12-2015

Life in the LGBTQ+ Community: Protective Factors Against Depression in the Community and in Everyday Life

Kristen Paris
East Tennessee State University

Life in the LGBTQ+ Community: Protective Factors Against Depression in the Community and in Everyday life.

An Undergraduate Thesis Submitted in Partial Fulfillment

of the Requirements for the

Fine and Performing Arts Scholars Program

and the

Honors College of

East Tennessee State University

By

Kristen Alyssa Paris

Presented November 30, 2015

Kristen A. Paris 12/7/15
Kristen A. Paris Date

Dr. Stacey Williams, Ph.D 12/7/15
Dr. Stacey Williams, Thesis Mentor Date

12/7/15
Dr. Matthew McBee, Reader Date

12/8/15
Dr. Scott Contreras-Koterbay, Reader Date

Acknowledgements

First and foremost, I would like to thank the Honors College and the Fine and Performing Arts Scholars Program for giving me such a wonderful opportunity for education at minimal cost to myself and my family. The course load and requirements were challenging at times, but you stuck with me when I did a complete 180 and changed my major to psychology two years into college. It has certainly been an interesting ride.

Next, I would like to thank my thesis advisor, Dr. Stacey Williams. You have been many roles during the past two semesters—a diligent helper and teacher, a taskmaster, a cheerleader, a guide when the way seemed dark and stormy. Most of all, you have been an amazing help to me along the way, there is no way that I could have even hoped to accomplish this without you. I am so glad that working in your lab presented me with the unique opportunity to work on a thesis of this nature. And to my thesis committee, Dr. Matthew McBee and Dr. Scott Contreras-Koterbay, thank you for taking the time out of your busy schedules to look over my thesis.

Finally, I would be nowhere without the support of my family and friends over the past four and a half years. You have been my rocks and my guidance throughout the crazy twists and turns that have been part of my journey at ETSU.

Abstract

In this study, we examined potential protective factors against depression in the LGBTQ+ community by determining whether outness, self-esteem, perceived social support, life meaning, courage to challenge or resilience/hardiness, life satisfaction, and hope were correlated with less depression. There were 149 participants in the study, 38 of whom identified as members of the LGBTQ+ community, and 107 of whom identified as heterosexual. Participants completed an online survey that took approximately 30 minutes. It was predicted that protective factors would be negatively related to depression. Results of both correlation and regression analyses revealed no significant relations between protective factors and depression. In a post-hoc analysis, the correlations between these factors in the heterosexual participants were statistically significant. Protective factors may be less prevalent or less directly helpful in the LGBTQ+ minority community than they are in the heterosexual majority. In addition, LGBTQ+ participants reported significantly higher levels of depression than the heterosexual participants. Thus, these findings indicate that there are significantly less protective factors present in the lives of LGBTQ+ persons than there are in their heterosexual counterparts.

CONTENTS

List of Tables

List of Figures

Introduction

LGBTQ+ Community

The Lesbian, Gay, Bisexual, Transgender, Queer, plus community (LGBTQ+) is a community that is slowing gaining its voice across the globe as stigmatization of their culture is lessening and they are granted more protections. They are men, women, gender-queer, gender-fluid, non-binary, and so many more. They are mothers, fathers, sisters, brothers, family to some and friends to many. They are nearly identical to any other human being, only differing in their sexual preferences or their preferred gender identity. Kinsey supposed that nearly 10% of the population must be gay, and we are still trying to determine if this is the case to this day. A study published by the *National Bureau of Economic Research* by Coffman, Coffman, and Erikson (2013), found that, according to their nation-wide poll of the United States, nearly 20% of the US population reported that they were attracted to their own gender. The poll used both "best practices method" and a "veiled elicitation method" to receive responses that increased self-report of non-heterosexual identity. The LGBTQ+ community is a large part of the worldwide population as well, if this study is any indication of a worldwide trend. Such a small matter of gender presentation or sexual preference seems to rock the boat fairly often.

Unfortunately for such a vibrant and varied people, they are plagued with many difficulties, one of which is mental illness. The LGBTQ+ community is no stranger to mental illnesses of many types. Depression is one of the most prevalent mental illnesses in the LGBTQ+ community. Emerson, Garofalo, and Mustanski found in their 2010 study that when a randomly selected group of LGBTQ+ adolescents were given the Beck Suicide Inventory (BSI-18), over 30%, or almost 1 in 3, of those adolescents had responded as having clinical levels of psychological distress within the past week.

Clinical Depression

Clinical depression in varying degrees of severity is a significant issue within the LGBTQ+ community. An additional study conducted by Almeida, Azrael, Corliss, Johnson, and Molnar (2009) in Boston, Massachusetts, concluded that the very factor of identification as part of the LGBTQ+ community had a positive correlation to depression. Almeida et al. also found that LGBTQ+ individuals often have worse cases of depression than their heterosexual and non-transgendered peers, in addition to having more instances of self-harm and suicidal thoughts as well. There is an even higher risk of suicide in just the transgendered community alone. Moody and Smith (2013) found that the suicide rate within the transgendered community is as high as 41%.

Clinical depression is a mental disorder that weighs down and even cripples the minds of millions of people every day. According to the American Psychological Association's diagnostic criteria, to be diagnosed with Major Depressive Disorder you must have at least five of nine symptoms. These five symptoms must have been present together during a period of 14 days and must cause a marked change from previously recognized levels of functioning as well. These are the nine symptoms: (1) being in a depressed mood for most of the day, (2) feelings of worthlessness or unusual and/or inappropriate guilt, (3) disinterest or lack of pleasure in once pleasing activities, (4) psychomotor agitation or decreased motor functions nearly every day, (5) unintentional weight loss or weight gain that is significant (5% change) without change in diet or a near daily sharp increase or decrease in appetite, (6) insomnia or hypersomnia nearly every day, (7) low energy levels along with fatigue, (8) inability to focus or indecisiveness, and, most seriously, (9) continuous thoughts of suicide or death, either with or without a concrete plan for a suicide attempt.

There are three separate, additional requirements for a major depressive episode. (1) These 5 symptoms must occur within the same 14-day period and they cannot be caused by the physical effects of a substance or a byproduct of a different medical condition. (2) There must be clinical levels of distress or impairment that interfere with normal social or occupational functions like that of school or a job. (3) And at least one of the five symptoms must be (a) lack of interest or pleasure in tasks that previously brought enjoyment or (b) depressed mood. The combination of all three of these requirements, in addition to the 5 symptoms can be constituted as a major depressive episode (American Psychological Association (2013).

Negative Factors That Could Cause Depression

Unfortunately, people that identify as part of the LGBTQ+ community are forced to deal with the emotional effects of stigmatization, hatred, and fear from others on a regular basis as part of their everyday lives. This stigmatization can take a multitude of forms and the hatred that is expressed towards them can present in any of several ways. The stigmatization and hatred can present itself anywhere, from the supposed safe place of their homes to the halls and classrooms of their schools, in their places of worship if they ascribe to a particular religion, online as part of the more recently prevalent cyber-bullying, at social events, or anywhere it is possible for a bigoted individual to exist. All of these locations present a place for humiliations, hatred, and violence.

Trauma. Brown and Pantalone (2011) found that LGBTQ+ individuals are at a higher risk of trauma, in terms of interpersonal violence and familial abuse than their non-sexual minority peers. And in a study that looked from an ecological viewpoint, Duncan and Hatzenbeuhler (2014) looked at the amount of hate-crimes in a neighborhood and compared this data with data about sexual orientation and suicicidality from teens in that neighborhood. They

found a significant correlation between suicidal ideations along with the number of suicide attempts and neighborhoods that have higher amounts of LGBTQ+ related hate-crimes.

Victimization/assault. Unfortunately violent victimization is particularly prevalent in the LGBTQ+ community. In an article by Card, Diaz, Russell, Ryan, and Toomey in 2013, their research showed that in gender non-conforming and non-heterosexual youths, victimization often lead to depression and suicidal ideations. The victimization and bullying that occurs toward members of the community is often significantly more violent than the violence that occurs against the sexual majority. Most of these events are considered hate-crimes due to their violent nature and because they are committed out of fear and hatred.

In a study assessing likelihood of sexual assault, Cramer et al. (2012) found that the LGBTQ+ community is 2.3 times likelier to be the victim of sexual assault than the non-LGBTQ+ community. The survey that was part of this study asked questions about the type of violence that the person being interviewed had normally experienced. The heterosexual interviewees indicated that their experiences were mainly that of physical assault, followed by shooting, sexual assault, stabbing, and then domestic violence. Victims that were LGBTQ+ reported that their experiences were mainly physical assault, followed by sexual assault, domestic violence, stabbing, vehicular assault, and shootings. When surveying the victims, Cramer et al. found that LGBTQ+ victims had more anxiety symptoms and higher levels of acute stress symptoms than their heterosexual counterparts.

Minority stress. In a 2003 study, Meyer performed a meta-analysis addressing mental illness in the LGB community. He proposed that the reason that there is a higher occurrence of mental illness in the LGB community is caused by an overly high amount of social stressors that are related to mental stigma and prejudice. Meyer (2003) suggests that there are 3 sources of

minority stress: "(a) external, objective stressful events and conditions (chronic and acute), (b) expectations of such events and the vigilance this expectation requires, and (c) the internalization of negative social attitudes" (p 676).

Stigma. Hatzenbuehler (2009) once more reiterated that sexual minorities such as those in the LGBTQ+ community are at a higher risk for mental health issues than their heterosexual counterparts. He suggests that this is due to two different sources of conflict: stressors that are specific to sexual minorities and general psychological processes not limited to these sexual minorities in the LGBTQ+ community. He developed a theoretical framework that hypothesizes the cause of these stressors. This framework is that sexual minorities have an increased exposure to emotional stress via their exposure to stigma, these stigma-related stressors cause an increase in emotion dysregulation, social and interpersonal problems, and mental processes related to psychopathological risk, and that the aforementioned processes mediate the relationship between stigma related stress and psychopathology (Hatzenbuehler, p 707).

Protective Factors That May Prevent Depression

Depression is often times induced by a chemical imbalance in the brain's neurotransmitters, but it can be increased and aided by trauma, unpleasant emotional experiences and other exacerbating factors. It seems that a large portion of the depression and the severity of that depression can be lessened by the combination of several protective factors. These protective factors are especially important in the LGBTQ+ community because it is a community plagued with not only more prevalent rates of depression, but also a community that has higher rates of suicidal tendencies, ideations, attempts, and completions. A study by Murphy (2012), found that LGBTQ+ teens are around four to six times more likely than their heterosexual peers to have attempted suicide that resulted in hospitalization within the past year. An article by Moody and

Smith (2013), stated that protective factors could be implemented to reduce the significant suicide rates within the transgendered community. These protective factors include: feeling social support from their families, increasing emotional stability, and finding a reason for living. These protective factors were found to be helpful and were associated with lowering rates of suicidal behavior. Other possible protective factors like these are self-esteem, courage to challenge or resilience against adversity, life satisfaction, and hope.

Perceived social support/self-esteem. Support in any matter of life is generally beneficial. Support and acceptance from friends, family members, schools, and other institutions is seemingly a crucial factor in decreasing depression in the LGBTQ+ community. In a 2013 study by Mustanski and Liu, they found that parental support of LGBT youth significantly decreased chances of depression that led to the occurrence of suicide. Ryan, Russell, Huebner, Diaz, and Sanchez (2010) found a definite correlation between familial support, social support, and self-esteem and the person's overall health, and a decrease in depression and suicidal tendencies.

Support from schools and other institutions seems equally important. In terms of protective factors, school acceptance plays a major roll in lessening depression and suicide within the LGBTQ+ community. Hatzenbuehler, Birkett, Van Wagenen, and Meyer (2014) found that LGBTQ+ youths were significantly more likely to have reported suicidal ideations and attempts within the past year than their heterosexual counterparts. They found that schools that had more protective factors towards and that were more accepting of their LGBTQ+ student populace had markedly less occurrences of suicidal thoughts and attempts than those that were lacking in these factors. The protective factors suggested within the study include, but are not limited to: anti-bullying/harassment policies that include sexual orientation and gender

representation, gay-straight alliances, documented safe spaces or safe zones for LGBTQ+ students, and having counselors that are trained in dealing with LGBTQ+ students, etc. (Hatzenbeuhler, Birkett, Van Wagenen, & Meyer (2014).

The significance of these protective factors is further corroborated in an article by Cochran, Flentje, and Heck (2013) that states that having a gay-straight alliance in high schools has a significant correlation with the decrease of depression, hopelessness, and suicide within the LGBTQ+ students at that school. For these people, feeling safe and welcomed in their school could play a large role in whether or not they become depressed or suicidal, especially if they are rejected for it at home. In situations where the student is rejected at home, the school can become a safe-haven that bolsters the self-esteem of the teen. Feeling safe at school instead of being fearful of bullying and violence because of an anti-bullying policy is important as well. To know that they have a safe place away from their home, if necessary, can be a huge relief to a student that is facing rejection or abuse at home. Schools implementing policies and having a gay-straight alliance is so important because behavior and prejudice is learned and it can be untaught through constant exposure to it at school.

Outness. In her 2003 article, Meyer references a 2001 article by Morris, Waldo, and Rothblum titled “A model of predictors and outcomes of outness among lesbian and bisexual women”. The reference from their article suggests that via the process of coming out of the closet, LGB people are forced to learn how to cope with and overcome the adverse effects of minority stress. This suggestion is easily extended to the LGBTQ+ community, as well. Being able to cope with stressors that come with being a sexual minority or a gender variant seems to indicate that the person would have less emotional backlash from the effects of that minority stress and possibly a smaller likelihood of depression related to it.

In the same 2003 article, Meyer brought up this point. He suggests that the LGB identity of the person can either increase their minority stress or decrease it, depending on the situation. If the LGB identity is the primary identity factor for the person instead of merely a secondary characteristic, it can worsen minority stress (Meyer, p 678). He suggests that the LGB identity can be a source of strength for the person if they associate it with social support and positive social affiliations as part of a group identity and that they can aid in dealing with minority stress (Meyer, p 679).

Courage to Challenge/Resilience. Scourfield, Roen, and McDermott (2008) looked at resilience in the LGBTQ+ community as a whole and the link between sexual identity and depression and destructive behavior. They focused on 4 factors that could increase survival. These four factors are: the importance of recognizing the prevalence of LGBTQ+ suicide risk when making suicide prevention policies, the necessity of ecological intervention, the necessity of practitioners dealing with LGBTQ+ patients having sex-culture competence and being informed on pertinent matters, and the importance of diverse responses to adversity. Scourfield, Roen, and McDermott (2008) found that inclusion, and even prioritization of the LGBTQ+ community within suicide-prevention campaigns and when implementing suicide-prevention strategies could influence the community in a positive manner.

Life Satisfaction The idea is that someone who is more satisfied with their life would be less prone to depression than a person who is exceedingly not satisfied with their life. This is corroborated by a study of 172 Malaysian medical students by Swami et al in their 2007 article. They found that life satisfaction had a significant negative correlation with suicidal attitudes, loneliness and depression and positively with health (Swami et al., p 161).

Koivumaa-Honkanen, Kaprio, Honkanen, Viinamäki and Koskenvuo's 2004 article further supports this idea. They conducted a longitudinal study of life satisfaction and its relationship to depression using a nationwide sample of Finnish adults (n = 9679). They found a strong linear association between the concurrent life satisfaction questions and the Beck Depression Inventory given to their participants. They found an increased risk of depression in those that reported low life satisfaction compared to the participants that reported a higher life satisfaction (Koivumaa-Honkanen et al.).

Hope. Likewise, hope seems like it would be negatively correlated with depression. Hopelessness is one of the main factors in several depression scales. Interesting information was found on this topic in a 2007 article by Arnau et al. Arnau and his colleagues conducted a multi-university study at The University of Southern Mississippi, Texas A&M University, University of California, Los Angeles, University of Tulsa, and Boise State University with a sample of 522 college students. They studied the effects of hope on depression and anxiety using a longitudinal design. They used Snyder's *Adult Hope Scale* to assess the levels of Agency and Pathways that the scale measures.

They assessed hope on a three-way, cross-lagged structural model and found that there was a small negative effect of hope on the later occurrence of depression due to the agency affect of hope. They also found that there was no effect of depression on later hope. Arnau et al. stated that they found their findings related to this interesting. They believed that their findings provided evidence for hope as a protective factor, or at least a factor related to resilience. This was because it was found to have at least a small effect on reducing depression symptoms at 1 month later and that depression did not have any effect on future levels of hopefulness (Arnau et al., p 58).

Current Study

With a multitude of factors working against the likelihood of happiness occurring in the LGBTQ+ community, factors found to decrease depression and other mental illness in that community would be helpful. There is a veritable myriad of damaging emotional factors mentioned in the above literature review. Hatred, lack of support from friends and family, bullying and violence as sources of victimization from social peers, disgust and stigmatization in schools, churches, places of worship, and other social institutions, hate crimes, are some of the issues that LGBTQ+ persons face on a daily basis. When these represent only some of the negative occurrences that they must deal with, it is no wonder that depression and other mental illnesses are more prevalent in this community than almost any other. This study examined a variety of potential protective factors that may be related to less depression in LGBTQ+ individuals (see Figure 1). The particular protective factors assessed are: outness, self-esteem, perceived social support, courage to challenge or resilience/hardiness, life satisfaction, and hope.

Given the above literature review, I hypothesized that some or all of these protective factors would be significantly and negatively related to depression symptoms. By examining these factors simultaneously, this research has the potential to uncover which factors could ultimately serve as a buffer to the negative stigmatization and occurrences that the members of the LGBTQ+ community face in their everyday lives.

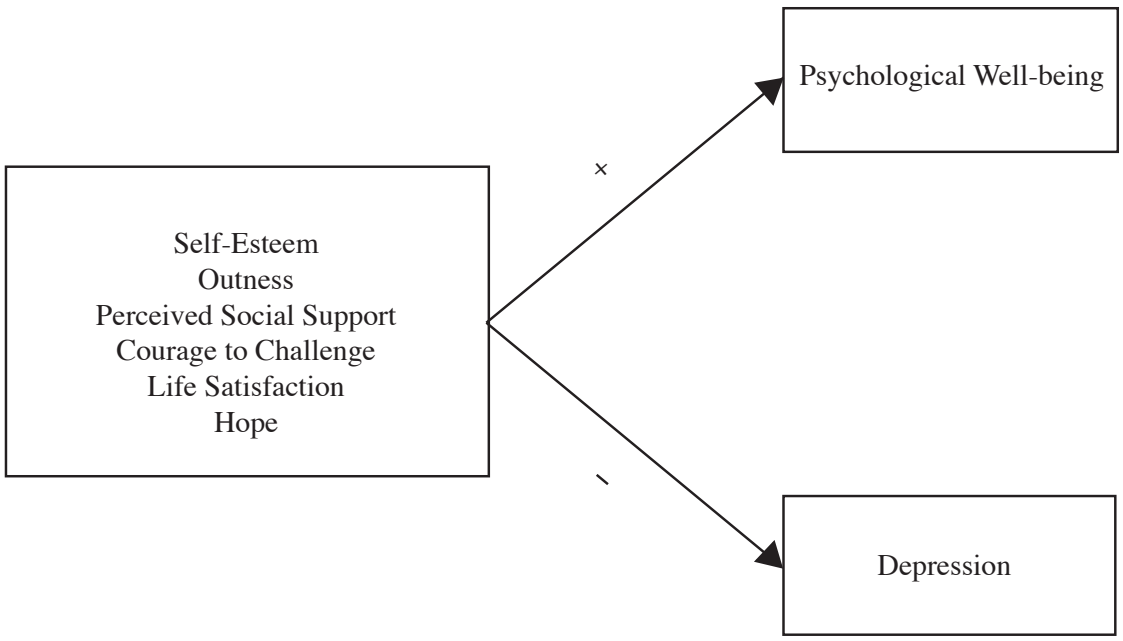

Figure 1. Proposed relationship between protective factors and depression

Methods

Participants

Participants could take the survey for a 2-week period, and they were recruited through advertisement (HEROES and PFLAG Tri-Cities Facebook pages) and via East Tennessee State University SONA systems. HEROES is an acronym that stands for Helping to Educate Regarding Orientation, Equality, and the Spectrum and is the Gay-Straight alliance on the East Tennessee State University Campus. PFLAG is an acronym that stands for Parents and Friends of Lesbians and Gays and it is a support group for the LGBTQ+ people in the tri-city area. It was requested that participants self-identified as LGBTQ+ and was a requirement that they be at least 18 years old—those using the SONA system received 0.5 SONA credits in their courses for completing the survey. There were no incentives for participation for those not taking the survey as part of the SONA system.

There were a total of 149 participants that participated in the online survey. One hundred and seven participants self-identified as heterosexual, and were omitted from main hypothesis testing (although they were included in a posthoc analysis). An additional four participants were completely missing data. That left 38 participants that self-identified as a member of the LGBTQ+ community (n= 6, asexual; n=13, bisexual; n= 9, homosexual (gay/lesbian); n=8, pansexual; n=2 transgendered individuals). Their ages were varied (N=35, Mean=25.34, SD= 9.277, Minimum= 18, Maximum=56).

Table 1

Demographics

	N	%
Gender		
Male	8	21
Female	23	60.5
Genderqueer/Gender Neutral/Two Spirit	2	5.3
Transgender (Male to Female)	1	2.6
Transgender (Female to Male)	1	2.6
Non-binary	1	2.6
Transwoman	2	5.3
Sexual orientation		
Asexual	6	15.8
Bisexual	13	34.2
Homosexual (Gay/Lesbian)	9	23.7
Pansexual	8	21.1
Demisexual	1	2.6
Queer	1	2.6
Race/Ethnicity		
Alaskan/Native American	3	7.9
African American	2	5.3
Asian	1	2.6
Caucasian/White	30	78.9
Hispanic	2	5.3
Other	3	7.9

Procedures

Eligibility requirements for participation in this study were only that the participants must be at least 18 years of age, and that they identified as LGBTQ+. The online survey was completely anonymous in an attempt to protect the identities of the participants. All data collected from the survey was completely anonymous, as well from both the SONA survey and the Survey Monkey Survey. Prior to conducting the experiment, the survey was approved by the IRB to determine its appropriateness.

Measures

Table 2

Reliability

	Cronbach's Alpha	N of Items
Self-Esteem	0.857	10
Outness	0.945	11
Social Support	0.894	12
Courage	0.925	18
Satisfaction	0.914	5
Hope	0.772	12

As seen in table 2, all of the below measures were found reliable via a Cronbach's alpha analysis.

The Beck Depression Inventory II (BDI-II) (Beck, 1996). This scale is a 21-item self-report measure used to assess the participant for the presence and severity of symptoms of depression are as listed in the DSM-IV (DSM-IV, 1994). Each question has a multiple choice answer scheme that generally has 4 or more different answers. There is a 4-point scale for each item that ranges from 0 to 3. Two questions contain a 7-point scale and address changes in appetite and sleep. Scoring 0-13 indicates minimal depression, 14-19 indicates mild depression, 20-28 indicates moderate depression, and 29-63 indicates severe depression.

The Outness Inventory (Mohr & Fassinger, 2000). This scale was used to determine the degree to which the participants were open about their sexuality to their friends and family. It is an 11-item measure, with each item having a level of outness that is rated by a 7-item scale. 1

= person definitely does not know about my sexuality, and 7 = person definitely knows. Higher overall scores indicate a higher overall level of outness.

The Rosenberg Self-Esteem Scale (Rosenberg, 1965). This scale is a 10-question scale used to assess participant's self-esteem via a 4 point rating scale, where the options range from strongly agree to strongly disagree. Higher scores on this measure indicated a higher self-esteem.

Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988). This scale is a 12-item measure with a 7-item scale for each item, where 1= very strongly disagree and 7 = very strongly agree. The questions each have a different support type: questions 1, 2, 5, and 10 are support from a significant other; questions 3, 4, 8, and 11 are familial support; questions 6, 7, 9, and 12 are support from friends. Those with higher scores have more support than those with lower scores.

Courage to Challenge Scale (Smith & Gray, 2009). This scale is an 18-item measure with a 7-item scale for each question, where 1 = strongly agree and 7 = strongly disagree. This measure is trying to identify levels of personal hardness or resilience in the face of adversity within the LGBTQ+ community.

The Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985). This scale is a 5-item measure with a 7-item scale to go with each item, where 1 = strongly disagree and 8 = strongly agree. Those with lower scores are more satisfied with their life.

The Adult Hope Scale (Snyder et al., 1991). This scale is a 12-item measure with an 8-item scale for each item, where 1 = definitely false and 8 = definitely true. It looks at a person's agency (how goal oriented someone is) via questions 2, 9, 10, and 12. It looks at a person's pathways (planning to accomplish goals) via questions 1, 4, 6, and 8. The total Hope Scale score is found by summing the agency and pathway items. Those with higher scores have higher levels

of hope. It was used to measure a participant's level of hope.

The descriptive statistics for the above measures can be found in the below table, table 3. It should be noted that the average depression reported in the study was not at clinical levels, but there were participants that met and exceeded the score requirements of clinical depression required by the BDI-II.

Table 3

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Self Esteem	37	1.60	3.90	2.86	0.52
Outness	37	11.00	77.00	34.65	17.20
Social Support	37	12.00	84.00	60.22	14.31
Courage to Challenge	33	1.72	6.50	5.02	0.98
Satisfaction	33	5.00	31.00	19.85	7.44
Hope	33	32.00	62.00	45.39	8.59
Beck	34	0.00	63.00	17.06	12.90

Results

Statistical Analysis

Correlational analysis was conducted to analyze the relationship between each of the factors and their predicted outcomes. A regression analysis was used as well to determine which of the protective factors emerged as the strongest predictors of depression when considered simultaneously. Post hoc analyses (correlation, independent samples *t* test) were used to examine the relationship between the protective factors and depression in heterosexual persons.

As shown in Table 4, bivariate correlations revealed that there was not a significant correlation between the protective factors and depression in the LGBTQ+ community. Four variables had marginal significance though: self-esteem (r = -.295, p = .091), social support (r = -.271, p = .122), and courage/resilience (r = -.260, p = .144) , with hope a little ways behind at (r = -.179, p = .320). Theories about this will be explained in the discussions section.

Table 4

Correlations Between Protective Factors and Depression (LGBTQ+ Sample)

	1	2	3	4	5	6	7
1. Self-esteem	1	-0.003	0.146	0.279	-0.399	0.169	-0.295
2. Outness		1	0.102	-0.080	-0.054	0.037	0.019
3. Social support			1	0.313	-0.161	0.377	-0.271
4. Courage/resilience				1	-0.253	0.708	-0.260
5. Satisfaction		-			1	0.023	0.162
6. Hope						1	-0.179
7. Depression							1

As shown in Table 5, the simultaneous regression analysis revealed that none of the protective factors significantly predicted depression.

Table 5

Simultaneous Regression of Protective Factors

	b	SE	Beta	Significance	R2
Constant	45.955	22.546		0.052	0.152
Self Esteem	-4.4	4.983	-0.176	0.385	
Outness	0.074	0.144	0.096	0.609	
Social Support	-0.202	0.174	-0.233	0.254	
Courage to Challenge	-2.076	3.68	-0.159	0.578	
Satisfaction	0.029	0.366	0.017	0.937	
Hope	0.072	0.417	0.048	0.865	

Post Hoc

Although not part of the original hypotheses, post-hoc correlational and independent samples *t* test analysis was conducted on the heterosexual sample, comparing the heterosexual and LGBTQ participants. These tests were done to determine if protective factors were significantly and negatively correlated with depression in a majority sample. As seen in table 6, results revealed that self-esteem (r = -.497**, p = .000), courage to challenge/resilience (r = -.457**, p = .000), life satisfaction (r = .403**, p = .000), and hope (r = -.313**, p = .002) were statistically significantly related to less depression.

Table 6

Correlations Between Protective Factors and Depression (Heterosexual Sample)

	1	2	3	4	5	6	7
1. Self-esteem	1	.074	.312**	.574**	-.655**	.536**	-.497**
2. Outness		1	.080	.119	-.244*	.162	-.121
3. Social support			1	.511**	-.469**	.615**	-.096
4. Courage/resilience				1	-.739**	.653**	-.457**
5. Satisfaction					1	-.685**	.403**
6. Hope						1	-.313**
7. Depression							1

As seen in Table 7, the independent sample *t* test comparison statistics of the two groups, where 0 = heterosexual and 1 = LGBTQ+, the results revealed heterosexual participants had better/healthier means in: self-esteem score (3.08 vs 2.86), openness about their sexuality (57.68 vs 35.65), social support (67.68 vs 60.22), courage (5.23 vs 1= 5.02), life satisfaction (14.99 vs 19.84), hope (46.57 vs 45.39), and lower means of depression (Beck) (10.86 vs 17.06). As seen in Table 8, these means were significantly different for self-esteem, outness, satisfaction, social support, and beck ($p = .006$). These scores indicate that LGBTQ individuals have less available protective resources (self-esteem, satisfaction, outness, and social support) and more depression than heterosexuals.

Table 7

Group Comparison Statistics (where 0 = Heterosexual and 1=LGBTQ+)

	Sexual Minority	N	Mean	Std. Deviation	Std. Error Mean
Self esteem	0	107	3.081	.539	0.052
	1	37	2.859	.525	0.086
Outness	0	95	57.684	20.363	2.089
	1	37	35.649	17.197	2.827
Social Support	0	104	67.683	14.405	1.413
	1	37	60.216	14.314	2.353
Courage	0	102	5.233	1.134	0.112
	1	33	5.025	0.978	0.170
Satisfaction	0	99	14.989	7.4416	0.748
	1	33	19.849	7.4419	1.296
Hope	0	97	46.567	10.836	1.100
	1	33	45.394	8.588	1.495
Beck	0	103	10.864	10.761	1.060
	1	34	17.059	12.900	2.212

Table 8

Independent Samples Test

		Levene's Test for Equality of Variances		t test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Self-esteem	Equal variances assumed	.198	.657	2.171	142	.032
	Equal variances not assumed	-	-	2.199	64.157	.031
Outness	Equal variances assumed	2.972	0.087	5.82	130	.000
	Equal variances not assumed	-	-	6.268	77.232	.000
Social Support	Equal variances assumed	0.155	0.694	2.712	139	.008
	Equal variances not assumed	-	-	2.72	63.723	.008
Courage	Equal variances assumed	1.915	0.169	0.942	133	.348
	Equal variances not assumed	-	-	1.017	62.191	.313
Satisfaction	Equal variances assumed	0.025	0.875	-3.248	130	.001
	Equal variances not assumed	-	-	-3.248	54.895	.002
Hope	Equal variances assumed	1.02	0.314	0.564	128	.574
	Equal variances not assumed	-	-	0.632	69.279	.529
Beck	Equal variances assumed	0.174	.677	-2.766	135	.006
	Equal variances not assumed	-	-	-2.525	49.064	.015

Discussion

Depression is prevalent in the LGBTQ+ community. This study attempted to examine possible protective factors (outness, self-esteem, perceived social support, life meaning, courage to challenge or resilience/hardiness, life satisfaction, and hope) against depression in the LGBTQ+ community. Based on various studies centered on depression in the community and possible alleviating factors, it was hypothesized that the presence of the previous protective factors would have a significant and negative correlation on the occurrence of depression.

Unfortunately, the results did not support hypotheses, at least in terms of the LGBTQ+ participants. There were no significant negative correlations between the protective factors and depression. This is inconsistent with much of the literature that seems to believe otherwise and not in line with the hypothesis of this study. However, there were a few correlations that were relatively strong (.2 and .3) which indicate they could be significant predictors if additional statistical power was possible in the analysis.

Indeed, one potential reason we conclude no significant correlations is the sample size was simply too small. The second potential explanation for the non-significant findings might be less of the protective factors present in the lives of our sample. The lack of protective factors might have been largely due to the stigmatization so prevalent in this area of the country (Northeast Tennessee). That LGBTQ+ simply do not have as much in the way of life satisfaction, resilience, hope, or a high enough self-esteem to act as protective factors. The post-hoc analysis of the heterosexual participants could be seen as support for either of these explanations. The sample size was much larger than the sample size of the LGBTQ+ community and their self-report measures on the survey indicated higher levels of the protective factors

present in their lives. There was a significant negative correlation between self-esteem (r = -.497**), courage to challenge/resilience (r = -.457**), and hope (r = -.313**) and they had higher scores in all of these areas than their counterparts. The results of the independent samples t test showed fewer available protective factors (social support, satisfaction, outness, self-esteem) and more depression for LGBTQ individuals compared to heterosexuals.

A final potential explanation for the non-significant findings, is that the role of protective factors in the lives of LGBTQ+ individuals is not direct. Instead, it may be that protective factors serve as possible buffers in the face of stigma and other stressful life events. Although we cannot test that hypothesis with current data due to small sample size, future research should examine the interaction between stigma or minority stress attached to being LGBTQ+ and each of the protective factors.

The implications of the findings are that the protective factors examined in this study, when present in a significant manner, actually have a significant correlation with decreasing depression (in the heterosexual group). This is rather important considering that depression is a plague on millions of people worldwide and in all communities, not just that of the LGBTQ+ community. These protective factors could be looked at in an experimental sense, at least in terms of increasing hope and self-esteem, and even possibly in the courage to challenge area as well. If these factors could be bolstered via cognitive therapy or talk therapy, it could potentially be beneficial to those seeking treatment for depression. Social support could be gained via group therapy or the invitation to a support group. There are many ways that these factors could be bolstered to aid in the lessening of depression.

Limitations

There are several limitations for this study. First and foremost, the sample size of participants from the LGBTQ+ community was incredibly small. The sub-sample of LGBTQ+ individuals had an n of only 38 people after omitting 107 surveys taken by heterosexuals. Another limitation is the cross-sectional study design where we cannot determine the temporal relations between the variables studied. Another limitation for this study is that the sample is a sample of convenience due to the use of the ETSU SONA systems and the use of two local area Facebook pages for advertisement. As a result, the sample may not be representative of all LGBTQ+ individuals. Future research on more comprehensive samples with larger and longitudinal samples will permit the full testing of the role of protective factors in preventing depression. To the degree this future work is successful, it may be that the protective factors discussed in this thesis could speak to future intervention work to improve the lives of LGBTQ+ individuals.

Conclusion

In summary, contrary to hypotheses, protective factors were not significantly correlated with depression in the LGBTQ+ community. Likely this lack of significance is due to a small sample size (only 38 LGBTQ+ individuals participated, whereas 107 heterosexually identified participants took the survey erroneously). In post hoc tests on the heterosexual subsample, strong correlations between protective factors and depression emerged. That there were significant negative correlations between several protective factors and depression, indicates more work should be done on these protective factors as they may have implications for depression therapy practices. Any method of bolstering the population of any community from depression, much

less a community that is so massively affected by it like the LGBTQ+ community, would be a large feat. Thus, research on this topic should continue in spite of non-significant findings reported here.

References

Almeida, J., Azrael, D., Corliss, H. L., Johnson, R. M., & Molnar, B. E. (2009). Emotional Distress Among LGBT Youth: The Influence of Perceived Discrimination Based on Sexual Orientation. *J Youth Adolescence, 38*, 1001–1014. doi: 10.1007/s10964-009-9397-9

Arnau, Randolph C. (2007). Longitudinal effects of hope on depression and anxiety: A latent variable analysis. *Journal of Personality, 75*(1), 43-63.

Beck, A.T., Steer, R.A., & Brown, G.K. (1996). Manual for the Beck Depression Inventory-II. San Antonio, TX: Psychological Corporation.

Brown, L. S., & Pantalone, D. (2011). Lesbian, gay, bisexual, and transgender issues in trauma psychology: A topic comes out of the closet. *Traumatology*, *17*(2), 1-3. doi:10.1177/1534765611417763

Card, N. A., Diaz, R. M., Russell, S. T., Ryan, C., & Toomey, R. B. (2013). Gender-nonconforming lesbian, gay, bisexual, and transgender youth: School victimization and young adult psychosocial adjustment. *Psychology of Sexual Orientation and Gender Diversity, 1*(S), 71–80. doi: 10.1037/2329-0382.1.S.71

Coffman, K. B., Coffman, L. C., & Marzilli Ericson, K.,M. (2013). The size of the LGBT population and the magnitude of anti-gay sentiment are substantially underestimated. *Cambridge: National Bureau of Economic Research, Inc.* doi:http://dx.doi.org/10.3386/w19508

Diaz, R., Huebner, D., Ryan, C., Russell, S. T., & Sanchez, J. (2013). Family acceptance in adolescence and the health of LGBT young adults. *Journal of Child and Adolescent Psychiatric Nursing, 23*(4), 205-213. doi: 10.1111/j.1744-6171.2010.00246.x

Diener, E., Emmons, R.A., Larsen, R.J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, *49*, 1-5.

Duncan, D. T., & Hatzenbuehler, M. L. (2014). Lesbian, gay, bisexual, and transgender hate crimes and suicidality among a population-based sample of sexual-minority adolescents in Boston. *American Journal of Public Health*, *104*(2), 272-278.

Emerson, E. M., Garofalo, R., & Mustanski, B. S. (2010). Mental health disorders, psychological distress, and suicidality in a diverse sample of lesbian, gay, bisexual, and transgender youths. *American Journal of Public Health, 100*(12), 2426-2432. doi: 10.2105/AJPH.2009.178319

Hatzenbuehler, Mark L. (2009). How Does Sexual Minority Stigma "Get under the Skin"? A Psychological Mediation Framework.*Psychological Bulletin, 135*(5), 707-730.

Hatzenbuehler, M. L., Birkett, M., Van Wagenen, A., & Meyer, I. H. (2014). Protective school climates and reduced risk for suicide ideation in sexual minority youths. *American Journal of Public Health*, *104*(2), 279-286. doi:10.2105/AJPH.2013.301508

Heck, N.C., Flentje, A., & Cochran, B. N. (2013). Offsetting risks: High school gay-straight alliances and lesbian, gay, bisexual, and transgender (LGBT) youth. *Psychology of Sexual Orientation and Gender Diversity, 1*(S), 81-90. doi:10.1037/2329-0382.1.S.81

Kessler, R. C., Andrews, G., Colpe, L. G., Hiripi, E., Mroczek, D. K., Normand, S. L.,… Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine, 32*(6), 959-976. doi: 10.1017/S0033291702006074

Koivumaa-Honkanen, H., Kaprio, J., Honkanen, R., Viinamäki, H., & Koskenvuo, M. (2004). Life satisfaction and depression in a 15-year follow-up of healthy adults. *Soc Psychiatry Psychiatr Epidemiol, 39*(12), 994-999.

Liu, R. T., & Mustanski, B. (2012). Suicidal ideation and self-harm in lesbian, gay, bisexual, and transgender youth. *American Journal of Preventive Medicine*, *42*(3), 221-228. doi:10.1016/j.amepre.2011.10.023

Liu, R. T., & Mustanski, B. (2013). A longitudinal study of predictors of suicide attempts among lesbian, gay, bisexual, and transgender youth. *Archives of Sexual Behavior*, *42*(3), 437-448. doi:10.1007/s10508-012-0013-9

Meyer, I., & Cooper, Harris. (2003). Prejudice, Social Stress, and Mental Health in Lesbian, Gay, and Bisexual Populations: Conceptual Issues and Research Evidence. *Psychological Bulletin, 129*(5), 674-697.

Mickelson, K. D. (2001). Perceived stigma, social support, and depression. Personality and Social Psychology Bulletin, 27(8), 1046-1056. doi: 10.1177/0146167201278011

Moody, C., & Smith, N. (2013). Suicide protective factors among trans adults. *Archives of Sexual Behavior*, *42*(5), 739-752. doi:10.1007/s10508-013-0099-8

Morris, J. F., Waldo, C. R., & Rothblum, E. D. (2001). A model of predictors and outcomes of outness among lesbian and bisexual women. *Journal of Orthopsychiatry, 71*(61–71).

Murphy, H. (2012). Improving the lives of students, gay and straight alike: Gay‐straight alliances and the role of school psychologists. *Psychology in the Schools*, *49*(9), 883-891. doi:10.1002/pits.21643

Riggle, E. D. B., & Mohr, J. J. (2014). A Proposed Multi Factor Measure of Positive Identity for Transgender Identified Individuals. Psychology of Sexual Orientation and Gender Diversity. Advance online publication.

Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.

Schmidt, N. & Sermat, V. (1983). Measuring loneliness in different relationships. *Journal of Personality and Social Psychology*, *44*, 1038-1047.

Scourfield, J., Roen, K., & McDermott, L. (2008). Lesbian, gay, bisexual and transgender young people's experiences of distress: Resilience, ambivalence and self-destructive behaviour. *Health & Social Care In The Community*, *16*(3), 329-336. doi:10.1111/j.1365-2524.2008.00769.x

Smith, M. S., & Gray, S. W. (2009). The courage to challenge: A new measure of hardiness in LGBT adults. *Journal of Gay & Lesbian Social Services, 21*(1), 73–89.

Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., et al.(1991). The will and the ways: Development and validation of an individual-differences measure of hope. Journal of Personality and Social Psychology, 60, 570-585.

Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The meaning in life questionnaire: Assessing the presence of and search for meaning in life. Journal of Counseling Psychology, 53, 80-93.

Swami, V., Chamorro-Premuzic, T., Sinniah, D., Maniam, T., Kannan, K., Stanistreet, D., & Furnham, A. (n.d.). General health mediates the relationship between loneliness, life satisfaction and depression. A study with Malaysian medical students. *Soc Psychiatry Psychiatr Epidemiol,42*(2), 161-166.

Szymanski, D.M. & Chung, Y.B. (2001). The lesbian internalized homophobia scale: A rational/theoretical approach. *Journal of Homosexuality*, *41*(2), 37–52.

Wang, Y.-P., & Gorenstein, C. (2013). Assessment of depression in medical patients: A systematic review of the utility of the Beck Depression Inventory-II. *Clinics*, *68*(9), 1274–1287. doi:10.6061/clinics/2013(09)15

Zimmerman, M., Martinez, J.H., Young, D., Chelminski, I., Dalrymple, K. (2013). Severity classification on the Hamilton depression rating scale. *Journal of Affective Disorders. 150*(2), 384-388. DOI: http://dx.doi.org/10.1016/j.jad.2013.04.028

Zimet, G., Dahlem, N., Zimet, S., & Farley, G. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, *52*(1), 30-41.

Appendices

Appendix A: Primary Tables

Table 1

Demographics

	N	%
Gender		
Male	8	21
Female	23	60.5
Genderqueer/Gender Neutral/Two Spirit	2	5.3
Transgender (Male to Female)	1	2.6
Transgender (Female to Male)	1	2.6
Non-binary	1	2.6
Transwoman	2	5.3
Sexual orientation		
Asexual	6	15.8
Bisexual	13	34.2
Homosexual (Gay/Lesbian)	9	23.7
Pansexual	8	21.1
Demisexual	1	2.6
Queer	1	2.6
Race/Ethnicity		
Alaskan/Native American	3	7.9
African American	2	5.3

Asian	1	2.6
Caucasian/White	30	78.9
Hispanic	2	5.3
Other	3	7.9

Table 2

Reliability

	Cronbach's Alpha
Self-Esteem	0.857
Outness	0.945
Social Support	0.894
Courage	0.925
Satisfaction	0.914
Hope	0.772

Table 3

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Self Esteem	37	1.600	3.900	2.859	0.525
Outness	37	11	77	34.649	17.197
Social Support	37	12	84	60.216	14.314
Courage to Challenge	33	1.720	6.500	5.025	0.978
Satisfaction	33	5	31	19.849	7.442
Hope	33	32	62	45.394	8.588
Beck	34	0	63	17.059	12.900

Table 4

Correlations Between Protective Factors and Depression (LGBTQ+ Sample)

	1	2	3	4	5	6	7
1. Self-esteem	1	-0.003	0.146	0.279	-0.399	0.169	-0.295
2. Outness		1	0.102	-0.080	-0.054	0.037	0.019
3. Social support			1	0.313	-0.161	0.377	-0.271
4. Courage/resilience				1	-0.253	0.708	-0.260
5. Satisfaction		-			1	0.023	0.162
6. Hope						1	-0.179
7. Depression							1

Table 5

Simultaneous Regression of Protective Factors

	b	SE	Beta	Significance	R2
Constant	45.955	22.546		0.052	0.152
Self Esteem	-4.4	4.983	-0.176	0.385	
Outness	0.074	0.144	0.096	0.609	
Social Support	-0.202	0.174	-0.233	0.254	
Courage to Challenge	-2.076	3.68	-0.159	0.578	
Satisfaction	0.029	0.366	0.017	0.937	
Hope	0.072	0.417	0.048	0.865	

Table 6

Correlations Between Protective Factors and Depression (LGBTQ+ Sample)

	1	2	3	4	5	6	7
1. Self-esteem	1	.074	.312**	.574**	-.655**	.536**	-.497**
2. Outness		1	.080	.119	-.244*	.162	-.121
3. Social support			1	.511**	-.469**	.615**	-.096
4. Courage/resilience				1	-.739**	.653**	-.457**
5. Satisfaction					1	-.685**	.403**
6. Hope						1	-.313**
7. Depression							1

Table 7

Group Comparison Statistics (where 0 = Heterosexual and 1=LGBTQ+)

	Sexual Minority	N	Mean	Std. Deviation	Std. Error Mean
Self esteem	0	107	3.081	.539	0.052
	1	37	2.859	.525	0.086
Outness	0	95	57.684	20.363	2.089
	1	37	35.649	17.197	2.827
Social Support	0	104	67.683	14.405	1.413
	1	37	60.216	14.314	2.353
Courage	0	102	5.233	1.134	0.112
	1	33	5.025	0.978	0.170
Satisfaction	0	99	14.989	7.4416	0.748
	1	33	19.849	7.4419	1.296
Hope	0	97	46.567	10.836	1.100
	1	33	45.394	8.588	1.495
Beck	0	103	10.864	10.761	1.060
	1	34	17.059	12.900	2.212

Table 8

Independent Samples Test

		Levene's Test for Equality of Variances		*t* test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Self-esteem	Equal variances assumed	.198	.657	2.171	142	.032
	Equal variances not assumed	-	-	2.199	64.157	.031
Outness	Equal variances assumed	2.972	0.087	5.82	130	.000
	Equal variances not assumed	-	-	6.268	77.232	.000
Social Support	Equal variances assumed	0.155	0.694	2.712	139	.008
	Equal variances not assumed	-	-	2.72	63.723	.008
Courage	Equal variances assumed	1.915	0.169	0.942	133	.348
	Equal variances not assumed	-	-	1.017	62.191	.313
Satisfaction	Equal variances assumed	0.025	0.875	-3.248	130	.001
	Equal variances not assumed	-	-	-3.248	54.895	.002
Hope	Equal variances assumed	1.02	0.314	0.564	128	.574
	Equal variances not assumed	-	-	0.632	69.279	.529
Beck	Equal variances assumed	0.174	.677	-2.766	135	.006
	Equal variances not assumed	-	-	-2.525	49.064	.015

Appendix B: Measures/Scales

Demographic Questionnaire

What is your age? (In years): _____

Gender:

___ Male

___ Female

___ Genderqueer/ Gender neutral/ Two-Spirit

___ Intersex

___ Transgender (Male to Female)

___ Transgender (Female to Male)

___ Non-binary

___ Other (please specify): _____

Please indicate your race/ethnicity:

___ Alaskan/Native American

___ African American

___ Asian

___ Caucasian/White

___ Hispanic

___ Other

Current zip code: _____

How would you classify the area that you grew up in?

___ Rural

___ Urban

___ Suburban

How would you classify the geographical region that you grew up in?

___ South
___ North
___ Mid-West
___ South West
___ West Coast
___ Other
___ New England
___ East Coast

How many years of school did you complete? Mark highest grade completed.

Grade: 7 8 9 10 11 12 or GED high school equivalent

College: 1 2 3 4 5

Graduate School: 1 2 3 4 5 6 7

Doctoral School: 1 2 3 4

Are you currently a college student? Y/N

___ Undergraduate
___ Graduate
___ Non-degree seeking

Sexual orientation:

___ Asexual
___ Bisexual
___ Heterosexual (straight)
___ Homosexual (gay/lesbian)
___ Pansexual
___ Other, Please Specify: _____

Relationship Status:

___ Single
___ Committed Relationship
___ Cohabitating
___ Married
___ Separated
___ Divorced
___ Widowed

Religious upbringing:

___ Catholic
___ Baptist
___ Southern Baptist
___ Muslim
___ Buddhist
___ Hindu
___ Jewish
___ Other (Christian)
___ Other (Non-Christian)
___ Spiritual – religious
___ Spiritual - Not religious
___ Not religious

Current religious identification:

___ Catholic
___ Baptist
___ Southern Baptist
___ Muslim
___ Buddhist
___ Hindu
___ Jewish
___ Other (Christian)
___ Other (Non-Christian)
___ Spiritual – religious
___ Spiritual – Not religious
___ Not religious

Rosenberg Self-Esteem Scale

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle **SA**. If you agree with the statement, circle **A**. If you disagree, circle **D**. If you strongly disagree, circle **SD**.

1.	On the whole, I am satisfied with myself.	SA	A	D	SD
2.*	At times, I think I am no good at all.	SA	A	D	SD
3.	I feel that I have a number of good qualities.	SA	A	D	SD
4.	I am able to do things as well as most other people.	SA	A	D	SD
5.*	I feel I do not have much to be proud of.	SA	A	D	SD
6.*	I certainly feel useless at times.	SA	A	D	SD
7.	I feel that I'm a person of worth, at least on an equal plane with others.	SA	A	D	SD
8.*	I wish I could have more respect for myself.	SA	A	D	SD
9.*	All in all, I am inclined to feel that I am a failure.	SA	A	D	SD
10.	I take a positive attitude toward myself.	SA	A	D	SD

Scoring: SA=3, A=2, D=1, SD=0. Items with an asterisk are reverse scored, that is, SA=0, A=1, D=2, SD=3. Sum the scores for the 10 items. The higher the score, the higher the self esteem.

OUTNESS INVENTORY

Use the following rating scale to indicate how open you are about your sexual orientation to the people listed below.

1 = Person definitely does NOT know about your sexual orientation status
2 = Person might know about your sexual orientation status, but it is NEVER talked about
3 = Person probably knows about your sexual orientation status, but it is NEVER talked about
4 = Person probably knows about your sexual orientation status, but it is RARELY talked about
5 = Person definitely knows about your sexual orientation status, but it is RARELY talked about
6 = Person definitely knows about your sexual orientation status, and it is SOMETIMES talked about
7 = Person definitely knows about your sexual orientation status, and it is OPENLY talked about

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

1. mother	1	2	3	4	5	6	7	0
2. father	1	2	3	4	5	6	7	0
3. siblings (sisters, brothers)	1	2	3	4	5	6	7	0
4. extended family/relatives	1	2	3	4	5	6	7	0
5. my new straight friends	1	2	3	4	5	6	7	0
6. my work peers	1	2	3	4	5	6	7	0
7. my work supervisor(s)	1	2	3	4	5	6	7	0
8. members of my religious community (e.g., church, temple)	1	2	3	4	5	6	7	0
9. leaders of my religious community (e.g., church, temple)	1	2	3	4	5	6	7	0
10. strangers, new acquaintances	1	2	3	4	5	6	7	0
11. my old heterosexual friends	1	2	3	4	5	6	7	0

The Multidimensional Scale of Perceived Social Support

Please answer the following question by picking the most applicable response listed below.

1 Very Strongly Agree
2 Disagree
3 Slightly Agree
4 Neutral
5 Slightly Agree
6 Agree
7 Very Strongly Agree

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

Beck Depression Inventory (BDI-II)

Pick the best answer for each of the following.

1. Sadness
   a. I do not feel sad
   b. I feel sad much of the time.
   c. I am sad all of the time.
   d. I am so sad or unhappy that I can't stand it.

2. Pessimism
   a. I am not discouraged about my future.
   b. I feel more discouraged about my future than I used to be.
   c. I do not expect things to work out for me.
   d. I feel my future is hopeless and will only get worse.

3. Past Failure
   a. I do not feel like a failure.
   b. I have failed more than I should have.
   c. As I look back, I see a lot of failures.
   d. I feel I am a total failure as a person.

4. Loss of Pleasure
   a. I get as much pleasure as I ever did from things I enjoy.
   b. I don't enjoy things as much as I used to.
   c. I get very little pleasure from the things that I used to enjoy.
   d. I can't get any pleasure from the things that I used to enjoy.

5. Guilty Feelings
   a. I don't feel particularly guilty.
   b. I feel guilty over many things I have done or should have done.
   c. I feel quite guilty most of the time.
   d. I feel guilty all of the time.

6. Punishment Feelings
   a. I don't feel like I am being punished.
   b. I feel I may be punished.
   c. I expect to be punished
   d. I feel I am being punished.

7. Self-Dislike
    a. I feel the same about myself as ever.
    b. I have lost confidence in myself.
    c. I am disappointed in myself.
    d. I dislike myself.

8. Self-Criticalness
    a. I don't criticize or blame myself more than usual.
    b. I am more critical of myself than I used to be.
    c. I criticize myself for all of my faults.
    d. I blame myself for all of my faults.

9. Suicidal Thoughts or Wish
    a. I don't have any thoughts of killing myself.
    b. I have thoughts of killing myself, but I would not carry them out.
    c. I would like to kill myself.
    d. I would kill myself if I had the chance.

10. Crying
    a. I don't cry any more than I used to.
    b. I cry more than I used to.
    c. I cry over every little thing.
    d. I feel like crying, but I can't.

11. Agitation
    a. I am no more restless or wound up than usual.
    b. I feel more restless or wound up than usual.
    c. I am so restless or agitated that it is hard to stay still.
    d. I am so restless or agitated that I have t keep moving or doing something.

12. Loss of Interest
    a. I have not lost interest in other people or activities.
    b. I am less interested in other people or things than before.
    c. I have lost most of my interest in other people or things.
    d. It's hard to get interested in anything.

13. Indecisiveness
    a. I make decisions about as well as ever.
    b. I find it more difficult to make decisions than usual.
    c. I have much greater difficulty in making decisions than I used to.
    d. I have trouble making any decisions.

14. Worthlessness
    a. I do not feel I am worthless.
    b. I don't consider myself as worthwhile and useful as I used to.
    c. I feel more worthless as compared to other people.
    d. I feel utterly worthless.

15. Loss of Energy
    a. I have as much energy as ever.
    b. I have less energy than I used to have.
    c. I don't have enough energy to do very much.
    d. I don't have enough energy to do anything.

16. Changes in Sleeping Pattern
    a. I have not experienced any change in my sleeping patterns.
    b. I sleep somewhat more than usual.
    c. I sleep somewhat less than usual.
    d. I sleep a lot more than usual.
    e. I sleep a lot less than usual.
    f. I sleep most of the day.
    g. I wake up 1-2 hours early and can't get back to sleep.

17. Irritability
    a. I am no more irritable than usual.
    b. I am more irritable than usual.
    c. I am much more irritable than usual.
    d. I am irritable all the time.

18. Changes in Appetite
    a. I have not experienced any change in my appetite.
    b. My appetite is somewhat less than usual.
    c. My appetite is somewhat greater than usual.
    d. My appetite is much less than before.
    e. My appetite is much greater than usual.

f. I have no appetite at all.
g. I crave food all the time.

19. Concentration Difficulty
    a. I can concentrate as well as ever.
    b. I can't concentrate as well as usual.
    c. It's hard to keep my mind on anything for very long.
    d. I find I can't concentrate on anything.

20. Tiredness or Fatigue
    a. I am no more tired or fatigued than usual.
    b. I get more tired or fatigued more easily than usual.
    c. I am too tired or fatigued to do a lot of the things that I used to do.
    d. I am too tired or fatigued to do most of the things that I used to do.

21. Loss of Interest in Sex
    a. I have not noticed any recent change in my interest in sex.
    b. I am less interested in sex than I used to be.
    c. I am much less interested in sex now.
    d. I have lost interest in sex completely.

Meaning of Life Questionnaire (MLQ)

Please take a moment to think about what makes your life and existence feel important and significant to you. Please respond to the following statements as truthfully and accurately as you can, and also please remember that these are very subjective questions and that there are no right or wrong answers. Please answer according to the scale below:

Absolutely Untrue	Mostly Untrue	Somewhat Untrue	Can't Say True or False	Somewhat True	Mostly True	Absolutely True
1	2	3	4	5	6	7

1. I understand my life's meaning.
2. I am looking for something that makes my life feel meaningful.
3. I am always looking to find my life's purpose.
4. My life has a clear sense of purpose.
5. I have a good sense of what makes my life meaningful.
6. I have discovered a satisfying life purpose.
7. I am always searching for something that makes my life feel significant.
8. I am seeking a purpose or mission for my life.
9. My life has no clear purpose.
10. I am searching for meaning in my life.

MLQ syntax to create Presence and Search subscales:
Presence = 1, 4, 5, 6, & 9-reverse-coded
Search = 2, 3, 7, 8, & 10

COURAGE TO CHALLENGE SCALE

PURPOSE: To assess personal hardiness in lesbian, gay, bisexual, and transgendered (LGBT) persons

Strongly Agree	Agree	Mildly Agree	Neutral	Mildly Disagree	Disagree	Strongly Disagree
1	2	3	4	5	6	7

1. I believe that things usually turn out for the best.
2. Dealing with difficult situations has helped me grow in positive ways.
3. When I encounter people's hostile attitudes, I can control my reactions.
4. When people don't support me, it doesn't stop me from going ahead with my goals.
5. I guess I'm pretty tough because I've gotten through some hard times.
6. I don't let fear rule my life.
7. Believing in myself helps me get through hard times.
8. I'm determined to reach my goals in life.
9. I'm convinced that if you put your mind to it, you can do almost anything.
10. I have the courage to stand up for what's right.
11. It is important to me to be honest about who I am.
12. When people don't support me, it doesn't get me down.
13. Getting though tough times prepares me for future challenges.
14. My sense of humor helps me get through tough times.
15. Integrity is not an important personal value of mine.
16. Even in the midst of very stressful times, I can find something to laugh about.
17. I guess I have spirit… It's hard to keep me down.
18. Finding the courage to come out has made me a much better person.

Satisfaction with Life Scale

Instructions:
Below are five statements that you may agree or disagree with. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number in the box to the right of the statement. Please be open and honest in your responding.

Strongly Disagree	Disagree	Slightly Disagree	Neither Agree or Disagree	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

____1. In most ways my life is close to my ideal.
____2. The conditions of my life are excellent.
____3. I am satisfied with life.
____4. So far I have gotten the important things I want in life.
____5. If I could live my life over, I would change almost nothing.

Scoring

31-35 Extremely satisfied
26-30 Satisfied
21-25 Slightly satisfied
20 Neutral
15-19 Slightly dissatisfied
10-14 Dissatisfied
5 - 9 Extremely dissatisfied

The Trait Hope Scale

Directions: Read each item carefully. Using the scale shown below, please select the number that best describes YOU and put that number in the blank provided.

Definitely False	Mostly False	Somewhat False	Slightly False	Slightly True	Somewhat True	Mostly True	Definitely True
1	2	3	4	5	6	7	8

___ 1. I can think of many ways to get out of a jam.

___ 2. I energetically pursue my goals.

___ 3. I feel tired most of the time.

___ 4. There are lots of ways around any problem.

___ 5. I am easily downed in an argument.

___ 6. I can think of many ways to get the things in life that are important to me.

___ 7. I worry about my health.

___ 8. Even when others get discouraged, I know I can find a way to solve the problem.

___ 9. My past experiences have prepared me well for my future.

___10. I've been pretty successful in life.

___11. I usually find myself worrying about something.

___12. I meet the goals that I set for myself.

Note. When administering the scale, it is called The Future Scale. The agency subscale score is derived by summing items 2, 9, 10, and 12; the pathway subscale score is derived by adding items 1, 4, 6, and 8. The total Hope Scale score is derived by summing the four agency and the four pathway items.