INQUIRIES INTO SEXUAL MINORITY YOUTH AND YOUNG ADULTS OVER TIME AND ACROSS CULTURES

by

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DEDICATION

I dedicate this dissertation to everyone that has supported me along this amazing journey, especially my mother, Peggy Watson, who—although not here to witness my journey in graduate school—undoubtedly cheered from above and always believed in my success. My Father, Grandparents, and Aunts & Uncles have supported me in a myriad of ways throughout my all of my schooling, and I am extremely grateful for this. In addition, I dedicate this project to all of the sexual minorities that have faced discrimination, stigma, and heartache as a result of their unique identities and hate. May science like this and the work of my colleagues contribute to a better and safer place for all human beings.

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ABSTRACT

Sexual minorities or those minoritized as a result of the expressed or assumed sexual orientations and identities (i.e., lesbian, gay, bisexual, transgender, queer), by virtue of their sometimes stigmatized identities, oftentimes report deleterious and unprovoked experiences of harassment, victimization, and prejudice. For several decades, research has confirmed that lesbian, gay, and bisexual individuals are at high risk for maladaptive outcomes, including higher rates of suicidality, depression, substance use and abuse, and anxiety disorders. The goal of this dissertation was to 1) document and compare these disparities across two cultures, 2) disentangle social support systems that are important to sexual minorities, and 3) identify factors that best protect sexual minorities against the effects of bias-based bullying. Large datasets were used to compare, understand, and trace the processes of interpersonal relational support on adjustment for sexual minorities. Specifically, different cultural normativities were hypothesized to explain differences in adjustment across culture, parent support was hypothesized to be most associated with lower depression and higher self-esteem, and parent acceptance was expected to buffer the relation between bias-based bullying and depression for sexual minorities. These expectations were generally supported and demonstrate the clear role that parents and friends contribute to mental health for sexual minorities. Implications for future research, parents, teachers, and other stakeholders are discussed in different contexts of sexual minority adjustment.

CHAPTER I: INTRODUCTION

Sexual minorities or those minoritized as a result of the expressed or assumed sexual orientations and identities (i.e., lesbian, gay, bisexual, transgender, queer) individuals oftentimes face stigma (Meyer, 2003) in multiple cultures (Shilo & Savaya, 2011; Wichstrøm & Hegna, 1999), which has been linked to maladjustment across indicators of mental, emotional, and physical health (Barrientos, Silva, Catalan, Gómez, & Longueira, 2010; Carrara, 2012; Mustanski, Garofalo, & Emerson, 2010; Russell, 2003). Research has found that protective factors, such as interpersonal relationships (e.g., family support) can promote positive outcomes (Ryan, Russell, Huebner, & Diaz, 2010). However, there has been mixed evidence pertaining to the potential role of parents in negating the effects of stigma and harassment for sexual minorities (Eisenberg & Resnick, 2006; Poteat, Mereish, DiGiovanni, & Koenig, 2011). Scholars have also focused on interpersonal relationships from the perspectives of different contexts (i.e., parents at home or friends at school) as potential sources of support for sexual minorities (see Shilo & Savaya, 2011; Ryan et al., 2010), yet no scholars have disentangled different social support systems to understand their potential nuances.

Though their experiences have been examined in several countries across the world (e.g., the United States, Russell, 2003; Israel, Shilo & Savaya, 2011; Norway, Wichstrøm & Hegna, 1999 to name a few), sexual minorities have never been compared on similar health outcomes with large, representative, and longitudinal datasets. No scholars have used quantitative studies to consider the role of culture and cultural normativities. These gaps and mixed findings in the literature provide the impetus for this

dissertation project; here, the current body of knowledge is expanded with data that compares sexual minority individuals across cultures, over time, and within groups.

Prior to this project, I had investigated compromised adjustment, parents, and patterns of identity disclosure to understand risk and resilience for sexual minorities. This project extends the work through my graduate career by: (1) investigating the landscape of disparities for sexual minorities across two Western countries, (2) discovering potential nuances of friend, classmate, teacher, and family support and acceptance in terms of their impact on depression, and (3) exploring how different types of support were linked to mental health. All three papers consider interpersonal relationships, mental health outcomes, and risk factors for sexual minorities.

Transdisciplinary training across the disciplines of social behavior sciences (Family Studies & Human Development) and the humanities (Rhetoric, Composition, and the Teaching of English) provided the frameworks and pedagogy from which these arguments were constructed. This dissertation is sensitive to populations that may not identify as "gay, lesbian, or bisexual" and might instead fall outside of the "gay/straight" binaries oftentimes perpetuated by science and media. Cross-cultural comparisons demonstrate potential areas for further study and understanding in Western countries. Through a consideration of normativities across different cultures, this project sheds light on potential ways for scholars to both learn from and be sensitive to differences across the world that might influence the experiences of those considered to be and those identifying as sexual minorities.

The dissertation project begins with an exploration of the patterns of maladjustment for sexual minorities. I used population-based data to investigate the general prevalence of disparities in mental health amongst sexual minorities compared to their sexual majority counterparts. Once disparities were revealed, I turned to understand how social support might be related to depression and self-esteem differently for sexual minorities. I considered multiple types of interpersonal relationships and how important these relationships were to sexual minorities. With these findings in mind, I considered a resiliency approach to understand how one important source of social support—family—might have attenuated the relation between bias-based bullying and depression for sexual minorities. Thus, each dissertation paper built on the previous findings to further promote well-being for sexual minority / minoritized youth.

This project utilized three contemporary, multi-site, longitudinal datasets to investigate the experiences for sexual minority youth: The National Longintdiunal Study of Adolescent Health (Add Health), Young in Norway, and Risk and Protective Factors for Suicide among Sexual Minority Youth (SOGI-Q). The **Add Health** survey began in 1994 and is one of the most comprehensive studies of adolescents in the United States (see Russell & Joyner, 2001 for overview of Add-Health). The original in-home survey included 20,745 adolescents in grades 7 through 12. These studies examine data from wave I (mean age=15.66) and wave III (mean age=23.05). In total, 20,745 participants are included in our analyses from the wave I sample; and 1,279 of these individuals reported same-sex attractions at wave I. The **Young in Norway** data is a representative national sample of adolescents who responded to a comprehensive questionnaire

beginning in 1992 (see Wichstrøm, 1999 for an overview of Young in Norway). Every school in Norway was included in the pool from which students were drawn; the sample was stratified in terms of geographical region. These studies examine data from wave I (n=3118, mean age=15.0) and wave III (n= 2423, mean age =21.54). **SOGI-Q** was developed to trace the experiences and protective factors of sexual minority youth who are resilient to suicidality compared to those who are not. This dataset contained measures that assessed social support, experiences with coming out, and emotional health (e.g., self-esteem). Data presented were collected from 932 LGB youth who were recruited in New York City, Tucson, and San Francisco.

Last, this dissertation project serves to demonstrate my understanding of diverse sets of statistical methodologies. I used SPSS 20.0, R Laavan package, and M-Plus 7.2 to perform several statistical analyses: logistic regression, two-way ANOVA, within-group structural equation modeling (SEM), and multiple SEM models.

Paper 1: Contextual Influences of Sexual Minority Health: Norway & the US

Health disparity research on sexual minorities has proliferated in the United States over the past two decades, yet scholarship on this topic in other parts of the world has been scarce. Gay, lesbian, bisexual, and MSM/WSW (men who have sex with men/women who have sex with women) heterosexual-identified individuals are compared in Norway and the United States to understand how sexual minorities fare in two distinctly different cultures. Logistic regression analyses revealed that gays, bisexuals, and MSM/WSW heterosexual-identified individuals experience many health disparities in comparison to their heterosexual counterparts. Sexual minorities had

significantly different experiences, such as higher rates of depression, substance use, and employment when Norwegian young adults were compared to young adults in the United States. These findings have implications for how we consider culture and laws as barriers and/or opportunities for sexual minority youth.

Paper 2: Do All Social Support Systems Matter Equally for LGB Youth?

Research over several decades has shown that sexual minority (e.g., lesbian, gay, and bisexual (LGB)) youth are at risk for a myriad of health disparities, yet little research explores potential coping mechanisms and support systems. The minority stress model and social support theories are used as frameworks to analyze the ways in which different forms of social support might impact mental health adjustment for LGB youth. Data from a diverse sample was used to understand how social support from friends, teachers and parents might be associated with less depression and increases in self-esteem differently for lesbian, gay, bisexual male and female youth. We found that parent support and its importance to the participant were consistently related to higher self-esteem and lower depression for all LGB youth. However, particular forms of social support influenced some groups of LGBs more than others. This study elucidates how interpersonal relationships impact mental health and provides parents, stakeholders, and school personnel a roadmap to appropriately assist sexual minorities in dealing with the impacts of minority stress.

Paper 3: Family Acceptance is Protective Against Bias-based Bullying for LGB Youth

Bullying is detrimental to the health and well-being of adolescents across the world. This paper focuses on bias-based bullying. Family and parent support ought to ameliorate negative experiences faced by adolescents, but research has produced complex findings in terms of family and well-being for LGB (i.e., lesbian, gay, and bisexual) adolescents. Scholars have found evidence to support two distinct mechanisms of parent support for LGB adolescents: most research finds that parent support promotes the well-being of LGB youth, yet other evidence also suggests that parents do not attenuate the relation between stigma and harassment on mental health outcomes. I used data from a multi-site study of LGB youth (N=941) over two years to understand whether general parent support and family acceptance of sexual orientation moderated the impact of bias-based bullying on depression. Results indicate that family acceptance of sexual orientation, but not parent support, significantly attenuated the relation between bias-based bullying and depression for LGB youth. *Parent support* is defined as general warmth and care perceived by the adolescent whereas *family acceptance* is the level of acceptance or rejection specific to sexual orientation for adolescents. This finding in part supports previous research that has not found parent support to negate the effects of bullying, yet our finding that family acceptance was significant whereas parent support was not warrants further investigation.

Summary

In summary, I present a series of three conceptually linked empirical investigations into the experiences of sexual minorities. One paper explored patterns and adjustment for sexual minorities in two distinct cultures. Two papers considered interpersonal relationships as important support systems that influenced adjustment as both direct correlates of adjustment and buffers of negative experiences for sexual minorities.

Data from the United States and Norway are considered to compare the adjustment of sexual minorities compared to sexual majorities. The second and third papers used data from the United States to explore how different forms of social support impacted mental health adjustment differently for lesbian, gay, and bisexual youth. Last, I inquired whether the families and parents buffered the relation of bias-based bullying and depression.

CHAPTER II: CONTEXTUAL INFLUENCES OF SEXUAL MINORITY HEALTH: NORWAY AND THE UNITED STATES

Mounting research over the past two decades has found that sexual minority (e.g., non-heterosexual; lesbian, gay, bisexual (LGB)) individuals in the United States are at risk for a myriad of health disparities compared to their sexual majority counterparts (Institute of Medicine, 2011). Research on sexual minorities has continued to increase in Western countries, and findings that highlight experiences of sexual minorities from different cultures and geographic regions have revealed various health disparities (Barrientos, Silva, Catalan, Gómez, & Longueira, 2010; Carrara, 2012; Shilo & Savaya, 2011; Shilo & Savaya, 2012; Sullivan & Jackson, 2001), despite the significantly different political and cultural environments across contexts. Scholars have developed frameworks and theories to explain the reasons for compromised outcomes (e.g., Minority Stress Model, Meyer, 2003).

Minority stress for LGB individuals, which results from discrimination, harassment, and stigma, has been used to explain many of the negative outcomes experienced by sexual minorities (see Meyer, 2003). However, studies from regions with more tolerant and progressive political and social environments, and less discrimination, also identify compromised health for LGBs (Hegna & Wichstrøm, 2007). An example of a 'socially progressive' society where LGB individuals face compromised health outcomes is Norway (Wichstrøm, 1999). Because of their well-known progressive laws and policies to protect sexual minorities set in place for over a decade, Norway is well positioned to investigate the experiences of sexual minority individuals. Because of the

contrasts between the North American and Scandinavian social environment, I examine the histories of laws, rights, and experiences of maladaptive outcomes in Norway and the United States.

Scholars in Norway have investigated the experiences of sexual minorities for over a decade (see Wichstrøm, 1999, Hegna & Wichstrøm, 2007). Contemporary public opinion about same-sex marriage differs between Norway and the United States: 78% of polled Norwegians compared to 60% of those polled in the United States answered that same-sex couples should be allowed to marry (Ipsos, 2013). Scholars have not explicitly compared whether sexual minorities differ from sexual majorities and whether the outcomes of LGBs differ across country. Furthermore, no one has examined how LGBs fare in cultures considered more socially progressive with regard to sexual minorities; for example, might LGBs report better adjustment in a country that is known for its progressive rights for sexual minorities?

Compounded with differences in disparities across cultural regions despite different social environments, inconsistency in the operationalization and measurement of sexual orientation has complicated comparisons of sexual minorities (Sell, 1997). As a result, scholars have typically been able to address only one component of sexual orientation at a time: identity, desire, or behavior, with few exceptions (for example, see Diamond, 2000). Can we compare the experience of a young adult man that reports attraction to other men—but does not have sex with men—to a young adult man that identifies as gay and has sex with men? In this study, we draw from two large samples that consider all three components of sexual orientation, and, in doing so, we identify a

highly understudied group in which reports of identity and behavior are discordant: MSM/WSW (men who have sex with men/women who have sex with women)-identified straight young adults.

Sexual Minority Disparities in Norway and the United States

Existing research has found that sexual minorities are at risk for maladaptive outcomes compared to their sexual majority counterparts in both the United States (Institute of Medicine, 2011) and Norway (Wichstrøm, & Hegna, 2003). Sexual minority youth in the United States are at risk for high rates of depression (Mustanski, Garofalo, & Emerson, 2010), suicidal ideation (Russell, 2003), substance abuse (Beatty, Madl-Young, & Bostwick, 2006), extreme forms of violence (Russell, Franz, & Driscoll, 2001), and lower educational performance (Kosciw, Greytak, Diaz, & Bartkiewicz, 2010). The findings are not as clear for occupational attainment: Ueno and colleagues (2013) found gender differences such that men who reported their first same-sex dating experience in young adulthood had higher occupational attainment compared to their female counterparts that reported same-sex dating in young adulthood.

In Norway, researchers have elucidated maladaptive outcomes with respect to sexual minorities' suicidal behavior; LGB youth were found to be at disproportionate risk for suicidality, which was attributed to a lack of parental contact, internalizing problems, low self-esteem, and victimization (Hegna & Wichstrøm, 2007). As a result, sexual minorities were three times more likely to engage in suicidal behavior compared to their sexual majority counterparts (Wichstrøm, & Hegna, 2003). Despite these findings, no studies have compared disparities across these two Western countries to see whether

LGBs display worse outcomes in a more conservative culture compared to one known for progressive marriage laws and gay rights. To provide context for such comparison, we will next compare the political and social environments for sexual minorities in the United States and Norway.

Experiences for Norwegian Sexual Minorities

Sex between men had been declared illegal in Norway from about 1100 until 1972 (Hellesund, 2009). The law that repealed the illegality of same-sex sex and other behaviors was initiated during the earliest documented gay and lesbian movement in Norway, which began when a Norwegian association published the first pamphlet about homosexuality in 1948. This pamphlet served as a community resource for education, which eventually led to education reform. Since 1998, Norwegian law has mandated that the experiences and contributions of lesbian and gay individuals be taught in primary school—beginning in the fourth grade (Hellesund, 2009). However, there is little attention given to this day on issues regarding bisexuality. In general, negative experiences for sexual minorities have occurred in the context of progressive laws and policies that address marriage and procreation.

Demographic Patterns of LGBs. Research has reported that people self-identify as lesbian, gay, and bisexual at similar rates in Norway as compared to the United States. By use of a national dataset, one study found that when using the most inclusive criteria for sexual minorities (i.e., behavior, identity, and/or attraction components), nearly 10% of individuals reported a same-sex experience; the most restricted of definitions (i.e., "homosexual" as only informed by one's identity) resulted in 1% of the sample reporting

exclusively same-sex attracted identities (Pedersen & Kristiansen, 2008). In another study that used nationally representative data, 6.5% of youth reported same-sex sexual contact (Wichstrøm & Hegna, 2003).

LGB Laws and Policies. Norway was the first country in the world to enact a law in 1981 that prohibited discrimination against LGBT people. In 1993, Norway became the second nation in the world to grant recognize to same-sex relationships after Denmark (Hellesund, 2009), and in 2009, was the sixth country in the world to legalize same-sex marriage (Hatzenbuehler, 2010). Between 1993 and 2007, about 3,400 couples had registered as domestic partners in Norway, which was a rough equivalent to gay marriage; the majority of these were couples of gay men (Hellesund, 2009). Since 2003, lesbian couples have had the option to receive government monetary assistance in their attempts to procreate—this benefit is available to all married couples in Norway. The Norwegian National Association of Lesbian and Gay Liberation reported successes in advancing gay rights. This organization, along with numerous LGB-serving organizations and youth clubs, are funded at local and national levels (Hellesund, 2009).

Cultural Shifts. Scholars have identified a contemporary "homosexualization"[1] movement in Norway. Namely, trends and relationship structures that were once reserved for gay individuals are now ubiquitous amongst sexual majority men (Nissen, 2001). For example, patterns of cohabitation (i.e., couples that prefer to delay marriage but choose to live together) are evidence of this "homosexualization movement." Despite progressive

[1] The term "homosexual" and "homosexualization" are oftentimes used differently across cultures. In North America, the term "homosexual" has developed negative undertones and many groups of sexual minorities find it an offensive term. Instead, we refer to these populations as "sexual minorities" or "LGBs".

laws and policies, great cultural shifts, and a large number of LGB individuals in Norway, previous research has nevertheless identified health disparities for sexual minorities in Norway (Hegna & Wichstrøm, 2007). Culture and societal norms are integral to the development of adolescent sexual identity; yet, it is perplexing that non-heterosexual adolescents are still at such high risk for compromised outcomes in Norway.

Experiences for Sexual Minorities in the United States

The popular notion of "sexual orientation" in the United States is less than two centuries old (Herek & Garnets, 2007), yet the scientific community until recently had defined "homosexuality" as a clinical disorder. During this time, clinicians attempted to "cure the disease" of homosexuality. Though homosexuality was removed from the United States Diagnostic Statistical Manual (DSM) more than 30 years ago, stigma against same-sex attracted individuals in the United States is still pervasive, and this stigma has been linked to increased rates of suicidality and depression in sexual minorities (Meyer, 2012). Since this time and despite the contemporary shift in discourse about sexual orientation, research has found that sexual minorities are still at high risk for a myriad of health disparities in the United States (Institute of Medicine, 2011).

Demographic Patterns of LGBs. There are debates regarding the number of sexual minorities in the United States; this topic entered public discourse freely at the time of Alfred Kinsey's work (Savin-Williams, 2009). In 1948, Alfred Kinsey posited that roughly 10% of males were "more or less exclusively" homosexual; this 10% statistic has since become a heuristic when estimating the proportion of sexual minorities in the population. However, many have critiqued the 10% heuristic because research has

consistently shown that individuals with same-sex behaviors and attractions identify as heterosexual, which potentially depresses the accurate count of sexual minorities in the United States. Other population-based surveys have accounted for nearly 9 million LGBs in the United States, which equates to roughly 3.5% of the population; these studies in have indicated that the prevalence of LGB individuals in the United States ranges from 1.7% to 5.6% (Gates, 2011), and many of these estimates differ based on measurement of sexual identity, behavior, or desire.

There is a small body of research in the United States—but not in Norway—that has identified a population of individuals that identify as straight but also report same-sex romantic attractions and sexual behaviors. Recent research has illustrated how the Internet, for example, has provided new opportunities for sexual majorities to explore same-sex desires. "Dude sex" is argued to be an authentic heterosexuality for young men who go online to seek sex with other men (Ward, 2007).

LGB Laws and Policies. In the past decade, the United States has witnessed rapid social change that has outpaced the speed of LGB-specific policy and scientific research. Thus, same-sex relations and identity are more recently part of public discourse than ever seen before. In 2004, same-sex marriage was not recognized in any territory across the United States; however, today, 31 of 50 states and the District of Columbia recognize gay marriage, and there are challenges to marriage bans in several states (Human Rights Campaign, 2014). Over the course of one month in 2014, 12 states ruled that a ban on same-sex marriage was unconstitutional. Popular opinion has more rapidly shifted greatly in more progressive states as well: In 2000, 61% of the voting Californians

voted against gay marriage—that number shrank to 52% by 2008. In 2013, the United States Supreme Court struck down the Defense of Marriage Act, a law that defined marriage as between a man and a woman and denied rights and benefits to LGB individuals. Such sweeping legislation throughout the United States has led to greater public awareness of LGB issues (Lewis & Oh, 2008). This rapid progress has not applied to facets of the LGB experience in the United States: most all of these laws only pertain to same-sex marriage but do not address school or employment policies.

Cultural Shifts. Given that large shifts over time in public opinion are relatively rare, public opinion about sexual minority rights has changed at an unusually fast pace, although at strikingly different rates in the United States by region (Brewer, 2014). Furthermore, public opinion about LGB rights has significantly impacted state policies regarding same-sex marriage (Lewis & Oh, 2008). This has been true in other cases where public opinion issues are salient (Haider-Markel, 2001), such as racialization, stances on war, and women's rights.

In sum, research has reported that people identify as lesbian, gay, and bisexual at similar rates in Norway as compared to the United States. Compared to the United States, there is less known about the actual prevalence of gay, lesbian, and bisexuals in Norway. There are progressive laws in Norway that have protected LGB's right to marriage and procreation for LGBs that have been in place for decades, whereas the United States has only experienced sweeping social change in the past 7 years.

Current Study

This study compares lesbian, gay, bisexual, and MSM/WSW (men who have sex with men/women who have sex with women)-straight identified young adults across psychosocial, career, and social outcomes over a similar time frame with prospective, representative data from Norway and the United States. Two research projects include nationally representative data on sexual orientation in both the United States (The National Longitudinal Study of Adolescent Health; see Russell & Toomey, 2013) and Norway (Young in Norway; see Hegna & Wichstrøm, 2003); these studies have found that sexual minorities are at high risk for emotional and mental health outcomes (e.g., Hegna & Wichstrøm, 2003; Russell, 2003). However, no one has explored how sexual minorities fare in multiple countries across time when compared on the same outcomes using national representative data in light of distinct political and cultural environments. MSM/WSW straight-identified populations have not been compared to lesbian, gay, and bisexual individuals; just a handful of studies find that this subgroup reports high levels of depression and anxiety (Ward, 2008). To best support all types of sexual minorities across the world, I interpret my findings in a cultural contextual framework that has the potential to elucidate and explain cross-cultural differences in adjustment across the world.

A focus on laws and societal attitudes around sexual minority rights provides the foundation for which results are interpreted. We consider two possibilities: 1) there will be differences in adjustment across countries because of differences in progressiveness

and political contexts; 2) regardless of protective policies, progressivity, and normative political/societal views, people who are stigmatized will experience maladjustment.

Method

Participants. We used one time point (Wave III) of two prospective representative national data sets to understand contextual influences on the sexual minority experience: The National Longitudinal Study of Adolescent Health (Add Health) and Young in Norway.

The Add Health survey began in 1994 and is one of the most comprehensive studies of adolescents and young adults in the United States. The original in-home survey included 20,745 adolescents in grades 7 through 12 (see Russell & Joyner, 2001 for overview of Add Health). This study includes data from the wave III survey (2001; mean age=23.05). At wave III, the number of participants totaled 14,335 young adults; of these participants, 838 participants reported both same-sex behaviors and/or identities. A little more than half (57%) of the sample was white and male. For the other half of the sample, 22% of respondents reported their race as Black and 20% of the sample reported their ethnicity as Hispanic.

Young in Norway is a representative national sample of adolescents and young adults that responded to a comprehensive questionnaire beginning in 1992 (for detailed information see Wichstrøm, 1999). Every school in Norway was included in the pool from which students were drawn; the sample was stratified in terms of geographical region.

This study examines data from wave III (1999). At wave III, there were 2,423 young adults; 232 of these participants reported both same-sex attractions and identities. Table 1 displays the breakdown of sexual minority participants at wave III in both Add Health and Young in Norway (see Table 1). Demographic characteristics for both Add Health and Young in Norway are displayed in Table 1.

Measures. The participant reported all measures in both datasets.

Sexual Orientation. A major limitation of previous studies that include sexual orientation has been the exclusive use of sexual behavior solely instead of exploring how experiences of sexual desire, identity, and behavior might inform the holistic understanding of a non-heterosexual individual (Pedersen, 2008). The current study includes measures of sexual behavior and identity.

Sexual Behavior. For Add Health, two items asked participants: "Considering all types of sexual activity, with how many (female/male) partners have you ever had sex?" Response options ranged from 0 to 600 partners. To identify young adults that engaged in same-sex behavior, we matched individuals where their response to the sex question (male/female) was concordant with their response to the sexual behavior question indicating they had sex with the same or both sexes. We dichotomized this variable as 0 (*no same-sex experiences*) and 1 (*at least one same-sex experience*). For Young in Norway, one item asked participants whether they ever "had any kind of sexual relations with persons of the same gender as yourself?" Responses were 0 (*no*) and 1 (*yes*).

Sexual Identity. For Add Health, one item asked the participant to: "Choose the description that best fits how you think about yourself." Response options included: 1

(*heterosexual*), 2 (*mostly heterosexual, but somewhat attracted to people of your own sex*), 3 (*bisexual—that is, attracted to men and women equally*), 4 (*mostly homosexual, but somewhat attracted to people of the opposite sex*), 5 (*homosexual*), 6 (*not sexually attracted to either males or females*), 7 (*refused*), and 8 (*do not know*). We coded responses of 1 and 2 as *heterosexual*, 3 as *bisexual*, and 4 and 5 as *homosexual*.

For Young in Norway, sexual identity was assessed using a single item: "How would you rate yourself on a scale from absolutely heterosexual to absolutely homosexual?" Response options included: 1 (*only heterosexual*), 2 (*mainly heterosexual, to a very small extent homosexual/lesbian*), 3 (*mainly heterosexual, to some extent homosexual/lesbian*), 4 (*about as much homosexual/lesbian as heterosexual*), 5 (*mainly homosexual/lesbian, to some extent heterosexual*), 6 (*mainly heterosexual/lesbian, to a very small extent heterosexual*), or 7 (*only homosexual/lesbian*). We coded responses of 1 and 2 as *heterosexual*, 3, 4, and 5 as *bisexual*, and 6 and 7 as *homosexual* participants.

Suicide Attempts. For Add Health, one item asked: "During the past 12 months, how many times did you actually attempt suicide?" Response options included 0 (*0 times*), 1 (*1 time*), 2 (*2 or 3 times*), 3 (*4 or 5 times*), and 4 (*6 or more times*). We dichotomized this item to represent participants that had never attempted suicide (0) and who had attempted suicide 1 or more times (1). For Young in Norway, suicide attempt was measured using one item that asked: "Have you ever tried to commit suicide?" Responses were "Yes" or "No".

Alcohol Use (Got Drunk). For Add Health, one item asked: "Over the past 12 months, on how many days have you gotten drunk or "very, very high" on alcohol?"

Response options ranged from 0 (*never*), 1 (*1 or 2 days in the past month*), 2 (*once a month or less)*, 3 (*2 or 3 days a month*), 4 (*1 or 2 days a week*), 5 (*3 to 5 days a week*), and 6 (*every day/almost every day*). We dichotomized this item to represent participants that had never gotten drunk (0) and who have gotten drunk 1 or more times (1) in the past year. For Young in Norway, alcohol use was measured using one item that asked about illegal or almost illegal actions that many people do: "Have you taken part in/done any of these actions in the last 12 months? – Drunk so much that you clearly felt drunk." Response options ranged from 0 (*never*) to 6 (*more than 50 times*). We dichotomized this item to represent participants that had never gotten drunk (0) and who had gotten drunk 1 or more times (1).

Marijuana Use. For Add Health, one item assessed marijuana use; "How old were you when you tried marijuana for the first time? If you never tried marijuana, enter '0'." Response options ranged from 0 to 18+ years. We reverse coded and dichotomized this item to represent participants that had never used marijuana (0) and who had used marijuana (1). For Young in Norway, one item assessed marijuana use by asking: "Have you ever used hash or marijuana?" Response options were "Yes" or "No".

Hard Drug Use. For Add Health, one item assessed marijuana use: "How old were you when you first tried any other type of illegal drug, such as LSD, PCP, ecstasy, mushrooms, speed, ice, heroin, or pills, without a doctor's prescription? If you never tried any other type of illegal drug, enter '0'." Response options ranged from 0 to 18+ years. We dichotomized this item to represent participants that had never used hard drugs (0) and who had used hard drugs at least once in their life (1). For Young in Norway, one

item assessed hard drug use: “Have you taken part in any of the following in the past 12 months: been using other drugs (like heroine, cocaine, LSD, etc.)”. Response options ranged from 0 (*never*) to 6 (*more than 50 times*). For the logistic regression, we dichotomized this item to represent participants that had never done hard drugs (0) and who had done hard drugs (1).

Ever Smoked. For Add Health, smoking was assessed by one item: “Have you ever tried cigarette smoking, even just 1 or 2 puffs?” Response options were 0 (*no*) and 1 (*yes*). For Young in Norway, one item assessed smoking: “Do you smoke?” Responses to this item were: 1 (*have never smoked, have never smoked regularly and do not smoke at all now*, 2 (*have smoked regularly and have quit now*), 3 (*do smoke but not daily*), and 4 (*smoke daily*). We dichotomized this item to represent participants who have never smoked (options 1 and 2) and participants that have at least regularly smoked in their lifetime (coded 1).

Depressive Symptoms. For Add Health, depression was assessed by a mean score of 10 items from the CES-D adapted by Meadows, Brown, & Elder (2006) for use with Add Health. Examples of items included: “Have you been depressed in the past 7 days,” “Have you been sad in the past seven days,” and “Have you been bothered by things that don’t usually bother you in the past 7 days”; higher scores indicate higher rates of depression. Responses ranged from 0 (*never or rarely*), 1 (*sometimes*), 2 (*a lot of the time*), and 3 (*most of the time or all of the time*). For the logistic regression, we dichotomized this variable by a clinical cut-off point of 16, as this value has been

substantiated to separate individuals that need help for emotional problems from those that do not (see McKinlay, McKinlay, & Brambilla, 1987).

For Young in Norway, depression was measured by a 12-item version of the Hopkins Symptom Checklist (SCL; Derogatis, 1982). The SCL is a self-report symptom inventory comprised of items representative of the symptom configurations commonly observed among outpatients (Derogatis, 1982). The 10 items stem from a short-version of the SCL-25 used by Hammer & Vuglum (1990). Four items overlapped, thus resulting in a 12-item measure (Wichstrøm, 1995). Examples of question include: "During the past week, have you not been bothered at all, a little bothered, pretty much bothered, or very much bothered by some of these things: suddenly scared for no reason; constantly scared or worried; crying easily; blaming yourself for things". We dichotomized this item to represent participants who have experienced major depressive symptoms (score of 3+; coded 1; see Wichstøm, 1995) and participants that have not experienced major depressive symptoms (score of under 3; coded 0).

Skipping Work. Skipping work in the Young in Norway data was assessed using one item: "Have you partaken in/done any of these actions in the last year—Skipped work a whole day". Response options ranged from 0 (*never*) to 6 (*more than 50 times*). We dichotomized this item to represent participants that had never skipped school/work (0) and who had skipped school/work 1 or more times (1). Data was only available about skipping work in the Young in Norway survey, thus this measure is not compared across country.

Unemployed. For Add Health, one item assessed current unemployment: "Are you currently working for pay for at least 10 hours a week?" Response options were "Yes" or "No". For Young in Norway, one item was used that asked if the participant was unemployed in the last 12 months. Response options were "Yes" or "No". Participants that reported full-time student statuses were excluded from the analyses for this item.

Mother & Father Closeness/Acceptance. For Add Health, one item was used that asked: "Do you feel close to your Mother/Father?" Response options ranged from 1 (*strongly agree*) to 5 (*strongly disagree*). We dichotomized this item to represent participants reported low Mother/Father closeness (scores above or equal to 4; coded 1) and who reported higher Mother/Father closeness (scores below 5; coded 0). For Young in Norway, mother acceptance was assessed at using two separate items for both mother and father: "Does your Mother/Father accept you totally—for both good and bad sides?" Response options were "Yes" or "No".

Plan of Analysis. I first correlated the standardized psychosocial, career, and social outcomes by country to understand how well the measurements operated across samples. Logistic regression was then used to test whether psychosocial, career, and social outcomes differed for young adults across two samples and time points. I inquired whether sexual minorities differed from their sexual majority counterparts in Norway and in the United States separately. I controlled for age, ethnicity, and region in Add Health and age and region in Young in Norway. I then combined the datasets using standardized outcome variables to determine whether lesbian, gay, and bisexual male/female

individuals significantly differed on outcome variables between Norway and the United States. We used a two-way ANOVA to test interactions with fixed factors of sexual orientation (e.g., MSM heterosexual, MSM homosexual) and country (i.e., Norway and the United States). To further interpret the results, we split the data by sexual orientation and ran postdoc independent t-tests. For the two-way ANOVA model, I controlled for age and sex as a potential confounds to reports of maladaptive outcomes.

Results

Norway-specific Findings. Table 3 presents the odds ratios for sexual minority young adult adjustment in Norway. Gay/lesbian young adults were more likely to use hard drugs, smoke, report less father acceptance, get drunk, use marijuana, and be lonely compared to their sexual majority counterparts. Bisexuals were most likely to have attempted suicide and be unemployed in young adulthood compared to heterosexual same-sex attracted young adults. Heterosexual-identified same-sex attracted adults (MSM/WSW heterosexual-identified) young adults were more likely than heterosexual-identify MSW/WSM to report depressive symptoms and skip work.

United States-specific Findings. Table 4 presents the odds ratios of sexual minority young adult adjustment in the United States. Gay/lesbian young adults were more likely to use marijuana and hard drugs compared to their other-sex attracted straight identified counterparts. Bisexual same-sex attracted young adults were most likely to have attempted suicide, smoked, report depressive symptoms and less mother acceptance other-sex attracted straight identified counterparts. Last, heterosexual same-sex attracted (MSM/WSW heterosexual-identified) young adults were at higher odds of attempting

suicide, using marijuana and hard drugs, and less mother acceptance compared to their other-sex attracted straight identified counterparts.

Interactions by Country. Table 5 presents the interactions of each outcome variable in Norway compared to the United States. There was a significant interaction by country for marijuana and hard drug use, ever smoking, depressive symptoms, and mother closeness/acceptance. Sexual majorities reported the lowest levels of all health-risk outcomes and highest reports of closeness/acceptance.

For marijuana use, we found a statistically significant difference between gays/lesbians, bisexual, and MSM/WSW heterosexual-identified across Norway and the United States, such that MSM/WSW heterosexual-identified (Norway *M*=0.68; USA *M*=0.29), bisexual (Norway *M*=0.37; USA *M*=0.14), and gay (Norway *M*=0.60; USA *M*=0.30) individuals reported higher rates of marijuana use in Norway compared to their counterparts in the United States.

For hard drug use, MSM/WSW heterosexual-identified and bisexual individuals significantly differed, such that MSM/WSW heterosexual-identified (Norway *M*=0.99; USA *M*=0.40) and bisexual (Norway *M*=0.33; USA *M*=0.12) individuals reported more hard drug use in Norway compared to their counterparts in the United States.

For reports of ever smoking cigarettes, MSM/WSW heterosexual-identified and bisexual individuals significantly differed, such that MSM/WSW heterosexual-identified (Norway *M*=0.47; USA *M*=0.06) and bisexual (Norway *M*=0.40; USA *M*=0.12) individuals reported more hard drug use in Norway compared to their counterparts in the United States.

For reports of depressive symptoms, MSM/WSW heterosexual-identified and bisexual individuals significantly differed, such that MSM/WSW heterosexual-identified individuals reported less depression (Norway *M*=-0.06; USA *M*=0.28) and bisexuals reported more depression (Norway *M*=0.64; USA *M*=0.30) in Norway compared to their counterparts in the United States.

Last, gays, bisexuals, and MSM/WSW heterosexual-identified individuals significantly differed on their reports of closeness/acceptance, such MSM/WSW heterosexual-identified, gay, and bisexual individuals were more likely to be accepted by their family in Norway compared to their counterparts in the United States. The differences were large: gays/lesbians reported the highest levels of closeness and acceptance in Norway whereas MSM/WSW heterosexual-identified individuals reported the lowest levels of closeness and acceptance in the United States.

Overall, MSM/WSW heterosexual-identified individuals reported the highest rates of marijuana and hard drug use, and ever smoking in Norway. In the United States, gays/lesbians reported the worst outcomes amongst all groups.

Discussion

This is the first study to compare nationally representative data on sexual orientation using measures of behavior and identity from two Western countries at two similar time points. Most research projects on sexual orientation (including nationally representative and non-probability samples) have only used reports of either desire or identity (see Russell, Seif, & Truong, 2001), and scholars are rarely able to measure desire, behavior, and identity within the same sample. In addition, to my knowledge, this

is the first study that addressed outcomes of MSM/WSW heterosexual-identified individuals in comparison to their lesbian, gay, bisexual, and heterosexual counterparts across multiple samples. The findings regarding risky outcomes of MSM/WSW heterosexual-identified individuals reveal the need for further research and understanding of this population.

The findings presented here support an explanation that implicates stigma of sexual orientation as in part a contributing factor in compromised well-being for sexual minorities. We posited two possibilities: 1) there ought to be differences in adjustment across countries because of differences in progressiveness and political contexts and, 2) people who are stigmatized, regardless of policies protecting minorities, will nevertheless experience maladjustment in cultures that differ radically on progressivity and political/societal views toward normativity. In short, we inquired what might explain disparate adjustment for sexual minorities: progressive laws or societal attitudes? The findings provide the most support for the second possibility and suggest that more proximal and fewer distal influences impact behavioral and psychological factors of minorities.

The comparison of sexual minorities across Norway and the United States (see Table 5) helps further demonstrate the disparities across country regardless of normativities of social behavior. To demonstrate this point, we focus on alcohol use in each country: Alcohol use might not be related to depression or income for young adults in the same ways in the United States compared to Norway. There is higher alcohol usage in Norway compared to the United States in general (Grant, 1997; Kringlen, Torgersen,

& Cramer, 2001). There may be processes in which risky behaviors are culturally distinct for sexual minorities in both countries, some of which are captured by the correlations presented in Table 1. For example, alcohol is illegal to drink until 21 years of age in the United States, but youth in Norway may legally drink alcohol six years earlier. Sexual majorities did not differ on any outcomes when comparing the United States to Norway suggests that potential differences in cultural normativities; this suggests these cultural differences may not be biasing my comparisons.

The implications of discrimination and pervasive stigma throughout both Norwegian and North American cultures may potentially explain the findings regarding similar outcomes for minorities across countries. Even though Norway has implemented more supportive policies toward sexual minorities, Norwegians continue to hold negative attitudes toward sexual minorities, as evidenced by Anderssen and Hellesund (2009), who state, "there are many signs that the cultural significance of homosexuality in Norway has dramatically altered over the last 30 years. However, conditions that reproduce attitudes of homosexuality as unwanted, inferior, and shameful still exist." Individuals excluded (e.g., homeless queer youth) from laws that support sexual minorities (e.g., same-sex marriage laws) may not benefit from policies intended to ameliorate the experiences of sexual minorities. The school-to-prison pipeline in the United States elucidates an instance where some youth, such as gender non-conforming individuals, experience more disparate experiences than their conforming counterparts but oftentimes are not protected within enumerated policies. This may be true in both Norway and the United States. In general, policies that target the wealthiest of a

marginalized group are unlikely to make a difference in the lives of those most poor. Therefore, future laws should include all populations of sexual minorities in order to expand the effects of beneficial, progressive policies.

Sexual minorities reported worse outcomes on several outcomes in Norway compared to the United States. Namely, MSM/WSW heterosexual-identified Norwegians were more than 10 times more likely to report depressive symptoms compared to sexual majorities in Norway. The stigma associated with sexual orientation (see Meyer, 2012) and the mechanisms associated with stigma and maladjustment (Goffman, 1954) may account for the disparities found in both countries. The stark differences in outcomes for MSM/WSW heterosexual-identified populations across countries support this interpretation: MSM/WSW heterosexual-identified individuals in Norway report some of the largest disparities in marijuana and hard drug use, smoking, and depressive symptoms compared to their sexual majority counterparts. This population engages in same-sex behaviors, yet labels their sexual identity as incongruent with their sexual behaviors. This group may be subject to double jeopardy minority stress; that is, this group might be stigmatized by both heterosexuals and self-identified homosexuals. This has implications for interventions: programs can help LGBs find congruency in their definitions of sexual identity by revealing the implications of the unique components of sexual orientation. In addition, interventions should educate sexual minorities (and their counterparts) about strategies that help to cope with stigma bias-based discrimination (Meyer & Bayer, 2013; Uribe & Harbeck, 1992) and avoid "blaming the victim" (see Garnets, Herek, & Levy, 1990 for more information).

These findings have important implications for the ways in which laws and policies address the holistic experiences of sexual minorities. We found that bisexuals and MSM/WSW heterosexual-identified individuals were the only groups that differed on outcomes by country (which the exception of gays on marijuana use). Thus, laws must address more than just the topic of same-sex marriage for sexual minorities and consider the implications these laws have on different groups—many adolescents and young adults struggle with mental health and social disparities.

While this study focused on disparities amongst sexual minorities, we acknowledge the importance of asset-driven research models that focus on resilience and consider that not all LGB individuals report negative experiences. One recent paper used Add Health data to investigate the trajectories of same-sex attracted youth over time: the authors found that two-thirds of the LGB youth were engaged at school, and this engagement was linked with better outcomes across 11 years of life (Watson & Russell, 2014). In this case, same-sex attracted youth showed resilience despite challenges they may have faced at school. Another study has found that protective factors such as parent involvement, interactions with the gay community, and inclusive policies should be considered in future research (Saewyc, 2011).

Limitations and Future Directions. Despite the strengths of this paper, limitations with examining these data exist. Add Health and Young in Norway do not ask about sexual identity milestones, first sexual experiences, disclosing sexual identity, or stigma attributed to sexual orientation. Although, this remains a challenge with nationally representative datasets that are typically designed to capture the experience of the

majority. Typically, only non-population based sampling techniques have included sexuality-specific measures to understand sexual identity development. A second limitation is that we included measures of parent closeness and acceptance, but we acknowledge that friend and classmate support is equally important to parent acceptance and support (Russell, Seif, & Truong, 2001; Shilo & Savaya, 2011); however, datasets did not include measures that assessed sexuality-specific social support.

In conclusion, researchers should pay special attention to the reasons why sexual minorities might be performing better in some areas compared to others, whether across regions in one country or across multiple countries. In addition, when conducting cross-cultural comparisons, scholars should consider what it means to be different (e.g., a gay man) in a country that might be more racially homogenous than another. Ideally, data should be used that incorporates measures of cultural norms, bias-based discrimination, sexuality-specific measures (such as parent support of sexual orientation), and attitudes about social policies designed for minorities. Other factors that may be important for more complete discussions of these topics are family composition (e.g., number of siblings), targets and timelines of disclosure for youth and young adults (e.g., have individuals disclosed their sexual orientation to family, friends, peers?), gender differences in stigmatization, visibility of gay, lesbian, bisexual, and transgender role models, and educational differences.

Table 1

Sample Characteristics for Young in Norway (1999) and Add Health (2001)

	Young in Norway (N=2423, *M* Age = 21.5)		**Add Health (N=14335, *M* Age = 23)**	
	n	**% of sample**	**n**	**% of sample**
Sexual Identity + Behavior				
MSW/WSM Heterosexual	2191	90.4	13,497	94.2
MSM/WSW Homosexual	57	2.4	223	1.6
MSM/WSW Bisexual	84	3.5	230	1.6
MSM/WSW Heterosexual	91	3.8	385	2.7

Note: MSW = men who have sex with women, WSM = women who have sex with men, MSM = men who have sex with men, WSW = women who have sex with women

Table 2

Bivariate Correlations and Descriptives of Independent and Dependent Variables for USA and Norway

Dependent Variable	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1. Suicide Attempts		0.10**	0.07**	0.12**	0.05**	0.19**	0.31**	-0.07**	-0.09**
2. Got Drunk	-0.01		0.01	0.71**	0.20**	-0.05**	-0.07**	-0.00	-0.01
3. Marijuana Use	0.08	0.25**		0.27**	0.03**	0.01	0.06**	-0.04*	-0.01
4. Hard Drug Use	0.03	0.07**	0.49**		0.15**	0.02	0.02**	-0.35**	-0.04*
5. Ever Smoked	0.10	0.28**	0.32**	0.13**		-0.01	-0.01	-0.00	-0.03
6. Depressive Symptoms	0.25**	0.32	0.08**	0.10**	0.04		0.34**	-0.07**	-0.09**
7. Unemployed	-0.01	0.01	0.19**	0.10**	0.11**	0.06*		-0.05**	-0.03
8. Mother Closeness/Acceptance	-0.13*	-0.06**	-0.10**	-0.10**	-0.14**	-0.06**	-0.08**		0.75**
9. Father Closeness /Acceptance	-0.15*	-0.05*	-0.11**	-0.07**	-0.16**	-0.07**	-0.08**	0.65**	
Mean (USA)	0.04	5.07	14.7	16.22	16.22	12.67	0.12	3.97	3.04
SD (USA)	0.26	1.47	3.88	3.41	4.44	2.93	0.02	0.77	0.27
Mean (Norway)	0.03	3.75	0.65	2.08	2.80	18.13	0.05	0.73	0.64
SD (Norway)	0.01	1.52	0.12	0.48	1.67	3.81	0.01	0.24	0.28

Note: ** $p < 0.01$, * $p < 0.05$; Values above the diagonal represent young adults in the United States, values below the diagonal represent young adults in Norway

Table 3

Odds of Experiencing Maladaptive Outcomes Amongst Sexual Minorities Compared to Heterosexuals (1999) in Norway

	Young Adult SSA (1999)		
	Gay (N=57)	**Bisexual (N=84)**	**SSB Heterosexual (N=91)**
	AOR (95% CI)	**AOR (95% CI)**	**AOR (95% CI)**
Psychosocial Outcomes			
Suicide Attempts	1.65 (0.46-5.93)	5.47 (1.45-20.67)*	1.71 (0.67-4.42)
Got Drunk	4.57 (0.62-33.85)	2.07 (0.90-4.82)	0.90 (0.50-1.62)
Marijuana Use	4.20 (2.63-6.72)***	2.79 (1.74-4.47)***	4.13 (1.85-9.22)**
Hard drug Use (LSD, heroin)	12.20 (4.70-31.63)***	5.53 (2.61-11.72)***	4.85 (2.30-10.23)***
Ever Smoked	2.59 (1.16-5.79)*	2.10 (1.32-3.36)**	2.51 (1.59-3.95)***
Depressive Symptoms (3+)	7.70 (3.24-18.32)***	0.94 (0.12-6.90)	10.68 (3.00-37.98)***
Career Outcomes			
Skipped Work	1.70 (0.78-3.71)	1.60 (1.01-2.54)*	2.33 (1.47-3.70)***
Unemployed	3.85 (0.82-18.10)	4.31 (1.68-11.04)**	2.63 (0.88-7.80)
Social Arenas			
Less Mother Acceptance	4.05 (2.08-9.77)***	1.27 (0.77-2.08)	1.14 (0.71-1.84)
Less Father Acceptance	3.73 (1.70-8.18)**	1.66 (1.06-2.62)*	1.43 (0.92-2.20)

Note: *** Denotes the odds significant from reference group (heterosexual-identified, other-sex sexual behavior) at $p < 0.001$; ** $p < 0.01$; *$p < 0.05$. Adjusted for age; SSB = young adults that engage in same-sex behavior (i.e., men who have sex with men OR women who have sex with women)

Table 4

Odds of Experiencing Maladaptive Outcomes Amongst Sexual Minorities Compared to Heterosexuals (2001) in the USA

	Young Adult SSA (2001)		
	Gay (N=223) AOR (95% CI)	**Bisexual (N=230)** AOR (95% CI)	**SSB Heterosexual (N=385)** AOR (95% CI)
Psychosocial Outcomes			
Suicide Attempts	3.79 (2.52-5.70)***	4.30 (2.92-6.31)***	2.42 (1.62-3.61)***
Got Drunk	0.80 (0.52-1.24)	0.76 (0.49-1.19)	1.20 (0.89-1.60)
Marijuana Use	2.40 (1.50-3.86)***	2.36 (1.50-3.70)***	1.60 (1.13-2.29)**
Hard drug Use (LSD, heroin)	3.25 (2.31-4.56)***	2.50 (1.75-3.58)***	1.55 (1.11-2.17)*
Ever Smoked	1.72 (1.21-2.47)***	2.51 (1.67-3.76)***	1.28 (0.95-1.66)
Depressive Symptoms	2.12 (1.22-3.69)***	2.95 (1.82-4.78)***	1.61 (0.99-2.62)
Career Outcomes			
Unemployed	0.92 (0.66-1.29)	1.44 (1.07-1.94)*	1.01 (0.79-1.31)
Social Arenas			
Less Mother Closeness	3.74 (1.33-10.53)*	5.52 (2.15-14.17)***	3.35 (1.43-7.86)***
Less Father Closeness	2.00 (0.61-6.52)	2.98 (1.05-8.47)*	2.36 (0.82-5.19)

Note: *** Denotes the odds significant from reference group (heterosexual-identified, other-sex sexual behavior) at $p < 0.001$; ** $p < 0.01$; *$p < 0.05$. Adjusted for age; SSB = young adults that engage in same-sex behavior (i.e., men who have sex with men OR women who have sex with women)

Table 5

Two-way ANOVA Interactions of Outcome Variables by Country

	Interaction	**Norway** *(M)*				**United States (***M)*			
	(F)	***H***	***G***	***B***	***SSB-H***	***H***	***G***	***B***	***SSB-H***
Psychosocial Outcomes									
Suicide Attempts	4.06	-0.07	0.86	-0.02	0.04	-0.05	0.57	0.25	0.46
Got Drunk	4.31	-0.02	0.29	0.07	0.43	-0.01	0.18	-0.02	0.10
Marijuana Use	4.22**	-0.06	0.60*	0.37*	0.68**	-0.03	0.30	0.14	0.29
Hard Drug Use	4.75***	-0.05	0.27	0.33*	0.99***	-0.03	0.42	0.12	0.40
Ever Smoked	3.08*	-0.05	0.30	0.40**	0.47*	-0.01	0.31	0.12	0.06
Depressive Symptoms	4.08**	-0.05	0.54	-0.06**	0.64*	-0.05	0.55	0.28	0.30
Closeness/Acceptance	14.12***	-0.02	0.61*	0.10**	0.14**	0.05	-0.08	-0.00	-0.73

Note: H = Heterosexual, G = Gay/Lesbian, B = Bisexual, SSB-H = MSM/WSW Heterosexual; ***Denotes the model significant at $p < 0.001$; **$p < 0.01$; *$p < 0.05$. Models adjusted for sex and age. M = Marginal means

CHAPTER III: DO ALL FORMS OF SOCIAL SUPPORT MATTER EQUALLY FOR LGB YOUTH?

Although poor psychosocial adjustment of many sexual minorities (i.e., non-heterosexuals; lesbian, gay, bisexuals (LGBs)) is well documented (Institute of Medicine, 2011; Marshal et al., 2011), the processes leading to this population's worsened outcomes compared to sexual majorities are poorly understood. There is evidence to suggest that an explicit focus on the role of social support is warranted; studies highlight the benefits of warmth, care, and support from loved ones, especially for sexual minorities (Hsieh, 2014). A link has been established between social support and adjustment: supportive romantic relationships (Rostosky, Riggle, Gray, & Hatton, 2007), families (Ryan, Russell, Huebner, Diaz, & Sanchez, 2010) and friendships (Shilo & Savaya, 2012) are associated with better adjustment for sexual minorities. Despite the established strong association between social support and adjustment, research has not disentangled how multiple sources of social support might be related to adjustment at the same time in the same sample LGB youth. Furthermore, most items and scales narrowly measure support by including only the perceived presence of social support (e.g., does one's mother show warmth or not).

Existing research on protective factors for LGBs investigates only the *presence* of social support. For this paper, I am working from the definition of social support that attends to the perceived amount of warmth and closeness received. For example, scholars have investigated the presence and frequency of different functions of social support (Shilo & Savaya, 2011), and other scholars have measured acceptance of sexual

orientation by asking the degree to which LGB participants felt accepted (Ryan et al., 2010). However, scholars who have investigated social support and adjustment for sexual minorities have only measured whether the *presence* and frequencies of social support were important to the youth. Measuring the *importance* of a social support system and not just the *presence* of a support system provides for a more holistic understanding (Marsh, 1986). For the LGB population in particular, one might imagine that youth can receive little support from their parents in regards to their sexuality, but perhaps this is not as important to youth than a potential lack of support from their friends. Thus, we inquire whether the relative *importance* of social support *combined* with the *presence* of social support from family, friends, and others is related to mental health adjustment.

Social Support, Depression, and Self-Esteem for LGB youth

Research suggests that some LGBs are at heightened risk for mental health disorders, especially depression and low self-esteem; these increased risks are in part attributed to stigma (Herek & Garnets, 2007). One recent meta-analysis found that sexual minority youth were at significantly higher risk for depression compared to their sexual majority counterparts (Marshal et al., 2011). LGB youth also report lower self-esteem compared to their sexual majority counterparts, especially when victimized at school (Kosciw et al., 2012).

However, high levels of support from parents (Ryan et al., 2010), teachers, classmates (Harbeck, 1992), and friends (Shilo & Savaya, 2012) can protect against depression for sexual minorities. Self-esteem and depression are linked to parent knowledge and lack of acceptance of sexual orientation: Savin-Williams (1989) found

that self-esteem was related to satisfaction with mother and father support and the presence of and contact with parents. For males, mother's knowledge of sexual orientation and infrequent contact with the father were predictive of higher self-esteem. For females, mother, but not father, relationships were predictive of higher self-esteem (Savin-Williams, 1989). In addition, when youth come out at school and had teachers and classmates that qwew supportive, they reported higher self-esteem compared to both youth who had come out and did not receive support and youth who chose not to come out (Harbeck, 1992).

Theoretical Framework: Social Support

Social support is defined by the attachments that individuals seek out and leverage to cope with stressors in their daily lives (Cobb, 1979). Social support oftentimes provides an "outside resource" that works to facilitate a sense of security and worth. Many receive simultaneous support from several different types of interpersonal relationships; that is, each relationship (e.g., family, friend, romantic partner) provides distinct types of resources and specialized support (Wellman & Wortley, 1990). Given this knowledge, it is surprising that few scholars have considered multiple forms of social support and their shared and simultaneous impact on behavioral and health outcomes.

Social support does not only act to directly influence mental health adjustment; instead, social support can intervene in multiple points throughout the stress process. For example, one study found that social support buffered depression indirectly; that is, social support minimized the manifestation of depression (Pearlin, Menaghan, Lieberman & Mullen, 1981). In fact, adolescents experience fewer adjustment problems when they

report higher levels of social support (Compas, Slavin, Wagner, & Vannatta, 1986; Ryan et al., 2010; Shilo & Savaya, 2011).

Forms of Social Support

It is unclear from previous research whether particular support systems are more strongly associated with well-being for LGB compared to sexual majority adolescents. In one study, LGB adolescents reported more friend support than parent support (Munoz-Plaza, Quinn, & Rounds, 2002). Other studies have found that parent (Hershberger, & D'Augelli, 1995; Ryan, Russell, Huebner, Diaz, & Sanchez, 2011), friend (Shilo & Savaya, 2012), teacher (Murdock & Bolch, 2005), and classmate (Kosciw et al., 2012) support are all essential to successfully cope with negative experiences for LGB youth. Each of these different forms of social support have individually been linked to mental health outcomes across multiple studies; however, no research to date disentangles the role of different sources of social support in the same sample of LGB youth.

Parent Support. Families are one of the most important institutions that contribute to the socialization of an adolescent; after all, young people must rely on families for support from even before they are conceived (Parke & Buriel, 2006). Both parenting practices and the role of the family system are important elements of adolescent adjustment and development (Parke & Buriel, 2006). From the tenets of parent support-rejection theory, researchers have identified that youth across the world need support (i.e., warmth and love) from their parents, and typically report psychological maladjustment if this need is not met. When youth perceive higher rates of rejection, they also report more mental health and behavioral problems (Rohner & Pettengill, 1985).

The same theoretical framework is as important—if not more important—for LGB youth. Most sexual majority youth can experience warmer and more constructive bonds with their parents around issues of sexual identity and sexual partners compared to sexual minority youth, and sexual minorities fear compromised relationships due to reactions to the disclosure of their sexual orientation (Savin-Williams, 1994). Savin-Williams (2003) described coming out to parents as one of the most treacherous tasks who a LGB young person must experience. Much is at stake for LGB adolescents that decide to disclose their sexual orientation. However, not all LGB youths' experiences with parents are characterized by stress and compromised adjustment; on the contrary, many parents support their LGB children.

Family support is protective for sexual minority youth. In one study of 245 families, scholars found strong associations between family acceptance, positive self-esteem, and social support for sexual minority youth (Ryan, Russell, Diaz, & Sanchez, 2010). Results indicated that family played an integral role in the mental and emotional health of sexual minority adolescents; the way that parents responded to their child's LGB identity remained crucial for healthy development. Doty and colleagues (2010) also assessed parent support of 98 LGB youth aged 18-21 and found that parent support diminished the effects of sexuality stress and emotional distress (Doty, Willoughby, Lindahl, & Malik, 2010). Thus, parent relations and support have clear implications for the well-being of LGB youth.

Support at School: Teachers and Classmates. Families are essential for efficacious socialization, yet experiences at school have also been found to have

profound impacts on LGB youth development. A study that explored LGB youths' school experiences found that troubles at school for bisexual boys and girls were attributed to the feelings the students' had about teachers (Russell, Seif, & Truong, 2001). Contemporary research indicates that students' find teachers and staff members more supportive than ever before. The 2011 Gay Lesbian Straight Education Network's national school climate survey report is encouraging: 95% of students identified at least one staff member that they considered supportive of LGBT students and more than half (54%) of students could identify six or more staff members (Kosciw et al., 2012). In addition, 50% of students reported that they felt comfortable or very comfortable talking to a teacher at their school about LGBT issues (Kosciw et al., 2012).

One study found that more reports of supportive educators in school were related to less victimization, greater self-esteem, higher GPAs, and fewer missed days of school (Kosciw, Palmer, Kull, & Greytak, 2013). However, while Kosciw and colleagues consider "supportive educators" studies have not considered distinct sources of support at school such as that expressed by teachers and classmates. In addition, youth who do not feel a strong sense of connection to classmates at school typically report that they are depressed and lonely (Rubin, Burgess, Kennedy, & Stewart, 2003); thus, it is imperative to understand the support youth do or do not have from their classmates and peers at school.

Clearly, research has demonstrated that support is critical for mental health in LGB youth. Research has not explored how these social support systems impact

outcomes when studied together, nor whether the support is related to adjustment in the same ways when youth rate the sources of social support as more or less important.

Gender Differences and Sexual Orientation

While research has found that all groups of sexual minorities experience some amount of compromised adjustment, there is a significant degree to which experiences differ across sexual identities (Wilson et al., 2011). That is, gays, lesbians, and bisexuals face distinct challenges and milestones that may be related to differences in mental health. Research has shown that gay men, lesbians, and bisexuals report variations in sexuality-related milestones (Martos, Nezhad, & Meyer, 2014). For example, lesbian youth disclosed their sexuality identity on average three years later than gay youth and report first intercourse 1.5 years later than gay youth.

Bisexual youth oftentimes fare worst amongst LGB populations. Bisexuals disclose their sexual orientation later than exclusively same-sex oriented youth (Martos, Nezhad, & Meyer, 2014). In addition, bisexuals must navigate a "dichotomous culture" and thus have little room to deviate from 'straight' and 'gay' binaries (Bradford, 2004), which may be related to their health outcomes. Studies have indicted that societal views toward bisexuality affect romance: One study showed that heterosexual and gay/lesbians were less likely to date bisexuals than to have sex or date no one (Feinstein, Dyar, Bhatia, Latack, & Davila, 2014). Likely related to these limited societal views, research has confirmed mental health disparities: bisexual females are at highest risk for maladaptive outcomes, such as depression (Udry & Chantala, 2002). In one study, bisexuals reported

the lowest self-esteem compared to straight, gay, and lesbian participants (Wilson, Zeng, & Blackburn, 2011).

Thus, mental health may vary based on experiences tied to the intersections of sexual identity and gender. There may be reason to believe that differences in the presence and importance of support are part of a distinct experience that plays out differently for male and female sexual minorities.

Current Study

By use of a novel approach to interpersonal support systems (i.e., considering both the support score and the importance of each social support system), the current study considers how multiple sources of social support might relate to mental health adjustment (depression and self-esteem), how youth ascribed importance might influence this association, and whether there are differences across gay, lesbian, and bisexual males and females. The following aims are explored:

Aim 1: Inquire whether different support systems significantly impact depression and self-esteem, and assess whether it matters how important each support system is when determining the role that the support system plays.

Aim 2: Explore the extent to which social support might impact depression and self-esteem differently. Because of previous findings that bisexual females report poorest mental health amongst all LGB subpopulations (Udry & Chantala, 2002), I expect that any form of social support will most strongly be associated with depression and self-esteem for bisexuals. Specifically, because bisexual women face high pressures to

conform to societal heteronormativity, I expect this effect to be stronger for bisexual females compared to their male counterparts.

Method

Sample. I used data from the first wave of a longitudinal study of the risk and protective factors of suicide among 1,021 queer (e.g., lesbian, gay, bisexual) youth and participants with same-sex attraction in three cities in the northeast, southwest, and west coasts of the United States. The majority of the youth were recruited from community-based agencies or college groups for queer youth, and earlier participants referred others. Of the included participants (N = 932, ages 15-21 at time of recruitment, M = 18.3, SD = 1.8), 28.5% identified as gay men, 19.8% as lesbian or gay-identified women, 13.7% as bisexual men, 27.5% as bisexual women, 2.4% as questioning men, 3.6% as questioning women, 1.2% as men with same-sex attraction, and 3.2% as women with same-sex attraction. Using current federal reporting guidelines, 39.2% were of Hispanic or Latino background. Regarding race, 20.8% were White, 24.2% Black or African-American, 4.8% Asian, 2.9 % American Indian or Alaskan Native, 0.8% Native Hawaii or Other Pacific Islander, 22.4% more than one race, and 24.0% did not report their race. Table 1 presents more detailed sample demographic information.

Measures.

Demographic Measures. Participant characteristics of the sample are displayed in Table 1 including age, which was self-reported as number of years by the participant, race/ethnicity, and the age at which a participant first disclosed he/she was lesbian, gay, bisexual, or queer.

Social Support. Support was measured using a subscale of The Child and Adolescent Social Support Scale (CASS; Malecki, Demaray, & Elliot, 2000). Four sources of social support were measured separately (parents, classmates, teachers, close friend) by creating a mean score from 12 items (48 total) that asked the degree to which they received support.

Twelve items were averaged that asked participants how often certain supportive behaviors occurred. Examples of items included: My parents "show they are proud of me", "listen to me when I need to talk", and "make suggestions when I don't know what to do". Response options ranged on a 7-point scale from 1 (*Never*) to 7 (*Always*). Higher scores correspond to higher levels of perceived support.

Twelve items were averaged that asked how important the support was to the participant. Response options ranged on a 3-point scale from 1 (*Not at all Important*) to 3 (*Very Important*). To create a scale that accessed each type of support and the importance of the support, the twelve items were averaged ($\alpha = 0.88$). Last, the perceived support score and importance score were multiplied together to assess the parent, classmate, teacher, and close friend social support. ($\alpha = 0.83$) Thus, scores ranged from 1 (*No support and not important*) to 21 (*Most support and very important*).

Depression. Depression was measured using 20 items adapted from the Beck Depression Inventory – Youth (BDI-Y; Beck, Beck, Jolly, & Steer, 2005). Participants were given a list of things people think and feel and then asked to choose the responses that correspond to how they feel. Examples of items included: "I think my life is bad; I have trouble doing things; I wish that I were dead". Response options range from 0

(*Never*) to 3 (*Always*). The 20 items were averaged so that higher scores correspond to greater levels of depression ($\alpha = 0.93$).

***Self-Esteem*.** Self-esteem was assessed using 10 items adapted from the Rosenberg Self-Esteem Scale (see Rosenberg, 1979). Examples of items included: "I feel that I am a person of worth, at least on an equal plane with others", "All in all, I am inclined to feel that I am a failure", and "I am able to do things as well as most other people." Response options ranged from 1 (*Strongly Agree*) to 4 (*Strongly Disagree*). Five items indicating feelings of failure and low self-esteem were reverse coded. All items were summed and averaged to create a self-esteem scale where higher scores indicate higher levels of self-esteem.

Plan of Analysis. Confirmatory factor analysis was first performed to ensure robust measurements of social support, depression, and self-esteem for all subgroups. R Laavan was used to conduct a structural equation model; I ran the full model for all 932 participants (see Figure 1).

Model Fit and Parceling. The structural equation model is presented in Figure 1. Three parcels were created for each system of social support: parent, classmate, teacher, and close friend. An Item-to-Construct Balance model was utilized to parcel; thus, the highest loaded item was grouped with the lowest loaded item to create the first parcel, and so on (for more information regarding parceling, see Little, Cunningham, Shahar, & Widaman, 2002). Model fit was good (CFI = 0.995; RMSEA=0.028): no adjustments were made to the model to facilitate a better fit. The loadings for the three

parcels on each social support construct were good. The loadings for self-esteem were not as robust, but the three parcels still had acceptable loadings.

There was no significant difference (p = .30) between both the weak and strong invariance tests across groups; thus, the investigation of differences in the relationship between social support and mental health across gay, bisexual, and lesbian groups was permissible.

An omnibus test revealed that there were differences between the four groups. Multiple group comparisons were assessed to see whether the significance of the beta coefficients for the pathways differed across models. To do this, all regression pathways were constrained across groups to estimate a base model to compare each subsequent group model. Next, individual pathways were constrained separately across groups and fit statistics were compared the base model to determine whether there were significant differences. For example, "parent support and importance" were constrained while other pathways were freely estimated and compared the fit statistic to the base model.

Results

Table 6 provides the descriptive information for key study variables and Table 7 displays the correlations. As a whole, participants reported receiving more friend support than parent, classmate, and teacher support; however, parent support was rated as most important to all participants followed by classmate and teacher support.

Aim 1: The Importance of Social Support for LBGs. First, results indicate that higher cross product between parent support and importance of this support was associated with moderately less depression for the entire sample. In addition, higher

levels of close friend support and the importance of their support was weakly and negatively associated with depression. The association between support and importance for classmates and teachers was not significant in the overall model.

Similarly, parent support/importance and close friend support/importance were positively related to self-esteem. Both parent and close friend support/importance were positively moderately associated with self-esteem. The relation between classmate and teacher support were not significant.

Aim 2: Differences across Lesbian, Gay, and Bisexuals. I next inquired whether social support would operate differently on depression and self-esteem for gay, lesbian, bisexual male, and bisexual female youth. The model fit indices indicated that social support worked equally well across groups. Differences in associations between support and mental health were found across groups. Table 8 displays the standardized betas for each pathway (e.g., depression on parent support/importance) for each of the four subgroups in the study.

Gay Male Youth. Only parent support/importance was associated with less depression. Parent and close friend support/importance were associated with higher self-esteem for gay youth.

Lesbian Youth. Parent, classmate, and close friend support/importance was related to less depression for lesbian youth. On the contrary, no support systems were significantly related to self-esteem for lesbian youth.

Bisexual Males. Parent support/importance was associated with of less depression and higher self-esteem for bisexual males.

Bisexual Females. Close friend support was associated with less depression for bisexual females and parent support/importance was associated with higher self-esteem.

Discussion

I investigated the role of protective factors relevant to LGB youth at a time when national attention is focused on the tribulations of LGBs. There has been little explanation of potential ways that youth can utilize support systems to cope with stressors stemming from sexual minority status (or identity). This project advances knowledge of the role of social support for LGBs. Parent and friend support/importance was associated with lower depression and higher self-esteem (except for lesbians), whereas experiences at school were not significantly associated with mental health adjustment in the sample of LGBs. Overall, the patterns of social support corroborated the findings of previous contemporary research: LGB youth rated friend support as most prevalent and important (similar to the findings of Doty et al., 2011).

Though a relatively large body of research has highlighted the importance of school experiences for LGB youth (see Kosciw et al., 2012), teacher support was not significantly associated with depression and self-esteem for LGB youth in this sample. Classmate support was only related to depression for females. LGB participants rated teacher support as more important than classmate support (see Table 6), yet not as important as teacher support. This is important to note because parents are oftentimes viewed as important agents of interpersonal support yet more research can continue to include teachers, classmates, and administrators (see Shilo & Savaya, 2011; Ryan et al., 2010). Scholars should continue to explore the role of supportive teachers and classmates

and develop appropriate instruments that can measure the unique contribution that supportive members at school might make to the overall well being of sexual minorities.

The minority stress model (Meyer, 2003) posits that coping mechanisms (e.g., social support from interpersonal relationships) can buffer the relation between minority stress and mental, emotional, and behavior health outcomes; however, this study provides evidence that scholars need to more thoughtfully conceptualize how each target of support might impact different facets of adjustment for various subpopulations of LGB young people. This suggests that social support may operate in different ways for some than others: for example, support at school was neither as important nor as predictive of mental health adjustment as parent and friend support. The recent shift to resiliency models and positive youth development (see Saewyc, 2011) is important. The nuances in social support revealed by this study should be considered in future resiliency research. With this knowledge, scholars and stakeholders can identify and leverage the most successful ways to protect and support vulnerable populations such as LGB youth (Saewyc, 2011).

One notable finding is that no systems of social support were protective against lower self-esteem outcomes for lesbians. However, three social support systems (parent, classmate, and close friend) were significantly associated with less depression for lesbians. This has implications for how we consider the processes that may differently influence depression and self-esteem. This finding contradicts previous literature that has implicated friends as especially important to lesbian women because of the void they may fill that exists from compromised support from family and community members (Jordan

& Deluty, 1998). The finding also contradicts an early study that showed that the well being of lesbian women was associated with interpersonal support that specifically reassured their worth as lesbian women (Wayment & Peplau, 1995). The findings from this study do not lead us to believe that supportive interpersonal relationships make no difference for lesbians' self-esteem; however, it is compelling that self-esteem for lesbians was not clearly associated with social support—whereas depression was— to the degree found with gay, bisexual, and MSM/WSW heterosexual-identified participants.

Findings regarding subgroup and gender differences show different patterns of social support and the reported relative importance on mental health adjustment. This suggests that counselors and stakeholders must realize that not all systems of social support are equally important to LGBs. In this sample, bisexual females reported better mental health outcomes in relation to higher levels of social support, yet only parent support was linked to depression and self-esteem for bisexual men. This suggests that support systems operate differently across minority individuals and there is one approach to dealing with LGB adolescents' maladjustment at home and school. Stakeholders should take into account the particular sexual identity of the individual when working to create supportive environments for sexual minorities at home and school.

Limitations and Future Directions. One limiting aspect of this study is the sample that measures only LGB youth; thus, we are not able to understand how the impact social support systems might operate differently for sexual majorities. For example, it would be interesting to know whether LGB youth found parent support significantly more important than sexual majorities. In addition, this study relies on cross-

sectional data, therefore we cannot conclude whether the support systems are directly predicting mental health adjustment—the opposite could be true. We would be able to take earlier reports of depression and self-esteem into consideration with longitudinal data. Last, the social support scale used did not measure sexuality specific-support. Previous research has noted the particular importance of sexuality-specific social support (see Doty et al., 2011), which suggests that sexual-specific support could play a distinct role in adjustment and mental health; thus, future studies should study multiple types of social support.

This study focused on measures of social-emotional support. Two domains of social support have been explored in previous literature: instrumental (advice giving) and social-emotional support (warmth and care); future work should consider both domains. Previous research has shown that LGB youth perceive instrumental support from both LGB and sexual majority friends and parents (Munoz-Plaza et al., 2002), and this support is related to well-being. Future studies should also consider different types of social support and the specific facets of this support, such as monetary assistance, emotional support, advice from LGB elders and role models, and relational support.

Very little research considers the role of romantic relationships as potential supportive buffers, and the few studies that have explored romantic relationships among LGB youth (or samples more generally) have reported mixed findings (see Russell, Watson, & Muraco, 2011). Scholars should continue to explore the potential role that same-sex partners and their own well-being—disclosed to others and not—might have on mental health for LGB youth.

Future research should continue to consider differences across sexual identities to reveal nuances in mental health adjustment and the role of social support. In addition, researchers should utilize longitudinal data to understand how support might impact LGB youth over time. There are many distinct factors pertaining to the LGB experience that scholars must measure when studying LGB youth: for example, the age that youth disclose their sexual identity is extremely relevant to the implications of interpersonal support, acceptance and rejection, and experiences of mental health. Scholars must also consider support from siblings, family structure, targets of disclosure (i.e., who youth have disclosed their identity to), and measures specific to sexual orientation, such as parent acceptance of one's sexual orientation.

Table 6

Frequencies of Study Variables

	Overall Sample (N=932)	**Gay** (n=310)	**Lesbian** (n=193)	**Bisexual Male** (n=155)	**Bisexual Female** (n=274)
Age	18.33	18.82	18.4	18.61	17.62
Depression	0.82	0.69	0.76	0.84	0.96
Self Esteem	3.06	3.17	3.15	3.05	2.96
Parent support x importance	8.56	8.89	8.7	8.79	8.24
Classmate support x importance	7.06	7.65	6.88	6.82	7.05
Teacher support x importance	9.85	10.77	9.73	9.5	9.28
Close friend support x importance	12.88	13.36	12.77	12.14	13.22

Note: All values represent the mean score of each variable.

Table 7

Bivariate Correlations and Descriptives of Independent and Dependent Variables

	1	2	3	4	5	6
1. Depression	1.00					
2. Self Esteem	-0.64**	1.00				
3. Parent support x importance	-0.38**	0.30**	1.00			
4. Classmate support x impt.	-0.30**	0.30**	0.47**	1.00		
5. Teacher support x impt.	-0.29**	0.16*	0.35**	0.54**	1.00	
6. Close friend support x impt.	-0.26**	0.19*	0.37**	0.42**	0.38**	1.00

Note: * $p < .05$, ** $p < .01$

Table 8

Associations Between Type of Support System and Mental Health Outcome by Sexual Orientation

	Overall (N=942)	**Gay** (n=312)	**Lesbian** (n=195)	**Bisexual Male** (n=158)	**Bisexual Female** (n=277)
Self Esteem					
Parent importance	0.26**	0.21**	0.15	0.41*	0.37**
Teacher importance	0.10	0.13	-0.01	0.07	0.02
Classmate importance	0.10	0.10	0.21	0.02	0.24
Close friend importance	0.31**	0.17*	0.16	-0.06	0.31*
Depression					
Parent importance	-0.29**	-0.22***	-0.18*	-0.39***	-0.22*
Teacher importance	-0.01	0.04	0.08	-0.12	-0.03
Classmate importance	-0.17	-0.12	-0.20*	-0.04	-0.12*
Close friend importance	-0.07**	-0.10	-0.14*	0.08	-0.14**

Note: Numbers presented are standardized beta coefficients; *** Denotes significance at $p <$. 001; **$p < .01$; *$p < .05$.

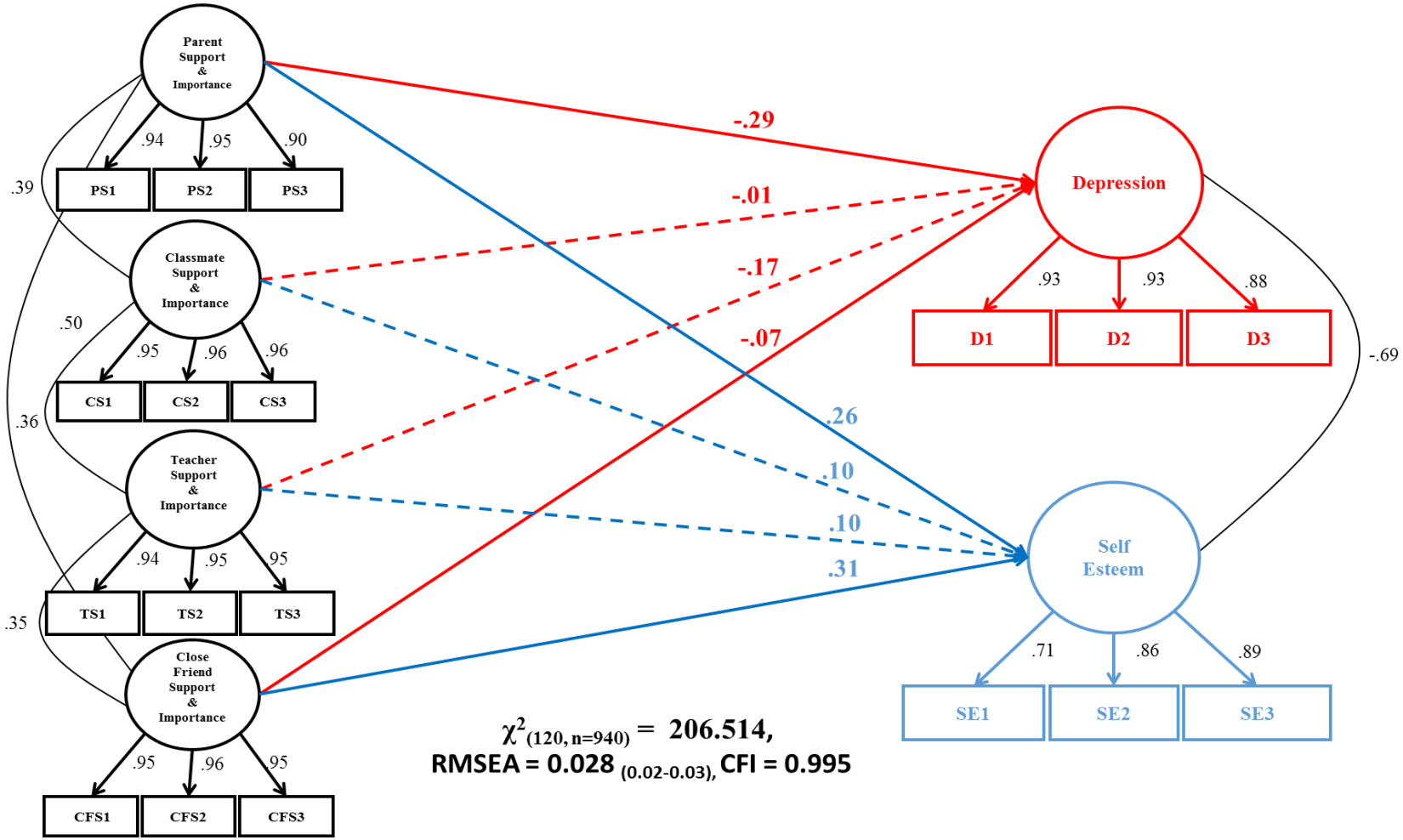

Figure 1

Structural equation model that presents the associations between social support and mental health for LGB youth

CHAPTER IV: FAMILY ACCEPTANCE IS PROTECTIVE AGAINST BIAS-BASED BULLYING FOR LGB YOUTH

Research has documented that the effects of bullying can be devastating: bullied youth across the world report being more depressed, more suicidal, and unhappier across the lifespan (Bauman, Toomey, & Walker, 2013; Klomek, Marrocco, Kleinman, Schonfeld, & Gould, 2007; Liu, Lu, Zhou, & Su, 2013). Lesbian, gay, and bisexual (LGB) youth report higher levels of victimization and bias-based bullying than their sexual majority counterparts (Katz-Wise & Hyde, 2012). Bias-based bullying is harassment based on personal characteristics such as race/ethnicity, sexual orientation, religion, body size, or disability (Russell, Sinclair, Poteat, & Koenig, 2012); in most cases, these are personal characteristics that one does not choose. Bias-based bullying negatively affects all youth—and is especially prevalent amongst LGB youth (Kosciw et al., 2012; Russell et al., 2012). For example, amongst 17,366 middle- and high-school students, lesbian, gay, bisexual, transgender, and questioning (LGBTQ) youth were between 5 and 8 times more likely to experience bias-based bullying (alone compared to in combination with cyber-bullying) than their sexual majority counterparts (Sinclair, Bauman, Poteat, Koenig, & Russell, 2012). These high levels of victimization have in part been attributed to minority stress (see Meyer, 2003).

The minority stress model (Meyer, 2003) suggests that stigma and prejudice are in part responsible for stressors experienced by LGB individuals; this felt stigma places LGB populations at risk for compromised mental health. While a substantial amount of research has confirmed the link between LGB stigma and compromised outcomes as a

result of minority stress, few scholars have focused on potential mechanisms for resiliency in this population (within and outside the context of the minority stress model; for exceptions see Saewyc, 2011). A recent meta-analysis noted a focus on negative parent influences (e.g., parental rejection) on LGB maladjustment (e.g., substance abuse, violence, and suicide; Bouris et al., 2010). However, more recently, there has been a growing interest in the role of interpersonal relationships as protective, and therefore positive, factors for LGB youth (Ryan, Russell, Huebner, Diaz, & Sanchez, 2010; Shilo & Savaya, 2011). Parent and family relations with LGB children have been measured in two different ways: support and acceptance of a child's sexual orientation specifically (e.g., telling a child he is loved as a gay male), and general support and acceptance of the child (e.g., telling a child he is loved). I consider both support and acceptance of sexual orientation separately in this project; both dimensions of family relations have been found to be related differently to mental health outcomes, such as depression (Feinstein, Wadsworth, Davila, & Goldfried, 2014).

On one hand, there is strong evidence that parent and family support is essential for well-being amongst LGB youth (Ryan, Russell, Huebner, Diaz, & Sanchez, 2009; Shilo & Savaya, 2011), yet, on the other, there is evidence that shows parent and family support may not buffer the relation between harassment (general and bias-based) and maladaptive outcomes (Hershberger & D'Augelli, 1995; Hershberger & D'Augelli, 1995; Poteat, Mereish, DiGiovanni, & Koenig, 2011). In one study, although parent support moderated the effects of general and homophobic bullying on suicidality for sexual majorities, the same was not true for parent support's effect on LGBT participants'

suicidality or school belonging (Poteat et al., 2011). However, Poteat and colleagues did not study sexuality-specific parent support. Other researchers found that parent support did not mediate the relation between victimization and mental health by itself (Hershberger & D'Augelli, 1995). Only one study has shown that family connectedness was protective against suicidal ideation amongst 2,225 youth that reported same-sex behavior in Minnesota; however, this study was not able to that demonstrate that family connectedness was causally related to suicidality (Eisenberg & Resnick, 2006).

Taken together, these mixed findings provide the impetus for an investigation into potential influences of parent support on the link between bullying and depression by use of longitudinal data that demonstrate how the family can buffer bullying's role in depression over time. Is general parent support sufficient to buffer minority stress, or is it the sexuality specific nature of support that would matter most?

Bias-based Bullying

There is strong evidence to suggest that bias-based bullying is detrimental for all adolescents (Russell, Sinclair, Poteat, & Koenig, 2012); one type of bias-based bullying is LGB-based harassment. Scholars have explored the effects of LGB-specific bullying on well-being: one study analyzed two large population-based studies of adolescents and compared youth who were bullied and those who were not by analyzing general, bias-based, and LGB-specific bullying (Russell et al., 2012). Youth that reported general (i.e., non-biased based) bullying were 2.5 times more likely to report depression, whereas LGB-based bullying was associated with 5.5 times more likely of reporting depression (Russell et al., 2012) compared to those who were not bullied. In a sample of 117

seventh-grade students, Poteat and Espelage (2007) found that youth that were the target of bias-based (homophobic) bullying also reported more personal distress, anxiety, and depression. Because of their established importance to adolescent development (e.g., Parke & Buriel, 2006), family intervention might be expected to buffer the effects of bullying on compromised well-being for LGB youth.

Role of Parent Relations for Adolescents

Parenting practices are important elements of adolescent adjustment and development (Parke & Buriel, 2006). Two decades of research suggest that parenting styles and behaviors directly affect outcomes for children (Baumrind, 1991); specifically, parent support (i.e., behaviors characterized by warmth and love) and autonomy granting (e.g., control of child's behaviors and choices) is related to healthy development for adolescents (Baumrind, 1991; Parke & Buriel, 2006). However, very little research has looked at the role of autonomy in the experiences for LGB adolescents. The handful of studies that have focused on autonomy in LGB populations found that controlling families were associated with less instances of disclosing same-sex attractions (Legate, Ryan & Weinstein, 2012), and when fathers were autonomy-supportive, homophobic attitudes from fathers were less predictive of maladjustment (Weinstein, Ryan, DeHaan, Przybylski, Legate, & Ryan, 2012). Thus, research has mainly focused on two distinct roles of parents in the development of LGB adolescents: parent support and acceptance.

Parent and Family Acceptance of Sexual Orientation. One way to understand the role of parents in the lives of sexual minorities is the acceptance of their child's sexual orientation. From the tenets of parent support-rejection theory (Rohner &

Pettengill, 1985), researchers have found that youth across the world need support (i.e., warmth and love) and acceptance from their parents, and oftentimes report psychological maladjustment if this need is not met. Rohner and Pettengill (1985) found that when youth perceived higher rates of perceived rejection from parents, they also reported more mental health and behavioral problems. Thus, we consider family acceptance as a protective factor that might buffer the relation of bias-based bullying on depression.

Ryan and colleagues (2010) surveyed 245 Latino and non-Latino White young adults and found that family constituted a protective factor in terms of the way that parents responded to their child's LGB identity. Specifically, family acceptance predicted a host of indicators of improved well-being: greater self-esteem, social support, and general health (Ryan et al., 2010); whereas family rejection predicted negative health outcomes for LGB youth such as increased odds of suicidal behavior (8.4 times), depression (5.9 times), and risky sex (3.4 times) compared to youth that reported lower levels of family rejection (Ryan, Huebner, Diaz, & Sanchez, 2009). Thus, there is demonstrated higher risk of maladjustment for youth that disclose their sexual orientation to their parents and are met with hostility/rejection. These trends are corroborated by other evidence: family acceptance of sexual orientation was associated with improved well-being and reduced distress for 461 self-identified LGB adolescents and young adults in Israel (Shilo & Savaya, 2011). In addition, bisexuality was specifically associated with lower well-being due to low family acceptance (Shilo & Savaya, 2012).

On the contrary, parent rejection is associated with maladaptive outcomes for young adolescents (Rohner & Pettengill, 1985), and there is evidence that parent rejection

may lead to disparately maladaptive outcomes for LGB youth compared to sexual majorities (Savin-Williams, 1994). In one study, youth who had told at least one parent about their sexual orientation reported higher rates of physical and verbal abuse and acknowledged more suicidality and those youth who had not come out expected more parental rejection (D'Augelli, Hershberger, & Pilkington, 1998).

Parent and Family Support of LGB Youth. Studies have shown that family and parent support are linked to better psychosocial adjustment, mental health, and overall well-being for LGBs (Ayala & Coleman, 2000; Doty & Brian, 2010; Elizur & Ziv, 2001; Hershberger & D'Augelli, 1995; Mcdowell & Serovich, 2007; Mustanski, Newcomb, & Garofalo, 2011; Vincke & Van Heeringe, 2002). In one study, Needham & Austin (2010) used nationally representative data and found that parental support mediated the associations between sexual orientation and mental health outcomes; for example, parent support mediated the relation between sexual orientation and suicidality such that higher levels of parent support was associated with less suicidality in LGBs (Needham & Austin, 2010).

Depression in LGB Youth

While there is nothing inherently depressogenic about same-sex attraction or LGB status in itself (Diamond et al., 2011), research has implicated discrimination and stigma as the primary cause for higher depression (amongst other mental health outcomes) in LGB youth (Meyer, 2003). After an examination of 12 studies that focused on depression in LGB individuals, Marshal and colleagues (2011) found a medium effect size for the relation between LGB status and depression (d =.33), potentially due to discrimination

and stigma. In a qualitative study of 10 LGB adolescents with clinically depressive symptoms, LGB-related victimization by parents and extra-familial adults on the basis of sexual orientation were found to be the most common causes of LGB depression (Diamond et al., 2011).

Current Study

Previous research has produced mixed results toward understanding the role of parents as buffers against bullying in the lives of LGB youth. In the present study, longitudinal data are used to demonstrate evidence for causality. The following aims are addressed for the sample of LGB youth:

Aim 1: Test whether bias-based bullying is associated with higher rates of depression in LGB youth. Based on previous research (see Russell et al., 2012), I predict that LGB youth that report higher rates of bias-based bullying will also report higher rates of depression.

Aim 2: Test whether parent support and family acceptance of sexual orientation buffers the relation between bias-based bullying and depression in different ways. Based on the mixed evidence that documents that parents do (Eisenberg & Resnick, 2006) and do not buffer bullying and suicidality (Poteat et al., 2011), I expect that family acceptance—but not family support—will moderate the relation between bias-based bullying and depression.

Method

Sample. I used data from the first and second waves of a longitudinal study of the risk and protective factors of suicide among 932 lesbian, gay, and bisexual youth and

participants with same-sex attraction in three cities in the northeast, southwest, and west coasts of the United States. The recruitment and demographics are identical to those reported in the third chapter of this dissertation (see page 56).

Measures.

Parent Support. Twelve items were averaged that asked participants how often certain supportive behaviors occurred. Examples of items included, How often do my parents, "show they are proud of me", "listen to me when I need to talk", and "make suggestions when I don't know what to do." Response options ranged on a 7-point scale from 1 (*Never*) to 7 (*Always*). Higher scores correspond to higher levels of perceived parent support ($\alpha = 0.88$).

Family Acceptance. Family acceptance of sexual orientation is measured using one item: "What percentage of family members are accepting of your sexual identity?" Response options include: 1 (*Less than 25%*), 2 (*25% to 50%*), 3 (*51%-75%*), and 4 (*More than 75%*). Higher scores indicate more acceptance of sexual identity.

Bias-based Bullying. Bias-based bullying at school (LGB-specific) was measured by three single items that measured three sexual orientation-specific domains of victimization: verbal bullying ("verbal insults"), threats of bullying ("threats of physical violence") and physical bullying ("objects thrown at you"). Response options ranged from 0 (*Never*) to 3 (*3+ times*). Higher scores correspond to greater prevalence of bias-based bullying.

Depression. I measured depression using 20 items adapted from the Beck Depression Inventory – Youth (BDI-Y; Beck, Beck, Jolly, & Steer, 2005). Participants

were given a list of things people think and feel and then asked to choose the responses that correspond to how they feel. Examples of items included: "I think my life is bad; I have trouble doing things; I wish that I were dead". Response options ranged from 0 (*Never*) to 3 (*Always*). The 20 items were averaged so that higher scores correspond to greater levels of depression ($\alpha = 0.93$).

Plan of Analysis. To test my two aims, I used M-Plus 7.2 to conduct three structural equation models that tested depression over nine months, the association between bias-based bullying and depression over nine months, and potential buffer effects of parent and family support and acceptance on the relation between bias-based bullying and depression. To test aim 2, I ran two separate models: 1) parent support was tested as a potential moderator between bias-based bullying and depression while controlling for family acceptance, and 2) parent acceptance was tested as a potential moderator of bias-based bullying's relation on depression while controlling for parent acceptance. To interpret the statistically significant interaction, I used standard pick-a-point procedures (e.g., Aiken & West, 1991), such that the simple slopes describing the associations between family acceptance and depression were evaluated.

Model Fit and Parceling. In all models, we adjusted for age, race/ethnicity, sexual orientation, and sex. I used chi-square, RMSEA, and CFI fit indices to evaluate my model: the fit of the final model (Figure 1) was good. I parceled using the Item-to-Construct method by pairing the highest correlated item with the lowest correlated item, and so on (for more information regarding parceling, see Little, Cunningham, Shahar, & Widaman, 2002). For depression, two parcels included 7 depression items and the third

included 6 items. For parent support, I created three parcels of 4 variables each. Acceptance was not parceled, as it was measured using a single-item.

Results

No demographic variables, with the exception of sex, were significant controls in my final model; therefore, I dropped the other demographic variables from all analyses and displayed frequencies separately by sex. Table 9 displays the frequencies of all study variables. Males were slightly older than females and reported more parent support, family acceptance, and bullying than females. Females reported more depression at both times 1 and 2 than males. Table 10 displays the correlations of study variables. Depression at time 1 was positively correlated with depression at time 2. Bias-based bullying was positively correlated with depression at both times 1 and 2. Parent support and family acceptance re negatively correlated with depression at times 1 and 2.

There was no measurement invariance for depression from time 1 to time 2. That is, the same construct of depression was measured at both time points, as evidenced by a strong correlation between time 1 and time 2. Analysis of measurement invariance showed that the measure of depression was stable across time (B=0.59).

Results indicated that bias-based bullying at time 1 was moderately associated with depression at time 2 (B=0.33) after controlling for depression at time 1.

I tested whether parent support and family acceptance separately buffered the relation between bias-based bullying and depression. While controlling for family acceptance, parent support did not statistically significantly buffer the relation between bias-based bullying at time 1 and depression at time 2 (B = -0.07, p = 0.54). However,

when controlling for parent support, family acceptance significantly buffered the relation between bias-based bullying at time 1 and depression at time 2 (B=-0.44, p = 0.03). The interaction was evaluated by plotting the simple slopes of the lines defining the association between family acceptance and depression for LGB youth. I plotted 1 SD above and below the mean of parent acceptance to represent higher and lower family acceptance, respectively. Reporting higher levels of family acceptance was associated with lower levels of depression.

Discussion

Findings from the current study help to clarify important nuances regarding parent support and family acceptance of sexual orientation and their role in well being for sexual minorities. These findings corroborate evidence that has found that general parent support alone does not negate the effects that bullying and harassment have on mental health (Hershberger & D'Augelli, 1995; Poteat et al., 2011). However, I found that family acceptance of sexual orientation alone significantly buffered the relation between bias-based bullying and depression. This finding keeps with the body of evidence that demonstrates the importance of protective factors for youth (Saewyc, 2011; Eisenberg & Resnick, 2006; Resnick et al., 1997) and suggests that sexuality-specific support from important relationships might best protect sexual minorities.

This study confirmed that bias-based bullying predicts lower depression nine months later in a sample of LGB youth. This is not surprising, as research has established that LGB-specific harassment is linked to higher rates of depression (Poteat & Espelage, 2007; Russell et al., 2012; Sinclair et al., 2012). Scholars need to be more inclusive and

attentive to sexuality-specific measurements of the LGB experience (see Mayer et al., 2008) because support related to sexual orientation may operate differently than general social support, as evidenced by the findings in this study. On one hand, sexual minorities may have parents that generally support their aspirations and health, yet completely reject their same-sex identity; on the other, LGBs may have parents that are unsupportive for reasons that do not pertain to their sexual identity—and perhaps these youth report low parent support, but the levels of their outcomes is more explained by experiences dealing with their sexual orientation specifically, such a parent acceptance. This distinction is supported by previous research: in one study, parent acceptance moderated the associations between depression and both internalized homonegativity and rejection sensitivity, such that when reporting less accepting parental attitudes, rejection sensitivity was significantly associated with depressive symptoms—yet general parent support did not moderate depression's association with internalized homonegativity or rejection sensitivity (Feinstein et al., 2014). Thus, research should continue to disentangle family and parent support, acceptance, and rejection based on sexual orientation to uncover the nuances of the potential role of families.

A major strength of this study was the use of data that included sexuality-specific measures compounded with the large within-group sample of LGB participants. This allowed for a more accurate and nuanced view into the experiences of these participants. With a family acceptance of sexual orientation measure, I was able to uncover outcomes that are specific to LGBs. In addition, another strength was the use of multiple time points. In a review on parental influences of LGB health, Bouris and colleagues (2010)

found that only three of 31 studies had presented findings based on longitudinal designs. The same review also found that most sampled youth were White (Bouris et al, 2010); whereas the sample presented here was ethnically diverse: 40% of the sample identified as Latino and 24% were African American.

Limitations and Future Directions. While many strengths emerged from the use of sexuality-specific measures and two waves of data, limitations still exist with the present study. First, the sample does not include sexual majorities, and thus we cannot compare the potential role of general parent support as a protective for sexual majorities, especially for those that may be victim to bias-based bullying. This is particularly compelling and timely to investigate given that previous research has found that bias-based bullying is particularly harmful for LGB adolescents (Poteat et al., 2011). Second, while the sample is ethnically and sexually diverse, participants were drawn from three metropolitan cities from the United States. Though more diverse than most non-population based samples that have explored experiences for LGBs, findings presented here cannot be generalized to all youth in the United States, as nationally representative samples are most robust for exploring population-level trends. Third, the measures used in this study were "parent support" and "family acceptance of sexual orientation"; the targets of support and acceptance may not actually be the same. Future studies should ensure consistency of language (i.e., parent support/warmth and parent acceptance of sexual orientation).

My study inquired whether different aspects of parent support and family acceptance buffered the relation between bias-based bullying and depression. In addition

to considerations of parents as protective factors, there are multiple parts of the family system that can be examined: extended family members, siblings, and families of choice (e.g., parental figures that individuals turn to because of their support of their sexual orientation). Future research should explicitly measure which parts of the family system are supportive and accepting of one's sexual identity and the potential differential impact of these relations.

Future research should also expand the outcomes of investigation to other health areas: substance use, victimization, and sexual behavior. Most research that has investigated parental influences on LGB well-being have focused on suicidality and depression (Bouris et al., 2010); since LGBs experience health disparities in sexual health (Garofalo, Mustanski, & Donenberg, 2008), we need to examine whether relations with family and parents are differently associated with various health outcomes both positive and negative. Other areas of concern should be academic, occupational, and social adjustment for LGBs. Scholars should explore whether LGB experiences at school might be influenced by the levels of acceptance and support that they receive at home. One question to consider is whether or not the patterns of experiences at school—that may be incongruent to those experiences at home—operate differently for sexual minorities than their majority counterparts?

Scholars should also investigate both potential direct and indirect effects of parental monitoring and autonomy, across cultural contexts, on the adjustment of sexual minorities. Scholars have yet to conceptualize autonomy as either a risk or protective factor for sexual minorities. For sexual majorities, perceptions of autonomy-granting has

been found to be important for a White adolescent's propensity for adaptive coping responses (Holmbeck, Paikoff, & Brooks-Gunn, 1995) and is a major aspect that defines a shift from childhood to adolescence in which parents must adapt and renegotiate their parenting strategies (Seiffge-Krenke & Pakalniskiene, 2011). Thus, scholars should consider whether patterns of autonomy-granting for LGB youth is consistent with the literature on sexual majority youth (see Crockett, Veed, & Russell, 2010). Autonomy might play out differently for LGB youth depending on whether parents delay freedoms, for example, in attempt to protect their child from problems related to their sexual identity.

Scholars should expand their focus to include the potential role of romantic relationship support and acceptance. Romantic relationships provide adolescents with the tools for successful development over the life course (Diamond, 2003) and are essential to the exploration of identities for all adolescents (Furman & Schaffer, 2003). Same-sex interested adolescents do in fact date both other-sex peers (Savin-Williams, 1994) and same-sex peers (Remafedi, 1987). Scholars should consider multiple aspects about dating (e.g., frequency, quality of relationships, duration) to understand how romantic relationships—while increasing the visibility of a non-heterosexual identity—may serve to protect an LGB young person from maladaptive outcomes.

In summary, though rejection by parents has been associated with violence and suicidality (D'Augelli et al., 1997) for LGB youth, family acceptance has been associated with well-being and better adjustment (Ryan et al., 2010; Shilo & Savaya, 2011). Findings from this study reveal that there are positive benefits for the LGB youths' well-

being if their family accepts them as LGB identified. This effect is much stronger than the role of general parent support for LGB.

Table 9

Frequencies of Study Variables

	Males (*n*=441)		**Females** (*n*=496)	
Study Variable	*Mean*	*SD*	*Mean*	*SD*
Age	18.98	1.61	18.24	1.72
Parent Support	45.00	16.95	42.74	16.54
Family Acceptance	2.51	1.22	2.28	1.27
Bias-based bullying	0.90	0.83	0.50	0.67
Depression (time 1)	14.88	12.28	17.36	12.62
Depression (time 2)	12.44	10.87	15.90	11.52

Note: All values represent the mean (M) and standard deviation (SD) of each variable.

Table 10

Bivariate Correlations and Descriptives of Independent and Dependent Variables

	1	2	3	4	5
1. Parent support	1.00				
2. Family acceptance	0.20**	1.00			
3. Bias-based bullying	-0.12*	-0.41**	1.00		
4. Depression (time 1)	-0.16**	-0.34**	0.33**	1.00	
5. Depression (time 2)	-0.13**	-0.29**	0.28*	0.58*	1.00

Note: * $p < .05$, ** $p < .01$

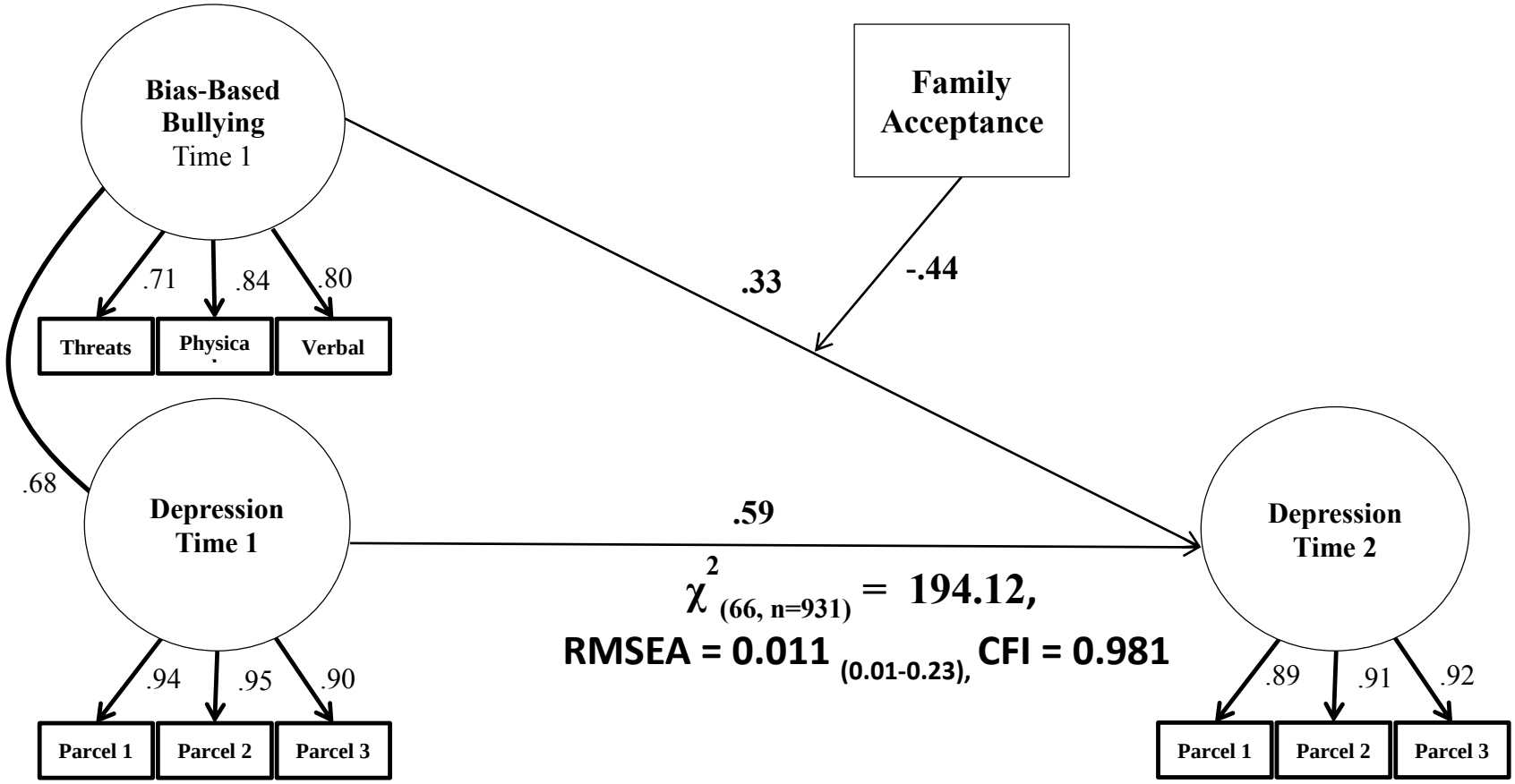

Figure 2

Structural equation model that presents the associations between bias-based bullying, depression, and the buffering effect of family acceptance on this relation

CHAPTER V: CONCLUSIONS

Overview of the Three Papers

The three papers presented in this dissertation investigated risk and protective factors for LGB adolescents and young adults with particular sensitivity to intersections of sexual orientation, sex, and region. In many ways, sexual minority Norwegian youth were equally at risk compared their counterparts in the United States. Interpersonal relationships—while expected to be meaningful for the development of all adolescents—were related to mental health outcomes in different ways for different sexual minority youth. Only family acceptance was meaningful for LGB youth in the context of its impact on depression when accounting for bias-based bullying.

Paper 1 was the first of its kind to compare LGB youth using nationally representative data from two countries. I found that different groups of sexual minorities fared different in Norway and the United States. For example, MSM/WSW heterosexual-identified individuals were at highest risk for maladaptive outcomes compared to their heterosexual MSW/WSM counterparts in Norway. However, this same population did not report high rates of psychosocial disorders in the United States. When individuals in the United States were compared to their counterparts in Norway, analyses revealed that mostly MSM/WSW heterosexual-identified and bisexual individuals differed greatly on health indicators. However, heterosexuals did not differ in terms of their adjustment across country.

Paper 2 investigated whether social support systems might operate in different ways for LGB youth. I inquired whether support from parents, teachers, classmates, and

close friends was associated with self-esteem and depression for young LGB adolescents. Findings revealed that parents and friends had a significant effect on depression and self-esteem for LGB youth, yet the magnitude and significance of these relationships differed by lesbian, gay, and bisexual youth. This has important implications for counselors and mental health professionals that deal with LGB populations. There may be different processes and mechanisms at work for different populations of LGB youth in consideration to the role that different support systems play in this population's well-being.

Paper 3 addressed a contention in the LGB parenting literature: it is well documented that family and parents play an important role in the lives of all adolescents—especially LGBs—yet research has not found that parents can moderate the negative effects of bullying for LGB youth in the same ways it does for sexual majorities. In this study, I found that parent support did not buffer the relation between bias-based bullying and depression; however, family acceptance of sexual orientation strongly buffered the relation between bias-based bullying and depression. The implications of these findings extend to research and practice. Not only do scholars need to be intentional in how they measure sexuality-specific protective factors, but stakeholders also need to be proactive and cognizant of the role of acceptance of sexual orientation, as acceptance is meaningful in overcoming the deleterious effect of bias-based bullying.

Summary of Findings

In this dissertation, I have sought to better understand how the experiences of LGB young people differ across cultures, from each other, and in respect to parent and

family support and acceptance. All three papers confirmed previous research: LGB individuals report harassment, compromised mental and emotional health, and low levels family acceptance. In addition, I have extended these findings by adding to extant knowledge in comparing lesbian, gay, and bisexual individuals to uncover whether social protect factors can differently impact the experience of sexual minorities. In addition, I addressed a contention in the literature and found that family acceptance of sexual orientation significantly buffered bias-based bullying's affect on depression, and confirmed that parent support did not. These findings have important implications for how scholars understand and measure the experiences of sexual minorities. In addition, my work has implications for stakeholders' knowledge of best supporting sexual minority population.

Practical Significance and Implications for the Field

Taken together, the research has significant potential to contribute to the field. Researchers attempt to understand the patterns and prevalence of behaviors and outcomes for people around the world, but this project demonstrates the need to take culture and normativties into account.

School counselors must oftentimes support sexual minority students that are bullied because of their sexual orientation but oftentimes do not know how to best support this population. This project finds that there is no "cookie cutter" answer to how a counselor can respond to a gay, lesbian, or bisexual experience: support systems were more meaningful for different groups of LGB youth. Thus, counselors must educate themselves on the best practices in working with vulnerable populations and keep in

mind that exploration of identity (including sexual identity) is both a normative and confusing point in child and adolescent development.

Parents are oftentimes bewildered that though they support their LGB adolescent, they still struggle with maladaptive outcomes report troubles at school. This project shows that "support" may be more nuanced than just warmth and control. In fact, parent acceptance of orientation was the only significant, and strong, buffer against depression for LGB youth. Parents should understand that—though they may fear for the safety of their LGB child—rejection and excessive control might exacerbate an already difficult experience for their sexual minority child.

Summary

As reviewed in these papers, sexual minorities do experience disparate mental and emotional health problems compared to their sexual majority counterparts, but effective support systems have been identified. These support systems seem to operate differently for different groups of sexual minorities, and family acceptance is most important in buffer the negative effects of bias-based bullying. Culture and stigma play important roles in explaining some of these disparities, and policy needs to focus more broadly than marriage equality for these populations. Last, there is reason to believe stakeholders must carefully think about how the experiences of gay, lesbian, bisexual, queer, and MSM/WSW heterosexual-identified may differ; tailoring interventions and counseling to each particular population is warranted.

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