

**The Impact of Online Social Support on Life Satisfaction for LGB
Individuals**

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Declaration

I declare that this thesis is my own work. Where I have read, consulted, and used the work of others I have acknowledged this in the text.

Signed:

Katie O'Sullivan

Date: 20th April 2020

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Abstract

Support for LGB sexuality can positively impact their wellbeing (Doty et al., 2010). This research investigated the impact of online social support on life satisfaction for LGB individuals. Participants were recruited online and from a third level Irish institution. An online survey method was used with participants (N= 119), gathering responses on an adapted version of the Social Provisions Scale (Cutrona & Russell, 1984), and Satisfaction with Life Scale (Diener et al., 1985). A One-Way MANOVA and 7 Pearson Correlations were conducted, finding a significant difference between LGB individuals across 4 levels of social support; however, no difference was found between LGB individuals and life satisfaction. A positive relationship was found between life satisfaction and online social support. Strengths of this research included using an online survey with reliable scales, however, there were also limitations, such as unequal group numbers and lack of a self-reported scale. Theoretical and practical implications were outlined, and suggestions for future research were discussed. This thesis adds to psychological literature as it examined a neglected area within research.

Literature Review

Introduction

For lesbian, gay, and bisexual (LGB) individuals, disclosing their sexual identity with others can be a significant milestone in their lives, which can improve their psychological wellbeing (Kosciw et al., 2015). Wellbeing can be defined as satisfaction with life, the presence of positive affect, and the absence of negative affect (Ryan & Deci, 2001). However, LGB individuals may also experience a fear that they will be discriminated against, rejected, and judged for their sexuality (Meyer, 2003). Ryan et al., (2009) investigated a sample of white and Latino LGB youths and discovered that those who were rejected from their families had higher levels of depression, attempted suicide, used illegal drugs, and had unprotected sex, than those who experienced little or no rejection from their families. However, the sample was not very ethnically diverse, and the reported experiences occurred several years earlier, which may have produced recall bias (Ryan et al., 2009). Legate et al., (2012) state that when one feels supported in expressing their authentic self, they are likely to disclose information about themselves, which decreases anger and depression, and increases self-esteem. Offline and online relationships play an important role in the lives of LGBT (transgender) people, as it impacts their views of feeling supported in their identities, which positively influences their wellbeing (Ybarra et al., 2015). These studies convey the importance that social support has on the wellbeing of LGB individuals.

History of LGB in Ireland

In Ireland, the laws against homosexuality can be dated back to Victorian times and were enforced for almost 150 years ("About LGBT Ireland", 2015). The 1970s marked the beginning of the social movement for the decriminalisation of homosexuality, led by David Norris (Halpin, 2018). The Campaign for Homosexual Law Reform aimed to decriminalise homosexuality in the Republic and Northern Ireland (Halpin, 2018). In the 1980s, Norris' case was defeated in the High Court, and was subsequently dismissed in the Supreme Court (Halpin, 2018). Ireland's first Pride parade occurred on March 1983, and on the 24th of June 1993, Ireland decriminalised homosexuality and the criminalisation of sexual acts (Halpin, 2018).

In 2010, the Civil Partnership Act was passed, giving LGBT couples the same rights and obligations of married couples, although it did not change the law on issues regarding children (Halpin, 2018). On the 22nd of May 2015, Ireland was the first country in the world to legalise same-sex marriage by constitutional referendum, with 62% of voters backing the amendment (Halpin, 2018).

Although Ireland has progressed in its support and acceptance of the LGBT+ community, discrimination and inequality still exists. People identifying as LGBTQ (queer/questioning) may experience prejudice and thus feel the need to deny or hide their sexual identity (Hughes et al., 2018). Lynch et al., (2018) found that young gay men fear disclosing their sexual identity due to homophobia from professionals, as well as damaging their public and personal image. However, LGBT communities can support and improve the wellbeing of those who are discriminated against for their sexuality. Ceatha et al., (2019) conducted interviews with LGBT participants, in which the findings strengthened the role that LGBT communities play in the promotion of social wellbeing and mental health. LGBT community groups encourage wellbeing through mutual exchange and social support; however, this has been overlooked in social and health policy fields in Ireland (Ceatha et al., 2019).

Help-Seeking Behaviours

Help-seeking behaviours describe an individuals' need to seek help when demanding tasks surpass their coping abilities or resources (Chan, 2013). The Internet and social media are often used as a source of emotional support during stressful periods (De Luca et al., 2019). Online help-seeking is usually free, anonymous, and accessible however, there are also risk factors like the formation of harmful relationships (De Luca et al., 2019). Seeking support from personal resources like family members can be difficult for LGB individuals as this involves disclosing their sexual identity, which may result in a limitation of resources as they are reliant on the supporters' acceptance (Stenersen et al., 2019).

Help-seeking behaviours exist in LGBT online support communities as they offer a range of help-seeking topics, including mental disorders, identity confusion,

networking, and crises in relationships (Liang et al., 2019). Posts may include mental/physical pain, suicidal ideation, shared negative emotion and experience (Liang et al., 2019). LGBT online communities' users are supportive, particularly those who have similar prior experiences (Liang et al., 2019). LGBT individuals have more control over their online experiences, managing or avoiding prejudice online, whereas discrimination may be unavoidable offline (Lytle et al., 2018). Social media enables users to connect, interact, and express emotions, ideas, thoughts, and feelings (Escobar-Viera et al., 2018). It is easier for LGB individuals to disclose their sexuality on social media, creating connections, offering education, enabling social support and positive interactions (Escobar-Viera et al., 2018). Being connected to other LGB individuals can reduce the psychological impact of victimization, harassment, and discrimination that they may experience in the social environment (Escobar-Viera et al., 2018).

Social Media Usage

The CSO reported that 16 and 29 years old were most likely to use instant messaging and social networking compared to other age groups (CSO, 2019). Facebook is Ireland's most popular social network with 62% having an account; however, Instagram has increased in recent years with 41% owning an account, 65% of which are daily users (Twomey, 2019).

Social media activity can act as the main purpose in understanding one's sense of self and creation and management of several social identities (Miller, 2017). Social media has been recognised as an effective channel for LGBTQ people, as they can decide how, when, and to whom to express or hide their sexual identity (Dhoest & Szulc, 2016).

Craig and McInroy (2014) revealed that online, people can explore, develop, and practice their LGBTQ identities. Anonymity online allows users to be creative with how they present themselves as well as enable the ability to change or reinvent identity (Craig & McInroy, 2014). Online activities allow users to explore identities, access resources, come out virtually before coming out offline, and develop their new

identities into their offline life (Craig & McInroy, 2014). Fox and Ralston (2016) support these findings, as LGBTQ individuals use social media to seek information regarding LGBTQ related issues, observe LGBTQ role models' experiences and behaviours, and experiment dating sites and apps. Online, LGBTQ people can decide whether to be seen or unseen while exploring, control the speed of interactions, and experiment with self-expression as their self-identity develops and mixes with their offline world (Fox & Ralston, 2016). Social media allows LGBTQ individuals to explore social relationships through mediated means that act as a protective role in defining their identities on their own conditions (Fox & Ralston, 2016).

Social Support

The theory of social support, as defined by Shumaker and Brownell (1984), is the exchange of resources among two people perceived by the provider or the receiver, to improve the receiver's well-being. Social support theory is the availability of people that a person can depend on, and who let a person know that they love, care and value them (Sarason et al., 1983). It can enhance intimacy, self-worth, competency, and sense of belonging, which encourages positive mental health (Berkman, 1995).

The present study will focus on two social support measures. Perceived social support is the cognitive appraisal of being constantly connected to others, as it tries to gain individuals' confidence that sufficient support would be available if needed, or to define an environment as helpful and consistent (Barrera, 1986). Enacted social support is the behavioural actions that network members perform to assist people in that network to provide social support (Barrera, 1986). Researchers have suggested that enacted and perceived social support have a positive effect on life satisfaction (Siedlecki et al., 2014), which is a variable within the current study.

The present study will focus on two ways in which social support can be provided. Informational support involves providing relevant information that helps an individual to cope with recent difficulties, which usually takes the form of guidance or advice in dealing with one's problems (Cohen, 2004). Emotional support involves the expression of empathy, reassurance, trust, caring, and allows for emotional venting and

expression (Cohen, 2004). LGB people seek LGBT communities for information on various topics about their sexuality, and as some LGB individuals suffer from rejection and prejudice, it is important that emotional support is also offered to them.

Social support plays an important role in protecting the wellbeing of LGBT individuals (Snapp et al., 2015). Ant3nio and Moleiro (2015) found that when social support for LGB individuals was low, levels of behavioural and emotional distress increased. Social support from friends, significant others, or family, has been found to have a strong link to well-being for LGB individuals (Budge et al., 2014). Nevertheless, when LGB people are rejected by their family, additional social support groups become more important (Toplu-Demirtas et al., 2018). The term “family of choice” is popular among the LGB community as it shows the significance of friendships and other support networks in offering a safe place for LGB people (Toplu-Demirtas et al., 2018).

A social support network is made up solely of individuals from ones’ social network, but not all members are available to provide social support (Hawthorne et al., 2018). Discrimination, victimisation, and stigma are likely to have effects on LGB’s support networks, as these experiences may increase the need for social support (Hawthorne et al., 2018). Older LGB people had similar sized social support networks in comparison to older heterosexual people, however, a significant amount of older LGB people are not receiving certain types of support from members of their networks (Hawthorne et al., 2018). Results also found that more social support came from friends and less came from family members for LGB people (Hawthorne et al., 2018). Bruce et al., (2015) found that LGB people interacting and receiving social support from friends buffered against the negative effects of experiencing sexual orientation stigma, which can decrease depressive symptoms. Helping young LGB people build social support networks with friends that support their sexuality can promote positive psychological well-being (Bruce et al., 2015).

Wardecker et al., (2019) conducted a study to investigate the differences in life satisfaction among LGB people. The results of the study revealed that over time there was an increase in life satisfaction for lesbian, gay, and heterosexual people, but the life satisfaction of bisexual people did not increase (Wardecker et al., 2019). Bisexuals may be less satisfied with their life in comparison to lesbians and gay men as their

experiences of stigma are different, and they may lack access to community level social support (Wardecker et al., 2019). Increasing means of social support can be important in increasing bisexuals' life satisfaction (Wardecker et al., 2019).

Life Satisfaction for LGB

Achieving social support is an important factor in life satisfaction (Oh et al., 2014). Pavot et al., (1991) describe life satisfaction as an individual's evaluation of their whole life, creating a standard, that they see as suitable for themselves, and compare the conditions of their life to that standard (Pavot et al., 1991). Life satisfaction is an essential psychological factor for mental health (Hu et al., 2016). In both LGB and heterosexual individuals, higher levels of life satisfaction were linked with greater levels of self-esteem, and lower levels of loneliness (Hu et al., 2016). LGB individuals who are concerned with how people perceive them, and their sexual orientation have lower levels of life satisfaction than those who are less concerned (Hu et al., 2013).

Resilience and self-acceptance, adaptive coping, and peer and social support have also been found to have a positive impact on LGBT well-being, happiness, and life satisfaction (de Vries et al., 2019). de Vries et al., (2019), revealed that identity and social struggles negatively impacted the happiness of young LGBTI (intersex) participants, however, older LGBTI participants reported higher levels of happiness as they may have already accepted their identity and have received growing social support from the community. Furthermore, the research identified that happiness and life satisfaction for gay and lesbian participants was significantly higher than bisexual, transgender, and intersex participants (de Vries et al., 2019). Happiness among LGBTI individuals can be influenced by self-acceptance, peer support, LGBTI advocacy, and general social support (de Vries et al., 2019). Unlike the study by de Vries et al., (2019), which primarily focused on the happiness of LGBTI individuals, the present study will concentrate on the impact of online social support on the life satisfaction of LGB people.

Bachmann and Simon (2014) found that victims of discrimination, hate crimes, or prejudice have a negative effect on life satisfaction for gay men. Reyes et al., (2015)

reported that high self-stigma is linked to reduced mental health for LGBT people, with high self-concept clarity being linked to positive mental health. LGBT people with a low sense of self-concept clarity were found to have poor life satisfaction, experience general negative affect, and poor emotional ties (Reyes et al., 2015). Petrou and Lemke (2018) identified that anti-gay victimisation and internalised homonegativism were linked with low levels of life satisfaction, however, gay individuals with a healthy sexual identity and low internalised homonegativity can relieve the impact of victimisation incidents. These studies focus on the negative effects that discrimination and lack of support and acceptance for LGB people have on their levels of life satisfaction. However, the current study aims to examine the positive impact that support on social media has on the life satisfaction of LGB people.

Online Social Support and Life Satisfaction for LGB Individuals

Social media allows users to engage in supportive interactions, providing encouragement and sharing information (Oh et al., 2014). Han et al., (2019) express that for those in the LGBT community, who may live with psychological problems, social media could be seen as a tool of online social support. As the LGBT community is considered vulnerable, online support activities are more sensitive and effective to them than to other people in expecting perceived social support (Han et al., 2019). The Internet allows LGB individuals to share knowledge and unite the community, to express and explore one's sexual identity, and to emotionally support each other (Chong et al., 2015). Online support communities for LGB individuals have an essential role in giving LGBT people a safe and private networking space as LGBT individuals are more susceptible to experience family rejection and social isolation (Liang et al., 2019). For LGBTQ youth, disclosing their identity with others can increase the feeling of authenticity in their relationships, avoid the stresses involved with identity concealment, and access LGBTQ social support from network members, which improves wellbeing (McConnell et al., 2018). Disclosing their identity in unsupportive settings can lead to the loss of support and feelings of victimisation and rejection, which diminishes wellbeing (McConnell et al., 2018). McConnell et al., (2018) found that LGBTQ youths who are not out to their online networks would feel less connected

to and gain lower social capital from their online networks, as sharing information about themselves online would be more complicated for them in comparison to others (McConnell et al., 2018). However, this study examined LGBTQ disclosing their sexuality on Facebook, in contrast to the current study which will look at LGB seeking social support on multiple social media sites, and its effect on their levels of life satisfaction.

These studies further inform the impact that social support has on the psychological wellbeing for LGB people. However, there is a paucity in the literature regarding online social support and life satisfaction for LGB individuals. It is important to research social support on social media for LGB individuals and its effects on life satisfaction, as social media is a vital platform for online social interaction and communication (Wright et al., 2018). As the acceptance and support of LGB individuals has increased in recent years (Hu et al., 2013), it may be beneficial to examine if this applies to social media and the impact that may have on LGB wellbeing.

The Proposed Study

The aims of the proposed study are to investigate whether LGB individuals differ in their levels of life satisfaction and online social support, and if there is a relationship between life satisfaction and online social support for LGB individuals. The proposed study aims to investigate this neglected area within the psychological literature, and add to this gap in the literature. The proposed study will seek to answer the following:

Research Questions:

RQ1: Do LGB individuals differ in their levels of online social support and life satisfaction?

RQ2: Does online social support have an effect on life satisfaction for LGB individuals?

Based on the above research questions, the following hypotheses will be proposed:

Hypotheses:

H1: There will be a difference between LGB individuals on their levels of online social support and life satisfaction.

H2: There will be a significant relationship between online social support and life satisfaction for LGB individuals.

Method

Design

This study employed a quantitative, survey-based design. This design was chosen as it facilitates participation in research where sensitive subjects or specific samples are required. The independent variable was LGB individuals. The dependent variables were online social support and life satisfaction.

Participants

There were 119 participants, recruited via social media by posting a link to the survey on the researchers' social media accounts (Appendix A), through contacting LGBT+ officers of IADT and USI via email (Appendix B), and on the IADT campus by distributing a flyer which contained a QR code to the survey (Appendix C). There were 22 participants in the lesbian group, 34 participants in the gay group, and 63 participants in the bisexual group. To qualify as a participant in this study, participants were over the age of 18 years old, were users of social media, and self-identified as either lesbian, gay, or bisexual. The treatment of participants was in accordance with the ethical standards of the Psychological Society of Ireland (PSI) and the Department of Technology Psychology Ethics Committee (DTPEC) in IADT.

Materials

An information sheet (Appendix D) was provided for participants to read carefully, which explained the aim of the study, the tasks involved in taking part, inform participants that their participation is voluntary as well as providing a withdrawal date (22/02/20) if any participant would like to withdraw from the study, and contact information for the researcher and supervisor provided. The consent form (Appendix E) ensured participants gave their permission to participate in the study by checking the boxes beside the statements that they agreed with. A series of demographic questions (Appendix F) were asked, including their age, gender, education level, locality, which sexuality do they self-identify with, and social media usage. The debrief (Appendix G) reiterated the aims of the study, offered contact information for the

researcher and supervisor, as well as contact information for relevant organisations, and lastly, thanked the participant for their participation.

The Social Provisions Scale (Cutrona & Russell, 1984): This scale contains 24 items, and measures 6 dimensions of social support that is received in interpersonal relationships. These 6 subscales are Guidance (information/advice), Reassurance of worth (recognition of ones' value by others), Reliable alliance (assurance that others can be relied on for help and support), Attachment (emotional closeness which provides security), Nurturance (the sense that one is needed by others), and Social integrations (belonging to a group similar to oneself). The scale was adapted to suit online activity for the study (Appendix H). It is measured on a four-point Likert scale, where "1" is Strongly disagree, and "4" is Strongly agree. Examples of questions asked include "I feel part of an online group of people who share my attitudes and beliefs." Cutrona and Russell (1984) reported a Cronbach alpha of .91, and the current study found a Cronbach alpha of .94, which shows strong reliability (Appendix I).

The Satisfaction with Life Scale (Diener et al., 1985): Consisting of five items, this scale measures how satisfied participants are with their lives (Appendix J). An example of questions asked include "I am satisfied with my life." The scale is measured on a seven-point Likert scale, in which "1" is Strongly disagree and "7" is Strongly agree. Diener et al., (1985) found a Cronbach alpha of .87, and the current study found a Cronbach alpha of .89, which shows strong reliability (Appendix K).

Procedure

Participants were recruited via social media, on the IADT campus, and through contacting LGBT+ officers. A link to the survey was posted on a number of social media platforms, flyers were handed out on the IADT campus which contained a QR code which, when scanned, directed the individual to the survey, and an email containing the link to the survey was sent to LGBT+ officers. The surveys were created using

Google Forms. All materials used in the study were included in the survey. Participants were asked to read and answer each survey carefully. Completed surveys were submitted when participants pressed the “submit” button at the end of the Google Form.

Ethics

As the present study looked at sexuality an Ethics B form was completed, which included all of the necessary documentation, and submitted to the DTPEC (Appendix L). The DTPEC gave ethical approval for the present study. As previously stated, the researcher adhered to the PSI Code of Ethics, and other ethical considerations were put in place when this study was being performed. Contact information for the researcher, thesis supervisor, and relevant organisations including the Samaritans, LGBT+ Ireland, and BeLonG To were given to the participant.

Pilot Study

A pilot study was conducted (N=3) to measure the average time to complete the study, and to identify any problems participants had with completing the study. The study was piloted on a laptop, an iPhone, and an Android smartphone. All of the participants reported the length of time to complete the study was 10 minutes. A few changes were made to the study following feedback from the participants. One of the questions regarding social media platforms was changed to allow the participant to choose more than one platform, a better explanation of online relationships was given, and the Google Form was fixed to accept submissions.

Results

Overview of Results

A One-Way Multivariate Analysis of Variance (MANOVA) investigated whether LGB individuals differ in their levels of online social support and life satisfaction. A series of Pearson Correlation Coefficients examined the relationship between online social support and life satisfaction. Preliminary analyses were conducted to check the assumptions of the MANOVA. Box's test of equality of covariance matrices was not violated for the MANOVA (Appendix M). Levene's test of equality of error variances was also not violated for the MANOVA (Appendix N). There were 6 subscales within the online social support scale, which were guidance, reassurance of worth, social integrations, attachment, nurturance, and reliable alliance. The SPSS Outputs for the MANOVA (Appendix O) and Correlations (Appendix P) are in the Appendices Section.

Analysis 1: LGB Individuals, Online Social Support, and Life Satisfaction

Descriptive Statistics

The data collected for Analysis 1 is summarised in Table 1 below. The N, Mean, and Standard Deviation (SD) values for the variables are presented below.

Table 1: *Summary of the variables (N, Mean, SD) for the 3 sexuality groups (lesbian, gay, bisexual).*

	Sexuality	N	Mean	SD
Life Satisfaction	Lesbian	22	22.3636	7.80443
	Gay	34	20.9412	7.60359
	Bisexual	63	18.8889	6.75877
Guidance	Lesbian	22	13.1818	2.78835
	Gay	34	11.0294	3.64721
	Bisexual	63	12.4921	3.21726
Reassurance of Worth	Lesbian	22	13.4545	2.01724
	Gay	34	11.4706	2.86288

	Bisexual	63	12.1270	2.35887
Social Integrations	Lesbian	22	14.4545	1.94513
	Gay	34	12.7353	3.00816
	Bisexual	63	14.2698	1.97734
Attachment	Lesbian	22	10.3636	2.15020
	Gay	34	9.1176	1.88719
	Bisexual	63	9.9206	2.37121
Nurturance	Lesbian	22	9.4091	2.78874
	Gay	34	7.9706	3.55464
	Bisexual	63	9.0317	3.03723
Reliable Alliance	Lesbian	22	12.4091	2.55714
	Gay	34	10.0000	3.49892
	Bisexual	63	11.8254	3.04557

Inferential Statistics

Hypothesis 1 stated that there would be a significant difference for LGB individuals on their levels of online social support and life satisfaction. A one-way between-groups MANOVA was performed to investigate this hypothesis. The MANOVA revealed a significant multivariate main effect for LGB individuals, Wilks' $\lambda = .791$, $F(14, 220) = .1957$, $p < .022$, partial eta squared = .111. Thus, hypothesis 1 was supported. Given the significance of the overall test, the univariate main effects were examined. Significant univariate main effect for LGB individuals were obtained for guidance, $F(2, 116) = 3.412$, $p < .036$, partial eta squared = .056; reassurance of worth, $F(2, 116) = 4.38$, $p < .015$, partial eta squared = .070; social integrations, $F(2, 116) = 5.736$, $p < .004$, partial eta squared = .090; and reliable alliance, $F(2, 116) = 5.217$, $p < .007$, partial eta squared = .083.

An inspection of the mean scores indicated that for guidance, there was a significant difference between lesbians ($M = 13.18$, $SD = 2.79$) and gays ($M = 11.03$, $SD = 3.65$); for reassurance of worth there was a significant difference between lesbians ($M = 13.45$,

SD= 2.02) and gays (M= 11.47, SD= 2.86); for social integrations, there was a significant difference between lesbians (M= 14.45, SD= 1.94) and gays (M= 12.73, SD= 3.00), and a significant difference between gays (M= 12.73, SD= 3.00) and bisexuals (M= 14.27, SD= 1.98), and for reassurance of worth, there was a significant difference between lesbians (M= 12.41, SD= 2.56) and gays (M= 10.00, SD= 3.50) and a significant difference between gays (M= 10.00, SD= 3.50) and bisexuals (M= 11.82, SD= 3.05). A series of means plot are displayed below to demonstrate the results.

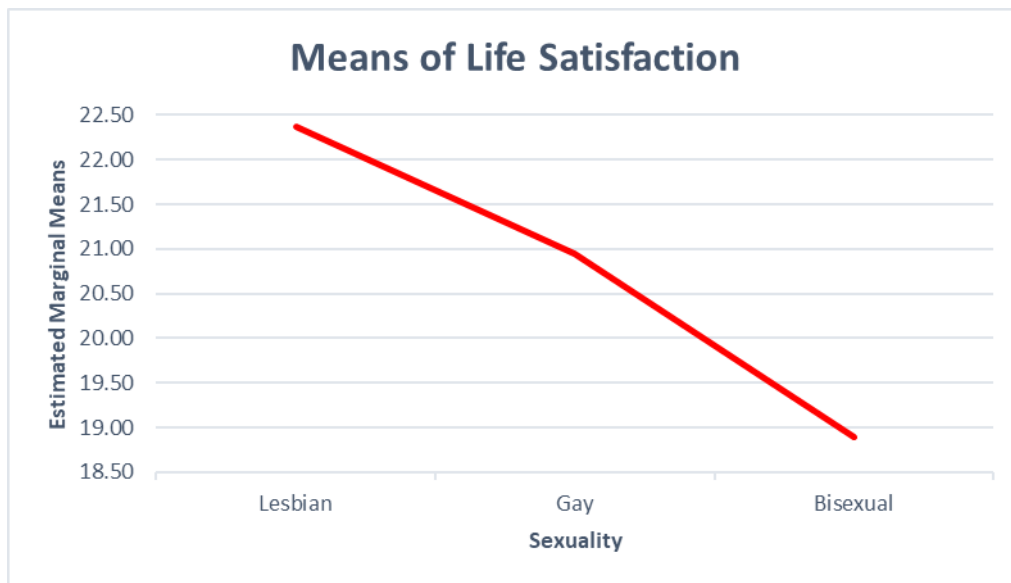


Figure 1: Life satisfaction scores for LGB individuals.

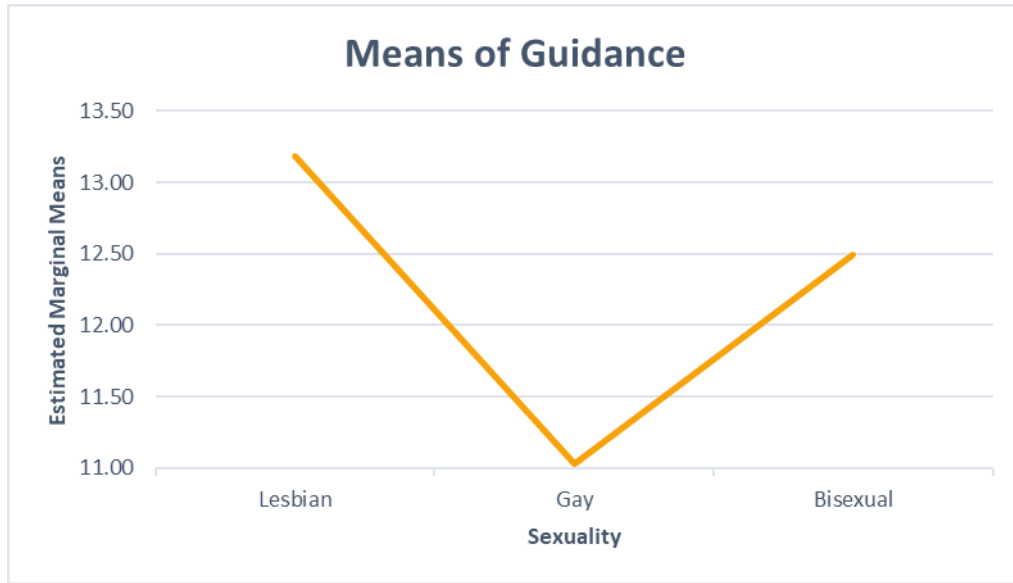


Figure 2: Guidance scores for LGB individuals.

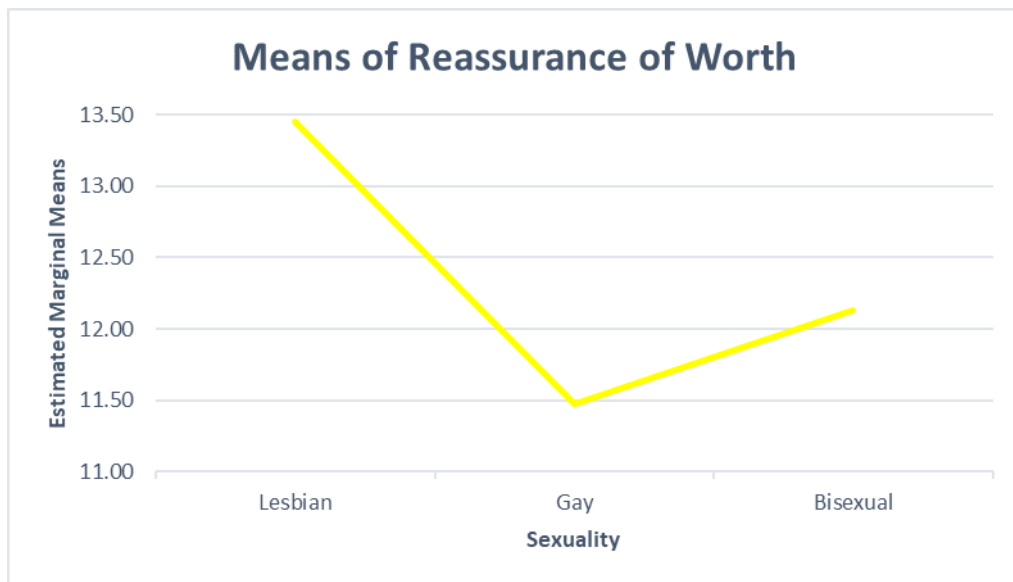


Figure 3: Reassurance of Worth scores for LGB individuals.

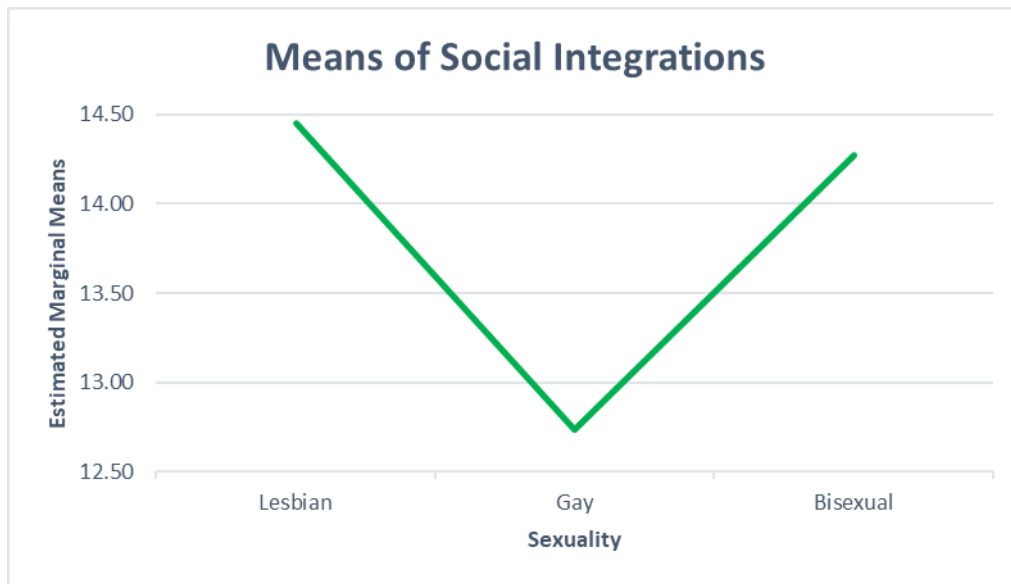


Figure 4: Social Integrations scores for LGB individuals.

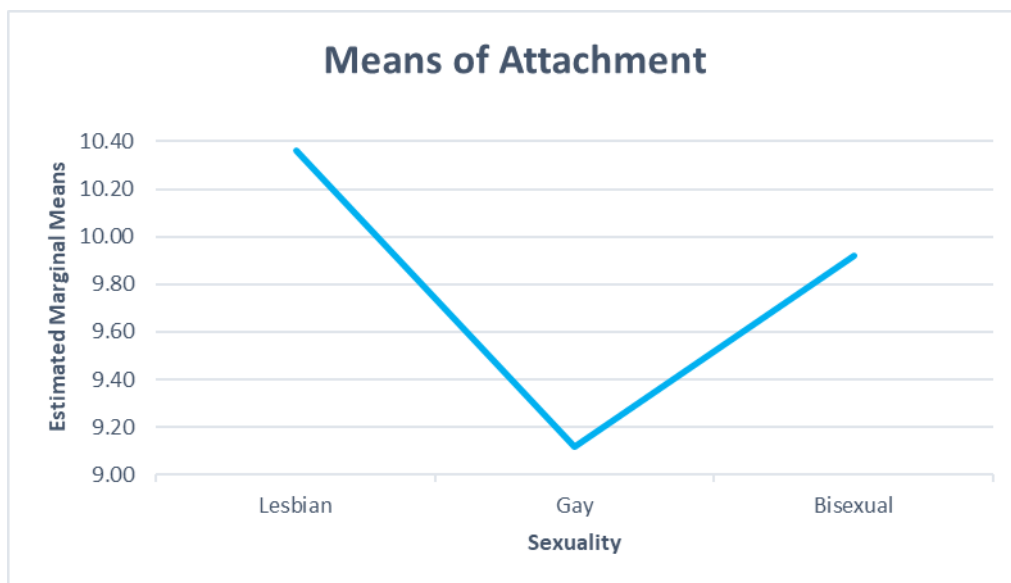


Figure 5: Attachment scores for LGB individuals.

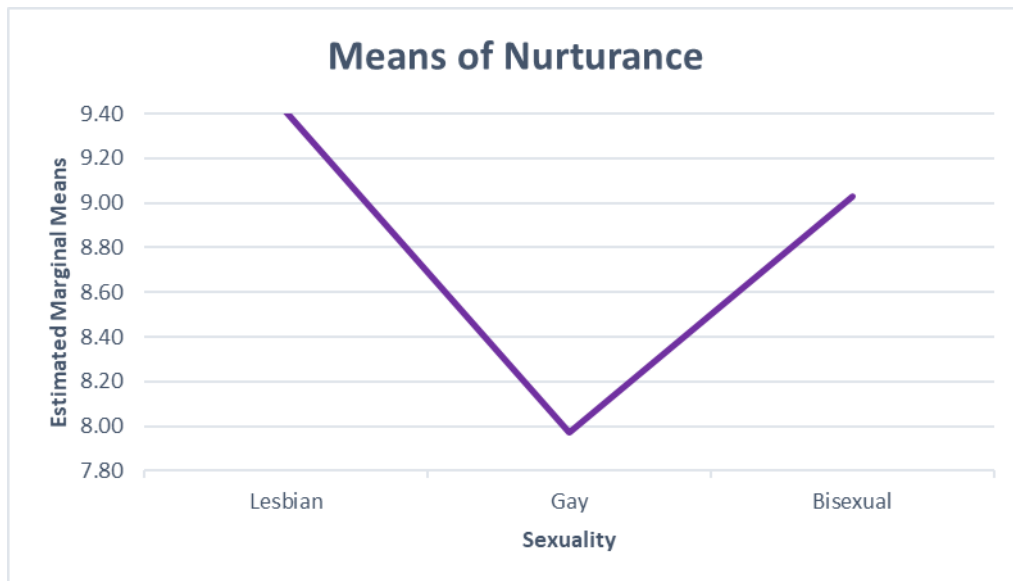


Figure 6: Nurturance scores for LGB individuals.

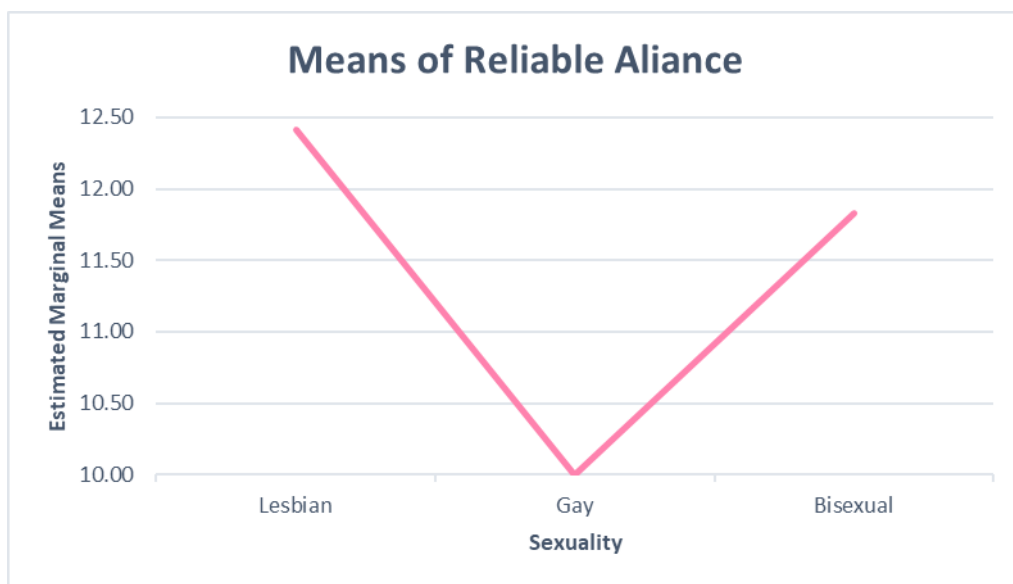


Figure 7: Reliable Alliance scores for LGB individuals.

Analysis 2: Life Satisfaction and Guidance

A Pearson correlation coefficient test revealed there was no significant relationship between life satisfaction ($M= 20.12$, $SD= 7.28$) and guidance ($M= 12.20$, $SD= 3.34$); $r= .011$, $n= 119$, $p= .904$. The scatterplot is displayed in (Appendix Q).

Analysis 3: Life Satisfaction and Reassurance of Worth

A Pearson correlation coefficient test revealed there was a weak positive significant relationship between life satisfaction ($M= 20.12$, $SD= 7.28$) and reassurance of worth ($M= 12.18$, $SD= 2.53$); $r= .264$, $n= 119$, $p= .004$. The scatterplot is displayed in Figure 8.



Figure 8: Life satisfaction scores by reassurance of worth for LGB individuals.

Analysis 4: Life Satisfaction and Social Integrations

A Pearson correlation coefficient test revealed there was a weak positive significant relationship between life satisfaction ($M= 20.12$, $SD= 7.28$) and social integrations ($M= 13.86$, $SD= 2.40$); $r= .217$, $n= 119$, $p= .018$. The scatterplot is displayed in Figure 9.

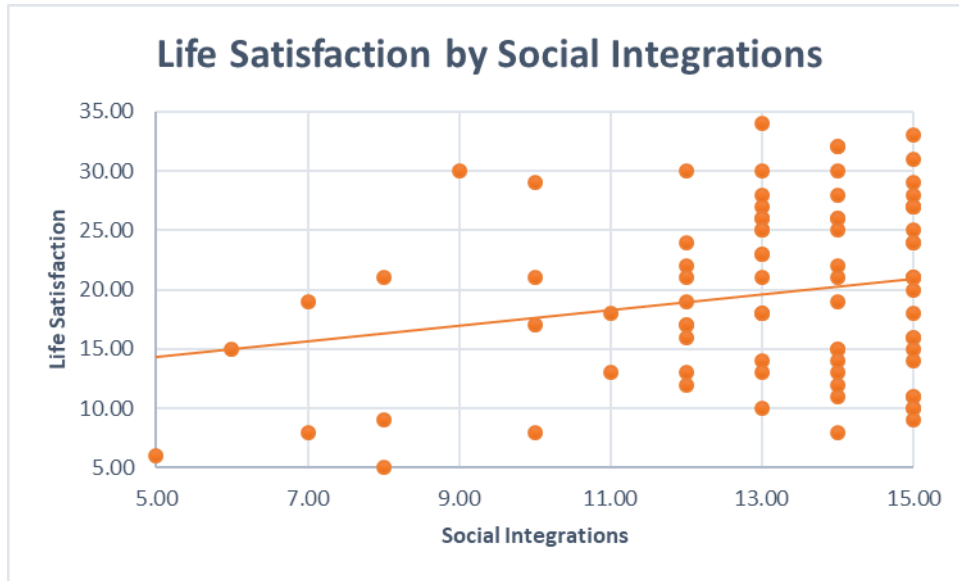


Figure 9: Life satisfaction scores by social integrations for LGB individuals.

Analysis 5: Life Satisfaction and Attachment

A Pearson’s correlation coefficient test revealed there was a weak negative relationship between life satisfaction ($M= 20.12, SD= 7.28$) and attachment ($M= 9.77, SD= 2.23$); $r= -.038, n= 119, p= .681$. The scatterplot is displayed in Figure 10.



Figure 10: Life satisfaction scores by attachment for LGB individuals.

Analysis 6: Life Satisfaction and Nurturance

A Pearson's correlation coefficient test revealed there was no significant relationship between life satisfaction ($M= 20.12$, $SD= 7.28$) and nurturance ($M= 8.80$, $SD= 3.17$); $r= .017$, $n= 119$, $p= .853$. The scatterplot is displayed in (Appendix R).

Analysis 7: Life Satisfaction and Reliable Alliance

A Pearson's correlation coefficient test revealed there was no significant relationship between life satisfaction ($M= 20.12$, $SD= 7.28$) and reliable alliance ($M= 11.41$, $SD= 3.21$); $r= .116$, $n= 119$, $p= .208$. The scatterplot is displayed in (Appendix S).

The results reported above will be further discussed in the discussion section. The findings from the present study will be compared to previous literature, and differences and similarities will be evaluated.

Discussion

Overview of Findings

The purpose of the present study was to investigate the impact of online social support on life satisfaction for LGB individuals. The following section will analyse the current findings compared to previous literature and consider the strengths and limitations of the present study, theoretical and practical implications, and suggestions for future research.

Hypothesis 1 stated that a significant difference would be found for LGB individuals on their levels of online social support and life satisfaction. The results found a significant difference between LGB individuals across 4 levels of online social support, which were guidance, reassurance of worth, social integrations, and reliable alliance. Similar to these findings, Hawthorne et al., (2018) revealed that social support from friends was prevalent in the lives of LGB people, and that LGB and heterosexual people share similar sized support networks. Bruce et al., (2015) reported that LGB individuals receiving social support buffered against negative feelings of discrimination, which can reduce depressive symptoms. Unlike the current study, Hawthorne et al., (2018) and Bruce et al., (2015) did not measure differences between LGB people and focused on offline social support as opposed to online.

There was no significant difference found between LGB individuals and their levels of life satisfaction. This goes against the findings of Wardercker et al., (2019), who examined life satisfaction among LGB people and heterosexuals across an 18-year period. In a sample of 6,304 participants, results showed that life satisfaction for heterosexuals, lesbians, and gays increased over time, whereas there was no increase for bisexuals (Wardecker et al., 2019). The researchers stated that a lack of social support may be the cause of this, however, the results of the current study did not support this rationale. de Vries et al., (2019) found that happiness and life satisfaction was higher for lesbian and gay people in comparison to bisexual, transgender, and intersex participants. Contrasting to the current study, de Vries et al., (2019) examined LGBTI people and happiness, whereas the present study focused on LGB people and life satisfaction.

Hypothesis 2 stated that a significant relationship would be found between online social support and life satisfaction for LGB individuals. A significant positive relationship was found between life satisfaction and reassurance of worth, and between life satisfaction and social integrations. This suggests that these levels of online social support have a positive effect on life satisfaction of LGB individuals. Contrary to these findings, Han et al., (2019) discovered a negative relationship between online social support and wellbeing. In a sample of 1,391 LGBT individuals, depression and lower levels of self-identification were related to those who had higher levels of perceived online social support (Han et al., 2019). However, social media use was limited to one Chinese social media site called 'Weibo', which may have affected the results, as opposed to the current study which focused on a wider range of social media platforms.

Strengths and Limitations of the Present Study

There were several strengths to the present study. To collect data for the study, an online survey was created using Google Forms. The survey was accessible on computers and smartphones and took ten minutes to complete. This was appealing to potential participants as it gave them the opportunity to answer the survey at any time and on any device they may have. Participants were recruited via social media, through emailing LGBT+ officers, and on the IADT campus by distributing posters containing a QR code which, when scanned, directed the participant to the survey. By doing this, data collection was more efficient and less time consuming, and allowed for a more diverse sample in regard to people of different ages, genders, college levels, and living areas.

Another strength of the study was the use of reliable and valid scales. A Cronbach alpha was conducted for each of the scales used to measure reliability. Both scales demonstrated strong reliability, with the online social support scale scoring a Cronbach alpha of .94, and .89 for the life satisfaction scale, supporting the accuracy of the results found in this study and allows the study to be replicated.

A major strength of this study was the results, which produced a significant finding for online social support for LGB individuals, thus supporting the hypothesis. This study adds to a gap in psychological literature regarding an area that has previously been neglected.

Although the above strengths can be seen in the present study, there were also limitations to be considered.

To be eligible to take part in this study, participants must meet a specific criterion, in that they must self-identify as either lesbian, gay, or bisexual, and use social media. This made the recruitment process longer and more difficult.

Due to the specific criteria of the study, the sample size was relatively small, with 119 participants taking part in the study. There was also an unequal number of participants among the 3 groups, with a larger number of participants in the bisexual group (N=63) than the gay group (N=34) and lesbian group (N=22). The inequality across the groups could have affected the results.

The scale used to measure social support was adapted to suit online use and was not a self-reported scale. Although the scale showed strong reliability, participants were not given the opportunity to state their own opinions and views in regard to the social support they personally receive online.

Theoretical and Practical Implications

The present study contributes to psychological literature, especially to an area of research that has previously been neglected. The current study investigated online social support and life satisfaction for LGB individuals. As social media has become more popular in recent years, it is important to look at how it effects its users' psychological wellbeing, particularly for a community that has been discriminated against, but in recent years, has become more accepted by society. Budge et al., (2014) found that social support from family, friends, and significant others has been strongly linked to positive wellbeing for LGB individuals. Relationships both offline and online

can enhance the lives of LGBT people, as it impacts their views of feeling supported in their identities, which positively influences their wellbeing (Ybarra et al., 2015).

Although the outcome of this study found significance across 4 levels of social support online among LGB individuals, no significant difference was found between LGB individuals and their levels of life satisfaction. It is important for research to continue in this area as social media is a vital platform for online social interaction and communication (Wright et al., 2018). The results of the present study may also encourage users of social media to be more supportive of others online as results showed a positive relationship between 2 levels of online social support and life satisfaction.

Future Research

Future research could benefit from investigating the variables used in this study among other members of the LGBTQ+ community and compare the results to heterosexual individuals. Other groups who have been discriminated against, like people of different races, ethnicities, genders, and people of disabilities, can also be examined in comparison to those who suffer little to no prejudice.

Future research could improve by comparing different social media platforms, and assess the social support that they provide to the LGBTQ+ community. There are many different forms of social media sites, such as image and video sharing, forums and discussion sites, and community blogs.

Further amelioration of future research could stem from using a mixed method design. Gathering both quantitative and qualitative data could enhance the results of a study. Qualitative data could be collected by using self-reported scales and open-ended questions as part of a survey, or from focus groups.

Conclusion

With regard to the literature, the present study investigated online social support and life satisfaction for LGB individuals. The findings of the current study found a

significant difference among LGB people across 4 levels of online social support, which were guidance, reassurance of worth, social integrations, and reliable alliance. No significant difference was found between life satisfaction and LGB individuals, however, a significant relationship was found between LGB's life satisfaction and reassurance of worth, and life satisfaction and social integrations. The study had a number of strengths, including using an online survey as an easier and quicker way to gather data, using reliable and valid scales, and contributing to psychological literature. This area of research can be improved by including other members of the LGBTQ+ community and other groups of people who have been discriminated against, comparing different social media sites and the social support that they provide to LGBTQ+ users, and using both quantitative and qualitative design methods.

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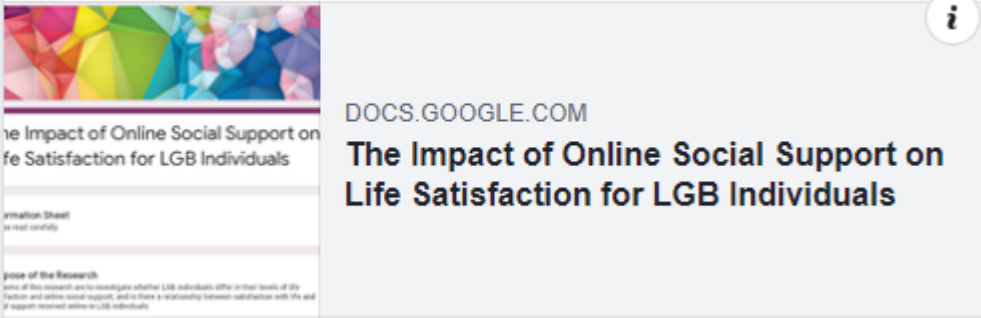
Appendices

Appendix A: Post on Facebook

 **Katie O'Sullivan** shared a link. ⋮
 February 13

Hello, hope everyone is keeping well! I'm currently recruiting participants for my MSc in Cyberpsychology thesis titled "The Impact of Online Social Support on Life Satisfaction for LGB Individuals". If you self-identify as lesbian, gay, or bisexual, please take part in my 10-minute survey, or please share with anyone you know who is LGB and would like to take part. Participation is anonymous and voluntary, and the link to the survey is below. Thank you all very much 😊💜

<https://forms.gle/7NY8AGugw7R39Xdy5>




The screenshot shows a Google Docs document with a colorful geometric pattern header. The title is "The Impact of Online Social Support on Life Satisfaction for LGB Individuals". Below the title, there is a section for "Purpose of the Research" which states: "The purpose of this research is to investigate whether LGB individuals differ in their levels of life satisfaction and online social support, and to explore a relationship between satisfaction with life and support received online in LGB individuals."

Appendix A: Post on Reddit

CLOSE

18 [Academic] Impact of Online Social Support on Life Satisfaction (LGB)

 **r/SampleSize** · Posted by u/katieos_ 1 month ago

[Academic] Impact of Online Social Support on Life Satisfaction (LGB)

Hello! I'm currently doing my masters in Cyberpsychology and need help recruiting participants for my thesis. My thesis is titled "The Impact of Online Social Support on Life Satisfaction for LGB Individuals". If anyone self-identifies as lesbian, gay, or bisexual and would like to take part in a 10 minute survey, I would greatly appreciate the help. Of course participation is voluntary and anonymous. I've linked the survey below and please share with anyone you know who is also LGB.


<https://forms.gle/8KQoCixUy7BHnUT8>

Thank you

Comment Share Edit Post Save Hide ... 91% Upvoted

Comment as [katieos_](#)

What are your thoughts?

 **r/SampleSize**




A place for both surveys and polls to be posted. Research studies for school purposes are welcome just as much as opinion polls that just popped into your head. We are also a place for people who enjoy responding to surveys to gather and help people obtain responses for their research. Questions about a mild level of statistics or wording of surveys are also permitted. Come check us out!




126k	128
Participants	Taking surveys now

Created Feb 21, 2012

JOINED

Appendix B: Email Asking for Permission

Support for Masters Thesis  Inbox x   

 **Katie O'Sullivan** <katieosullivan3a@gmail.com> Fri, Dec 6, 2019, 12:38 PM   
to welfare, equality, Liam ▾

Hi there,

My name is Katie O'Sullivan and I am currently in my final year of the MSc in Cyberpsychology at IADT. I am working on my thesis which is about online social support and life satisfaction for LGB individuals. I will be recruiting participants at the start of 2020, and in order to participate in the study, participants will be asked whether they identify as either lesbian, gay, or bisexual.





I was wondering if you would be able to support this thesis by publicising the link to the study in some way, i.e. mailing lists that you may be apart of. I have received ethical approval to conduct this study and can send you the survey for you to review before I begin recruiting participants.

If you have any questions please do not hesitate to email me or my supervisor, Dr. Liam Challenor, who I have copied in this email.

Thank you very much for taking the time to read this email and I look forward to your response.
Kind regards,

Katie O'Sullivan

Appendix B: Email Containing Link to Survey


 **Katie O'Sullivan** <katieosullivan3a@gmail.com> Mon, Feb 3, 1:38 PM   
to Megan ▾



Hi Megan,

Thank you so much for agreeing to share my survey. If you have any questions or concerns, please let me know. I have attached the link to the survey below.

<https://forms.gle/g43WcLdYWEZzoVc68>

Thanks again and kind regards,
Katie



 Reply  Forward

Appendix C: Flyer with QR Code

**PARTICIPANTS NEEDED FOR MSC in
CYBERPSYCHOLOGY THESIS.**

If you self-identify as either lesbian, gay, or bisexual, please take part in a 10-minute psychological study titled “The Impact of Online Social Support on Life Satisfaction for LGB Individuals”. Participation is anonymous and voluntary.

Open the camera on your phone and point at the QR code below. It will send you to the survey.



Thank you for your participation.

Appendix D: Information Sheet



The Impact of Online Social Support on Life Satisfaction for LGB Individuals

Information Sheet

Please read carefully

Purpose of the Research

The aims of this research are to investigate whether LGB individuals differ in their levels of life satisfaction and online social support, and is there a relationship between satisfaction with life and social support received online in LGB individuals.

Invitation

You are being invited to consider taking part in the research study The Impact of Online Social Support on Life Satisfaction for LGB Individuals. This project is being undertaken by Katie O'Sullivan.

Before you decide whether or not you wish to take part, it is important for you to understand why this research is being done and what it will involve. Please take time to read this information carefully and discuss it with friends and relatives if you wish.

Do I have to take part?

You are free to decide whether you wish to take part or not. If you do decide to take part you will be asked to check the boxes beside the statements that you agree with, confirming your permission to take part in the study. You are free to withdraw from this study before the 22nd of February 2020 without giving reasons.

If I take part, what do I have to do?

You will be asked to answer a series of questionnaires which should take 10 minutes to complete. As part of the demographic questionnaires, you must choose which sexuality out of lesbian, gay, and bisexual that you self-identify with.

Who will have access to information about me?

The data will be stored securely on a password protected computer on my IADT student drive that only I will have access to. After 1 year from the submission date of the dissertation, the data will be securely destroyed. In the case of the dissertation being published, the data will be stored for 5 years and will then be securely destroyed.

What will happen to the results of the study?

The data collected will be used for my MSc in Cyberpsychology dissertation in the Dun Laoghaire Institute of Art, Design, and Technology.

Who has reviewed the study?

This study has been approved by the Department of Technology and Psychology Ethics Committee (DTPEC).

Contact Information

If you have a concern about any aspect of this study or wish to withdraw from the study, you may contact the researcher, Katie O'Sullivan, at N00143236@student.iadt.ie, or my Supervisor, Dr. Liam Challenor at Liam.Challenor@iadt.ie.

Thank you

Thank you for taking the time to read this information sheet.

Date

11/01/20

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Appendix E: Consent Form

Consent Form

Please read carefully and select the boxes if you would like to participate in the study.

I confirm that I have read and understand the information sheet for the above study. *

Yes

I understand that my participation is voluntary and that I am free to withdraw before the withdrawal date. *

Yes

I agree to take part in this study. *

Yes

I understand that data collected about me during this study will be anonymized before it is submitted for publication. *

Yes

I am over 18. *

Yes

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Appendix F: Demographic Questions**Demographic Questions**

What is your gender?

- Male
- Female
- Other: _____

What is your age?

- 18-20
- 21-23
- 24-26
- 27-29
- 30-35
- 36-40
- 41-49
- 50+

Are you an undergraduate or postgraduate student?

- Undergraduate
- Postgraduate
- Not in college

Which area are you living in?

- City
- Suburban
- Town
- Village
- Rural

Which of the following social media sites do you use?

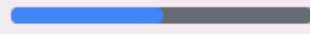
- Facebook
- Twitter
- Instagram
- Snapchat
- Other: _____

Which sexuality do you self-identify with? *

- Lesbian
- Gay
- Bisexual

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Appendix G: Debrief

Debrief

Thank you very much for taking part in this research study.

The study in which you just participated was designed to investigate whether LGB individuals differ in their levels of life satisfaction and online social support, and is there a relationship between satisfaction with life and social support received online in LGB individuals.

If you have questions about this study or you wish to have your data removed from the study (22/02/20), please contact me at the following e-mail address: N00143236@student.iadt.ie. Alternatively, you may contact my supervisor, Dr. Liam Challenor at Liam.Challenor@iadt.ie.

We thank you sincerely for contributing and assure you that your data is confidential and anonymous, and if published the data will not be in any way identifiable as yours.

If you have been affected by the content of this study in any way, the organizations below may be of assistance:

The Samaritans- (01) 671 0071 or <https://www.samaritans.org>

LGBT Ireland- 1890929539 or <https://lgbt.ie>

BeLong To- 01 670 6223 or <https://belongto.org>

Katie O'Sullivan

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Submit

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Appendix H: Online Social Support Scale

Online Social Provisions Scale

In answering the following questions, think about your current online relationships, i.e. friends, family, LGBT+ support groups and forums. Please indicate to what extent each statement describes your current online relationships with other people. Use the scale to indicate your opinion.

For example, if you feel a statement is very true of your current online relationships, you would respond with a 4 (strongly agree). If you feel a statement clearly does not describe your online relationships, you would respond with a 1 (strongly disagree).

There are people online I can depend on to help me if I really need it. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I feel that I do not have close personal relationships with other people online. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

There is no one online I can turn to for guidance in times of stress. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

There are people online who depend on me for help. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

There are people online who enjoy the same social activities I do. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

Other people online do not view me as competent. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I feel personally responsible for the well-being of another person online. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I feel part of an online group of people who share my attitudes and beliefs. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I do not think other people online respect my skills and abilities. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

If something went wrong, no one would come to my assistance online. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I have close relationships online that provide me with a sense of emotional security and well-being. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

There is someone online I could talk to about important decisions in my life. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I have online relationships where my competence and skill are recognized. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

There is no one online who shares my interests and concerns. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

There is no one online who really relies on me for their well-being. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

There is a trustworthy person online I could turn to for advice if I were having problems. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I feel a strong emotional bond with at least one other person online. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

There is no one online I can depend on for aid if I really need it. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

There is no one online I feel comfortable talking about problems with. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

There are people online who admire my talents and abilities. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I lack a feeling of intimacy with another person online. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

There is no one online who likes to do the things I do. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

There are people online who I can count on in an emergency. *

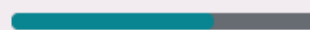
	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

No one online needs me to care for them. *

	1	2	3	4	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

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Appendix I: Cronbach Alpha for Online Social Support Scale

Case Processing Summary

		N	%
Cases	Valid	119	100.0
	Excluded ^a	0	.0
	Total	119	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.943	.941	24

Appendix J: Life Satisfaction Scale

Satisfaction with Life Scale

Below are five statements that you may agree or disagree with. Please indicate how strongly you agree or disagree with each statement.

In most ways my life is close to my ideal. *

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

The conditions of my life are excellent. *

	1	2	3	4	5	6	7	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I am satisfied with my life. *

1 2 3 4 5 6 7

Strongly Disagree Strongly Agree

So far, I have gotten the important things I want in life. *

1 2 3 4 5 6 7

Strongly Disagree Strongly Agree

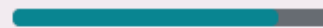
If I could live my life over, I would change almost nothing *

1 2 3 4 5 6 7

Strongly Disagree Strongly Agree

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Appendix K: Cronbach Alpha for Life Satisfaction Scale

Case Processing Summary

		N	%
Cases	Valid	119	100.0
	Excluded ^a	0	.0
	Total	119	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.887	.894	5

Appendix L: Ethics B Form

DEPARTMENT OF TECHNOLOGY AND PSYCHOLOGY ETHICAL APPROVAL FORM B*

Three printed copies of this form should be submitted to the chair of the ethics committee

Title of project The Impact of Online Social Support on Life Satisfaction for LGB

Individuals.

Name of researcher Katie O'Sullivan

Email contact N00143236@student.iadt.ie

Name of supervisor

		Yes	No	N/A
1	Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	✓		
2	Will you tell participants that their participation is voluntary?	✓		
3	Will you obtain written consent for participation (through a signed or 'ticked' consent form)?	✓		
4	If the research is observational, will you ask participants for their consent to being observed?			✓
5	Will you tell participants that they may withdraw from the research at any time and for any reason?	✓		
6	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	✓		
7	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	✓		
8	Will you debrief participants at the end of their participation (i.e., give them a brief explanation of the study)?	✓		
9	If your study involves people between 16 and 18 years, will you ensure that <u>passive</u> consent is obtained from parents/guardians, with active consent obtained from both the child and their school/organisation?			✓
10	If your study involves people under 16 years, will you ensure that <u>active</u> consent is obtained from parents/guardians <u>and</u> that a parent/guardian or their nominee (such as a teacher) will be present throughout the data collection period?			✓
11	Will your project involve deliberately misleading participants in any way?		✓	
12	Is there any realistic risk of any participants experiencing either physical or psychological distress or discomfort?		✓	
13	Does your project involve work with animals?		✓	
14	Do you plan to give individual feedback to participants regarding their scores on any task or scale?		✓	
15	Does your study examine any sensitive topics (such as, but not limited to, religion, sexuality, alcohol, crime, drugs, mental health, physical health)?	✓		
16	Is your study designed to change the mental state of participants in any negative way (such as inducing aggression, frustration, etc.)?		✓	
17	Does your study involve an external agency (e.g. for recruitment)?		✓	

18	Do participants fall into any of the following special groups?	People with learning or communication difficulties		<input checked="" type="checkbox"/>	
		Patients (either inpatient or outpatient)		<input checked="" type="checkbox"/>	
		People in custody		<input checked="" type="checkbox"/>	

If you have ticked **No** to any of questions 1 to 10, or **Yes** to any of questions 11 to 18 you should refer to the PSI Code of Professional Ethics and BPS Guidelines. There is an obligation on the lead researcher to bring to the attention of the Department of Technology and Psychology Ethics Committee (DTPEC) any issues with ethical implications not clearly covered by the above checklist.

* This Ethics B form should be completed by researchers whose studies involve any ethically questionable practices.

I consider that this project **may** have ethical implications that should be brought before the DTPEC.

Please provide all the further information listed below, adhering closely to the suggested word counts.

1. Purpose of project with very clear and specific justification for the study [its potential benefits], given the acknowledged sensitivity of the topic of study or the methods used (approximately 100 words)

The purpose of the project is to investigate whether lesbian, gay, and bisexual (LGB) individuals differ in their levels of life satisfaction and online social support, and is there a relationship between life satisfaction and online social support for LGB individuals. Research shows that supporting LGB people can enhance their psychological wellbeing and produce greater levels of life satisfaction. However, there is a paucity in the literature as to whether this applies to the online world. The research hopes to find a relationship between higher levels of online social support and greater life satisfaction for LGB individuals. Potential benefits of this outcome would encourage more people to be supportive online of LGB people.

2. Proposed methodology (approximately 300 words). This must include:
 - a. Participants: recruitment methods, number, age, gender, exclusion/inclusion criteria.
 - b. Brief description of methods and measurements.

Participants must be 18 years old or older to participate in this study. They must identify as either lesbian, gay, or bisexual and must use social networking sites (SNS). The researcher hopes to recruit 90 participants, 30 in each group (lesbian, gay, bisexual). Participants will be recruited through SNS, LGBT organizations, and on the IADT campus. Participants will be asked to answer a series of surveys which have been created using Google Forms. Flyers will be made and will contain a QR code that potential participants can scan to send them to the survey. A link to the survey will be posted on various SNS and will be sent via email to LGBT organizations. The information sheet, consent form, and debrief will be embedded into the Google Form. If the participant does not check the boxes on the consent form, then they will not be allowed to continue with the survey. The participant will be asked a series of demographic questions, including their gender, age, what sexuality do they identify with (lesbian, gay, bisexual), what SNS do they use. Participants will be asked to complete The Social Provisions Scale (Cutrona & Russell, 1984) which will be adapted to suit online activity, and the Satisfaction with Life Scale (Diener, Emmons, Larsen, and Griffin, 1985). The Social Provisions Scale contains 24 items and measures 6 aspects of social support in the context of interpersonal relationships. The 6 aspects are Guidance, Reliable alliance, Reassurance of worth, Opportunity for nurturance, Attachments, and Social integration. The Satisfaction with Life Scale is made up of 5 items and measures how satisfied one is with their life. Contact information for a number of organizations will be made available to the participant on the debrief form in case anything from the survey affected them.

<p>3. A clear but concise statement of the ethical considerations raised by the project and how you intend to deal with them (approximately 100 words).</p> <p>The researcher will follow the ethical guidelines as proposed by the PSI Code of Ethics and will await ethical approval from DTPEC before commencing recruitment of participants. The project is asking participants which sexuality they identify with, however, no more questions regarding their sexuality will be asked. In the case that this may upset the participant, contact information for the researcher and supervisor will be provided, as well as contact information for relevant organizations. The participant will also be assured that they will be anonymous, participation is voluntary, and that they can withdraw their data from the study before the withdrawal date.</p> <p>4. Copies of all materials to be used in your study should be attached to this form. This must include consent and participant information arrangements and debrief forms. It should also include copies of all standardized and/or non-standardized questionnaires and instruments, as well as any interventions and/or audio-visual materials which will be used. Please note that these materials will not be returned to you, so you should ensure that you retain a copy for your own records. All loose materials (such as DVDs, handouts etc.) should be clearly labeled with your name. There is no word count limit on appendices, but no appendices should be included that will not be used as materials in your study.</p> <p>Three copies of this form, along with all materials to be used in your study, should be submitted to the DTPEC for consideration. <i>If any of the above information is missing, your application will not be considered at the DTPEC meeting, and your research may be significantly delayed.</i></p>	
--	--

I am familiar with the PSI Code of Professional Ethics and BPS Guidelines (and have discussed them with the other researchers involved in the project). I have read and understood the specific guidelines for completion of Ethics Application Forms.

Signed _____ Print Name Katie O'Sullivan Date 17/04/19

Applicant

Signed _____ Print Name _____ Date _____

Supervisor

Appendix M: Box's Tests of Equality of Covariance Matrices for MANOVA**Box's Test of
Equality of
Covariance
Matrices^a**

Box's M	77.753
F	1.237
df1	56
df2	13990.002
Sig.	.110

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

- a. Design:
Intercept +
sexuality

Appendix N: Levene's Test of Equality of Error Variances for MANOVA

Levene's Test of Equality of Error Variances^a

		Levene Statistic	df1	df2	Sig.
total life satisfaction score	Based on Mean	.762	2	116	.469
	Based on Median	.758	2	116	.471
	Based on Median and with adjusted df	.758	2	112.944	.471
	Based on trimmed mean	.755	2	116	.472
guidance	Based on Mean	.974	2	116	.381
	Based on Median	1.003	2	116	.370
	Based on Median and with adjusted df	1.003	2	114.073	.370
	Based on trimmed mean	1.013	2	116	.366
reassurance of worth	Based on Mean	1.938	2	116	.149
	Based on Median	1.395	2	116	.252
	Based on Median and with adjusted df	1.395	2	108.692	.252
	Based on trimmed mean	1.823	2	116	.166
social integrations	Based on Mean	3.032	2	116	.052
	Based on Median	2.419	2	116	.094
	Based on Median and with adjusted df	2.419	2	103.288	.094
	Based on trimmed mean	2.502	2	116	.086
attachment	Based on Mean	3.758	2	116	.026
	Based on Median	3.696	2	116	.028
	Based on Median and with adjusted df	3.696	2	106.115	.028
	Based on trimmed mean	3.774	2	116	.026
nurturance	Based on Mean	.957	2	116	.387
	Based on Median	1.028	2	116	.361
	Based on Median and with adjusted df	1.028	2	113.029	.361
	Based on trimmed mean	.961	2	116	.386
reliable aliance	Based on Mean	1.006	2	116	.369
	Based on Median	1.072	2	116	.346
	Based on Median and with adjusted df	1.072	2	111.028	.346
	Based on trimmed mean	1.008	2	116	.368

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + sexuality

Appendix O: MANOVA Output

Between-Subjects Factors

		Value Label	N
sexuality	1	Lesbian	22
	2	Gay	34
	3	Bisexual	63

Descriptive Statistics

	sexuality	Mean	Std. Deviation	N
total life satisfaction score	Lesbian	22.3636	7.80443	22
	Gay	20.9412	7.60359	34
	Bisexual	18.8889	6.75877	63
	Total	20.1176	7.27682	119
guidance	Lesbian	13.1818	2.78835	22
	Gay	11.0294	3.64721	34
	Bisexual	12.4921	3.21726	63
	Total	12.2017	3.34101	119
reassurance of worth	Lesbian	13.4545	2.01724	22
	Gay	11.4706	2.86288	34
	Bisexual	12.1270	2.35887	63
	Total	12.1849	2.52770	119
social integrations	Lesbian	14.4545	1.94513	22
	Gay	12.7353	3.00816	34
	Bisexual	14.2698	1.97734	63
	Total	13.8655	2.40383	119
attachment	Lesbian	10.3636	2.15020	22
	Gay	9.1176	1.88719	34
	Bisexual	9.9206	2.37121	63
	Total	9.7731	2.23014	119
nurturance	Lesbian	9.4091	2.78874	22
	Gay	7.9706	3.55464	34
	Bisexual	9.0317	3.03723	63
	Total	8.7983	3.17186	119
reliable aliance	Lesbian	12.4091	2.55714	22
	Gay	10.0000	3.49892	34
	Bisexual	11.8254	3.04557	63
	Total	11.4118	3.21124	119

Multivariate Tests^a

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^d
Intercept	Pillai's Trace	.980	770.850 ^b	7.000	110.000	.000	.980	5395.952	1.000
	Wilks' Lambda	.020	770.850 ^b	7.000	110.000	.000	.980	5395.952	1.000
	Hotelling's Trace	49.054	770.850 ^b	7.000	110.000	.000	.980	5395.952	1.000
	Roy's Largest Root	49.054	770.850 ^b	7.000	110.000	.000	.980	5395.952	1.000
sexuality	Pillai's Trace	.219	1.955	14.000	222.000	.022	.110	27.366	.938
	Wilks' Lambda	.791	1.957 ^b	14.000	220.000	.022	.111	27.401	.938
	Hotelling's Trace	.252	1.959	14.000	218.000	.022	.112	27.431	.939
	Roy's Largest Root	.180	2.847 ^c	7.000	111.000	.009	.152	19.929	.908

a. Design: Intercept + sexuality

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

d. Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^h
Corrected Model	total life satisfaction score	229.157 ^a	2	114.579	2.208	.115	.037	4.416	.443
	guidance	73.170 ^b	2	36.585	3.412	.036	.056	6.823	.631
	reassurance of worth	53.024 ^c	2	26.512	4.388	.015	.070	8.775	.748
	social integrations	61.364 ^d	2	30.682	5.736	.004	.090	11.472	.859
	attachment	23.650 ^e	2	11.825	2.435	.092	.040	4.871	.482
	nurturance	34.934 ^f	2	17.467	1.759	.177	.029	3.517	.362
	reliable aliance	100.426 ^g	2	50.213	5.217	.007	.083	10.435	.822
Intercept	total life satisfaction score	42628.226	1	42628.226	821.517	.000	.876	821.517	1.000
	guidance	14846.173	1	14846.173	1384.382	.000	.923	1384.382	1.000
	reassurance of worth	15129.707	1	15129.707	2503.956	.000	.956	2503.956	1.000
	social integrations	18943.332	1	18943.332	3541.467	.000	.968	3541.467	1.000
	attachment	9526.992	1	9526.992	1962.154	.000	.944	1962.154	1.000
	nurturance	7687.553	1	7687.553	773.943	.000	.870	773.943	1.000
	reliable aliance	12916.121	1	12916.121	1342.058	.000	.920	1342.058	1.000
sexuality	total life satisfaction score	229.157	2	114.579	2.208	.115	.037	4.416	.443
	guidance	73.170	2	36.585	3.412	.036	.056	6.823	.631
	reassurance of worth	53.024	2	26.512	4.388	.015	.070	8.775	.748
	social integrations	61.364	2	30.682	5.736	.004	.090	11.472	.859
	attachment	23.650	2	11.825	2.435	.092	.040	4.871	.482
	nurturance	34.934	2	17.467	1.759	.177	.029	3.517	.362
	reliable aliance	100.426	2	50.213	5.217	.007	.083	10.435	.822
Error	total life satisfaction score	6019.195	116	51.890					
	guidance	1243.989	116	10.724					
	reassurance of worth	700.909	116	6.042					
	social integrations	620.485	116	5.349					
	attachment	563.223	116	4.855					
	nurturance	1152.225	116	9.933					
	reliable aliance	1116.398	116	9.624					
Total	total life satisfaction score	54410.000	119						
	guidance	19034.000	119						
	reassurance of worth	18422.000	119						
	social integrations	23560.000	119						
	attachment	11953.000	119						
	nurturance	10399.000	119						
	reliable aliance	16714.000	119						
Corrected Total	total life satisfaction score	6248.353	118						
	guidance	1317.160	118						
	reassurance of worth	753.933	118						
	social integrations	681.849	118						
	attachment	586.874	118						
	nurturance	1187.160	118						
	reliable aliance	1216.824	118						

- a. R Squared = .037 (Adjusted R Squared = .020)
- b. R Squared = .056 (Adjusted R Squared = .039)
- c. R Squared = .070 (Adjusted R Squared = .054)
- d. R Squared = .090 (Adjusted R Squared = .074)
- e. R Squared = .040 (Adjusted R Squared = .024)
- f. R Squared = .029 (Adjusted R Squared = .013)
- g. R Squared = .083 (Adjusted R Squared = .067)
- h. Computed using alpha = .05

Estimates

Dependent Variable	sexuality	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
total life satisfaction score	Lesbian	22.364	1.536	19.322	25.405
	Gay	20.941	1.235	18.494	23.388
	Bisexual	18.889	.908	17.091	20.686
guidance	Lesbian	13.182	.698	11.799	14.565
	Gay	11.029	.562	9.917	12.142
	Bisexual	12.492	.413	11.675	13.309
reassurance of worth	Lesbian	13.455	.524	12.417	14.493
	Gay	11.471	.422	10.636	12.306
	Bisexual	12.127	.310	11.514	12.740
social integrations	Lesbian	14.455	.493	13.478	15.431
	Gay	12.735	.397	11.950	13.521
	Bisexual	14.270	.291	13.693	14.847
attachment	Lesbian	10.364	.470	9.433	11.294
	Gay	9.118	.378	8.369	9.866
	Bisexual	9.921	.278	9.371	10.470
nurturance	Lesbian	9.409	.672	8.078	10.740
	Gay	7.971	.541	6.900	9.041
	Bisexual	9.032	.397	8.245	9.818
reliable alliance	Lesbian	12.409	.661	11.099	13.719
	Gay	10.000	.532	8.946	11.054
	Bisexual	11.825	.391	11.051	12.600

Pairwise Comparisons

Dependent Variable	(I) sexuality	(J) sexuality	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
						Lower Bound	Upper Bound
total life satisfaction score	Lesbian	Gay	1.422	1.971	.472	-2.481	5.326
		Bisexual	3.475	1.784	.054	-.058	7.008
	Gay	Lesbian	-1.422	1.971	.472	-5.326	2.481
		Bisexual	2.052	1.533	.183	-.984	5.088
	Bisexual	Lesbian	-3.475	1.784	.054	-7.008	.058
		Gay	-2.052	1.533	.183	-5.088	.984
guidance	Lesbian	Gay	2.152 [*]	.896	.018	.378	3.927
		Bisexual	.690	.811	.397	-.916	2.296
	Gay	Lesbian	-2.152 [*]	.896	.018	-3.927	-.378
		Bisexual	-1.463 [*]	.697	.038	-2.843	-.082
	Bisexual	Lesbian	-.690	.811	.397	-2.296	.916
		Gay	1.463 [*]	.697	.038	.082	2.843
reassurance of worth	Lesbian	Gay	1.984 [*]	.673	.004	.652	3.316
		Bisexual	1.328 [*]	.609	.031	.122	2.533
	Gay	Lesbian	-1.984 [*]	.673	.004	-3.316	-.652
		Bisexual	-.656	.523	.212	-1.692	.380
	Bisexual	Lesbian	-1.328 [*]	.609	.031	-2.533	-.122
		Gay	.656	.523	.212	-.380	1.692
social integrations	Lesbian	Gay	1.719 [*]	.633	.008	.466	2.973
		Bisexual	.185	.573	.748	-.950	1.319
	Gay	Lesbian	-1.719 [*]	.633	.008	-2.973	-.466
		Bisexual	-1.535 [*]	.492	.002	-2.509	-.560
	Bisexual	Lesbian	-.185	.573	.748	-1.319	.950
		Gay	1.535 [*]	.492	.002	.560	2.509
attachment	Lesbian	Gay	1.246 [*]	.603	.041	.052	2.440
		Bisexual	.443	.546	.419	-.638	1.524
	Gay	Lesbian	-1.246 [*]	.603	.041	-2.440	-.052
		Bisexual	-.803	.469	.089	-1.732	.126
	Bisexual	Lesbian	-.443	.546	.419	-1.524	.638
		Gay	.803	.469	.089	-.126	1.732
nurturance	Lesbian	Gay	1.439	.862	.098	-.269	3.146
		Bisexual	.377	.780	.630	-1.169	1.923
	Gay	Lesbian	-1.439	.862	.098	-3.146	.269
		Bisexual	-1.061	.671	.116	-2.390	.267
	Bisexual	Lesbian	-.377	.780	.630	-1.923	1.169
		Gay	1.061	.671	.116	-.267	2.390
reliable aliance	Lesbian	Gay	2.409 [*]	.849	.005	.728	4.090
		Bisexual	.584	.768	.449	-.938	2.105
	Gay	Lesbian	-2.409 [*]	.849	.005	-4.090	-.728
		Bisexual	-1.825 [*]	.660	.007	-3.133	-.518
	Bisexual	Lesbian	-.584	.768	.449	-2.105	.938
		Gay	1.825 [*]	.660	.007	.518	3.133

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Multivariate Tests

	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^c
Pillai's trace	.219	1.955	14.000	222.000	.022	.110	27.366	.938
Wilks' lambda	.791	1.957 ^a	14.000	220.000	.022	.111	27.401	.938
Hotelling's trace	.252	1.959	14.000	218.000	.022	.112	27.431	.939
Roy's largest root	.180	2.847 ^b	7.000	111.000	.009	.152	19.929	.908

Each F tests the multivariate effect of sexuality. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Exact statistic

b. The statistic is an upper bound on F that yields a lower bound on the significance level.

c. Computed using alpha = .05

Univariate Tests

Dependent Variable		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^a
total life satisfaction score	Contrast	229.157	2	114.579	2.208	.115	.037	4.416	.443
	Error	6019.195	116	51.890					
guidance	Contrast	73.170	2	36.585	3.412	.036	.056	6.823	.631
	Error	1243.989	116	10.724					
reassurance of worth	Contrast	53.024	2	26.512	4.388	.015	.070	8.775	.748
	Error	700.909	116	6.042					
social integrations	Contrast	61.364	2	30.682	5.736	.004	.090	11.472	.859
	Error	620.485	116	5.349					
attachment	Contrast	23.650	2	11.825	2.435	.092	.040	4.871	.482
	Error	563.223	116	4.855					
nurturance	Contrast	34.934	2	17.467	1.759	.177	.029	3.517	.362
	Error	1152.225	116	9.933					
reliable aliance	Contrast	100.426	2	50.213	5.217	.007	.083	10.435	.822
	Error	1116.398	116	9.624					

The F tests the effect of sexuality. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

Multiple Comparisons

Tukey HSD

Dependent Variable	(I) sexuality	(J) sexuality	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
total life satisfaction score	Lesbian	Gay	1.4225	1.97099	.751	-3.2570	6.1019
		Bisexual	3.4747	1.78389	.130	-.7605	7.7100
	Gay	Lesbian	-1.4225	1.97099	.751	-6.1019	3.2570
		Bisexual	2.0523	1.53291	.377	-1.5871	5.6917
	Bisexual	Lesbian	-3.4747	1.78389	.130	-7.7100	.7605
		Gay	-2.0523	1.53291	.377	-5.6917	1.5871
guidance	Lesbian	Gay	2.1524*	.89603	.047	.0251	4.2797
		Bisexual	.6898	.81097	.672	-1.2356	2.6151
	Gay	Lesbian	-2.1524*	.89603	.047	-4.2797	-.0251
		Bisexual	-1.4627	.69688	.094	-3.1172	.1919
	Bisexual	Lesbian	-.6898	.81097	.672	-2.6151	1.2356
		Gay	1.4627	.69688	.094	-.1919	3.1172
reassurance of worth	Lesbian	Gay	1.9840*	.67258	.011	.3871	3.5808
		Bisexual	1.3276	.60874	.079	-.1177	2.7728
	Gay	Lesbian	-1.9840*	.67258	.011	-3.5808	-.3871
		Bisexual	-.6564	.52309	.424	-1.8983	.5855
	Bisexual	Lesbian	-1.3276	.60874	.079	-2.7728	.1177
		Gay	.6564	.52309	.424	-.5855	1.8983
social integrations	Lesbian	Gay	1.7193*	.63282	.021	.2168	3.2217
		Bisexual	.1847	.57275	.944	-1.1751	1.5445
	Gay	Lesbian	-1.7193*	.63282	.021	-3.2217	-.2168
		Bisexual	-1.5345*	.49217	.006	-2.7030	-.3661
	Bisexual	Lesbian	-.1847	.57275	.944	-1.5445	1.1751
		Gay	1.5345*	.49217	.006	.3661	2.7030
attachment	Lesbian	Gay	1.2460	.60291	.101	-.1854	2.6774
		Bisexual	.4430	.54568	.696	-.8525	1.7385
	Gay	Lesbian	-1.2460	.60291	.101	-2.6774	.1854
		Bisexual	-.8030	.46891	.205	-1.9163	.3103
	Bisexual	Lesbian	-.4430	.54568	.696	-1.7385	.8525
		Gay	.8030	.46891	.205	-.3103	1.9163
nurturance	Lesbian	Gay	1.4385	.86235	.222	-.6089	3.4859
		Bisexual	.3773	.78049	.879	-1.4757	2.2304
	Gay	Lesbian	-1.4385	.86235	.222	-3.4859	.6089
		Bisexual	-1.0612	.67068	.257	-2.6535	.5312
	Bisexual	Lesbian	-.3773	.78049	.879	-2.2304	1.4757
		Gay	1.0612	.67068	.257	-.5312	2.6535
reliable alliance	Lesbian	Gay	2.4091*	.84884	.015	.3938	4.4244
		Bisexual	.5837	.76826	.728	-1.2403	2.4077
	Gay	Lesbian	-2.4091*	.84884	.015	-4.4244	-.3938
		Bisexual	-1.8254*	.66017	.018	-3.3928	-.2580
	Bisexual	Lesbian	-.5837	.76826	.728	-2.4077	1.2403
		Gay	1.8254*	.66017	.018	.2580	3.3928

Based on observed means.

The error term is Mean Square(Error) = 9.624.

*. The mean difference is significant at the .05 level.

total life satisfaction score

Tukey HSD^{a,b,c}

sexuality	N	Subset
		1
Bisexual	63	18.8889
Gay	34	20.9412
Lesbian	22	22.3636
Sig.		.127

Means for groups in homogeneous subsets are displayed.

Based on observed means.
The error term is Mean Square (Error) = 51.890.

- a. Uses Harmonic Mean Sample Size = 33.062.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.
- c. Alpha = .05.

guidance

Tukey HSD^{a,b,c}

sexuality	N	Subset	
		1	2
Gay	34	11.0294	
Bisexual	63	12.4921	12.4921
Lesbian	22		13.1818
Sig.		.169	.669

Means for groups in homogeneous subsets are displayed.

Based on observed means.
The error term is Mean Square(Error) = 10.724.

- a. Uses Harmonic Mean Sample Size = 33.062.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.
- c. Alpha = .05.

reassurance of worth

Tukey HSD^{a,b,c}

sexuality	N	Subset	
		1	2
Gay	34	11.4706	
Bisexual	63	12.1270	12.1270
Lesbian	22		13.4545
Sig.		.525	.076

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 6.042.

- a. Uses Harmonic Mean Sample Size = 33.062.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.
- c. Alpha = .05.

social integrations

Tukey HSD^{a,b,c}

sexuality	N	Subset	
		1	2
Gay	34	12.7353	
Bisexual	63		14.2698
Lesbian	22		14.4545
Sig.		1.000	.944

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 5.349.

- a. Uses Harmonic Mean Sample Size = 33.062.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.
- c. Alpha = .05.

attachment

Tukey HSD^{a,b,c}

sexuality	N	Subset 1
Gay	34	9.1176
Bisexual	63	9.9206
Lesbian	22	10.3636
Sig.		.060

Means for groups in homogeneous subsets are displayed.

Based on observed means.
The error term is Mean Square (Error) = 4.855.

- a. Uses Harmonic Mean Sample Size = 33.062.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.
- c. Alpha = .05.

nurturance

Tukey HSD^{a,b,c}

sexuality	N	Subset 1
Gay	34	7.9706
Bisexual	63	9.0317
Lesbian	22	9.4091
Sig.		.156

Means for groups in homogeneous subsets are displayed.

Based on observed means.
The error term is Mean Square (Error) = 9.933.

- a. Uses Harmonic Mean Sample Size = 33.062.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.
- c. Alpha = .05.

reliable alianceTukey HSD^{a,b,c}

sexuality	N	Subset	
		1	2
Gay	34	10.0000	
Bisexual	63		11.8254
Lesbian	22		12.4091
Sig.		1.000	.725

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 9.624.

a. Uses Harmonic Mean Sample Size = 33.062.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

c. Alpha = .05.

Appendix P: Correlations Output

Descriptive Statistics

	Mean	Std. Deviation	N
total life satisfaction score	20.1176	7.27682	119
guidance	12.2017	3.34101	119
reassurance of worth	12.1849	2.52770	119
social integrations	13.8655	2.40383	119
attachment	9.7731	2.23014	119
nurturance	8.7983	3.17186	119
reliable aliance	11.4118	3.21124	119

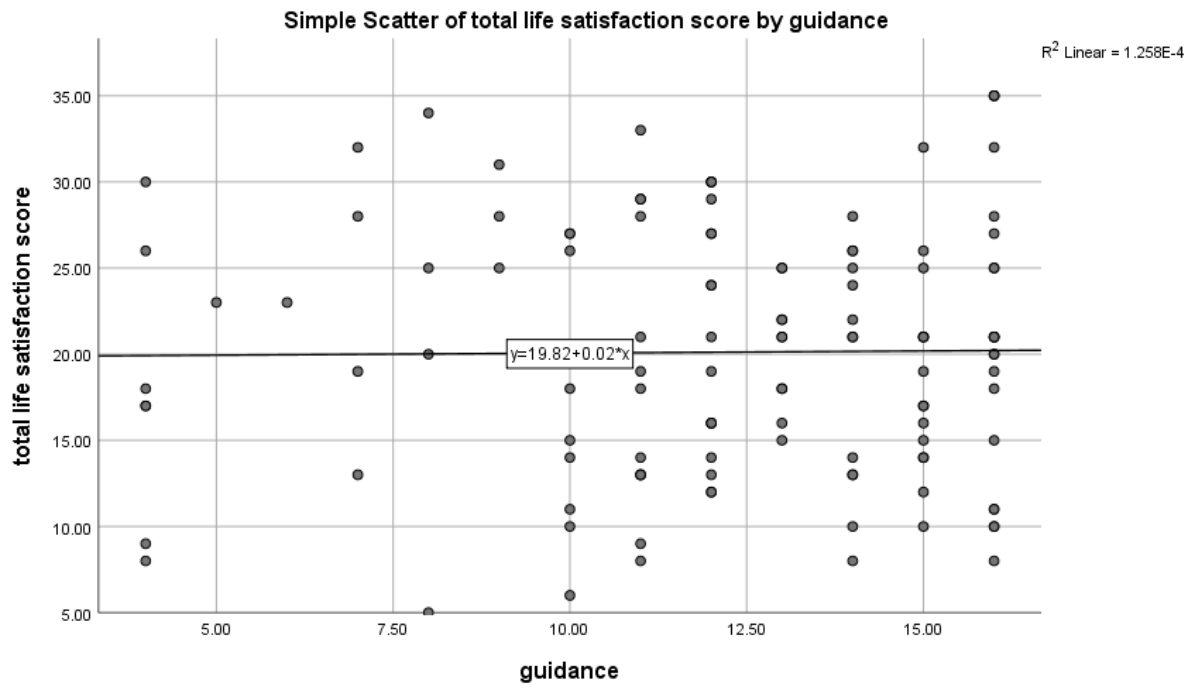
Correlations

		total life satisfaction score	guidance	reassurance of worth	social integrations	attachment	nurturance	reliable aliance
total life satisfaction score	Pearson Correlation	1	.011	.264**	.217*	-.038	.017	.116
	Sig. (2-tailed)		.904	.004	.018	.681	.853	.208
	N	119	119	119	119	119	119	119
guidance	Pearson Correlation	.011	1	.558**	.497**	.570**	.627**	.870**
	Sig. (2-tailed)	.904		.000	.000	.000	.000	.000
	N	119	119	119	119	119	119	119
reassurance of worth	Pearson Correlation	.264**	.558**	1	.510**	.425**	.457**	.617**
	Sig. (2-tailed)	.004	.000		.000	.000	.000	.000
	N	119	119	119	119	119	119	119
social integrations	Pearson Correlation	.217*	.497**	.510**	1	.260**	.455**	.548**
	Sig. (2-tailed)	.018	.000	.000		.004	.000	.000
	N	119	119	119	119	119	119	119
attachment	Pearson Correlation	-.038	.570**	.425**	.260**	1	.693**	.513**
	Sig. (2-tailed)	.681	.000	.000	.004		.000	.000
	N	119	119	119	119	119	119	119
nurturance	Pearson Correlation	.017	.627**	.457**	.455**	.693**	1	.657**
	Sig. (2-tailed)	.853	.000	.000	.000	.000		.000
	N	119	119	119	119	119	119	119
reliable aliance	Pearson Correlation	.116	.870**	.617**	.548**	.513**	.657**	1
	Sig. (2-tailed)	.208	.000	.000	.000	.000	.000	
	N	119	119	119	119	119	119	119

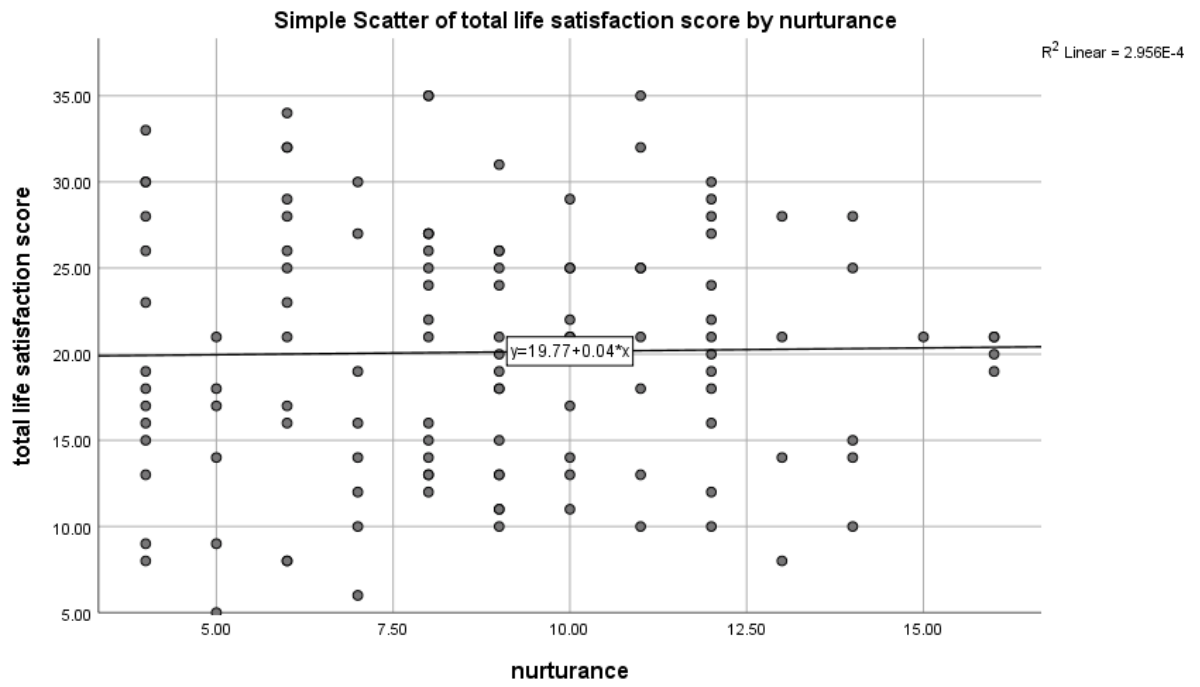
** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Appendix Q: Scatterplot for Life Satisfaction and Guidance



Appendix R: Scatterplot for Life Satisfaction and Nurturance



Appendix S: Scatterplot for Life Satisfaction and Reliable Alliance

