, and thus is a negative coping strategy. This finding contrasts with previous findings from Western societies where being out was associated with better mental health outcomes and less internalized sexual orientation stigma (Lawrenz & Habigzang, 2019). In fact, studies in the field of coming out should take into consideration the social representation of homosexuality and whether families are more likely to accept gay orientation or not, which mediates gay men's psychological adjustment. Whenever

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family support and acceptance of gay identity play a significant positive role in the coping process of gay men, coming out can be considered as a "resiliency model". Wherever the family environment is not welcoming, coming out may be a threat leading to negative mental health outcomes. The concept of social curse, in particular, emphasizes the detrimental effects of social exclusion and discrimination within identity-based groups. It underscores the risks associated with not all individuals within these groups experiencing the same level of support or inclusion, leading to adverse health outcomes, mental health challenges, and an overall decrease in well-being (Stevenson et al., 2023; McNamara & Parsons, 2016). However, it's important to note that this study did not specifically investigate the concept of social curse; rather, it emerged as a secondary finding not included in the initial hypotheses. Therefore, further research is needed to delve deeper into this aspect and its implications for the well-being of GBM in Lebanon.

Conversely, higher levels of self-esteem, self-efficacy, continuity, and positive distinctiveness may provide individuals with the psychological resources to cope with the potential risks of coming out and facing undesirable reactions such as rejection and discrimination. This concept of identity resilience is referred to as the overall combined rating of self-esteem, self-efficacy, continuity, and positive distinctiveness (Breakwell & Jaspal, 2022). However, this project did not directly examine the combined strength of the four identity principles (which encompasses a broader conceptualization of selfhood, including self-efficacy and distinctiveness) while recalling a past memory. It would be important to include this measurement in future studies in Lebanon to draw further conclusions on identity resilience among GBM.

Several examples from study 2 are in line with these results and get to be understood in line with the *identity process theory*. For those who conveyed a low sense of belonging to the Lebanese heteronormative society and family expectations and prioritized the principles of self-esteem, self-efficacy, continuity, and distinctiveness, coming out further enhanced their sense of belonging to their sexual identity and increased resilience in the face of social threats and rejections. Conversely, those who reported an identity concealment leading to threats to their identity experienced subsequent adverse feelings of anxiety, negatively affecting their self-acceptance. It is crucial to mention here that there are several additional factors that have played role in this process such as time, positive reactions upon disclosure, social and financial independence, and personal character (prioritizing being independent). Focusing on the role of family should not decrease the respective roles of several additional factors that were not explored in this study.

Beside the role of the family, insights on other social representations variables that were discussed in Chapter 2 could be provided at a lesser extent. Intragroup support (mentioned by some individuals in study 2) helped some gay men to be proud of their identity, out to their parents and peers, thus assuming self-acceptance. Conversely, some others like bisexual men in the group interviewed were constantly distancing themselves from the gay affirmative context, amid a complete absence of bi-affirmative environment. Although some bisexuals described gay context negatively, they seemed to lack from any other support beside family and religion. It is important to note however that the identification and alignment with the gay community in Lebanon is different from other Western societies. This can be due to different factors that were not explored in this project. Yet, the absence of a gay culture per se in a country where being gay is legally prohibited, along with several overlapping crises, can all play different roles in the absence of a permissive environment where gay community is present and empowered. Moreover, building close relationships with gay men from different religious and cultural backgrounds (due to the religious diversity in Lebanon) can be challenging due to differing norms and expectations. Likely, this could represent a source of adaptive coping strategies in other societies through a source of support and belonging. In fact, based on the frame of research using *identity process theory*, people may strategically identify with, and align themselves with, groups and individuals in order to achieve a more positive sense of self and consequently more sense of identity resilience (Jaspal & Breakwell, 2021). Unfortunately, this does not seem to be the case in a religiously and culturally diverse context such as Lebanon. However, in some instances, the hypothesis of belonging to a religious group as a social cure might represent an exception to this conclusion.

Coping outcomes and strategies for enhancing Identity

Having discussed the difference between GBM, and then the different stressors related to social representations (religion, family, intragroup support), it is timely to explore the coping outcomes and styles that emerged across the three studies of this project.

The *identity process theory* suggests that individuals employ coping mechanisms to eliminate or at least minimize identity threats, considering their personality and social context. As discussed in Chapter 4, coping strategies operate at various levels, including intrapsychic, interpersonal, and intergroup. Coping strategies may involve denial, reconceptualization, selfisolation, self-disclosure, and the acquisition of social support through group affiliations. In essence, individuals seek to bolster and restore their sense of identity when it is challenged or compromised. *Identity process theory* research has recently emphasized the concept of identity resilience. The latter refers to individuals' perception of their overall self-efficacy, self-esteem, continuity, and distinctiveness, which collectively contribute to their sense of resilience (Breakwell & Jaspal, 2021). Thus, identity resilience reflects the combined strength of the four identity principles. Furthermore, it reflects a subjective belief in one's ability to overcome challenges, a sense of self-worth, a clear understanding of one's identity, and a positive self-construal compared to others.

In *identity process theory*, identity resilience is viewed as a stable self-schema or trait that develops over time. Various social factors and experiences, such as group memberships, education, cultural contexts, and religion, as well as personal characteristics like personality traits and intellectual capacity, can influence an individual's perception of their identity resilience. Consequently, individuals with higher levels of identity resilience may be able to resist aversive social representations associated with internalized homonegativity and avoid incorporating them into their self-evaluation. Moreover, these individuals may feel more empowered to seek out adaptive coping strategies, including seeking social support from others. It is worth mentioning that coping strategies may apply respectively to mental and sexual health outcomes.

Putting the pieces together, chronic prejudice based on sexual orientation, and the resulting internalized sexual orientation stigma, can negatively affect mental health and cause feelings of distress. This chronic prejudice can increase the risk of difficulties developing and maintaining intimate relationships, as well as a fear of rejection. Individuals may even anticipate and perceive rejection in situations where it is not present. Facing these stressors to self-identity, individuals can cope with different aspects. The coping outcome is a personal choice that relies on previous experiences, individual traits and how do people interpret or are impacted by social representations.

For people who are mostly affected by the *role of their family* in their life, the significance of homosexual relationships in identity may be downplayed and perceived solely as a "source of pleasure". An extreme example is based on findings in bisexual men who conveyed a prioritized sense of belonging and continuity to family, social and religious norms over their belonging to their sexual identity. Accordingly, they negatively evaluated their homosexual identity in a heteronormative context like Lebanon. Identity concealment in this case was intended to safeguard bisexuals' self-esteem and preserve the continuity of their identity, but it has the potential to erode their sense of identity authenticity. More importantly, by hiding their

identity from others, bisexuals are deprived of access to informational networks that could have helped them gain knowledge and cope more effectively. Similarly, those who lived negative experiences through the coming out process with their families exhibited higher identity threat and higher internalized sexual orientation stigma leading to more psychological distress. Conversely, others may perceive their homosexual relationships as an aspect of identity, which is essentially an acceptance strategy and a model of identity resilience. This is the case with gay men interviewed in study 2 who conveyed high self-acceptance, acquired either instantly upon sexual orientation discovery or over time. From an *identity process theory* perspective, re-defining identity principles whereby early focus on conformity and belonging to social norms shifts towards enhancing self-esteem, self-efficacy and belonging to the new identity element is paralleled with sexual identity acceptance.

For people who are mostly impacted by *religion*, the significance of homosexual relationships in identity may have different levels. Some people cope by rejecting religion and reporting atheism, thus by distancing themselves from negative social and religious representations of their sexual orientation. This group might however experience negative mental health outcomes, due to the lack of institutionalized religious ceremony attendance and benefit (psychological benefit). Conversely, for some other GBM, religion appeared to be decelerating self-acceptance when one lives in a moral dissonance due to perceived conflicting religious and sexual identities. In this particular case, religion might be positively associated with internalized sexual orientation stigma, in turn negatively affecting self-acceptance. To cope, these individuals may be using compartmentalization where sex with men and religion are completely separated in their mind. This compartmentalization allows homosexual relationships to be downplayed and perceived different then a threat. It also may enable some GBM to use religious institutions as a potential coping strategy against social psychological stressors in the Lebanese society to be able to maintain their identity principles (identity resilience). From an *identity process theory* perspective, compartmentalizing allows people to accept their sexual orientation and to benefit from religion's coping to overcome other aspects of identity (other than the sexual identity) threats.

Intragroup friendships were studied in this project and do not seem to play a crucial role in a highly stigmatized and legally prohibited same-sex context. Outgroup friendships based on the few insights given in the interviews of study 2 are consistent with the identity concealment because of the lack of outness in non-gay context. Moreover, romantic relationships were

mentioned in Chapter 2 as a social representation but were not explored across this project. Sexual relationships seemed to be modulated by fear of HIV and STIs and fear from online exposure. Dating apps were referred to as a "toxic environment" where people hide behind "fake profiles". People who constantly use sexual dating apps appeared to be those who prefer to have sexual intercourses under the influence of drugs and alcohol. One can argue that substance use strategy initially deployed to get disconnected from the stressors and to transiently inhibit their identity threats, would allow these individuals to enhance aspects of their identity and to achieve a pleasurable sexual intercourse.

It is crucial to note that, across the studies, the coping strategies for mental health outcomes rely on psychological distress (in study 3) and self-harm (study 1). Other mental health variables such as history of suicide were not included. This variable may be further explored in research projects in the future. It is also important to mention that these conclusions might be a simple interpretation of a more complex identity management.

Lastly, sexual health outcomes were explored in study 1 but could not provide bold conclusions in terms of coping strategies. Study 1 had shown higher number of condomless insertive anal sex and lower HIV knowledge in individuals who had family pressure to have a heterosexual marriage. From an *identity process theory* perspective, the distress resulting from the different stressors (religion, family) can lead to short-term coping mechanisms, like drug use and risky sexual behaviors, which can deliver immediate sexual pleasure but also sustain an unstable and vulnerable sense of self in the individual. These maladaptive coping strategies in turn, may prompt these individuals to engage in sexual risk-taking behaviors, ultimately leading to additional stress (e.g., from contracting HIV). This conclusion is in line with the need to further explore sexual health variables (see Chapter 10) and to explore how further in-depth findings related to sexual health can be put in the frame of *identity process theory*.

To conclude, identity resilience or the combined strength of the four identity principles (selfesteem, self-efficacy continuity and distinctiveness) needs adaptive coping strategies. Identity resilience is a quality that is not static but rather dynamic and can change throughout an individual's life in response to various experiences. It is shaped by an individual's interpretation and choices, which are influenced by their experiences. The degree of identity resilience an individual has at any given moment may influence the selection of coping strategies when faced with adversity or deciding on a course of action against a hazard. However, the development of identity resilience over time is a consequence of employing these coping strategies. Furthermore, it is recognized that the coping strategies that are readily accessible to people from marginalized groups in society tend to be more individualistic and less effective in the long term. The context of Lebanon where family and religion both have negative social representations of homosexuality, but both also having a key role to play in people's lives make it difficult for them to disclose aspects of their threatened identity to others for fear of further stigma. Since religion in Lebanon is more than just a religious identity and instead constitutes a surviving meaning, some GBM may find it challenging to draw boundaries around additional identities that threaten their existing identity structure. Importantly, the current political and economic instability in Lebanon makes positive coping mechanisms less readily available which could lead to an increased mental health burden. Consequently, the temporary coping mechanisms explored in this project provide a psychological advantage by avoiding conflicts and difficulties that arise from having multiple, potentially conflicting identities. It is true that the pathway to the adaptive coping style of social engagement (re-thinking/planning) among GBM may be more readily available to men in an essentially patriarchal society, such as that of Lebanon, however, it relies on having a more resilient identity which would provide the confidence and ability to engage in the social engagement coping style. All these challenges increase the likelihood that GBM will resort to less effective coping strategies, as more effective strategies such as deriving social support are less available to them. Although identity threat is not unusual, given the minority status and stigma associated with gay men, it may be more chronic and aversive for psychological well-being in this population.

Thesis takeaways: key messages and insights

This thesis explored the understudied and invisible population of bisexual men in Lebanon, shedding light on their unique challenges and experiences. Despite societal stigmas, familial expectations, and negative evaluations of same-sex relationships, bisexual men in Lebanon demonstrate a complex identity negotiation, often prioritizing conformity to heteronormative expectations over their sexual identity. Surprisingly, unlike western literature, this dual identity does not result in worse mental health outcomes compared to gay men, revealing a complex interplay of societal norms, family dynamics, and individual coping mechanisms.

Moreover, this project delved into the complex relationship between religion and the identities of GBM in Lebanon, revealing a paradoxical interplay of negative social representations and positive coping mechanisms. The findings highlighted two distinct identity management options: renouncing religion or compartmentalizing religious and sexual identities. Those who reject religion experience higher outness but suffer negative mental health outcomes. On the other hand, individuals practicing compartmentalization benefit from improved mental health but face challenges in family dynamics and disclosure. Engaging with religious rituals, however, was associated with better mental health outcomes. As such, the findings highlighted the complexity of identity management, with the perception of sexual orientation as a threat leading to diverse coping strategies, influenced by the interplay of religious and familial dynamics in Lebanon.

Furthermore, the findings of the project revealed that family dynamics and societal acceptance play a crucial role in the identity construction and mental health outcomes of GBM in Lebanon. Coming out can be a complex process influenced by family expectations and acceptance. While family support was associated with positive outcomes, the threat between sexual and family pressure can lead to psychological distress. The concept of identity resilience, encompassing self-esteem, self-efficacy, continuity, and positive distinctiveness, appeared to be essential for coping with the challenges of coming out. Additionally, the absence of a supportive gay community in Lebanon poses unique challenges, contrasting with Western societies. Understanding these dynamics is vital for tailoring interventions and support systems for the well-being of GBM in the Lebanese context.

Finally, in navigating the complex interplay of family, religion, and societal stigma, GBM in Lebanon, employ diverse coping strategies to manage identity threats. The concept of identity resilience, encompassing self-esteem, self-efficacy, continuity, and distinctiveness, emerged as a crucial factor. Coping mechanisms, ranging from denial to social support seeking, played a role in restoring a sense of identity. Notably, the family's influence, religious beliefs, and societal stigma shaped these coping strategies, whereby family-centric coping may involve downplaying the significance of homosexual relationships to preserve identity continuity, while religious coping manifested through rejection or compartmentalization. Challenges in Lebanon, marked by negative social representations and political instability, limit positive coping mechanisms, leading to a reliance on less effective strategies. Understanding the dynamics of identity resilience and coping strategies is vital for mental health interventions tailored to the unique context of Lebanon's GBM population.

Chapter 10: Contributions and conclusions

1. Revisiting the aims and objectives

As mentioned in Chapter 1, the overall aim of this project was to understand sexual identity, mental and sexual health outcomes in adult GBM in Lebanon and to compare between bisexual men and gay men to understand what differences there are, if any, between these two groups. Bisexual men experience stressors (higher internalized sexual orientation stigma, less outness and more family pressure to get a heterosexual marriage than gay men) which may reinforce the negative evaluation of the same-sex relationships in the sampled bisexual men.

Moreover, some bisexual men tend to have a high sense of belonging to social and family norms along with a sense of continuity of family lineage, furthering hindering positive evaluation of their sexual identity. As such, they live in a double life whereby they adhere to the patriarchal cultural, social and religious norms of heterosexuality, on one hand, while engaging in stigmatized relationships with men, on the other hand. Accordingly, occupying a dual space make bisexuals more prone to negatively evaluating their men-to-men relationships further intensifying internalized sexual orientation stigma. Moreover, bisexual participants refrained from committing and being involved in romantic relationships with men. As such, bisexual participants affirmed their tendency to have purely sexual relationships (pleasure driven) with men while being romantically involved with women. They also aimed at having heterosexual marriage and a family. Consequently, they were more sexually precautious when compared with gay men. ("internalized HIV phobia"). Furthermore, bisexual men did not experience worse mental health outcomes compared to gay men. This finding is remarkably different from previous report in the Western literature and was attributed to the key role played by religiosity, mainly to the role of institutionalized religion (social cure perspective).

On the other hand, the study investigated how GBM in Lebanon navigate their identity in various settings, as well as the correlation between identity management and mental and sexual well-being. By utilizing the *identity process theory*, the research explored how social factors, including religion and familial and peer influences, impact identity management and coming out experiences. Facing stressors to self-identity, individuals can cope with different aspects, based on how people are affected by the social representations. Some interpersonal (managing family pressure to have a heterosexual by accepting the pressure or accepting the identity) and intrapsychic strategies (denying religion or compartmentalizing religious/sexual identities)

(identity resilience) were explored. Effective versus defective coping styles were also assessed through some mental and sexual health variables.

2. Contributions to knowledge

While Western literature is rich in empirical findings among GBM, there is a critical lack of understanding how these communities are affected by psychosocial risks and stressors in a long-standing unstable country such as Lebanon. This project explored the interactions of identity principles with psychosocial stressors and the resulting coping strategies, on both mental and sexual health. More importantly, this project empirically explored samples of GBM aiming at identifying generalizable correlations between psychosocial factors, risk-taking behaviors, and adverse mental health outcomes; exploring sexual identity, connection with and support from people, stigma about sexuality, family/peers support and psychological well-being; and investigating the impact of psychological stressors on the process of identity construction. All these aspects have not been explored in Lebanese context.

This project used different methods because of the "sensitive" group of GBM in a religiously diverse but relatively conservative society in Lebanon and because of the scarce previous studies in these communities. As mentioned in Chapter 5, the methods perspective is that the current research aims at answering questions, rather than searching for the "truth". The methodological model showed a successful outcome where results from the different studies could complement and/or each other and where the strengths of the different methods were used to reach the project's general aim. Moreover, a "ready-made" method that applies to a Western society (where GBM have a relative more freedom and where societies are not as religiously diverse as Lebanon) would not necessarily fit into the Lebanese context.

Through three different methods, this project concluded on differences between gay men and bisexual men in Lebanon in terms of understanding sexual identity, mental and sexual health outcomes. It is a first of its kind in its dedication to bisexual men and to the psychosocial aspect of sexual identity in GBM. Moreover, it relied on a clear theory frame (*identity process theory*) in its attempt to respond to the different research questions.

In line with previous studies, using sexual attraction as a categorization method provided a more comprehensive range of attraction reported by bisexual men, and thus, it should be preferred over sexual orientation, particularly in stigmatized contexts such as Lebanon. This would enable the classification of sampled populations into gay and bisexual men more accurately.

Beside the methodological model, findings related to the mental health burden are novel. Countries like Lebanon, where political and economic instability are chronic, individuals may face challenges in accessing adaptive coping strategies, which might increase their mental health burden. It is important to ensure that mental health services are adequately funded and available to the general population, but also particularly to vulnerable communities. Additionally, this project found a negative correlation between religiosity and mental health burden, suggesting that building resilience and problem-solving skills compatible with religious and spiritual beliefs could promote effective coping. While this project is not solely dedicated to mental health or to sexual health, it can guide policies on GBM's health in Lebanon. It can serve as a baseline of findings in the gay and bisexual literature.

In fact, the implications of our findings extend to public health services and approaches, with practical recommendations for mental health and sexual health services, as well as community organizations focused on social support:

Mental health services: These findings highlight the importance of integrating discussions around sexual identity into psychology and psychiatry services, especially in the context of cyber psychology. Service providers can improve their approach by incorporating targeted questions about sexual identity, family pressure, and religiosity when individuals disclose psychological distress. By better understanding the factors contributing to psychological challenges, mental health professionals can tailor interventions effectively. Another intervention would be similar to the mentioned work related to "social prescribing"

(See Chapter 4, paragraph on Social cure theory and social curse) (Stevenson et al., 2023). In fact, a social prescribing-based approach or a social cure via social prescribing may help individuals transitioning from a stigmatized identity that fosters concealment to a recovery identity (Stevenson et al., 2023). Consequently, tailoring care in a way to foster individuals' participation to communities with a positive identity, and limit contact with those that reiterate stigma and a social curse, may help empowering their self-efficacy, self-esteem, continuity and cohesiveness, and distinctiveness. etc. This may be specific to each individual (for instance the mix of religious, political, social identities might require a personalized approach), therefore, specific training of practitioners and educators is warranted, and these results could potentially

play a key role in informing future prevention and intervention in the local communities in Lebanon.

Sexual health services: There is a need to enhance sexual health services, particularly in addressing behaviors such as frequent use of dating apps and HIV phobia. Service providers can benefit from integrating discussions about sexual identity into their assessments, enabling them to identify individuals who may require additional mental health support. By recognizing the intersectionality of sexual health and mental well-being, these services can offer comprehensive care.

Social support: Community organizations and NGOs play a crucial role in providing social support to LGBTQ individuals. Emphasizing the importance of social support, these organizations should work in coordination with mental health and sexual health services to ensure comprehensive care. This collaboration can involve accessing funding resources to improve psychological distress, mental health challenges, and sexual health outcomes within the LGBTQ community.

By implementing these practical recommendations, public health services can better address the mental health, sexual health, and social support needs of LGBTQ individuals, ultimately improving overall well-being and reducing health disparities. Coordination among various stakeholders is essential to ensure holistic care and effective utilization of resources.

3. Research limitations

The first limitation of the project is that it coincided with unusual times for Lebanon. Beside the COVID-19 pandemic, there is a severe economic, political and social crisis since 2019. Studying the "delicate" group of GBM in a religiously diverse but relatively conservative society in Lebanon is not easy during such times. Moreover, recruitment of wide samples was difficult because in such times, people have their mental and sexual health (and participating in a research) as the least priority. This is why the choice to include different methods aimed at widening the options to explore findings and answer the research questions. Consistently, the aim of adding three different methods was to use the strengths of these different methods and their respective sources of techniques in order to reach the project's general aim. As mentioned in Chapter 5 (Methodological review), due to the scarce studies in this field in Lebanon, this project aimed at answering questions, rather than searching for the "truth". In light of these facts, the following research limitations can be unexclusively mentioned.

- 1) This project in its studies 1 and 3 relied on different scales, scores, and other quantitative tools to assess mental health disorders, religiosity, sexual health outcomes, outness, etc. In fact, it is empirically difficult to quantify many of these variables. As an example, religiosity score does not include spirituality items. Another example is that the frequency of attending a place of worship was a better tool in the sample then religiosity. This is due to the fact that these scales were validated in different contexts and might not be the best options for a different cultural context (Lebanon). Future research should assess the roles of other correlates of mental health outcomes, such as trait anxiety and stress. It is possible that depression or psychological distress are too overstretched to be captured, whereas stress and anxiety for instance could capture more statistical significance. For study 3, the effect of recalling a negative family experience related to sexuality on psychological distress and identity threat was explored. Other variables can be investigated in future research such as self-harm and suicidal ideation.
- 2) Efforts were made to keep the questionnaires as concise as possible to minimize the likelihood of respondent attrition in the study. Capturing all aspects of a mental health disorder in one short survey is a definite method limitation. It was not possible to have scales for other mental health disorders such as anxiety, stress, etc.
- 3) Strength of sexual identification in the first study was not measured. Therefore, it was not possible to determine the extent to which identification as gay/ bisexual was associated with internalized sexual orientation stigma and mental health outcomes. This should be considered in future research.
- 4) The studies focused on data from a convenience sample of GBM in Lebanon, as one aim was to compare outcomes in these groups. Future research should replicate these findings using additional samples of GBM and other sexual minority groups, such as lesbian and bisexual women.
- 5) Some variables in the studies, such as family's expectation of a heterosexual marriage are based on the participant's beliefs and more sophisticated measures should be used in future studies to address such variables. Some other sexual health variables should use more sophisticated measures or other type of research (qualitative and/or experimental) because they failed to predict models and had low reliability (i.e., perceived HIV risk).
- 6) It is possible that the experimental condition was not sufficiently impactful on the dependent variables, given that recalling a personal experience with family is biased

(Schmier & Halpern, 2004). Future research ought to validate a more solid manipulation (including visuals) than that used (recall) in this study. Moreover, coming out is a process over time, capturing it in research gives an momentaneous exploration.

- 7) There might be a need to differentiate between the psychological mechanisms associated with religiosity and the requirement for customized measures to assess them in future research. For instance, although not limited to this aspect, religiosity as a social cure, as discussed earlier, revolves around the perceived support and protection offered through psychological connections formed through participation in religious events.
- 8) Sexual health outcomes were explored in study 1 but could not provide bold conclusions in terms of coping strategies. The Sexual behavior scale included in study 1 exhibited mean reliability (α =.43). Consequently, important conclusions in terms of sexual health outcomes put in the frame of the *identity process theory* could not be drawn. Further research in this field is needed.
- 9) Several other aspects could not be included in this project, such as the group-level and peer support within the gay community. While this project focused on the identity management, several group-level themes and interpretations raised and would deserve further exploration in future research, . especially in relation to the importance of peer-support within the gay community, as shown in recent research in other contexts (Stevenson et al., 2023).

4. Suggestions for future research

Based on the research limitations, one can suggest some methodological improvements for future research. First, scales capturing the effect of economic, political and social crisis could be offered as a baseline to quantify the impact of these overlapping crises on the overall mental health outcomes (to differentiate between outcomes from the crises and outcomes from social representations threats). Second, other mental health scales can be added including those on trait anxiety and stress. More importantly, sexual health scales should be assessed because the current ones used in this project failed to show significant impact of identity. Future research should be more of experimental design to include assessment of strength of sexual identification, and more qualitative to explore experiences of outness. Research should use additional samples of GBM and other sexual minority groups, such as lesbian and bisexual women; more sophisticated variables avoiding being based on the participant's beliefs (having a heterosexual marriage). Research ought to validate a more solid manipulation (including visuals).

From a broader perspective, future research should explore in-depth coping styles in GBM in Lebanon, deployed when social threats (such as those identified in this project) arise. As an example, familial pressure to have a marriage should be explored qualitatively. The distinction between attending religious ceremonies, spirituality and religiosity should be assessed.

Furthermore, future research should also investigate maladaptive coping styles such as chemsex usage and its motivations, sex parties and its motivations, and condomless anal sex and its motivation.

Finally, the lack of peer support within the gay community, often termed as a "social curse", requires acknowledgment as an area for future research. While the social cure theory suggests that supportive communities positively impact health outcomes for GBM (refer to chapter 4), this study primarily focused on individual aspects rather than group dynamics. Future research should explore ingroup support mechanisms within the GBM community, particularly in contexts like Lebanon, where conservative norms and legal frameworks pose significant challenges. In such settings, the theory's application may be limited due to pervasive social stigma and discrimination against the LGBTQ community. Culturally sensitive approaches are crucial to understanding and addressing the unique challenges faced by GBM in Lebanon, such as those outlined by the identity process theory.

5. Final thoughts

Gay stigma and discrimination are not a thing of the past. Unfortunately, many countries still have laws, policies, religious and individual ideologies that discriminate gays. While some gay and bisexual men take their freedom of living for granted, gay stigma and discrimination still harm some other people in the world. Some gays chose to identify as bisexual thinking that this will decrease this stigma toward their homosexual relationships. Whatever the coping mechanism is, gay people are affected, and they have limited right and access to secure healthcare services, education, jobs, religious services. They still experience lack of family love and acceptance, and more importantly, they feel they do not have the right and access to a "normal" psychological life. To all these people, my patients, my peers, my friends, I dedicate this project.

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Appendices

Appendix 1: Study 1 (Questionnaire and consent form)Appendix 2: Study 2 (Interview guide questions and consent form)Appendix 3: Study 3 (questionnaire and consent form)

Appendix 1: Study 1 (Questionnaire and consent form)

Questionnaire (Study 1)

Part 1 : Identification

Questionnaire Identification Number:

Date of Interview (DD/MM/YY):

Part 2 : More about you

This section presents some variables (age, literacy status, occupation, status of sexual partnership, residential status, etc.).

2.1.What is your nationality? □ Lebanese □ Syrian		□ No nationality		
2.2.How long have you been Number of years	•			
2.3. How old were you at your last birthday?				
2.4. Which city do you live in	1?			
2.5. What is the highest quali	fication that you have?			
□ Primary school	\Box Secondary school	□ Undergraduate degree		
□ Postgraduate degree	□ None	□ Other		
2.6. With whom do you live?				
□ Alone	□ With spouse/Live-i	n partner		
□ With parents	\Box With other relatives	\square With employer		
□ With co-worker/students	\Box With a friend \Box (Other		
2.7.How many persons live in your house?2.8. What is the number of rooms in the house excluding bathroom(s) and kitchen?				
2.9. What is your relationship	o status?			
□ Single	□ In a monogamous r	elationship		
□ Civil partnership	□ Married	□ In an open relationship		
		er partners in the last year without my		
2.10. What is your marital status?				
□ Currently married, living with female spouse				
Currently married, living with another female sexual partner				

 \Box Currently married, not living with spouse or any other female sexual partner

□ Not married, living with female sexual partner

\Box Not married, not living with female sexual par	tner
---	------

 \Box No response

2.11. What is your re	ligious faith?	
□ Maronite Catholicis	m 🛛 Greek Orthodox	Greek Catholicism
□ Armenian Orthodox	□ Armenian Catho	licism 🛛 Syriac Orthodox
□ Syriac Catholicism	□ Protestantism	□ Chaldean Orthodox
Chaldean Catholicis	m 🛛 Sunni Islam	🗆 Shia Islam
🗆 Alawi Islam	□ Druzism	🗆 Judaism
□ No religion		
\Box Any other religion, p	please describe	_
2.12. How regularly of	do you attend a place of we	orship?
\Box Never \Box Rarel		\Box Regularly \Box Very regularly
2.13. Does your fami	ly expect you to marry a w	voman?
□ Yes	□No	
Part 3:		
	5 5	ligiosity and outing status.
2019)		he following genders? (Ho F and Mussap A.J
\Box Man f	from 0 to 100	
	from 0 to 100	
□ Other gender	from 0 to 100	-
3.2.Which of the follow Massachusetts 2003 Youth	ving best describes you? (S Risk Behavior Survey)	Sexual orientation identity;
□ Heterosexual/straigh	it 🗆 gay	□ Bisexual
□ Other:		
	-	with only males, only females, or both d Massachusetts Behavioral Risk Factor Surveillance
\Box only males	\Box only females	\Box both males and females
-		to other people. Which best describes your ional Survey of Family Growth)
\Box only attracted to fem	ales \Box mostly attracted	to females \Box mostly attracted to males
\Box equally attracted to t	females and males	\Box only attracted to males
\Box not sure		

Please rate each item below on a scale from 1 to 7 how open you are about your sexual orientation to the people listed below (questions 2.7 to 2.) (Outness Inventory (Mohr & Fassinger 2000)

1 = person definitely does not know about your sexual orientation status

2 = person might know about your sexual orientation status, but it is never talked about

3 = person probably knows about your sexual orientation status, but it is never talked about

4 = personal probably knows about your sexual orientation status, but it is rarely talked about

5 = person definitely knows about your sexual orientation status, but it is rarely talked about

6 = personal definitely knows about your sexual orientation status, and it is sometimes talked about

7 = person definitely knows about your sexual orientation status, and it is openly talked about

0 = not applicable to your situation; there is no such person or group of people in your life

- 3.5. My new straight friends
- 3.6. My work peers
- 3.7.My work supervisors
- 3.8.Strangers
- 3.9.Mother
- 3.10. Father
- 3.11. Siblings
- 3.12. Extended family/relatives
- 3.13. Members of my religious community (e.g., church, mosque)
- 3.14. Leaders of my religious community (e.g., priest, sheikh)
- 3.15. My old heterosexual friends

For each of the following statements, mark the response that best indicates your experiences as a LGB person. Please be as honest as possible in your responses (Internalized Homophobia (IHP) Scale Items LGB Version).

(Totally disagree) 1...2...3...4...5 (I totally agree)

- 3.16. I have tried to stop being attracted to same-sex people in general.
- 3.17. If someone offered me the chance to be completely heterosexual, I would accept the chance.
- 3.18. I wish I weren't bisexual.
- 3.19. I feel that being bisexual is a personal shortcoming for me.
- 3.20. I would like to get professional help in order to change my sexual orientation from bisexual to straight.
- 3.21. I have tried to become more sexually attracted to women.
- 3.22. I often feel it best to avoid personal or social involvement with other bisexual people.
- 3.23. I feel alienated from myself because of being bisexual.
- 3.24. I wish that I could develop more erotic feelings about women.

For each of the following statements, mark the response that best indicates your experiences as a LGB person. Please be as honest as possible in your responses (Abbreviated Santa Clara Strength of Religious Faith Questionnaire (SCSRFQ; Plante et., al 2007).

(Totally disagree) 1...2...3...4...5 (I totally agree)

- 3.25. I pray daily
- 3.26. I look to my faith as providing meaning and purpose in my life
- 3.27. I consider myself active in my faith or place of worship (i.e. church, mosque,etc.)
- 3.28. I enjoy being around others who share my faith
- 3.29. My faith impacts many of my decisions

Part 4:

This section will focus on your female and/or male sexual partners

4.1.In the past	12 months, how many sexual partners have you had?	
Female:	Male:	

4.2. How often did you use a condom with all of your female partners during the past 12 months?

Never \Box Rarely \Box Sometimes \Box Often \Box VeryOften \Box

Part 5

This section will focus on your risks towards HIV

In the following set of questions (5.1. to 5.7.), we would like to ask you about your <u>CURRENT</u> sexual behaviour. <u>Please tick only one box for each question</u>

5.1.How often do you currently have insertive vaginal sex with a woman without a condom?Never □Rarely □Sometimes □Often □Very Often □

5.2. How often do you currently have insertive anal sex (as a "top") without a condom? Never □ Rarely □ Sometimes □ Often □ Very Often □

5.3. How often do you currently have receptive anal sex (as a "bottom") without a condom? Never □ Rarely □ Sometimes □ Often □ Very Often □

5.4. How often do you currently perform oral sex (giving a "blowjob") on other men without a condom?

Never \Box Rarely \Box Sometimes \Box Often \Box VeryOften \Box VeryOften \Box

5.5. How often do you talk about HIV with someone you are about to have sex with? Never □ Rarely □ Sometimes □ Often □ Very Often □

5.6. How often do you have sex while under the influence of alcohol (i.e. drunk)? Never \Box Rarely \Box Sometimes \Box Often \Box Very Often \Box

5.7. How often do you currently have "chemsex" (taking drugs during a sex session)?Never □Rarely □Sometimes □Often □Very Often □

5.8. In the past month, how often have you used the Internet or a mobile application

(e.g. Grindr/Scruff) to meet p	eople for sex?		
□ never	\Box one or two times	\Box once a wee	k
\Box two or three times a week	\Box more than 3 times	a week 🛛 every day	
5.9. Have you ever used post □ Yes	-exposure prophylaxis □ No	s (PEP)?	
5.10. How often do you ge	t tested for HIV?		
\Box Every 3 months	\Box Every 6 months	□ Every year	
\Box Every few years	□ Never		
5.11. Your last HIV test wa	ls:		
□ Positive	□ Negative		
Have you received			
5.12. The Hepatitis B vacci	ne? □ Ye	S	□ No
5.13. The HPV vaccine?	□ Ye	S	\Box No
5.14. Which sexually transmit 12 months? (Please select all		s) have you been contra	acted in the last
□ Chlamydia	□ Pubic lice	□ Genital warts	
□ Gonorrhoea	□ Hepatitis B	□ Hepatitis C	
□ Herpes □ Human papilloma virus (HPV)			
□ Lymphogranuloma venereum (LGV) □ Syphilis			
\Box No STIs diagnosis in the la	ast 12 months		

5.15. How many people have paid or received money from you for sex in the last year? (HRBS; Ward, Darke, & Hall, 1990)

Part 6:

This section will focus on your psychological health.

Please indicate how often you have felt this way (CES-D10 Self-Report Depression Scale)

- 0= (Rarely or none of the time (less than 1 day)
- 1 = Some or a little of the time (1-2 days)
- 2 =Occasionally or a moderate amount of time (3-4 days)
- 3 = All of the time (5-7 days)
- 6.1.During the past week, I was bothered by things that don't normally bother me
- 6.2. During the past week, I had trouble keeping my mind on what I was doing

6.3. During the past week, I felt depressed

- 6.4. During the past week, I felt everything I did was an effort
- 6.5. During the past week, I felt hopeful about the future
- 6.6.During the past week, my sleep was restless
- 6.7.During the past week, I was happy
- 6.8. During the past week, I felt lonely

6.9. During the past week, I could not "get going"

Below is a list of problems people sometimes have (<u>Psychological distress - The Brief Symptom</u> <u>Inventory- 18 (BSI-18))</u>

Read each one carefully and fill in the circle that best describes HOW MUCH THAT PROBLEM HAS DISTRESSED OR BOTHERED YOU DURING THE PAST 7 DAYS INCLUDING TODAY.

- 1 = Not at all; 2 = A little bit; 3 = Moderately; 4 = Quite a bit; 5 = Extremely
- 6.10. Faintness or dizziness
- 6.11. Feeling no interest in things
- 6.12. Nervousness or shakiness inside
- 6.13. Pains in heart or chest
- 6.14. Feeling lonely
- 6.15. Feeling tense or keyed up
- 6.16. Nausea or upset stomach
- 6.17. Feeling blue
- 6.18. Suddenly scared for no reason
- 6.19. Trouble getting your breath
- 6.20. Feelings of worthlessness
- 6.21. Spells of terror or panic
- 6.22. Numbness or tingling in parts of your body
- 6.23. Feeling hopeless about the future
- 6.24. Feeling so restless you couldn't sit still
- 6.25. Feeling weak in parts of your body
- 6.26. Thoughts of ending your life
- 6.27. Feeling fearful

6.28. Have you ever deliberately harmed yourself in any way but not with the intention of killing yourself?

 \Box Yes \Box No

6.29. Have you ever actually harmed yourself (e.g. taking pills, cutting your wrists)?□ Yes □ No

Part 7:

This section will focus on your knowledge in terms of HIV

In the following set of questions, we would like to tap into your knowledge of HIV. <u>Please</u> tick only one box for each question.

7.1.Coughing and sneezing DO NOT spread HIV.

□ True □ False □ Unsure

7.2.A person can get HIV by sharing a glass of water with someone who has HIV. □ True □ False □ Unsure

7.3.Pulling out the penis before a man climaxes/cums keeps his partner from getting HIV during sex.

□ True □ False □ Unsure

7.4.A man can get HI			
□ True	□ False	□ Unsure	
7.5.Showering, or wa HIV.	shing one's genital	ls/ private parts, after sex k	eeps a person from getting
□ True	□ False	□ Unsure	
7.6.People who have □ True	been infected with □ False	HIV quickly show sympto	oms of being infected.
7.7.HIV is NOT cural □ True	ble. □ False	□ Unsure	
7.8.People are likely t if the partner has HIV	• • •	kissing, putting their tong	ue in their partner's mouth,
□ True	□ False	□ Unsure	
7.9.Having sex with r with HIV.	nore than one part	ner can increase a person's	chance of being infected
□ True	□ False	□ Unsure	
7.10. Taking an HIV □ True	√ test one week aft □ False	ter having sex will tell a per □ Unsure	rson if they have HIV.
7.11. A person can □ True	get HIV from oral □ False	sex. □ Unsure	
7.12. Using Vaselin □ True	e or baby oil with □ False	latex condoms lowers the c	chance of getting HIV.
7.13. There is an en AFTER sex with an H □ True		can be taken to stop a pers n. □ Unsure	on from getting HIV
7.14. An HIV-posit unlikely to pass the v □ True		has been taking HIV medi ual partners. □ Unsure	cation for 6 months is
In the following set o getting HIV. Please ti	- ·	ould like to ask you about y or each question	our perceived risk of
7.15. What is your § □ Very unlikely		ow likely you are to get inf Neutral □ Likely	Tected with HIV? □ Very likely [1]
7.16. I worry about □ Never	0 0	ith HIV: Sometimes □ Often	□ Very Often

7.17.	Picturing mys	elf getting HIV	is something I	find:			
□ Ver	y hard	□ Hard	□ Neutral	□ Easy			
7.18.	7.18. I am sure I will NOT get infected with HIV.						
□ Stro	ngly disagree	□ Disagree	□ Neutral	□ Agree	\Box Strongly agree $[sep]$		
7.19. I feel vulnerable to HIV infection.							
□ Stro	ngly disagree	□ Disagree	□ Neutral	□ Agree	□ Strongly agree		
7.20. There is a chance, no matter how small, I could get HIV.							
□ Stro	ongly disagree	□ Disagree	□ Neutral	□ Agree	□ Strongly agree		
7.21. I think my chances of getting infected with HIV are:							
□ Zero)	□ Almost zero	o 🗆 Neutral	□ Large	\Box Very large \sum_{sep}		
7.22.	Getting HIV is	s something I th	nink about:				
□ Nev	rer	\Box Rarely	□ Sometimes	□ Often	□ Very Often		

Consent form (Study 1)

Title of project: Mental and sexual health outcomes of gay and bisexual men in Lebanon Name of researchers: Ismaël Maatouk; Rusi Jaspal

Please initial all boxes if you agree

1. I confirm that I have read and understood the information sheet [date and version number] for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.

3. I agree that non-identifiable data may be published in articles or used in conference presentations.

4. I agree to take the computer-based anonymous questionnaire

5. I understand that anonymous data collected during the study may be looked at by a supervisor from De Montfort University. I give permission for the supervisor to have access to my data.

6. I understand that if sexual assault is disclosed, I would be, if I accept, referred to the appropriate free services.

7. I understand that this survey takes place in the context of health/wellbeing centres that are focussed on HIV/STIs prevention and intervention.

8. I agree to take part in this study

Print name of participant	Date	Signature
Print name of person taking consent	Date	Signature
Consent form date of issue: [date] Consent form version number: [version	1]	

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Appendix 2: Study 2 (Interview guide questions and consent form)

Interview guide question (Study 2)

Thank you for accepting to be part of this study.

I consider that people at any age are a product: the product of their past, their childhood, their experiences and relationships. I will discuss with you these topics which I divided into 2 sections: one about your sexual identity and one about your sexual health.

Before going through these questions, may I ask you general questions about you?

- Are you a gay man or a bisexual man?
- What is your age?
- Where do you live? (According to the Lebanese Governorates of Beirut-Mont Lebanon-North-South-Bekaa and Keserwan)
- Are you in a relationship, whether monogamous or polygamous?
- What is your HIV status?

1. Sexual identity and well-being

- 1.1. Let me ask you first about yourself, tell me about yourself? What is your sexual orientation or sexuality at this stage of your life and when did you accept it? Did you accept this from the beginning or not?
- 1.2. When we fully accept our sexuality, we don't have problems with being out about it. To whom have you shared your sexuality? (if yes: what is the experience like? if not: why could not you come out about your sexuality?)
- 1.3. As I mentioned before, our sexuality can be affected by our relationships with others. Can you describe your relationship with your family in general and specifically concerning your sexuality? What about your heterosexual friends and colleagues? Homosexual friends? Elaborate
- 1.4. One of the forms of relationships in a country like Lebanon is religion. We are a multi sectarian country and religion takes a major place in our society and our identities. Can you tell me more about the role of religion in your life? Do you attend religious events? Do you fast? How does it impact your sexual identity, if at all?
- 1.5. My question now is about your romantic and sexual relationships. Tell me about some of your previous relationships; and the impact of these relationships on you.

- 1.6. I understand that coming out can sometimes lead to bullying. And some other times, even before coming out, we expect how people will react to our coming out. This happens mainly in school or university or at work or with any form of relationship like family and religious groups. Did you experience any form of bullying from coming out? Did you expect any rejection? Can you share with me these experiences please?
- 1.7.My last question for this section is about your well-being: can you describe your feeling?

2. Sexual health

2.1.We will discuss now some sexual health issues:

How do you feel about HIV? What comes to your mind when you think about HIV? When do you test for HIV?

- 2.2.Tell me about the circumstances of having sex and about your last sexual encounters.
- 2.3. You know that dating applications like Grindr are widely used. Tell me more about your use or experience or what do you think about this app. Why do you use it? What do you talk on Grindr?
- 2.4. In the last intercourse where you did not use a condom, what were the reasons of not using condoms?
- 2.5. How do you protect yourself from HIV (if the participant said he is negative)?

Consent form (Study 2)

Information and Consent form for Participants.

If you read this information form and would like to find out more, ask, questions and/or arrange to take part, please contact Dr Ismaël Maatouk at <u>N0963459@my.ntu.ac.uk</u> and we can arrange to have a conversation about the study.

Who are we and why are we doing this research?

We are interested in looking at your sexual health behaviours in relation to your sense of self and people in your life. We are specifically interested in the following: sexual identity, connection with and support from people, stigma about sexuality, family and other support, use of drugs in sexual experiences, HIV status, and well-being.

The study will be conducted by Dr. Ismaël Maatouk, who is a PhD student based at Nottingham Trent University and a Dermatologist sub-specialized in sexually transmitted infections and the principal researcher, along with Dr. Rusi Jaspal who is a Professor of Psychology at Nottingham Trent University, UK. Both have many years of working within LGBT communities and are committed to anti-racist and anti-homophobic practices. Contact information for both is provided below.

We aim to use our findings to inform HIV-specific mental and sexual health services provisions in Lebanon for gay and bisexual men health outcomes.

What is the research about?

We are interested in looking at your sexual health behaviours in relation to your sense of self and mental health. We are specifically interested in the following: sexual identity, connection with and support from people, stigma about sexuality, family and other support, use of drugs in sexual experiences, HIV status, and psychological well-being.

Why have I been invited to participate?

You have been invited to participate because you are an adult gay or a bisexual man living in Lebanon, and because we are interested in learning about your experiences with your sexual health and mental health. By proceeding, you are voluntarily agreeing to take part in this study. It is important to note that there are no correct or incorrect answers to any of the questions asked in the study. We are not looking for particular responses. No judgments will be made on the basis of responses. Rather, your honest opinions and views are of interest. Please note that no diagnostic measures of mental health will be used in the interview.

Do I have to participate?

Your participation is completely voluntary. Choosing not to participate in this study does not affect your rights to access the clinic, organization or group or other service where you might have seen the information about the study. You can withdraw from this study at any time and for any reason without any impact on your care needs. You do not have to provide a reason. If you wish to withdraw from the study, kindly inform the researcher and no questions will be asked. If you wish to withdraw your data after having participated, please email the researcher within 2 weeks of the interview, and your data will be deleted and excluded from the study.

What are you asking of me?

You will be asked to conduct a remote interview to provide information about your sexual identity, connection with and support from people, stigma about sexuality, family and other support, use of drugs in sexual experiences, HIV status, and well-being. Although the interview has no time limit, it will last roughly 1 hours. The interview will tap into your beliefs and perceptions in the areas mentioned.

What are the possible advantages or disadvantages and risks of taking part?

There are no known risks associated with participation in this study and we do not anticipate any disadvantages to you. However, please be aware that some of the questions do ask you about personal and intimate parts of your life and behaviours. There are no financial incentives for participants who take part in the study. However, you will be contributing to knowledge in an under-explored public health topic.

What if I want to drop out or if I feel upset during or after the interview?

If you wish to drop out at any point you can do so without providing a reason and without any impact on your care needs. Please let one of the researchers know within 2 weeks of the interview and your information will be deleted. If you wish to withdraw your data after having participated, please email the researcher and your interview will be deleted and excluded from the study.

Will the information I give you to be kept confidential?

This is a qualitative interview study, which means that the data we audio record, transcribe, and

analyse need to be your words. Written phrases of your interview might be used in my thesis or publications arising from it. Any identifying information such as your name, other people's names, your locations, and any other information that may identify you will be removed on transcription of the audio data to written form. No identifying information (like this consent form) will be kept with this interview data, and you will be given a pseudonym/alias. All data will be kept securely in line with the GDPR (2018) and your anonymity will be protected. By agreeing to take part, you are giving your full, explicit, and informed consent to your data (words) being included for analyses, some of which might be presented in my PhD thesis or a publication.

Who will have access to the raw and aggregated data?

Only Ismaël and Rusi will have access to the raw data (before anonymisation). In rare cases, the research ethics committee may be granted access to check that the research is being performed in accordance with ethics approval. The transcripts will be stored electronically on a password-protected computer in a locked office.

What will happen to my responses to the study?

When you take part in the interview, we will secure your audio data on a password protected computer. We will then transcribe the data and anonymise the interview as noted above. We intend to publish the findings from this work in reports and journal articles. Please note that all forms of the data will be destroyed 10 years from the date of publication.

Who has ethically considered this study?

This project has been considered by Nottingham Trent University's Schools of Business, Law and Social Sciences Research Ethics Committee and has met with a favourable ethics opinion.

What if something goes wrong? Who can I complain to?

If you have a complaint regarding anything to do with this study, you can initially approach the researchers Dr Ismaël Maatouk and/or Professor Rusi Jaspal. If this achieves no satisfactory outcome, you should then contact the Administrator for the Faculty Research Ethics Committee: contactable via: soc.ethics@ntu.ac.uk

Contact details of the people involved in this project:

Researcher: Dr Ismaël Maatouk c/o Professor Rusi Jaspal, Dermatology-Sexually transmitted infections specialist; HIV/STIs/Key populations researcher, Clemenceau Medical Center (hospital); Dr Maatouk's private clinic; 114 Massabki-Serhal Building, Cairo Street (street 86), 2d floor; Hamra (sector 34), Beirut 1103; Lebanon E-mail: <u>N0963459@my.ntu.ac.uk</u> **Researcher: Professor Rusi Jaspal**, Professor of Psychology, Pro Vice-Chancellor – Research & Knowledge Exchange; Vice-Chancellor's Office; University of Brighton, UK; Telephone: <u>+44</u> (0)1273 642003; E-mail: R.Jaspal@brighton.ac.uk

Formal explicit informed consent

(to be completed by participant prior to an interview)

• I confirm that I have read and understood the information sheet for this study and all within. I have had the opportunity to consider the information, ask questions if necessary, and have had these questions answered satisfactorily.

YES NO (please select by deletion or by highlighting your answer)

• I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.

YES NO (please select by deletion or by highlighting your answer)

• I agree that the <u>anonymised</u> data (words) I provide may be published in PhD thesis, articles or books or used in conference presentations.

YES NO (please select by deletion or by highlighting your answer)

• In order to participate, I understand that I will need to allow the researchers to record the interview, and that the interview will take place remotely, using either telephone or a video conferencing platform (e.g. Skype). I consent to recording and also to the use of technology in order to take part.

• I explicitly consent to take part in this study.

YES NO (please select by deletion or by highlighting your answer)

NAME: SIGNED: DATE:

If you read this information form and would like to find out more, ask, questions and/or arrange to take part, please contact Dr Ismaël Maatouk on <u>N0963459@my.ntu.ac.uk</u>

Appendix 3: Study 3 (questionnaire and consent form)

Questionnaire (Study 3)

- 1. What is your age?
- 2. What gender do you identify as?

Male

Female

Non-binary

Other (Please specify)

3. How would you describe your sexual orientation?

Heterosexual Gay Lesbian Bisexual Asexual Other (Please specify)

4. What is your citizenship? (Please describe)

Lebanese Syrian Palestinian Other (Please specify)

5. What is your religion?

Maronite Catholicism

Greek Orthodox

Greek Catholicism

- Armenian Orthodox
- Armenian Catholicism
- Syriac Orthodox

Syriac Catholicism

Protestantism

Chaldean Orthodox

Chaldean Catholicism

Sunni Islam Shia Islam Alawi Islam Druzism Judaism No religion Any other religion, please describe

6. What is your highest qualification?

Never attended school Attended school, but never completed any level Primary school Complementary school Secondary school Vocational school University undergraduate degree University postgraduate degree

What is your employment status?
 Employed
 Self-employed

Unemployed Student Other (Please specify)

8. What is your relationship status?

Single

In a monogamous relationship

In an open relationship

Engaged to a man

Married to a man

Engaged to a woman

Married to a woman

Other (Please specify)

9. In which governorate do you currently reside?

Beirut

Mount Lebanon North South Bekaa Keserwan

10. Which governorate are you originally from?

Beirut

Mount Lebanon

North

South

Bekaa

Keserwan

How regularly to you attend a place of worship?
Never
Rarely
Sometimes
Regularly
Very regularly
The following statements are about your religious faith. Please indicate your level of agreement with each statement.

12. For the following questions, answer Totally disagree; Disagree; Neutral; Agree; Totally agree

I pray daily.

I look to my faith as providing meaning and purpose in my life.

I consider myself active in my faith or place of worship (i.e. church, mosque, temple, Gurudwara, etc.).

I enjoy being around others who share my faith.

My faith impacts many of my decisions.

13. Please indicate your level of agreement with the below statements:

Totally disagree; Disagree; Neutral; Agree; Totally agree

I have tried to stop being attracted to men in general

If someone offered me the chance to be completely heterosexual, I would accept the chance

I wish I weren't gay

I feel that being gay is a personal shortcoming for me I would like to get professional help in order to change my sexual orientation from gay to straight I have tried to become more sexually attracted to women L often feel it best to avoid personal or social involvement with other gay men

I often feel it best to avoid personal or social involvement with other gay men

I feel alienated from myself because of being gay

I wish that I could develop more erotic feelings about women

Experimental condition: can you recall an experience where your family had a pressure regarding any aspect of your sexuality? (negative change condition) Kindly recall and describe in 2–3 sentences.

Stablity condition: can you recall an experience where your family had a positive attitude regarding any aspect of your sexuality?" - unrelated to sexuality at all Kindly recall and describe in 2–3 sentences.

Please think carefully about the experience you just described. While doing so, please indicate the extent to which each statement is true of you when you think about this experience: Totally disagree; Disagree; Neutral; Agree; Totally agree

It undermines my sense of self-worth It makes me feel less competent I feel that my identity has changed It makes me feel less unique as a person Below is a list of problems people sometimes have (Psychological distress - The Brief Symptom Inventory- 18 (BSI-18)) Read each one carefully and fill in the box that best describes

How much that problem has distressed or bothered you during the past 7 days including today? None at all; A little bit; Moderately; Quite a bit; Extremely

Faintness or dizziness

Feeling no interest in things Nervousness or shakiness inside Pains in heart or chest Feeling lonely Feeling tense or keyed up Nausea or upset stomach Feeling blue Suddenly scared for no reason Trouble getting your breath Feelings of worthlessness Spells of terror or panic Numbness or tingling in parts of your body Feeling hopeless about the future Feeling so restless you couldn't sit still Feeling weak in parts of your body Thoughts of ending your life Feeling fearful

Consent form (Study 3)

Information and Consent form for Participants.

Who are we and why are we doing this research?

We are interested in understanding your sexual and mental health in relation to your sense of self religiosity, and people in your life. We are specifically interested in the following: sexual identity, family support, stigma about sexuality, religiosity, and their impact on your well-being. This will allow in identifying generalizable correlations between psychosocial factors, and adverse mental health outcomes in adult gay and bisexual men in Lebanon.

The study will be conducted by Dr. Ismaël Maatouk, who is a PhD student based at Nottingham Trent University and a Dermatologist sub-specialized in sexually transmitted infections and the principal researcher, along with Emanuel Fino and Sarah Seymour-Smith. They have many years of working within LGBT communities and are committed to anti-racist and anti-homophobic practices. Contact information for the researchers is provided below.

We aim to use our findings to inform HIV-specific mental and sexual health services provisions in Lebanon for gay and bisexual men health outcomes.

Why have I been invited to participate?

You have been invited to participate because you are an adult gay or a bisexual man living in Lebanon, and because we are interested in learning about your experiences with your sexual health and mental health. By electronically signing the consent form, you are voluntarily agreeing to take part in this study. It is important to note that there are no correct or incorrect answers to any of the questions asked in the study. We are not looking for particular responses. No judgments will be made on the basis of responses. Rather, your honest responses are of interest.

Do I have to participate?

Your participation is completely voluntary. Choosing not to participate in this study does not affect your rights to access the clinic, organization or group or other service where you might have seen the information about the study. You can withdraw from this study at any time and for any reason without any impact on your care needs. You do not have to provide a reason. If you wish to withdraw from the study, kindly inform the researcher and no questions will be asked. If you wish to withdraw your data after having participated, please email the researcher within 2 weeks of the study, providing the short text or alphanumeric string that you filled in the questionnaire and that you will need to remember, and your data will be deleted and excluded from the study. Note that your data is anonymous, the provided unique identifier will not reveal your identity in any way.

What are you asking of me?

You will be asked to remotely fill out a questionnaire to provide information about your sexual identity, family support, stigma about sexuality, religiosity, and their impact on your well-being. Although the questionnaire has no time limit, it will last roughly 30 minutes. The questionnaire will tap into your beliefs and perceptions in the areas mentioned.

What are the possible advantages or disadvantages and risks of taking part?

There are no known risks associated with participation in this study and we do not anticipate any disadvantages to you. However, please be aware that some of the questions do ask you about personal and intimate parts of your life and behaviours. There are no financial incentives for participants who take part in the study. However, you will be contributing to knowledge in an under-explored public health topic. Kindly note that if you refuse to be enrolled in the study, this will not affect your access to services in Dr Ismael Maatouk's clinic (owner of the clinic and manager) in any way.

What if I want to drop out or if I feel upset during or after filling the questionnaire?

If you wish to drop out at any point you can do so at any time while filling the questionnaire without providing a reason and without any impact on your care needs. If you wish to withdraw your data after having participated, please email the researcher providing the short text or alphanumeric string that you filled in the questionnaire and that you will need to remember, and your questionnaire will be deleted and excluded from the study. As abovementioned, your data is anonymous , and the provided unique identifier will not reveal your identity in any way. Regarding your withdrawal after analysis is published, you have a timeframe (mid-October to 28 February 2023) where you can participate noting that after publication, withdrawal is not possible

Will the information I give you to be kept confidential?

This is an experimental study where anonymity is the followed procedure: The data is completely anonymous given that you accessed the questionnaire through a link sent to you via WatsApp (numbers accessed from Dr Ismael Maatouk's clinic, owner of the clinic and manager)) without filling any identifiable information. Your name will not be recorded in any place and no other identifiable data will be collected. The study includes a written part from your side which means that the data we analyse need to be your words. Written phrases in your questionnaire might be used in my thesis or publications arising from it. Any identifying information such as your name, other people's names, your locations, and any other information that may identify you will be removed. To ensure participants' confidentiality, participant data will be link-anonymised instead of using names.. Consents forms will be stored in on Qualtrics which is a password protected program and only accessible to the researchers.

No identifying information (like this consent form) will be kept with the questionnaire data. All data will be kept securely in line with the GDPR (2018) and your anonymity will be protected. By agreeing to take part, you are giving your full, explicit, and informed consent to your data being included for analyses, some of which might be presented in my PhD thesis or a publication.

Who will have access to the raw and aggregated data?

Only Ismaël, Emanuele and Sarah will have access to the raw data (before anonymisation). In rare cases, the research ethics committee may be granted access to check that the research is being performed in accordance with ethics approval. The questionnaires will be stored electronically on a password-protected program.

What will happen to my responses to the study?

When you take part in the study, we will secure your survey data on a password protected program. We will anonymise the questionnaires as noted above. We intend to publish the findings from this work in reports and journal articles. Please note that all forms of the data will be destroyed 10 years from the date of publication.

Who has ethically considered this study?

This project has been considered by Nottingham Trent University's Schools of Business, Law and Social Sciences Research Ethics Committee and has met with a favourable ethics opinion.

What if something goes wrong? Who can I complain to?

If you have a complaint regarding anything to do with this study, you can initially approach the researchers Dr Ismaël Maatouk (n0963459@my.ntu.ac.uk) and/or Emanuele Fino (emanuele.fino@ntu.ac.uk) and/or Dr Duncan Guest (Head of Academy: (https://www.ntu.ac.uk/staff-profiles/social-sciences/duncan-guest)). If this achieves no satisfactory outcome, you should then contact the Administrator for the Faculty Research Ethics Committee: contactable via: soc.ethics@ntu.ac.uk

Contact details of the people involved in this project:

Researcher: Dr Ismaël Maatouk c/o Professor Rusi Jaspal, Dermatology-Sexually transmitted infections specialist; HIV/STIs/Key populations researcher, Clemenceau Medical Center (hospital); Dr Maatouk's private clinic; 114 Massabki-Serhal Building, Cairo Street (street 86), 2d floor; Hamra (sector 34), Beirut 1103; Lebanon E-mail: N0963459@my.ntu.ac.uk

Researcher: Emanuele Fino, thesis director, NTU (emanuele.fino@ntu.ac.uk): Nottingham trent university, United Kingdom

Researcher: Sarah Seymour-Smith, NTU (sarah.seymoursmith@ntu.ac.uk): Nottingham trent university, United Kingdom

Researcher: Dr Duncan Guest, Head of Academy (https://www.ntu.ac.uk/staff-profiles/socialsciences/duncan-guest): Nottingham trent university, United Kingdom

Formal explicit informed consent

(to be completed by participant prior to completing the questionnaire)

 I confirm that I have read and understood the information sheet for this study and all within. I have had the opportunity to consider the information, ask questions if necessary, and have had these questions answered satisfactorily. YES

NO (please select by deletion or by highlighting your answer)

- I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.
 YES NO (please select by deletion or by highlighting your answer)
- I agree that the <u>anonymised</u> data (words) I provide may be published in PhD thesis, articles or books or used in conference presentations.
 YES NO (please select by deletion or by highlighting your answer)
- I explicitly consent to take part in this study.
 YES NO (please select by deletion or by highlighting your answer)

If you read this information form and would like to find out more, ask, questions and/or arrange to take part, please contact Dr Ismaël Maatouk on <u>N0963459@my.ntu.ac.uk</u>