

40 Developmental Assets: A comparison of retrospective reports between sexual minority
and majority adults

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ABSTRACT

There is currently a dearth in the research examining resiliency among self-identified Gay, Lesbian, Bisexual, and questioning youth. Demonstration of risk behaviors, mental illness, and negative peer interactions among sexual minority youth is highlighted in the current literature. These inherent risks in behavior, social interactions, and mental health are suggested to be much more pronounced in the GLB population when compared to the Straight or sexual majority population. This study examines the comparative resiliency attributes among the sexual majority and minority groups. By examining resiliency, risk is highlighted. Data from 111 sexual majority participants and 42 sexual minority participants were collected via an online survey. The results indicated no significant differences on internal or external measures of resiliency between the sexual majority and minority groups. Limitations and conclusions are discussed.

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CHAPTER I

INTRODUCTION

The existing literature specific to the experiences and adjustment of Gay, Lesbian, Bisexual, questioning, other (sexual minority) adolescents has typically attended to bullying, substance use, mental health, physical health, suicide, homelessness, gang affiliation, and sexual victimization (Ciro et al. 2005; Conron, 2010; Corliss, Goodenow, Nichols, & Austin, 2011; King et al., 2008; Marshal, Friedman, Stall, & Thompson, 2009; Robinson, 2009; Saewyc, 2011; Teasdale & Bradley-Engen, 2010; Totten, 2012). At risk behaviors such as self-harm, suicide, and drug abuse have been examined in Western as well as Midwestern and Eastern regions of the world indicating that risk behaviors and adjustment difficulties among sexual minority transcend local and geopolitical factors (DiStefano, 2008; Poon & Saewyc, 2009; Shenkman & Shmotkin, 2011; Wichstrøm & Hegna, 2003). Additional evidence suggests that local factors are as well relevant. For example, Poon et al. (2009) suggest that suicide and mental health risk factors may be moderated by rural and urban environments; such that rural (as opposed to urban) sexual minority boys were at higher risk for suicidal ideation and attempts. In addition, the available literature suggests that sexual minority teens are at greater risk for mental health concerns (e.g., depression or suicide ideation), negative peer encounters (e.g., bullying), and substance use than their non-Gay, Straight, heterosexual (sexual majority) peers.

The existing literature relevant to resiliency, a term used to explain one's ability to "bounce back" from negative life events (i.e. trauma, stress, distress, crisis etc.) in sexual minority youth, specifically sexual minority youth, has been focused on relational

connection. Investigations of the relational connection have focused on school faculty, peer groups, and family. Specifically, Shiloh and Savaya (2011) suggest that family and friends' support and acceptance have yielded positive self-acceptance of sexual minority youth. Furthermore, Saewyc et al. (2009) suggest that social connection should also be monitored. Their findings indicated a negative relation between social connectedness and risky behaviors among Bisexual and homosexual youth, such that with greater social connection, these youth experienced decreased levels of prevalence in risky behaviors. Other research has suggested that special attention needs to be directed toward sexual minority youth in schools by those who advocate and provide information such as counselors, principals, and teachers (Hirsch, Carlson, & Cowl, 2010). To date, there appears to be little research on the specific factors that influence risky behavior in sexual minority youth. Other than social and family support and connection (Shiloh & Savaya, 2011), research has not been conducted to focus on multiple aspects of sexual minority youths' lives to determine areas of resiliency or vulnerability.

Resiliency

The term resiliency is used by mental health professionals to describe a person's ability to maintain positive life trajectory when affected by stress or crisis that could potentially disrupt positive trajectory (Short & Russell-Mayhew, 2009). Resiliency is defined as the ability to return to baseline or original form after being affected or changed ("Definition of Resilience," n.d.). By applying this definition to an adolescent population, it becomes more of a metaphor to describe one's ability or list of attributes that enable one to be minimally affected by crisis or other hardship (Short & Russell-

Mayhew, 2009).

The Search Institute (SI) is an organization that focuses on the development of psychometrically valid measures to assess protective factors, which inhibit risk behaviors. This organization has done extensive work in the assessment of Resiliency. For the purposes of this study, we adopt their use and definition of resiliency. According to the Search Institute, resiliency is determined by a number of set attributes possessed by a person of a common population studied for their ability to maintain functionality despite setbacks and instead overcome stress and crisis (Search Institute, 2012). These attributes are divided into two categories, internal and external. Specifically, the internal assets are categorized by identifying one's commitment to learning (i.e. how motivated or engaged one is to school and learning), positive values (e.g. helping others, standing up for what one believes in, telling the truth, responsibility), social competencies (e.g. planning ahead, show of empathy and social skills, resisting negative peer pressure, nonviolent conflict resolution), and positive identity (e.g. self-efficacy, high self-esteem, sense of purpose). Furthermore, external assets are categorized by identifying one's support (e.g. family support, caring school and neighborhood climate, parental involvement), empowerment (e.g. one feels value in their community, having useful roles, serving the community, feeling safe), boundaries and expectations (e.g. clear family rules and consequences, clear school rules and consequences, being encouraged to do well) and constructive use of time (i.e. the amount of time doing creative activities, youth programs, religious activities etc.)

Empirical evidence suggests that sexual minority adolescent populations

demonstrate a higher prevalence of risky behaviors (Lock & Steiner, 1999; Poon & Saewyc, 2009). Specifically, Poon et al. (2009) examined sexual minority male and female adolescents living in rural communities and compared them with their urban peers in British Columbia. They found high risk behaviors in that rural sexual minority youth are more likely to report substance use and males were more likely to report dating violence. Moreover, Lock and Steiner (1999) examined vulnerabilities that self-identified upper middle class sexual minority high school adolescents demonstrated in a self-report health survey. These vulnerabilities included: health risks in mental health, sexual risk-taking, and general health risks. When compared to self-identified heterosexual or straight peers, these vulnerabilities were significantly increased in the sexual minority group. By applying the Search Institute's logic of high risk behaviors having a relation with low assets (Scales & Roehlkepartain, 2003), the above suggests that given the risky behaviors in self-identified sexual minority kindled by vulnerability, sexual minority youth possess less resilient or more vulnerable attributes. To date, the focus of resilient attributes or developmental assets among sexual minority youth has not been examined in the current literature available.

Theoretical Orientation

Resiliency as mentioned above is alluded to in the research conducted by Scales and colleague (2007; 2006; 2003) and Benson and colleagues (2004; 2009) on behalf of the Search-Institute. By exploring assets and attributes possessed by those individuals who were less likely to engage in risky behavior and demonstrate healthy development, the SI has found a method by which resiliency can be measured (Search Institute, 2012). Resiliency is also defined by the SI as, "...factors that increase young people's ability to

rebound in the face of adversity, from poverty to drug-abusing parents to dangerous neighborhoods.” The SI has explored the effects on the behaviors and developmental aspects of youth (12-18). This body of research concludes that, “Young people with more assets are more likely to be engaged in positive behavior (i.e. self-control, school achievement, abstaining from substance use, demonstrating healthy relationships etc.), (and) are less likely to be engaged in negative behavior (i.e. substance use, crime, truancy, suicide etc.)” Furthermore, a negative relationship exists between the demonstration of developmental assets and risk behaviors such as alcohol use, violence, illicit drug use, and sexual activity. The SI affirms that promoting these positive behaviors or assets has the power to protect young individuals and maintain or secure healthy development and resiliency (Search-Institute, 2012; Scales & Roehlkepartain, 2003).

The Developmental Assets Profile (DAP) is an instrument designed to measure these assets in youth. The DAP demonstrates an acceptable Cronbach $\alpha = .97$. By borrowing this definition and understanding to use as the conceptual foundation of resiliency for the current study, the investigators also receive a means by which to measure and highlight resiliency and risk among different cohorts of peers. Specifically, these cohorts were sexual minority adults reporting from their adolescents and sexual majority (Straight, heterosexual) adults reporting from their adolescents.

Justification and Rationale

While adolescents experience elevated vulnerability to risky behaviors, sexual minority youth experience greater likelihood for emotional, physical, and social problems

in comparison to their straight counterparts (Lock & Steiner, 1999). Furthermore, Wolf (2000) suggests that protective factors (e.g. attachment to school, commitment to conventional norms, attitudinal intolerance of deviance) and psychosocial risk (e.g. maladaptive behaviors, psychopathology) are related to delinquent behavior (e.g. physical aggression, property destruction, theft, staying out all night) in that higher reported levels of risk are associated with greater involvement in delinquent behavior, and higher levels of protection are associated with lower involvement in delinquent behavior.

The 40 Developmental Assets conceptualized by the Search Institute have been found to be associated with reduced vulnerability to risky behaviors and to promote healthy, caring, and responsible behavior in adults (Scales & Roehlkepartain, 2003). Thus far, however, the relationship between sexual orientation and these assets in adolescents remains unexamined. To date, research has not attended to similarities or differences in the protective factors that are reported between sexual minority youth and sexual majority youth. Examining a comparison in the protective factors of risky behaviors between sexual minority youth and sexual majority youth is important because it could help identify weaknesses in the enforcement of the protective factors that are suggested to reduce a wide variety of high risk behaviors and promote the ability to thrive (Search Institute, 2012; Benson, Scales, & Syvertsen, 2011). This comparison could be valuable to any facility, program, or mental health professional in order to help serve sexual minority youth in a more informed, responsible, and beneficial manner.

Research Questions and Study Objectives

Taken together, research suggests that adolescents are vulnerable for high

prevalence of risky behaviors, specifically, bullying, substance use, mental health, suicide, homelessness and gang affiliation (Ciro et al., 2005; Corliss, Goodenow, Nichols, & Austin, 2011; King et al., 2008; Marshal, Friedman, Stall, & Thompson, 2009; Robinson, 2009; Saewyc, 2011; Teasdale & Bradley-Engen, 2010; Totten, 2012). These risky behaviors are associated with low resiliency or vulnerability (Edwards et al. 2007; Search-Institute, 2013; Short et al. 2009). The aforementioned literature has addressed areas in which sexual minority youth, such as those that identify as Gay, Lesbian, or Bisexual are vulnerable (i.e. they have a significantly greater risk of mental health disorders, general health concerns, substance use, suicide, dating violence; Giro et al. 2005; Corliss, Goodenow, Nichols, & Austin, 2011; King et al., 2008; DiStefano, 2008; Poon & Saewyc, 2009). The Search-Institute's 40 Developmental Assets has been applied to youth in after school programs, schools, and youth organizations (Search-Institute, 2013). The 40 Developmental Assets have been used to compare subgroups of adolescents. For example, Sesma and colleagues (2003) evaluated high-risk behaviors among different cultural groups of youth including, Latino, African American, White, Asian American, American Indian, and multicultural. This study concluded a negative relationship between the number of assets reported and the number of high-risk behaviors reported (Sesma & Roehlkepartain, 2003). Perkins and colleagues (2002) employed the 40 Developmental Assets in their study which focused solely on females (Perkins, Daniel F., Luster, Tom, & Jank, Wolfgang. 2002). This study identified that participants reporting high levels of family support and positive experiences in school were less likely engage in the risk behaviors pertaining to symptoms of an eating disorder. These examples show not only that the Developmental Assets are applicable across racial/ethnic

and gender groups, but that they also attest to a strong reliability in measuring resiliency and highlighting risk or suggested vulnerability. Despite the varying applications and past research of the Search Institute's Developmental Assets, this framework or measure has not been applied to nor has a body of research been focused on the comparison of resiliency in sexual minority youth and sexual majority youth. This comparison could prove useful in understanding the specific areas of resiliency and vulnerability between the groups of youth. This understanding can thereby attribute to a more informed and responsible execution of services and guidance for today's adolescents.

The research question guiding this study involved the exploration of differences and similarities in the developmental assets of Gay, Lesbian, Bisexual, and/or questioning youth compared to their straight or non-sexual minority peers. According to the Search-Institute, these identified 40 assets are an integral part of fostering the development of healthy and thriving youth. Given this, what are the differences, if any, in internal and external assets between sexual minority youth and their sexual majority peers? It is hypothesized that Gay, Lesbian, and Bisexual individuals possess lower levels of resiliency assets in comparison to their non-Gay or Lesbian or Bisexual, self-identified heterosexual or Straight peers. It is also hypothesized that a relationship exists between the coming out age of sexual minority and the level of resiliency assets demonstrated. The purpose of this study was to examine the differences in resiliency between sexual majority and sexual minority groups from a retrospective adolescent experience.

CHAPTER II

LITERATURE REVIEW

Generally, recent literature has been fairly consistent in suggesting that Lesbian, Gay, Bisexual, questioning, other (sexual minority) people are at an elevated risk for mental disorders (e.g. anxiety disorders, depression) suicide ideation, substance abuse or misuse, and non-suicidal self-injury than their straight peers (King, Semlyen, Tai, Killaspy, Osborn, Popelyuk, & Nazareth, 2008). This chapter will review the literature relevant to risk and resiliency for adolescents in association with sexual orientation. This discussion will include an overview of what research suggests about general adolescent risk. The wording, “adolescent risk” is intentionally used when talking about risk taking behaviors as well as at risk factors such as vulnerability. This literature review will also focus on research exploration of Gay and Lesbian risk and specific at risk factors. Specifically, these risk factors include mental health, substance use, non-suicidal self-injury and suicide, bullying or negative peer dynamics, and other considerations (e.g. gang affiliation, homelessness, drop out/truancy). Areas of literature exploring resiliency will also be discussed. Finally, this literature review will conclude with the hypotheses of this study.

Risk Factors Among Adolescent/Youth Risk

The following section will quickly report adolescent risk statistics from the past decade. The purpose of discussing this section will aid in putting overall adolescent risk into perspective. This will be helpful when later sections discuss adolescent risk specific to sexual minority or sexual majority.

Kann (2001) explored data collected by The Youth Risk Behavior Surveillance

System (YRBSS). The results suggests that, regarding suicide, 8.3% of students grade 9-12 had attempted suicide at least once in the previous 12 months prior to taking the survey in 1999. Moreover, 14.5% of students reported making a specific plan of suicide; such that, female students were more likely than male students to have made a plan and attempt suicide (10.9% to 5.7% respectively in attempts). Furthermore, Hispanic students were more likely than Caucasian or African American students in making a plan and suicide attempts. Still regarding suicide, in 2012, the YRBSS concluded that 7.8% of students grade 9-12 had attempted suicide and 12.5% of students had made a plan (Eaton, 2012). This information regarding suicide suggests that roughly 7-10 percent of adolescents grade 9-12 report have attempted suicide while a larger number, roughly 12-15 percent of adolescents, have reported making a plan (Eaton, 2012; Kann, 2001). These reports also suggest that females may be at higher risk for making a plan and attempting suicide (Kann, 2001). Furthermore, it is suggested that Hispanic females may be at the greatest risk for planning and attempting suicide (Kann, 2001).

In addition, regarding risk behavior, the same YRBSS showed that 8.2% of students had driven a car or vehicle one or more times when they had been drinking alcohol within the previous 30 days of taking the survey. Hispanic 12th grade males were more likely than students that were female or Caucasian or African American to have engaged in this behavior. Nationwide, 32.8% of students had texted or emailed while driving a vehicle within one day of taking the survey. Furthermore, 32.8% of 9th grade Hispanic or Black males were more than White males but significantly more than females to have reported being in a fight (Eaton, 2012). Specifically, the above research suggests

that 8.2-32.8 percent of students demonstrate high risk behaviors in that they reported operating a motor vehicle under unsafe conditions putting themselves, passengers, and other drivers at risk of injury or death (Eaton, 2012). Other demonstrations of high risk behavior are suggested above in that males demonstrate more aggressive risk behaviors by engaging in physical altercations with another person (Eaton, 2012).

To focus on bullying, 20.1% of students nationwide had reported being bullied on school property during the previous 12 months before taking the survey. Furthermore, 5.9% of students had not gone to school at least one day within 30 days prior to taking the survey because they felt unsafe at or on their way to school. Furthermore, 16.2% had reported being electronically bullied, which includes bullying through email, chat room, instant messaging, websites, or texting during the previous 12 months before the survey (Eaton, 2012). Specifically, bullying may affect up to 20.1% of students grade 9-12 with an additional percentage (16.2%) specific to reported electronic bullying and possibly accounting for some (5.9% who skipped school recently at least once due to feeling unsafe) truancy (Eaton, 2012).

Regarding Alcohol and drug use, 70.8% of students had at least one drink during one day in their life. Furthermore, 20.5% of students had drunk alcohol before 13 years of age. During the 30 days prior to taking the survey, 38.7% of students had at least one drink of alcohol. Specific to marijuana use, 8.1% of students had tried it for the first time before the age of 13. 23.1% of students reported using marijuana at least one time during the previous 30 days of the study. Specific to cocaine use, 6.8% of students had used any form of cocaine (e.g. freebase, crack, powder) one or more times in their life.

Furthermore, 3% of students also reported that they had used any form of cocaine at least once 30 days before the survey. Using methamphetamine, ecstasy, inhalants, or heroin at least once in their lifetime was also reported (3.8%, 8.2%, 11.4%, 2.9% respectively; Eaton, 2012). Eaton's findings (2012) above suggest that of the general population of 9-12 graders, alcohol consumption is 70.8% concerning one time use over their lifetime but remains roughly 40% of recent (during the past 30 days) alcohol consumption by the time they are in high school. Reported drug use is less than reported alcohol use among this population. Nevertheless, recent drug use is reported by high schoolers specific to cocaine, marijuana, methamphetamine, ecstasy, inhalants, and/or heroin (Eaton, 2012).

By viewing the above adolescent risk behavior prevalence with the lens provided by the rationale in chapter one, these students are suggested to have possessed low resiliency assets that are related to healthy development, success and low demonstration risk behavior (Search Institute, 2012; Benson, Scales, & Syvertsen, 2011; Scales & Roehlkepartain, 2003). To continue following the theoretical orientation outlined by these researchers and their colleagues (2012, 2011, 2003), these students may be at continued risk for delinquency, drop out, substance use, non-enrollment into higher education, and not achieving a higher level life satisfaction. It should be noted that this survey accounts for grade, gender, and ethnicity. As extensive as this survey is, sexual orientation or identity was not accounted for in measuring risk behaviors among adolescents.

Furthermore, while risk and the use of the DAP have been discussed above to address differences and similarities in male and female gender, relatively little research

was found to examine the inherent differences of male to female components of risk and resiliency. Hartman and colleagues (2009) explored gender differences in protective factors. The results of their research suggested that male and female resiliency are more similar than different in that gender differences in resiliency are minor and that an all-encompassing attempt at resiliency and risk prevention is not inappropriate across genders. Specifically however, females demonstrated that religiosity and positive school environment had a positive relation to resiliency whereas males showed an inverse relation with these components. More importantly, these components alone indicated a trivial effect on resilience from drug use and serious delinquency. Although this difference occurred, the accumulative effect of resilient components overall was an indicator of youths demonstrating resiliency to drug use and serious delinquency.

Risk Factors Among Gay and Lesbian Youth

Mental Health

Literature contributed by Alexander (2002), examined two national studies that defined sexual orientation differently. In order to reach a more inclusive sample representation, sexual orientation was defined as a broader report of sexual behavior (e.g., occurrence of same sex behaviors) and participant self-report as Gay or Lesbian. This examination concluded that homosexual orientation could be a risk factor for mental health difficulties. Moreover, in a study conducted by Ciro and colleagues (2012), adolescents were compared in areas of mental health, safety, drug use, school performance, sexual activity, and family and friends. Of the 758 participants, those who identified as Gay and Lesbian also reported the highest levels of bingeing and purging and second highest levels of general concerns about their health. Finally, adolescents self-

identifying as Gay, Lesbian, or Bisexual in a community sample of 1,769 high school students were found to be at a significantly increased risk for mental health and physical health problems compared to self-identifying as heterosexual (Lock & Steiner, 1999). Finally, literature suggests that mental health symptoms, such as depression and anxiety disorders, may be 1.5 times higher in LGB populations (King et al., 2008).

Other research has focused on the externalizing and internalizing (i.e. categories of symptoms including depression, poor self-esteem, violence, aggression, law breaking) symptoms of stress as related to LGB youth. In the aforementioned Lock (1999) study, results indicate that the group of adolescents that reported being unsure about their sexual orientation were more likely to be more self-deceptive (e.g. denial, poor self-awareness) even when compared to the self-identified Gay, Lesbian, and Bisexual group. These results could suggest susceptibility to poor emotional regulation. Moreover, sexual minority adolescents obtain low emotional regulation deficits that mediated the relationship between sexual minority status and internalizing symptoms, such as depression and anxiety (Hatzenbuehler, McLaughlin, & Nolen-Hoeksema, 2008). Conversely, older literature contributed by Elze (2002) found that although there was a difference in internalizing and externalizing problems directly related to self-identified sexual orientation, this difference may be accounted for by limitations (e.g. small sample size not representing exclusively closeted or sexual minority youth of color) in the study itself, instead of actual phenomena. The variance between straight and sexual minority youth was but 1 percent for Gay adolescence and 4 percent for Lesbian adolescence. This small variance suggests that when controlling for sexual orientation, internalizing

and externalizing problems do not differ among the sexual minority and non-sexual minority youth groups.

It is important to note here a finding in this article (Elze, 2002) that echoes other literature findings in that family support and functionality have a relation on the mental well-being of GLB adolescents (Goodenow, Szalacha, & Westheimer, 2006; Ryan, Russell, Huebner, Diaz, & Sanchez, 2010; Rosario, Schrimshaw, & Hunter, 2012; Saewyc, 2011; Saewyc, Homma, Skay, Bearinger, Resnick, & Reis, 2009; Shilo & Savaya, 2011; Teasdale & Bradley-Engen, 2010). Specifically to the Elze (2002) literature, Gay, Lesbian, and Bisexual youth who perceive a negative or hostile community exhibited higher externalizing symptoms (e.g. violence, law breaking, aggression). Although this certainly does not dictate causality, it is deserving of consideration given the dynamic agreement held with a variety of sexual minority risk and resiliency literature discussed in this literature review. This concept will be discussed in the following subsections of resiliency.

Substance Use/Abuse

Research suggests that Gay or Lesbian come with inherent risk factors, such as an elevation of alcohol use and substance dependence in adulthood (Alexander et al., 2002). The latter also suggests that substance abuse could have occurred during adolescence. Alexander and colleagues (2002) go further to suggest a relationship between higher rates of victimization, discrimination, depression and alcohol use. However, inconsistencies in the literature exist between this examination and research conducted by Lock and colleagues (1999). Specifically, among the results of a survey administered to

adolescents, there was no elevation of high risk behaviors such as substance use between youth who identified as Gay, Lesbian, Bisexual, or unsure and youth who identified as heterosexual. This inconsistency may be explained by examining age of self-identifying sexual orientation. Talley, Sher, and Littlefield (2010) concluded that youth who identified LGB in emerging adulthood had exponential increase in drug use as opposed to identifying LGB 4 years later, closer to adulthood instead of adolescence. In the aforementioned meta-analysis conducted by King and colleagues (2008), people who identify as LGB may be at 1.5 times higher risk than their straight peers for substance dependence. Furthermore, women of the former population may be at an even greater risk for these specific factors (King et al., 2008). Finally, a meta-analysis examining the relationship between LGB youth and substance use disorders revealed 190 percent higher risk for LGB youth to use substances than straight youth (Marshall et al., 2008). In addition, there was a 400 percent higher risk for LB females specifically, which agrees with aforementioned literature. Overall, a vast and consistent body of literature exists suggesting that sexual minority groups reveal a relationship with higher substance use and abuse. It is only when examining adolescent sexual minority groups where inconsistencies in the literature emerge. This also indicates a dearth of empirical investigation in sexual minority adolescent.

Suicide and Non-Suicidal Self-Injury

Alexander and colleagues (1999) applied the same caution for risk of suicide ideation/attempts as they did substance abuse when addressing risk factors of being Gay, Lesbian, or Bisexual. Specifically, LGB populations may be at a two-fold higher risk of suicide ideation or attempts (King et al., 2008). This is especially concerning for GB

men, who have a much higher rate for lifetime suicide attempts (King et al., 2008).

Though non-suicidal self-injury does not necessarily have to be preceded by suicide ideation, it can certainly increase lethality in future suicide attempts (Van Orden et al., 2010). GLB youth are at an increased risk for self-harm behaviors (e.g. cutting self, burning self, Brown, & Martin, 2002). Brown and Martin (2002) further explain that these behaviors could be attributed to keeping sexual attraction and orientation a secret from those perceived to be unaccepting such as friends and family.

Bullying/Negative Peer Relationships

Other literature has demonstrated broadening the scope of predication in the relationship of sexual orientation and inherent risk. This literature discusses the impact of stigma, internalized homophobia, and negative social experience such as bullying. This stigma of sexual orientation could account for higher levels of psychological and behavioral issues (Perlick et al., 2007) in LGB adolescents (Talley & Bettencourt, 2011). Other than stigma, there are other negative social interactions associated with self-identifying as LGB. Among youth, a sense of social belonging for students regardless of their sexual orientation has been associated positively with perceived LGB acceptance and discrimination (Aerts, Van Houtte, Dewaele, Cox, & Vincke, 2012). Additionally, Robinson (2009) found that 63 percent of respondents reported that they had been either frequently or physically harassed because of their sexual orientation. Robinson (2009) goes on to explain that this may be the reason GLSEN (Gay, Lesbian, and Straight Education Network) reported that “...(LGB) students are five times more likely to skip school and are only half as likely to continue on to post-secondary education.”

Moreover, a meta-analysis of literature concluded that “sexual minority youths experience significantly more bullying and victimization than do their heterosexual peers and that these hostile experiences contribute to a number of negative outcomes for sexual minority youths” (Fedewa & Ahn, 2012). Furthermore, internalized stigma (internalized homophobia) experienced from negative social interactions and perceptions can reflect poor coping skills and lead to detrimental effects (e.g. depression) to one’s psychological adjustment (Meyer, 2003; Talley & Bettencourt, 2011).

Other Considerations

Other specific behavior risks noted in Gay and Lesbian adolescent literature include LGB gang affiliation and homelessness (Corliss, Goodenow, Nichols, & Austin, 2011; Rosario, Schrimshaw, & Hunter, 2012; Rosario, Schrimshaw, & Hunter, 2012 ;Totten, 2012). In literature contributed by Totten (2012), socially and economically marginal adolescents who were rendered homeless by their families of origin for factors mainly pertaining to their sexual minority status, became involved with street families and gang affiliation (Totten, 2012). This risk for homelessness is also evident among GLB adolescents (Corliss, Goodenow, Nichols, & Austin, 2011; Rosario, Schrimshaw, & Hunter, 2012; Rosario, Schrimshaw, & Hunter, 2012). Corliss and colleagues (2011) concluded that more youth indicating sexual minority behavior, either by indicating some incidence of same sexual behavior or self-identifying GLB, made up more of homeless youth proportion than did youth indicating heterosexual behavior exclusivity or self-identifying as heterosexual. Moreover, estimates as high as one third of high school students who were also homeless reported some same sex orientation or were unsure of their sexual orientation (Rew, Whittaker, Taylor-Seehafer, & Smith, 2005). Furthermore,

homelessness among GLB youth increases the risks of victimization, mental illness, and suicidality more so than their straight non sexual minority peers (Cochran, Stewart, Ginzler, & Cauce, 2002; Noell & Ochs, 2001; Tyler, 2008; Whitbeck, Chen, Hoyt, Tyler, & Johnson, 2004). Congruently, adolescents who identified as Lesbian or Bisexual women appeared to be at an even elevated risk of drug use/abuse. Rosario and colleagues (2012) went further to corroborate the above literature even after controlling for childhood sexual abuse and early development for sexual orientation.

Resiliency/Protective Factors

There is an emerging sector of literature aimed at the positive aspects of youth risk, some of which are focused on GLB adolescents. This literature tends to agree that social connection, close relationships, and acceptance are protective factors and/or mediate the relationship between identifying as GLB and the risk factors mentioned above (Goodenow, Szalacha, & Westheimer, 2006; Ryan, Russell, Huebner, Diaz, & Sanchez, 2010; Rosario, Schrimshaw, & Hunter, 2012; Saewyc, 2011; Shilo & Savaya, 2011; Teasdale & Bradley-Engen, 2010). Furthermore, Yarbrough (2003) has highlighted resiliency trends in some sexual minority students such as achieving a graduate degree or succeeding in interpersonal relationships and self-esteem despite coming out at an early age and receiving ridicule and social stress. This study could not specify the resiliency relationship however. Further research needs to be conducted to understand specific factors that mediate sexual orientation and risk (Yarbrough, 2003).

One study conducted by Saewyc and colleagues (2009) attempted to compare Bisexual youth to their heterosexual peers in areas of levels of the protective factors:

family connectedness, liking school, school connectedness, and religious or spiritual identify. This study concluded that these assets were significantly less prevalent in Bisexual youth than in heterosexual youth. Gender differences of these factors existed within the two dichotomies of Bisexual and straight. This study did not attempt to explain specific risks relationships to protective factors nor did this study attempt to explain the relationship of protective factors and sexual orientation. Still, by understanding that the protective factor of family or social support mediates homelessness, suicide symptoms, substance use, and mental health one can deduce that risk may not be inherent to sexual orientation as once thought. Other than the literature contributed by Saewyc and colleagues (2009) combining certain protective factors to a sexual minority group, no research has been found that examines protective factors defined by the Search Institute's Developmental Assets Profile in Gay and Lesbian youth comparatively with their heterosexual peers.

Developmental Assets Profile

The Developmental Assets Profile is the measure chosen by the researchers from which to gauge demonstrated resiliency assets. This instrument contains 58 questions and relies on Likert formatting by which participants respond. Research has been conducted to incorporate and examine the SI's 40 developmental assets to many aspects of adolescents' lives. This body of research includes examining and influencing substance abuse among adolescents (Benson, Roehlkepartain, & Sesma, 2004), boosting school performance (Scales & Benson, 2007), predicting academic achievement (Scales, Benson, Roehlkepartain, Sesma, & van Dulmen, 2006), and preventing adolescent violence (Benson & Scales, 2009). Moreover, literature also highlights the importance of

studying, understanding, and potentially influencing resiliency in adolescents using the Assets. Edwards and colleagues (2007) and Short and colleagues (2009) call for action among school psychologists and school professionals to enact specific interventions guided by the Assets to increase resiliency in multiethnic multicultural schools around the world. All of the above is an indication and testament to the effectiveness of the SI's 40 Developmental Assets at influencing and identifying resiliency. To date, regardless of the breadth of applications the 40 Developmental Assets have been used for, there is no account in existing literature of this instrument being applied to sexual minority adolescents.

Other research includes specifically examining high risk behaviors highlighting or indicating low assets (Scales & Roehlkepartain, 2003). Scales and colleague (2003) posit that a negative relationship exists between the demonstration of developmental assets and risk behaviors. Conversely, Scales and colleague, along with The Search Institute (2003, 2012 respectively), affirm that promoting these positive behaviors or assets has a positive relationship with resiliency. By exploring these assets of the sample population, the DAP becomes a method by which resiliency is a component capable of being measured and compared (Search Institute, 2012). Moreover, since the 40 developmental assets are specifically sectioned into two categories of internal and external, not only can resiliency be quantified, but it can also be used to indicate specific areas of the group's interpersonal lives thus giving investigators an understanding of exactly participants will differ in regards to the internal and external assets and then in the eight categories therein: support, empowerment, boundaries and expectations, constructive use of time,

commitment to learning, positive values, social competencies, and positive identity.

Hypotheses

Given the discussion of the literature above, specifically literature contributed by Brown and Martin (2002), it can be suggested that by identifying as sexual minority as an adolescent comes with inherent social, mental, and physical health risk. Specifically the lack of acceptance with family/community may attribute to the demonstration of risk behaviors or symptoms of dysfunction (e.g. self-harm, suicide ideation, aggression, depression, bullying, Alexander et al., 2002; Brown & Martin, 2002; Elze, 2002). From these findings, the researchers of this thesis have developed the hypotheses below.

Furthermore, given the protective factor of family/community acceptance and the relation with healthier adolescents (Yarbrough, 2003), the researchers hypothesize a relation between demonstration of resiliency and coming out. Findings from Talley, Sher, and Littlefield (2010), which discussed a relation (although opposite from Yarbrough) between the coming out age and substance use further bolster this hypothesis. According to the research, the relation between these two factors are positive or negative. Lastly, to supplement the above, the investigators would like to reiterate literature put forth by Scales and colleague (2003) who suggest that since sexual minority adolescents demonstrate relatively higher risk behaviors (Lock & Steiner, 1999; Poon & Saewyc, 2009), they hypothetically would possess a relatively low amount of Developmental Assets when compared with their non-Gay or straight peers. These specific hypotheses are described as below:

Hypothesis 1

Sexual minority participants will demonstrate significantly lower levels of

external assets in comparison to sexual majority (non-Gay or Lesbian, self-identified heterosexual or Straight) participants.

Hypothesis 2

Sexual minority participants will demonstrate lower levels of internal assets in comparison to sexual majority participants.

Hypothesis 3

A significant relation between sexual minority participants who report both a retrospective age less than 15 and a level of outness other than “not at all” with the demonstration of higher levels of internal assets.

CHAPTER III

METHOD

Recruitment

Participants were pulled from the sample of social media website users' Facebook account holders. They were exposed to the attached recruiting material by viewing the designated research page set up by the researcher. The title of this page for potential participants to see was, "Retrospective Research Exploring What it was like for You Growing Up." This research Facebook page was designed specifically for the viewing and learning about the researcher's study. Specifically the page included information about the research, privacy and confidentiality information, along with tips on how to pick a retrospective age for the survey. This page had the privacy setting as "public" in order for the sample population to have access to the recruiting information regardless of "friend" status to the researcher. Clicking on a hyperlink addressed to the research page is how one would access it. The researchers depended on other Facebook users "sharing" the research page's information on their own personal Facebook page. The researcher first sharing the research page's information on own personal page accomplished the first wave of exposure. Any person able to view the researcher's personal Facebook page was exposed to the research page information hyperlink. From here, participants could select the hyperlink to view the Facebook research page. Once on the page, participants were exposed to the information explained above and had the option to select the survey link that would direct them to the DAP. In this way, possible participants are provided directions on how to access the survey without coercion. Regardless of participation in the survey, viewers had the opportunity to "share" the research page's information on

their own personal wall. Directions on how to share the research page's information were included in the description and on the page itself. Recruiting potential participants in this way was use of a convenience sample by taking advantage of Facebook's reposting and "sharing" feature to achieve a snowball effect in sample size. The spread of the survey information in this way ensured that individuals could freely view the recruiting materials without being asked or coerced. This also ensured viewers' and participants' confidential information since Facebook does not publically track page visitors. Furthermore, The Search Institute does not record participants' identifying information aside from the information they choose to include in the survey's demographic form. Facebook was specifically targeted for its ability to reach a broad demographic of anyone who has internet access and a Facebook account. In another use of Facebook for research participant recruitment of 16-25 year old females, Fenner and colleagues were able to reach into more rural and less urban populations (Fenner et al., 2012). Furthermore, participants 18-25 years old were more likely to respond which is inclusive of the targeted population for the investigators' current research study. Furthermore, using this method, the authors intended to employ a cost effective recruiting method that could efficiently reach a broad audience of age and across a wide geographic area to influence statistical power. Repeated posting of this link and recruitment information were posted to the investigator's Facebook page to help ensure long exposure to potential participants. Depending on the rate at which the investigators received completed surveys, new waves of posting were executed in an attempt to reach more possible participants and increase chances at which other Facebook users reposted the

recruitment information.

Once participants complete the survey by clicking on “submit” at the bottom of the survey’s webpage, the Search Institute scores the responses electronically and instantly. This electronic scoring database stores all participants’ scorecard securely. A username and password was provided to the researchers from the Search Institute. From here, the researchers were able to view individual score cards or download entire sample data into a Microsoft Excel spreadsheet. This download also included participants’ reported demographic information.

Population

The population from which the participants were drawn included all adult (18 years and older) male, female, and/or other individuals who had access to the internet. The individuals also had to have access to a Facebook account of their own. The survey specifically requested that potential participants report their sexual orientation, pick a retrospective age from adolescence, and disclose their level of outness at this retrospective age. Based on this information provided by participants, they were separated into appropriate groups (i.e. indicating lesbian would indicate that participant be included into the sexual minority group). Failure of a participant to report the above information about themselves lead to not including that participant in a specific group or removing the participants utilizing listwise deletion.

Participants

Refer to Table 1 for a list of this demographic information. A total of 153 participants were recruited for this study. The majority of the participants were female (n

= 101, 66%). The rest of the sample were males ($n = 52$, 34%). The majority of the sample identified as Straight ($n = 111$, 72.5%), 9.8% identified as Gay ($n = 15$), 6.5% as Lesbian ($n = 10$), 7.2% as Bisexual ($n = 11$), and 3.3% as questioning or other ($n = 5$). These groups are collapsed together to form the sexual minority sample. One participant did not answer this question (.7%). This participant was counted and added into the sexual minority group. The rest of the sample included male sexual minority ($n = 21$, 13.7%) and female sexual minority ($n = 21$, 13.7%).

In the sexual minority portion of the sample, the researchers asked the participants to report their level of outness relative to their retrospective age. Although every participant had the option to report their level of outness, the researchers removed outness reports from those participants who also reported sexual majority status. The reasons for this are because of the common societal assumption of individuals being straight until they disclose sexual minority status. Given this, the researchers did not feel it necessary for sexual majority participants to report the level to which they had disclosed their sexual orientation. Another reason for the removal of outness data among sexual majority is due to the difference in possible meanings of outness reported. The researchers could not guarantee the validity of a sexual majority participant answering “not out at all” to mean that they were in the closet, or going along with the societal assumptions mentioned earlier. Conversely, a sexual minority participant indicating “not out at all” would indicate a closeted or restricted level of their disclosure of sexual orientation. In order for this variable to maintain a constant representation of meaning for participants, the sexual majority reports of outness were removed. Some participants

chose not to report their level of outness. Among the sexual minority participants that were tallied for reporting their level of outness, a total of 23.5% ($n = 36$) of the $N = 153$ participants chose to report their level of outness. One hundred seventeen participants

Table 1
Sample Demographics

Variable	Frequency	Percentage
Sexual Orientation		
Straight	111	72.5
Gay	15	9.8
Lesbian	10	6.5
Bisexual	11	7.2
Questioning/other	5	3.3
Missing	1	.7
Gender		
Male	52	34
Female	101	66
Retrospective Age		
12	3	2
13	5	3.3
14	6	3.9
15	20	13.1
16	24	15.7
17	28	18.3
18	28	18.3
Missing	39	25.5
Level of Outness		
Not at all	25	16.3
Friends only	10	6.5
Family only	2	1.3
Friends and Family	8	5.2
Everyone	42	27.5
Missing	66	43.1
Education Acquired		
Less than High School	3	2
High School/GED	15	9.8
Some College	32	20.9
Associate's Degree	16	10.5
Bachelor's Degree	40	26.1
Master's Degree	38	24.8
PhD.	4	2.6

Prof. Degree/JD/MD	4	2.6
Missing	1	.7

either chose not to answer or were not counted. This is due to the participants reporting as sexual majority or providing a non-applicable answer. Of those sexual minority who disclosed their outness relative to their retrospective age, 9.2% (38.9 valid percent, $n = 14$) reported “not at all,” 5.9% (25 valid percent, $n = 9$) reported “friends only,” .7% (2.8 valid percent, $n = 1$) reported “family only,” 3.3% (13.9 valid percent, $n = 5$) reported “friends and family,” and 4.6% (19.4 valid percent, $n = 7$) reported “everyone.”

The mean retrospective age reported by the sample was 16.2 years ($SD = 1.55$). It should be noted that only 114 of 153 ($n = 39$ missing) participants provided their retrospective age. Furthermore, 81% ($n = 124$) of participants reported a race of White while 9.8% ($n = 15$) were Hispanic/Latino/Latina. For Black/African American $n = 1$ (.7%). .7% ($n = 1$) also reported Asian/Asian American and .7% ($n = 1$) reported American Indian/Native American/Alaskan Native, and 7.2% ($n = 11$) reported a mixed race/ethnicity. Additionally, 2% of the sample’s highest level of education was reported as “less than high school”, 9.8% ($n = 15$) of the sample’s highest level of education was “high school or GED”, and 20.9% ($n = 32$) reported “some college” as their highest level of education. “2 year college/Associates” as highest level of education obtained was represented by 10.5% ($n = 16$) of participants, and 26.1% ($n = 40$) held a 4yr college/BA/BS education or degree. Furthermore, 24.8% ($n = 38$) held a MS/MA, and 2.6% ($n = 4$) of the sample reported they held a PhD. Finally, 2.6% ($n = 4$) reported a professional degree/JD/MD as their highest level of education achieved.

Procedure

Participants were exposed to the recruiting material by viewing the designated research page set up by the researcher. This material and link to the research page were posted on the researcher's personal Facebook page. The title of this page for potential participants to see was, "Retrospective Research Exploring What it was like for You Growing Up." This research Facebook page was designed specifically for the viewing and learning about the researcher's study. Specifically the page included information about the research, privacy and confidentiality information, along with tips on how to pick a retrospective age for the survey. This page had the privacy setting as "public" in order for the sample population to have access to the recruiting information regardless of "friend" status to the researcher. A hyperlink to this page was included in the recruiting information posted on the researcher's Facebook page. This hyperlink is how a potential participant accessed the research page.

Once at the research recruitment Facebook page, potential respondents had the opportunity to independently read over the pretest instructions and elect to participate without coercion by following a link to the Search-Institute's Developmental Assets Profile assessment. Participants were informed of their right to discontinue the survey at any time by simply closing out of their browser windows. Upon completion of the survey, the participant were thanked for their participation and directed back to the Facebook page.

Once participants complete the survey by clicking on "submit" at the bottom of the survey's webpage, the Search Institute scores the responses electronically and

instantly. This electronic scoring database stored all participants' scorecard securely. A username and password was provided to the researchers from the Search Institute. From here, the researchers were able to view individual score cards or download entire sample data into a Microsoft Excel spreadsheet. This download also includes participants' reported demographic information.

Design

This study examined the relative effects of gender and sexual orientation on the developmental assets of young adults. The independent variables were identifying as sexual minority or majority. The dependent variables were the Internal Assets group of assets derived from participant responses and External Assets group of assets derived from participant responses. A 2X2, between subjects, design was utilized. The first factor was a between subjects variable composed of two levels, sexual minority and sexual majority. The second independent variable was gender. This consisted of 2 levels: male, female. Demographic data pertaining to age, retrospective age, gender, and education was collected to determine the equivalence of the participants between the two levels for both of the independent variables. Table 1 reports the data describing the sample. Specifically, this table shows frequency and percentages of each variable breakdown (e.g. sexual orientation, gender, ethnicity etc.).

Dependent Variables

A total of two dependent variables were included in this study. The first was comprised of the four domain scores of Support, Empowerment, Boundaries and Expectations, and Constructive Use of Time under the broader External Asset domain of the Developmental Asset Instrument. This variable is titled, External Assets. The final

variable was comprised of the four domain scores of Commitment to Learning, Positive Values, Social Competence, and Positive Identity under the broader Internal Asset domain of the Developmental Asset Instrument. This variable is titled, Internal Assets. More information is provided about this instrument in the following sections.

Measure

Currently, the Search Institute (SI) has many assessments to be used in partnership with youth organizations such as church groups, school districts, and after school programs to identify youth assets and levels of resiliency. Resiliency is specifically assessed for by designing these surveys to ask the participant to rank levels of specific traits or assets identified for their indication of resiliency. The participants rank on a Likert scale. This ranks the level of the occurrence of these assets in every-day life. This is done by sorting the 40 developmental assets into two main groups, external assets and internal assets. The first external assets group has 4 categories in which the specific assets are held: support, empowerment, boundaries and expectations, and constructive use of time. The internal assets group also has 4 categories in which the specific assets are held: commitment to learning, positive values, social competencies, and positive identity. Once these categories are ranked in terms of occurrence, categories of internal and external assets can be assessed.

The DAP assessment was specifically chosen by the investigators for its design to target small groups of individuals, and its ability to be taken online in a short amount of time. The DAP survey also gives the investigators the option of receiving scoring material in the mail from the SI in order to personally score the completed surveys. As

another option, the SI scored and created an online report of these completed surveys for the investigators.

The DAP is a 58-item survey that measures the protective factors of support, empowerment, boundaries and expectations, constructive use of time, commitment to learning, positive values, social competences, and positive identity (Search Institute, 2004). For the current survey, the researchers created the demographic portion of the measure to include: retrospective age, or age at which the participants chooses to report from to complete the measure, self-identified sexual orientation, highest level of education achieved, and level to which the participant is "out" at the time of retrospective age. This colloquialism was used to ask participants, in common language, the level of which they have disclosed their sexual orientation at the time of the age they have identified to report from when filling out the survey. For this question, four answers were provided for the participant to choose all that apply to them: not at all, friends, family, friends and family, everyone. Furthermore, the participants were asked to self-select an age from adolescence (12-18). It is from this age that the participants were asked to fill out the survey questions provided in the DAP. They were then asked by the DAP to check the item that is true. The options for selection are: Not At All or Rarely, Somewhat or Sometimes, Very or Often, Extremely or Almost Always. Example statements that participants were asked to respond to include: "I stand up for what I believe in." or "I have friends who set good examples for me."

By compiling this list of developmental assets, the Search Institute has also identified different developmental stages: adolescents (12-18 years of age), middle

childhood (8-12 years of age), grades K-3 (5-9 years of age), and early childhood (3-5 years of age). These different groups have slightly adjusted definitions of each asset component. For example, “constructive use of free time” is defined differently among adolescents and middle childhood as “spending time with friends” and “spending time at home not playing video games” respectively. Although the specific components are adjusted to better fit an appropriate developmental stage, the key 40 developmental assets stay the same.

Validity and Reliability of the DAP

According to the technical summary of the DAP provided online by the Search Institute (2013), “the DAP is found to be a reliable, valid, and stable measure for young people’s strengths and supports.” Previous testing reported an average internal consistency of .81 for the eight asset category scales. Specifically, internal consistency was .95 for Internal Assets, and .93 for External Assets. .97 was the reported internal consistency for total assets. The specific asset of Constructive Use of Time is reported at .59. The Search Institute (2013) reports that results did not vary significantly between the groups. After testing for reliability among 6th – 12th graders ($n = 225$), the test-retest reliability score averaged an acceptable $r = .79$ for the eight asset categories. Test-retest reliability for the Internal Assets Score was $r = .86$ and $r = .84$ for the External Assets Score. Test-retest reliability for Total Asset Score was $r = .87$. The specific asset, Constructive Use of Time had acceptable test-retest reliability, especially among females ($r = .79$) and high school youth ($r = .75$).

The concurrent validity of the DAP has been assessed from an original survey of

Attitudes & Behaviors (A&B) administered to more than 4 million youth (Search Institute, 2013). This past research has allowed for testing concurrent validity of the DAP. There is a strong linear relationship between Total Asset Score and the total number of assets taken from A&B survey, $r=.82, p < .001$. Furthermore, youth who reported 0 – 10 assets with the A&B survey influenced the Total Asset Score on the DAP to be deemed in the “Challenged” range (0 – 29). Youth who reported 11-19 assets had DAP scores deemed in the “Vulnerable” range. Likewise, youth who reported 21 – 30 assets had DAP scores in the “Adequate” range. Finally, youth who reported 31 – 40 assets had DAP scores in the “Thriving” range. The DAP also was able to assess ten high-risk behavior patterns using the A&B survey. Higher scores had a negative relation to high risk behavior indices. For example, Youth scoring in the “Challenged” range on the DAP External Assets scale reported on average 3.2 and 2.8 risk behavior patterns for males and females, respectively. Youth scoring in the “Thriving” range on the DAP External Assets scale, reported on average .5 risk behavior patterns for males, and .3 for females (Search Institute, 2013). Furthermore, the DAP demonstrates an acceptable Cronbach $\alpha = .97$ for its use in measuring Developmental Assets by which to measure resiliency and risk in youth populations. Analysis of the internal consistency of the DAP in the present study revealed a Cronbach’s alpha of .95.

Prep and Cleaning

The first and second hypotheses are: Sexual minority participants will demonstrate lower levels of external assets in comparison to sexual majority (non-Gay or Lesbian, self-identified heterosexual or Straight) participants and Sexual minority participants will demonstrate lower levels of internal assets in comparison to sexual

majority participants. To test these hypotheses, the researchers conducted a one-way multivariate analysis of variance (MANOVA) for each of the scale clusters of Internal Assets and External Assets. The Internal Assets of Support, Empowerment, Boundaries & Expectations, and Constructive Use of Time and External Assets of Commitment to Learning, Positive Values, Social Competence, and Positive Identity variables were entered as the dependent variables. Gender and sexual orientation were entered as the independent variables.

The third hypothesis was that there would be a relation between sexual minority participants who report a mean retrospective age of less than 16, level of outness other than “not at all” and the demonstration of higher levels of internal assets. Findings are not available in for this hypothesis. Chapter four provides a discussion of analyzing this hypothesis.

Utilizing the data from the finalized sample, Little’s missing completely at random (MCAR) test was conducted. Little’s MCAR test is a chi-square test to deduce if the location of missing data is completely random. The results of this analyses indicated that the data were not missing completely at random ($\chi^2 [1233, N = 153] = 1309.33, p = .064$). Due to the results of Little's MCAR test, Expectation Maximization (EM) procedures were utilized to replace missing data (Tabachnick & Fidell, 2007). In short, EM replaces missing values according to what might be expected in the missing data-points, based on the patterns of the data for other variables in the data file (Tabachnick & Fidell, 2007). The scores in the completed data, after the EM procedure, were then used to calculate the subscales or total scales for the measure used in this study.

Prior to running the analyses, the data was examined to look for incomplete/missing responses. The DAP cannot be responsibly scored if more than six items are missing. Furthermore, birthday discrepancies presented themselves as repeating birthday responses in less than a day. The researchers anticipated that this could be from a respondent closing out of the DAP and then coming back to take the survey a short time later. A close look at some data with repeating birthday responses revealed the former response possessed incomplete data while the latter repeated birthday response held completed data. If demographic information also repeated in these two responses, the researchers then compared what response data was available. If the response data and the birthday responses matched between both incomplete and complete responses, the former incomplete participant data was removed. Participants were removed in this manner only if the information corroborated to strongly suggest a repeat in participation. A total of 8 participants were removed with this process taking the total participant number collected from $n = 161$ to $n = 153$.

Other pre-analyses review highlighted that responses for “retrospective age” contained some non-applicable data or missing data where respondents did not answer this question. This was true for 13 respondent data that did not report a retrospective age and 30 respondent data that reported a non-applicable answer. This presented a problem in that the researchers could not guarantee the validity of these 43 survey responses (i.e. whether or not the data was from a retrospective age). To remedy this, the researchers ran a T-test to compare the scores between the 43 responses with incorrect retrospective age and responses with a correct retrospective age. Levene’s test for equality of

variances weren't statistically significant at $\alpha < .05$. This indicates that the two groups did not significantly vary in their survey responses relative to reporting retrospective age.

Lastly, pre-analyses data preparation reviewed the population utilizing the data from the finalized sample ($n=153$). Little's missing completely at random (MCAR) test was conducted. Little's MCAR test is a chi-squared test to deduce if the location of missing data is completely random. The results of this analyses yielded a non-significant chi-squared. Therefore, the data was missing completely at random ($\chi^2 [1233, N = 153] = 1309.33, p = .064$). Due to the results of Little's MCAR test, Expectation Maximization (EM) procedures were utilized to replace missing data (Tabachnick & Fidell, 2007). In short, EM replaces missing values according to what might be expected in the missing data-points, based on the patterns of the data for other variables in the data file (Tabachnick & Fidell, 2007). The scores in the completed data, after the EM procedure, were then used to calculate the subscales or total scales for the measure used in this study.

CHAPTER IV

RESULTS

Overview

This chapter reports the findings of the study. The results of the data analysis are organized according to the tests of the research hypotheses.

Hypothesis 1

Sexual minority participants will demonstrate lower levels of External Assets in comparison to sexual majority participants (non-Gay or Lesbian, self-identified heterosexual or Straight) participants. To test this hypothesis, the researchers collapsed the non-straight sexual orientation groups into an inclusive group of sexual minority. This was done to provide a way to generalize non-straight sexual orientation. Another reason the researchers did this was to create a more robust sample for analysis. To test this hypothesis, a one-way multivariate analysis of variance (MANOVA) for the External Assets group: support, empowerment, boundaries and expectations, and constructive use of time. The results of the analysis of this group of External Assets between the different sexual orientations (e.g. Lesbian, Gay, Bisexual, questioning, other, vs. Straight or sexual majority) revealed no significant difference between the groups. Furthermore, the results of the analysis of the group of External Assets between the sexual majority group and sexual minority group as well revealed no significant difference. Refer to Table 2 for descriptive statistics regarding this hypothesis testing.

Table 2

Descriptive Statistics for the Sexual Minority and Sexual Majority Between Group Comparisons for Hypothesis One and Hypothesis Two (N = 153)

	Internal Assets			External Assets		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>
Sexual Minority	19.37	5.66	41	17.39	5.44	41
Sexual Majority	20.48	4.89	111	19.02	5.28	111

Note: *M* = Mean; *SD* = Standard Deviation; *N* = Total sample size; *n* = group sample size

Hypothesis 2

Sexual minority participants will demonstrate lower levels of internal assets in comparison to sexual majority participants. To test this hypothesis, the researchers ran a one-way multivariate analysis of variance (MANOVA) for the Internal Assets group: commitment to learning, positive values, social competencies, and positive identity. The results of the analysis of this group of Internal Assets between the different sexual orientations (e.g. Lesbian, Gay, Bisexual, questioning, other, Straight) revealed no significant difference among the groups. The results of the analysis of this cluster of External Assets between the sexual majority group and sexual minority groups as well revealed no difference between the two groups.

Hypothesis 3

There is a relationship between sexual minority participants who report a retrospective age of 15 or earlier, level of outness other than “not at all” and the demonstration of higher levels of internal assets. There was inadequate participation who reported a mean age of less than 16 to run this analysis. Refer to Table 3 for descriptive statistics regarding this hypothesis testing.

Table 3

Descriptive Statistics for the Sexual Orientation Between Group Comparisons for Hypothesis Three (N = 153)

Sexual Orientation	Internal Assets			External Assets		
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>n</i>
Gay	18.67	6.56	15	17.20	5.25	15
Lesbian	21.70	5.03	10	18.20	5.63	10
Bisexual	19.73	4.31	11	17.64	5.16	11
Questioning	16.33	6.35	3	20.67	3.21	3
Other	15.50	7.78	2	8.50	4.95	2
Straight	20.48	4.89	111	19.02	5.28	111

Note: *M* = Mean; *SD* = Standard Deviation; *N* = Total sample size; *n* = group sample size

CHAPTER V

DISCUSSION

Overview of the Findings

The purpose of this study was to explore the topic of developmental assets with respect to sexual orientation in order to provide helping professionals, such as Marriage and Family Therapists, a better understanding and in turn provide better clinical services. Using a survey methodology, this study explored independent variables of gender and sexual orientation and dependent variables of internal and external developmental assets. This was achieved by having participants fill out the Developmental Assets Profile. This instrument has tested reliable and valid (Search Institute, 2013) for its effectiveness in examining areas of resiliency and risk as highlighted by The 40 Developmental Assets created by the Search Institute (2013). Three hypotheses were examined in the context of this study. The three include: (1) sexual minority participants will demonstrate lower levels of external assets in comparison to sexual majority (non-Gay or Lesbian, self-identified heterosexual or Straight) participants; (2) sexual minority participants will demonstrate lower levels of internal assets in comparison to sexual majority participants; (3) a relationship between sexual minority participants who report a retrospective age of 15 or earlier, level of outness other than “not at all” and the demonstration of higher levels of internal assets.

The importance of this study comes from the necessity to fill in gaps of literature pertaining to gay youth resiliency and risk. Current research has highlighted a difference between sexual minority populations and the sexual majority population in areas of mental health, negative social experiences, and risk behaviors (Lock & Steiner, 1999;

Poon & Saewyc, 2009). According to Scales and colleague (2003), these differences in risk should also suggest a deficit in the sexual minorities' ability to thrive throughout adolescence and into adulthood. Gaining more understanding in these risk issues through empirical analysis will lend more information to literature. It is the researchers' hope, that this contribution to literature will assist in future consideration of the imperative learning process of caring for, stewarding, and addressing potential risk issues of young people (Edwards, Mumford, & Serra-Roldan, 2007; Short, & Russell-Mayhew, 2009) with respect to sexual orientation. This information could prove useful to the professionals who may serve these populations (e.g. school counselors, teachers, mental health professionals).

Sexual Minority Demonstration of External Assets

The findings of this study indicate that there are no differences in External Assets between sexual majority and sexual minority youth. Specifically, there was no significant variation in the asset scales, Commitment to Learning, Positive Values, Social Competence, Positive Identity that were reported between the sexual majority and sexual minority groups.

Sexual Minority Demonstration of Internal Assets

The findings of this study indicate that there are no differences in External Assets between sexual majority and sexual minority youth. Specifically, there was no significant variation in the asset scales, Support, Empowerment, Boundaries & Expectation, and Constructive Use of Time that were reported between the sexual majority and sexual minority groups.

Relationship Between Outness, Retrospective Age, and Level of Internal Assets

The third hypothesis failed to produce a significance score due to lack of participant data from sexual minority participants. Specifically, analysis could not be conducted due to the lack of data in variables pertaining to sexual orientation, reported outness, and reported retrospective age.

Discussion of Findings

The results of this study have suggested that there are no differences in External and Internal Assets of resiliency between the sexual majority and sexual minority groups. An explanation of the absence of significant variation between the sexual orientation groups could likely be the consequence of diminished power attributable to low cell sizes within the sexual minority groups. Power analysis revealed limited ability to detect effects for the sexual minority group (.298). It is possible that variation in the resiliency assets between the two sexual orientation groups could argue with the results of this study given a more robust sexual minority sample.

Another explanation is that the lack of significant difference could be in part due to resiliency as operationalized according to this instrument not being an accurate explanation of the elevated risk behaviors demonstrated by the minority group (King, Semlyen, Tai, Killaspy, Osborn, Popelyuk, & Nazareth, 2008). Specifically, the elevated occurrence of mental illness, suicide ideation, substance abuse, and non-suicidal self-injury may be explained by another phenomenon not captured in this study. It is also possible that sexual minority and majority demonstrate the same levels of resiliency assets because the inherent differences in risk behaviors emerge in developmental periods

post adolescence. Furthermore, risk behaviors documented among the minority youth in comparison to their straight peers may actually be explained by variables other than sexual minority status.

The non-significance of asset scores between sexual orientation groups may suggest that the Developmental Assets Profile (DAP) instrument may not be a sufficient tool for retrospective data. Furthermore, retrospective data may not be the best type of data for answering the research questions put forth in this study. Although used extensively among adolescent groups, to date the Search Institute has not conducted a retrospective analysis using the DAP that these researchers have found. Adults reporting from their youth to demonstrate internal and external components of resiliency may require a different measurement to detect the variables examined in this study. Recruiting from a population that does not require retrospective reporting may utilize the DAP in a way that would better capture the possible variations among sexual minority youth resiliency.

These explanations suggest a possible type II error. Specifically, the researchers may have failed to detect significance in the differences of asset scoring between sexual orientation when the relationship actually existed. This error may possibly have occurred due to the lack of participant data. Conducting further research and collecting a larger sample from sexual minority and majority adults reporting from their youth may yield a more powerful effect size from which significance can be determined. Furthermore, using a different measure or collecting data from a population that does not rely on retrospection may be a more effective way of answering the research question of the

possible differences in resiliency between sexual majority and sexual minority adolescents.

Finally, it is worth discussing that the lack of significant difference between the two groups' resiliency may accurately reflect population trends. There is a lack of research that discusses the similarities among the sexual minority and sexual majority groups. However, the issue remains that risk behaviors are inherent to adolescence and may be independent of sexual orientation. Risk and resiliency is a concern among youth in general (Search Institute, 2013). Although aspects differ among different groups of adolescents (e.g. gender, SES, regional, culture/ethnicity etc., Kann, 2001), the component of risk behavior and resiliency being inherent and fluid throughout teen years remains true. Perhaps the similarities of these risk behaviors (bullying, drug exposure and usage, mental illness, gang affiliation, homelessness etc.) between sexual minority and majority youth are more profound than the literature (partial to discussing difference) would suggest.

Limitations

A number of limitations are worthy of acknowledgement due to their possible impact on the current study. Briefly discussed above is the limitation due to the overall small sexual minority sample size collected from the population. While adequate participant data was collected to run analyses examining sexual orientation and resiliency assets, there was not enough participant data to examine these assets among the minority sample. The lack of participant data from the sexual minority sample may have factored into the inability for the chosen analyses to detect significance in the chosen variables.

This study used data collected from 26.8% sexual minority participants and 73.2% sexual majority participants. These percentages illustrate an unequal sample demographic. One may argue that this demographic information could represent the population from which the sample was collected; however, future research would need a more robust sexual minority sample to conduct analyses exploring the variables proposed in this research study. Furthermore, although the sexual minority sample had an equal distribution of males and females ($n = 21$ for both), the overall sample has a male to female distribution of $n = 52$ and $n = 101$ respectively. This highlights yet another unbalanced sample distribution that could have affected the analysis conducted to examine gender.

In addition to small sample size and unequal demographic distribution, the utilization of retrospective reporting comes with inherent limitations. Howard (2011) suggests, “(although) retrospective reporting yields usable data, (it) may still have accuracy problems.” Future research able to bypass retrospective reporting and gather data from sexual minority adolescence could be a better means by which to test this study’s hypotheses. Furthermore, retrospective reporting may be problematic when used in tandem with the DAP instrument. Although this instrument is statistically suggested to be reliable and valid in predicting resiliency by measuring reported assets (Search Institute, 2013), the same reliability and validity may not transfer when using the instrument with adults reporting retrospectively from their youth. The utilization of the DAP may be an ill calibrated tool in examining resiliency by the demonstration of assets when using an adult population.

Finally, the sampling procedures conducted in this study relied on convenience

sampling through the social media website Facebook. The inherent limitations due to this sampling technique lie in potential sampling biases. To attempt to gather a sample more representative of the population, one would need to employ a more random sampling procedure. The current procedure was chosen based on convenience, low cost, and accessibility. While the extent of this limitation's affects can be curbed by sound research methods, it is worth noting that future research may need to rely on multiple sampling procedures to help gauge and influence demographic distribution and sample size.

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APPENDIX A

RECRUITMENT MATERIAL

**We would like 10 – 15 minutes of your time to better understand what
It was like for you when you were growing up.**

What is this project studying?

This study is collecting surveys about what life was like when you were an adolescent (12-18). The goal of this study is to compare strengths and weaknesses between youth that identify themselves as "gay, bisexual, straight, other, questioning."

How do I participate?

To participate, click on the link below to start a survey. This survey should not take very long, just 10-15 minutes. If you have to close out early before you complete it, just come back and take the survey again.

First, pick an age during your adolescents which is between 12 and 18 years old.

Next, indicate the age you picked next to "retrospective age." Also, indicate at the top how you identified your own sexual orientation during this time in your life. If you are not sure which to pick, just do your best to identify a time in your life when one of the answers fit for you.

The survey will ask you general questions about yourself and your environment. Do the best that you can to indicate the best answer that fits you during this time.

When you are done, click submit at the bottom of the page.

Why should I do this?

Your effort in taking this survey will contribute to research that is being studied on what it is like to be an adolescent. Specifically, we are trying to find out how life is the same or different between adolescents who report a sexual orientation of gay, bisexual, straight, other, or questioning. This research will be valuable to agencies such as schools and youth centers or professionals such as teachers, therapists, or mentors who work with a youth population.

Am I exposed to any risk by participating in this survey?

The predicted risks to participants from this survey are minimal to none for discomfort and/or stress. You do not have to answer every question if you do not want to. Of course, you have the right to stop participating in this survey any time you wish. This can be done by closing out of the application window.

How are you protecting my privacy?

The information you provide will be kept anonymous and confidential. We will not be able to trace your answers back to you.

Anything else I should know before I start this survey?

Yes, it may helpful for you to know, that for the purposes of this research you will be asked to include your sexual orientation. The terms this survey use are: gay, lesbian, straight, bisexual, and questioning, other.

The researcher has intentionally used these words to describe an innate orientation of a person instead of just their sexual history. Pick whichever term you personally identify with the most. If you do not identify with any of the terms provided, select other.

Another question you will be asked is the level of outness you were during the time of age you have picked. This means, if you were private about your sexual orientation, who had you disclosed to? Answer this question as best as you can with the answers provided. Remember to answer from the age that you have picked, not the age you are now.

I have some questions about this study. Who can I ask?

The study is being run by Dr. David Ivey and Cody Heath. They are from the Marriage and Family Therapy Program in the Department of Community Family Addiction Services. If you have questions, you can call them at 806-742-3074 ext: 454.

TTU also has a Board that protects the rights of people who participate in research. You can call them at 806-742-2064. You can write to them at the Human Research Protection Program, Office of the Vice President for Research, Texas Tech University, Lubbock TX 79409.

If you select yes, you are indicating that you have read and understand the information above and that you agree to take part in this study.

If you close out early or have to leave the survey without submitting, you may come back to start your survey over. You understand to only submit one survey

Please select one of the following

Yes, I agree to participate in this study.

No, I do NOT want to participate in this study. (Browser window will close.)

APPENDIX B

DEVELOPMENTAL ASSET PROTOCOL SAMPLE

DEVELOPMENTAL ASSETS PROFILE
Self-Report for Ages 11-18

WHAT IS YOUR RETROSPECTIVE AGE AND LEVEL OF OUTNESS AT THAT POINT IN TIME? (NOT AT ALL, FRIENDS, FAMILY, FRIENDS AND FAMILY, OR EVERYONE): _____

TODAY'S DATE: Mr. _____ Day: _____ Yr: _____ SEX: Male Female

WHAT IS YOUR HIGHEST LEVEL OF SCHOOLING? _____ BIRTH YEAR: Yr: _____

SEXUAL ORIENTATION: Gay Lesbian Bisexual Straight Questioning Other

RACE/ETHNICITY (Check all that apply): American Indian or Alaska Native Asian

Black or African American Hispanic or Latino/Latina Native Hawaiian or Other Pacific Islander

White Other (*please specify*): _____

INSTRUCTIONS: Below is a list of positive things that you might have in *yourself, your family, friends, neighborhood, school, and community*. For each item that describes you **now** or **within the past 3 months**, check if the item is true:

Not At All or Rarely Somewhat or Sometimes Very or Often Extremely or Almost Always

If you do not want to answer an item, leave it blank. But please try to answer all items as best you can.

Not At All or Rarely	Somewhat or Sometimes	Very or Often	Extremely or Almost Always	
				I. . .
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. Stand up for what I believe in.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. Feel in control of my life and future.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. Feel good about myself.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. Avoid things that are dangerous or unhealthy.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5. Enjoy reading or being read to.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. Build friendships with other people.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. Care about school.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8. Do my homework.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9. Stay away from tobacco, alcohol, and other drugs.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10. Enjoy learning.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11. Express my feelings in proper ways.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12. Feel good about my future.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13. Seek advice from my parents.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14. Deal with frustration in positive ways.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15. Overcome challenges in positive ways.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16. Think it is important to help other people.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17. Feel safe and secure at home.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18. Plan ahead and make good choices.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19. Resist bad influences.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20. Resolve conflicts without anyone getting hurt.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	21. Feel valued and appreciated by others.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	22. Take responsibility for what I do.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	23. Tell the truth even when it is not easy.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24. Accept people who are different from me.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	25. Feel safe at school.

PLEASE TURN OVER AND COMPLETE THE BACK.

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Note: The term "Parent(s)" means 1 or more adults who are responsible for raising you.

Not At All or Rarely	Somewhat or Sometimes	Very or Often	Extremely or Almost Always
----------------------------	-----------------------------	---------------------	----------------------------------

I AM...

- | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 26. Actively engaged in learning new things. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 27. Developing a sense of purpose in my life. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 28. Encouraged to try things that might be good for me. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 29. Included in family tasks and decisions. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 30. Helping to make my community a better place. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 31. Involved in a religious group or activity. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 32. Developing good health habits. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 33. Encouraged to help others. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 34. Involved in a sport, club, or other group. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 35. Trying to help solve social problems. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 36. Given useful roles and responsibilities. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 37. Developing respect for other people. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 38. Eager to do well in school and other activities. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 39. Sensitive to the needs and feelings of others. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 40. Involved in creative things such as music, theater, or art. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 41. Seeing others in my community. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 42. Spending quality time at home with my parent(s). |

SAMPLE

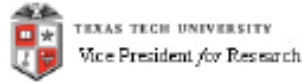
HOWEVER...

- | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 43. Friends who set good examples for me. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 44. A school that gives students clear rules. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 45. Adults who are good role models for me. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 46. A safe neighborhood. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 47. Parent(s) who try to help me succeed. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 48. Good neighbors who care about me. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 49. A school that cares about kids and encourages them. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 50. Teachers who urge me to develop and achieve. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 51. Support from adults other than my parents. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 52. A family that provides me with clear rules. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 53. Parent(s) who urge me to do well in school. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 54. A family that gives me love and support. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 55. Neighbors who help watch out for me. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 56. Parent(s) who are good at talking with me about things. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 57. A school that enforces rules fairly. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 58. A family that knows where I am and what I am doing. |

THANK YOU FOR COMPLETING THIS FORM.

APPENDIX C

IRB APPROVAL LETTER



December 11, 2012

David Ivey
Community, Family, and Addiction Services
Mail Stop: 1210

Regarding: 503615 Comparative Results of Developmental Assets between Gay/Lesbain Adults Reporting From Their Youth and Straight Adults Reporting from Their Youth

Dr. David Ivey:

The Texas Tech University Protection of Human Subjects Committee has approved your proposal referenced above. The approval is effective from December 11, 2012 to November 30, 2050. This expiration date must appear on all of your consent documents.

We will remind you of the pending expiration approximately eight weeks before November 30, 2050 and to update information about the project. If you request an extension, the proposal on file and the information you provide will be routed for continuing review.

Sincerely,



Rosemary Cogan, Ph.D., ABPP
Protection of Human Subjects Committee