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Living in a heteronormative world: LGBT forums versus LGBT Facebook groups as sources of support and well-being.

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Declaration

This thesis is entirely my own work, and has not been previously submitted to this or any other third level institution.

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Abstract

Existing research on online support groups suggests that in-group identification mediates the relationship between social support and well-being. Since anonymity is theorised to increase group salience, it was hypothesised that LGBT support forums would engender a greater level of in-group identification than LGBT Facebook groups. As no study to date had compared LGBT support groups on these platforms, the relationships between social support, in-group identification and well-being were also investigated. An online survey was completed by a sample of 114 LGBT adults. While in-group identification was found to be significantly higher on LGBT forums than on LGBT Facebook groups, no relationship was found between social support and well-being, or between in-group identification and well-being, on either platform. The characteristics of the sample may have contributed to this finding as most respondents were out offline, felt comfortable with their identity, and lived in an urban area, and thus may have been less dependent on online support. Future research might focus on a younger, more rural, cohort for whom online support may be more crucial.

Introduction

LGBT civil and legal rights have advanced considerably in recent years as evidenced by the introduction of marriage equality in 26 countries worldwide (Pew Research Center, 2017). At a European level, LGBT individuals have been accorded protection from workplace discrimination by Article 21 of the Charter of Fundamental Rights of the European Union (European Union Agency for Fundamental Rights, 2013). And at a national level, Ireland has not only introduced a marriage equality act but also a Gender Recognition Act (Department of Children and Youth Affairs, 2017). Despite this, society remains overwhelmingly heteronormative and LGBT people still frequently experience discrimination and bullying in their everyday lives (Department of Children and Youth Affairs, 2017). School environments are still unsupportive of LGBT students. For example, a nationwide survey of US schools found that over 98% reported being distressed by the pejorative use of the term gay while over half of all students had heard members of staff make homophobic comments (Kosciw, Greytak, Giga, Villenas & Danischewski, 2016). This was mirrored by the experience of Irish students who also reported the use of homophobic language by students and staff alike (Higgins et al., 2016). Victimisation is still commonplace: 66% of EU LGBT respondents said they would not hold hands in public because of the threat of harassment or physical violence (European Union Agency for Fundamental Rights, 2013). And a majority of respondents in every EU country said they had encountered negative attitudes and behaviour towards work colleagues perceived to be LGBT (European Union Agency for Fundamental Rights, 2013). All of this has tangible consequences for the well-being of LGBT people, especially the young. Irish LGBTI youth were three times more likely to attempt suicide than a similarly aged non-LGBT cohort (Higgins et al., 2016). And almost a quarter of Irish LGBTI students had missed school because of negative experiences (Higgins et al., 2016). Support from family, friends, and community groups can mitigate the harmful effects of negative life experiences, and allow LGBT individuals to develop a resilience to adversity (Mayock, Bryan, Carr & Kitching, 2009; Moody, Fuks, Peláez & Smith, 2015). However, these resources are not always available, and Internet based support now plays an important part in the lives of LGBT individuals especially those who are not out offline (Hillier et al., 2010).

Literature Review

Online social support

  Going online allows LGBT people to develop friendships with similar others, experience a sense of community, and to practice coming out in a safe environment. Participants in a US study were found to have initially used the Internet to access information and support when they first became aware of their sexual orientation (Hillier, Mitchell & Ybarra, 2012). Going online allowed them to elicit social support from similar others at a time when they were not out offline, and thus could not obtain support from existing friends (Hillier et al., 2012). While the study's non-LGB cohort had only a small number of exclusively online friends, the LGB group had many more with some having up to ten friends that they exclusively met and knew in an online environment (Hillier et al., 2012). The importance of online support was found to decrease when adolescences began to come out offline (Hillier et al., 2012). The significance, and representativeness, of the results may be limited by a small sample size (LGB n=33, non-LGB n=26) that was mostly composed of white, public school students (Hillier et al., 2012). However, Ybarra, Mitchell, Palmer, and Reisner (2015) found a similar pattern of online friendship and social support among a much larger sample of 5,542 US adolescents. The authors note however, that the representativeness of the results may be affected by self-selection bias and the use of a cross-sectional design (Ybarra et al., 2015). An Australian survey of LGBT adolescents also reported similar findings. Australian youth typically used the Internet to find others who were negotiating similar issues, and to gather information that was not available from traditional sources such as family and friends (Hillier et al., 2010). Interacting with others online, allowed young LGBT Australians to explore and normalise their sexual identity in a safe setting (Hillier et al., 2010). For some, this lead to an increased sense of being connected into a community, and reduced feelings of loneliness and isolation, with some online friendships developing into offline relationships (Hillier et al., 2010). This sense of being connected to an online community may be especially important to those who live in areas where it was reported to be more difficult to access traditional LGBT

community support, either because of the rural setting, or simply because of the absence of an LGBT supportive culture (Higgins et al., 2016; Hillier et al., 2010; Mayock et al., 2009).

Because society is overwhelmingly heteronormative, coming out is an emotionally challenging disclosure that always risks a negative response and one that must be repeated many times over (Duguay, 2016). According to Hillier et al. (2010), the anonymous nature of online support networks was found to make it easier for LGBT youth to come out online when they may not be ready to do so offline (Hillier et al., 2010). In an online context, it was of much less consequence if coming out was met with a negative response and participants were found to be willing to risk greater disclosure in this setting (Hillier et al., 2010). This perspective was mirrored by US LGB respondents who felt that it was much safer to disclose their sexual orientation online as they did not run the social risk of being rejected by family or friends or coming to physical harm (Hillier et al., 2012). The lack of social awkwardness associated with face-to-face encounters was also a factor that contributed to why many US LGB adolescents found it easier to come out online rather than offline (Hillier et al., 2012). Similarly, an Italian study of online transgender communities found the anonymous, text-based nature of online interactions allowed transgender people to circumvent any sense of awkwardness about their physical appearance and express themselves freely (Cipolletta, Votadoro & Faccio, 2017). Additionally, the asynchronous nature of some online communication is thought to facilitate deeper and more thoughtful expression (Barak, Boniel-Nissim & Suler, 2008) and US LGB respondents considered this characteristic particularly useful when discussing sensitive subjects (Hillier et al., 2012). Finally, coming out online may allow individuals a chance to practice dealing with negative responses. A qualitative study of Canadian LGBTQ youth found that tackling transphobia and homophobia online allowed individuals to build coping skills and resilience that they could later deploy when they encountered negative reactions offline (Craig, McInroy, McCready & Alaggia, 2015). Because the study sample was very small (n=19) and limited to a well-educated, affluent, and urban cohort, the results may not be applicable to other LGBTQ populations. Australian

youth also reported engaging in online activism by tackling homophobic posts in chatrooms and forums (Hillier et al., 2010).

Social support, in-group identification and well-being

The ability of online support groups to provide social support has been widely evidenced by research concerning disability (Obst & Stafurik, 2010), weight loss (Ballantine & Stephenson, 2011; Taiminen & Taiminen, 2015), physical health (Coulson, 2013; Coulson & Knibb, 2007; Flickinger et al., 2016; Gaysynsky, Romansky-Poulin & Arpadi, 2015; Steadman & Pretorius, 2014), mental health (Cole, Nick, Zelkowitz, Roeder & Spinelli, 2017; DeChoudhury & Sushovan De, 2014; Kummervold et al., 2002; Pendry & Salvatore, 2015; Tanis, Das & Fortgens-Sillmann, 2011), and LGBT identity (Cserni & Talmud, 2015; Hillier et al., 2012). Furthermore, a review of studies concerning online support groups for physical and mental health issues such as cancer, diabetes, depression and eating disorders, found members reported significant increases in levels of social support and well-being (Rains & Young, 2009).

Pendry and Salvatore (2015) suggest that in-group identification is the mechanism by which other variables such as social capital benefits well-being, and their own research on stigma-related forums found well-being was predicted by the level of forum identification. Although this study refers to the relationship between social capital and well-being, social support is considered an outcome of mobilising network social capital (Trepte & Scharkow, 2016) and therefore the findings are considered relevant to the current study. Pendry and Salvatore's assertion is supported by several transgender studies that found an association between online and offline identification with the transgender community and well-being. Barr, Budge, and Adelson (2016) found that a sense of offline community belonging was predictive of psychological well-being in a group of transgender individuals. The study consisted of a convenience sample of 571 US adults. The representativeness of the findings are limited by the predominantly white sample and the failure to account for any differences between gender subsets within the sample. And a qualitative investigation into suicide protection factors also found that a sense of connection with similar others via participation in either online or in-person support groups enabled transgender people to counter psychological distress (Moody et al.,

2015). The study sample consisted of 133 Canadian transgender people with an average age of 37 years. As with other studies, the predominance of white respondents limited the applicability of the results to other racial groups (Moody et al., 2015). Finally, a qualitative study of 43 transgender adults of colour in San Francisco found that younger participants, who exhibited minority stress in the form of vexation with societal discrimination and the limited availability of family support, were able to cultivate coping mechanisms by developing a sense of belonging with other transgender people (Bith-Melander et al., 2010). The authors note that the small study size means the findings may not be representative.

Meyer's theory of Minority Stress in the LGB population (2003) also proposes that psychological well-being is typically improved by identification with members of the minority group to which one belongs. Developing a strong sense of community identity allows members of a stigmatised minority to compare themselves positively to similar others rather than negatively to members of the dominant out-group. Furthermore, in-group identification allows members of a group to reappraise their experiences and feelings, and provides an emotional buffer against victimisation (Meyer, 2003). In this way, identification is theorised to improve mental health by attenuating minority stress (Meyer, 2003). Likewise, connectedness to the LGBT community is thought to reduce feelings of internalised homophobia and to facilitate the process of coming out (Frost & Meyer, 2012). In-group identification and reduced stigma were found to mediate the relationship between the use of LGB social media sites and levels of satisfaction with life (Chong, Zhang, Mak & Pang, 2015). However the study found no relationship between measures of well-being and emotional support (Chong et al., 2015). The sample consisted of 233 Chinese LGB people based in Hong Kong, a location that the authors note remains LGB unfriendly (Chong et al., 2015). Because the study was cross-sectional, no causal relationships can be determined. Furthermore, the study included all genders and sexual orientations as a single group and the authors suggest that future studies might focus on a single orientation in order to determine if the relationships remain significant (Chong et al., 2015).

Facebook groups, forums, and social support

The rise of social media, particularly Facebook groups, as a platform for the provision of online support and the concomitant decline of the traditional forum has been documented and discussed by Pendry and Salvatore (2015). The authors suggest that forums are increasingly viewed as outdated in comparison to major social network sites such as Facebook, a view that is echoed by Cipolletta et al. (2017). Pendry and Salvatore (2015) further note that the biggest distinction between the platforms is the sense of anonymity afforded by the traditional forum and argue that a valuable social resource will be lost if they disappear. Unlike forums, Facebook mandates the use of real names and even secret Facebook groups allow current members to view the profile pictures and names of other members ("What are the privacy settings for Facebook groups? | Facebook Help Centre | Facebook", 2018). Breeding (2007, as cited by Gaysynsky et al., 2015) suggests people generally follow these guidelines and use their own identity and profile images. And while it remains possible to create fake accounts, the combination of user, friends, and system generated content has been found to provide sufficient information to allow others to make inferences about a user's identity (Halpern & Gibbs, 2013).

An absence of anonymity may be of consequence because it is theorised to strengthen perceived similarity with other online support group members (Tanis, 2007). A lack of cues that individuate members, such as age and appearance, may increase feelings of cohesion and thus increase perceptions of similarity and interpersonal trust, and may even lead to greater self-disclosure than would be found in a face-to-face encounter (Tanis, 2007). For example, the inability to view other members in a support forum is thought to help people reveal distressing information that would be difficult to express in a face-to-face encounter (Rains and Young, 2009). Since it has been suggested that the degree of in-group identification mediates the relationship between social support and well-being, lack of anonymity in Facebook support groups may reduce their effectiveness in improving well-being.

Only two studies were found that directly compared Facebook groups and online forums in relation to social support and well-being. Coulson (2015) investigated social support and well-being for patients with Inflammatory Bowel

Disease (IBD). Participants were split into two groups, those who used a forum and those who used a Facebook support group. Once socio-demographic factors were taken into account, no differences were found between the two groups in terms of levels of perceived social support, health-related well-being and perceived stress (Coulson, 2015). However, the design of the study presumed that participants used forums and Facebook in a mutually exclusive manner which, increasingly, may not always be the case and the author suggests that future studies take this into account (Coulson, 2015). The self-selecting nature of the sample and the small size (n=147) means the results cannot be reliably applied to a broader population (Coulson, 2015). Additionally, the cross-sectional design means the interplay between support and well-being over time is not captured (Coulson, 2015). Taiminen and Taiminen (2015) compared the levels of emotional and informational support derived from each of these platforms for a weight loss program and found that higher levels of emotional support were derived from the Facebook group. The authors suggest that the rich communication channels on Facebook facilitate additional social benefits and speculate that the secret status of the group made users feel secure, and that anonymity may not be as important to users as was previously thought. However, obesity is a conspicuous quality, that cannot be concealed, and overweight people are aware of others like them. Anonymity may be more important to those with a concealable marginal identity since it can be difficult to identify similar others, or those with a sympathetic viewpoint, in order to disclose one's identity and gain support (Tanis, 2007). Howard (2014) found that the presence of anonymity did affect a stigmatised support group for LGBT people differently to a health support group, with the LGBT group reporting higher levels of self-disclosure online. The study was limited by the small sample size per group and the use of a cross-sectional design that precluded capturing changes in emotions and group dynamics over a longer period (Howard, 2014).

Current study

       The current study will contribute to the research outlined above by considering the relationship between social support and well-being on both LGBT forums and Facebook groups. It will also consider if forums engender a greater sense of in-group identification and if this identification is related to well-being.

Research questions

1. What is the relationship between online social support and well-being?

2. How do participants report levels of in-group identification in relation to LGBT forums and Facebook groups?

3. What is the relationship between in-group identification and well-being?

Hypotheses

$H_{1.1}$ The level of social support derived from LGBT forums will be positively associated with well-being.

$H_{1.2}$ The level of social support derived from LGBT Facebook groups will be positively associated with well-being.

H_2: LGBT forum members will report higher levels of in-group identification than Facebook LGBT group members.

$H_{3.1}$: Higher levels of in-group identification on LGBT forums will be associated with higher levels of well-being.

$H_{3.2}$: Higher levels of in-group identification on LGBT Facebook groups will be associated with higher levels of well-being.

Operational definitions

Social support

Social support may be viewed as interpersonal communication that enables people to cope with uncertainty and that ultimately contributes to well-being (Tanis, 2007). The concept of social support is sometimes further differentiated into perceived and received support. Perceived support is defined as the support a person believes is available to them from a social network while enacted support is actual support that has been given or received (Meng, Martinez, Holmstrom, Chung & Cox, 2017). The current study will focus on perceived levels of social support because it is considered to be more closely related to well-being (Trepte & Scharkow, 2016).

Web forums

Web forums are the most common form of online support group (Barak et al., 2008). Forums are typically divided into threads or conversations and members can either respond to an existing thread or start a new one (Tanis, 2007). In general forum users can remain anonymous and communication is asynchronous (Tanis, 2007).

Facebook groups

Facebook groups are set up by Facebook members to bring together Facebook users who are interested in a particular topic (Hicks, 2018). Facebook groups can have different privacy settings and may be set to open, secret, or closed. The content and membership of open groups are accessible to all Facebook users ("What are the privacy settings for Facebook groups? | Facebook Help Centre | Facebook", 2018). Closed groups can be searched for but a user must request to join in order to view group content. However, any user can view the profile images and names of group members ("What are the privacy settings for Facebook groups? | Facebook Help Centre | Facebook", 2018). Secret groups operate as closed groups except they cannot be searched for and a user must be invited to join ("What are the privacy settings for Facebook groups? | Facebook Help Centre | Facebook", 2018).

Methodology

Design

Since none of the phenomena under investigation were manipulated by the researcher, the study employed a non-experimental fixed design. Furthermore, all relationships were examined as a single group because it was considered difficult to find participants who used a single support platform to the exclusion of all others. All measures were taken at approximately the same time, making this a cross-sectional survey.

Explanatory variables

- Online levels of social support
- In-group identification

Outcome variables

- Well-being

Participants

Participants were recruited online using a mixture of convenience and snowball sampling techniques. A total of 176 respondents completed the survey but only 114 were included in the final data analysis. Participants were excluded from analysis if they were under 18 (n=1), were non-LGBT (n=8), or did not use either LGBT Facebook groups or forums (n=53). Of the remaining participants, 55 described themselves as male, 55 as female, and three as non-binary (Table 1).

The age of respondents ranged from 18 to 69 years (M=33.57, SD=11.61) with almost half (44.1%) aged under 30. In terms of education, over three-quarters (76.1%) were educated to third level, a figure that is significantly higher than the national average of 42% (Central Statistics Office, 2017). Fifty percent were employed full-time while almost thirty percent were in school (1.8%) or college (27.3%), and only 3.6% were unemployed. In terms of residential location, participants were mainly based in an urban setting with 75.4% living in either a city

or suburb. Only 11.4% were located in a village. 86% of respondents were currently

residing in the Republic of Ireland and the sample was mainly composed of Irish

(78.8%), American (8.8%), and British (5.3%) respondents with almost all describing

themselves as white (92.0%). A full breakdown of the socio-demographic

characteristics of the sample may be found in Table 1. In terms of sexual orientation,

the vast majority of respondents described themselves as 'gay or lesbian' (73.5%) or

else bisexual (15%). Only 11.4% (n=13) of respondents identified as transgender. A

full breakdown of sexual and gender orientation is provided in Table 2.

Table 1.

Socio-demographic characteristics.

	Frequency	Valid Percentage
Nationality		
American	10	8.8
Belgian	2	1.8
Brazilian	1	0.9
British	6	5.3
Canadian	1	0.9
Dutch	1	0.9
Irish	89	78.8
Indian	1	0.9
Iraqi	1	0.9
Polish	1	0.9
Current country of residence		
Republic of Ireland	98	86.0
Northern Ireland	0	0.0
Outside the island of Ireland	16	14.0
Race		
White	103	92.0
Black	2	1.8
Hispanic/Latino	1	0.9
Asian	2	1.8
Mixed race	2	1.8
Unknown	2	1.8
Location		
A city	56	49.1
A suburb	30	26.3
A town	15	13.2
A village	13	11.4
Gender		
Female	55	48.7
Male	55	48.7
Non-binary	3	2.7
Education		
Primary education	3	2.7
Secondary/technical education	24	21.2
Third level education	86	76.1
Main occupation		
Enrolled in school	2	1.8
Enrolled in college	30	27.3
Employed full-time	55	50.0
Employed part-time	13	11.8
Unemployed	4	3.6
Retired from work	3	2.7
Unable to work	3	2.7

Table 2.

Gender and sexual orientation.

	Frequency	Valid Percentage
Transgender identity		
Yes	13	11.4
No	101	88.6
Sexual Orientation		
Gay or Lesbian	83	73.5
Bisexual	17	15.0
Questioning	1	0.9
Heterosexual	2	1.8
Pansexual	2	1.8
Queer	8	7.1

Measures

Survey instrument

An anonymous, self-report survey was designed and hosted on

SurveyMonkey.com. The survey began with an information sheet that provided a

brief indication of the research topic, information concerning the anonymous and

voluntary nature of participation, and an outline of the content of the questionnaire.

The information sheet concluded with contact details for the researcher and their

supervisor to allow respondents to raise any questions or concerns. To proceed to

the questionnaire, participants were required to check an informed consent

checkbox that included an over-18 declaration. The questionnaire opened with a

short demographic section that gathered details on age, education, occupation,

nationality, ethnicity, location, and the availability of LGBT community support.

Background data was also gathered on sexual orientation, gender identity, and

coming out. Questions in these sections were based on those in the Supporting LGBT

Lives questionnaire (Mayock et al., 2009). The survey also included two open-ended

items that measured the frequency of use of each platform. The wording and scoring

of each item (e.g. "In the past week, on average, approximately how many minutes

per day have you spent on Facebook LGBT groups") was based on the frequency of

use item in the Facebook Intensity Scale (Ellison, Steinfield & Lampe, 2007). The

remainder of the survey contained measures of social support, in-group

identification, and well-being, all of which are outlined below. The survey concluded with a debrief segment that included phone numbers and web addresses for help agencies such as the Samaritans and the LGBT Helpline. Data storage, privacy protection, and security measures were addressed in this section too. A full copy of the survey, including all the measures listed below, can be found in Appendix A.

Traditional Social support

Offline Social support was measured using the Multidimensional Scale of Perceived Social Support (MSPSS) developed by Zimet, Dahlem, Zimet, and Farley in 1988. The twelve-item scale assesses both the perceived availability and adequacy of emotional and instrumental social support from family, friends, and a significant other (López & Cooper, 2011). Each item is composed of a seven-point Likert scale that ranges in value from 'very strongly disagree' (1) to 'very strongly agree' (7), with a higher score indicating greater levels of perceived support (McConnell, Birkett & Mustanski, 2016). The scale has been found to have strong internal validity across different populations (Ybarra et al., 2015) and the authors have made the scale free to use once the original paper is credited. In the current study, acceptable internal validity was found for both the overall scale (Cronbach's α=.941) and the subscales ($\alpha_{friends}$ = .943; α_{family} = .953; $\alpha_{significant\ other}$ = .959).

Online social support

Social support from Facebook LGBT groups and LGBT forums was measured using a modified version of the MSPSS friends subscale. This subscale has previously been altered to measure online support by either changing the instructions (Ybarra et al., 2015) or the wording of the individual items ("I could count on my friends in the discussion boards when things went wrong") (Nambisan, 2011). Based on the former approach, the online subscales were prepended with an instruction to think about friends first met on the platform in question ("Please indicate how you feel about the following statements concerning FRIENDS YOU FIRST MET ON FACEBOOK LGBT GROUPS"). Because the current study was investigating two different platforms, the wording of individual subscale items was modified to focus the respondent's attention on the platform under consideration (e.g. "My friends on

Facebook LGBT groups really try to help me"). Internal validity for the LGBT Facebook groups scale (Cronbach's α = .904) and the LGBT forums scale (Cronbach's α = .948) was acceptable.

In-group identification

The Inclusion of the Other in the Self (IOS) Scale is typically displayed as a single picture item and provides a reliable measure of relationship closeness that is easy to administer (Gächter, Starmer, & Tufano, 2015). The original scale was developed by Aron, Aron, and Smollan in 1992 but was modified by Tropp and Wright in 2001 to measure in-group identification (Pendry & Salvatore, 2015). The diagram consists of pairs of circles that are arranged progressively from zero overlap (1, low degree of closeness) to almost complete overlap (7, highly close) (Dibble, Levine & Park, 2011). For the current study, a new set of diagrams were drawn up, with the wording in the right circle of each pair being changed from 'other' to 'LGBT forum' or 'Facebook LGBT group' as appropriate. Respondents were asked to select the pair of circles that best represented their relationship with others on their primary LGBT forum and/or Facebook LGBT group.

Well-being

Subjective well-being was measured using the Satisfaction with Life Scale (SWLS) developed by Diener, Emmons, Larsen and Griffin (1985). This is a five-item scale that measures global life satisfaction and has demonstrated high levels of internal consistency and reliability (Leung & Lee, 2005). Individual items ("In most ways my life is close to my ideal") are rated on seven-point Likert scales that range in value from 'strongly disagree' to 'strongly agree' (Diener et al., 1985). The overall score is an aggregate of individual item values with higher amounts indicating a greater satisfaction with life (Diener, 2006). The scale is free to use once the authors are credited (Diener, 2009). A link to the scoring sheet is provided in Appendix B. The reliability of the scale in the current study was found to be acceptable (Cronbach's α = .934).

Procedure

Participants were recruited online using a combination of convenience and snowball sampling methods. The latter method is considered particularly useful when studying sensitive topics but can lead to sampling bias as respondent's peer groups may share similar characteristics (Mayock et al., 2009). An invitation to post a link to the self-report online survey was emailed to Irish LGBT organisations and third-level LGBT societies. The same request was also sent to administrators of LGBT forums and Facebook groups and a full list of invitees can be found in Appendix C. In common with the survey, the invitations outlined the purpose and value of the research, the voluntary nature of participation, and details of all measures that would be undertaken to preserve anonymity, data privacy and security. The over 18 inclusion criterion was also emphasised. Finally, recipients were also made aware that the study had been passed by an IADT ethics committee. A copy of the introduction letter can be found in Appendix D. Data collection took place between January 29th 2018 and April 8th 2018.

Pilot study

A pilot survey, hosted on SurveyMonkey, was tested by five people, one of whom was a member of the LGBT community. All found the instructions and survey questions clear. Any remaining feedback mainly highlighted typos and grammatical errors, all of which were addressed in the final draft. Finally, SurveyMonkey displays questions, one at a time, by default. This results in participants having to click an 'ok' button after certain question types in order to view the next question. All of the respondents found this annoying and this setting was disabled.

Ethics

Ethical approval for the current study was granted by the Department of Technology and Psychology Ethics Committee (DTPEC). LGBT individuals are members of a vulnerable minority whose identity is associated with an increased incidence of mental and physical health issues (Mayock et al., 2009; Snapp, Watson, Russell, Diaz & Ryan, 2015). Therefore, questions concerning identity, social support, coming out, and well-being may elicit emotional responses. However, the current study focused on social support as a form of resilience and no questions regarding

mental health issues were included in the survey. Furthermore, the study was restricted to those over 18 years of age and the survey began with an information sheet that stressed that participation was voluntary, and that respondents were free to withdraw at any point before the survey was submitted. Moreover, no questions were compulsory, and the optional nature of all questions was restated prior to the section on social support. The survey concluded with a debrief segment that included the phone numbers and web addresses for help agencies such as the Samaritans and the LGBT Helpline. Contact details for the researcher and their supervisor were repeated at this point in case any further questions arose. Finally, the debrief asked participants to exercise caution when sharing the survey in order to avoid unintentionally exposing another person's sexual or gender identity.

Results

      Descriptive and inferential statistics are presented below followed by a summary of the qualitative findings. All quantitative data analysis was carried out using IBM SPSS 24.

Degree of being out to others

      All respondents reported being out to at least one other person. As illustrated by Table 3 below, just over seven out of every ten respondents were out to all friends (71.1%), both parents (70.3%), and all siblings (74.6%). And less than one percent were not out to any friends. In contrast, less than half of all respondents (46.4%) were out to all work colleagues although only 18.8% were not out to any colleagues, a figure that is not substantially higher than the equivalent values for parents and siblings (Table 3). Just over half (55.9%) of those at school or college were out to all fellow students while just over one in five were not out to anyone else at school or college. Although two-thirds (66.7%) of participants were out to all friends known only in an online setting, 10% were not out to anyone in this category.

Table 3.

Degree to which respondents are out to others.

	Frequency	Valid Percentage
Out to at least one other person		
Yes	111	100.0
No	0	0.0
Out to friends		
None	1	0.9
Some	32	28.1
All	81	71.1
Out to parents		
None	16	14.4
Some	17	15.3
All	78	70.3
Out to siblings		
None	16	14.0
Some	13	11.4
All	85	74.6
Out to work		
None	21	18.8
Some	39	34.8
All	52	46.4
Out to school/ college		
None	23	22.5
Some	22	21.6
All	57	55.9
Online friends		
None	11	10.2
Some	25	23.1
All	72	66.7

Comfort with sexual orientation and gender identity

       As can be seen from Table 4 below, respondents were overwhelmingly positive regarding their sexual orientation. Over 80% stated that they felt at least comfortable in this regard and only five percent (5.3%) reported feeling any degree of discomfort. Only 13 respondents identified as transgender. Of these, seven were positive about their identity while three felt very uncomfortable (Table 5).

Table 4.

Level of comfort with sexual orientation.

Level of comfort with sexual orientation	Frequency	Valid Percentage
Very comfortable	57	50.0
Comfortable	38	33.3
Neither comfortable nor uncomfortable	13	11.4
Uncomfortable	4	3.5
Very uncomfortable	2	1.8

Table 5.

Level of comfort with gender identity.

Level of comfort with transgender identity	Frequency	Valid Percentage
Very comfortable	2	15.4
Comfortable	5	38.5
Neither comfortable nor uncomfortable	3	23.1
Uncomfortable	0	0.0
Very uncomfortable	3	23.1

Patterns of support platform use

As illustrated by Table 6 below, over half of the sample (56.1%) used LGBT Facebook groups exclusively while just over a quarter (25.4%) used both LGBT Facebook groups and forums. In contrast, just under one in five participants (18.4%) used LGBT forums in an exclusive manner. In accordance with the approach taken by the Facebook Intensity Scale (Ellison et al., 2007), the number of minutes spent per day on LGBT Facebook groups and forums was collated into categories and the results presented in Table 6 below. In general, respondents reported spending longer on LGBT forums when compared to LGBT Facebook groups. While only 22% of LGBT forum users reported spending under ten minutes per day on these sites, almost half of those who used Facebook groups indicated they spent less than 10 minutes per day on LGBT groups.

Table 6.

LGBT forums and Facebook groups use.

	Frequency	Valid Percentage
Platform use		
LGBT forums only	21	18.4
LGBT Facebook groups only	64	56.1
Both LGBT forums and Facebook groups	29	25.4
Time spent on forums per day		
Less than 10 minutes	11	22.0
10 to 30 minutes	26	52.0
31 to 60 minutes	7	14.0
1-2 hours	2	4.0
2-3 hours	4	8.0
More than 3 hours	0	0.0
Time spent on Facebook groups per day		
Less than 10 minutes	40	48.8
10 to 30 minutes	26	31.7
31 to 60 minutes	9	11.0
1-2 hours	2	2.4
2-3 hours	3	3.7
More than 3 hours	2	2.4

Social support

      In the absence of verified population norms on the MSPSS scale, Zimet (n.d.) suggests using scale descriptors to categorise the results into low (1 - 2.9), medium (3 – 5), and high (5.1 - 7) levels of social support. Based on this categorisation, the overall level of traditional social support (*M*=5.16, *SD*=1.36) may be considered high. However, the level of support from family (*M*=4.44, *SD*=1.83) is moderate and lower than the perceived level of social support from friends (*M*=5.54, *SD*=1.33) or a significant other (*M*=5.52, *SD*=1.70). Moderate levels of perceived social support from LGBT Facebook groups (*M*=4.30, *SD*=1.18) and forums (*M*=4.49, *SD*=1.38) were reported. Social support scores are summarised in Table 7 below.

Table 7.

Social support.

	N	Mean	Std. Deviation
Offline social support	107	5.16	1.36
Family	109	4.44	1.83
Friends	113	5.54	1.33
Significant other	111	5.52	1.70
Online social support			
LGBT forums	46	4.49	1.38
LGBT Facebook groups	77	4.30	1.18

Well-being

The average level of well-being reported by participants (*M*=20.86, *SD*=8.04) falls just above the lower bound of what is classified as an 'average' level of well-being (Diener, 2006). Based on Diener's classification schema (2006), the reported results for well-being were collated into categories and the results are displayed in Table 8 below. Just under 40% reported a less than average score while 38% reported a higher than average level of well-being.

Table 8.
Well-being.

	Frequency	Valid Percentage
Extremely dissatisfied	11	9.7
Dissatisfied	18	15.9
Slightly below average in life satisfaction	16	14.2
Average score	25	22.1
Very high score	26	23.0
Highly satisfied	17	15.0

Hypotheses

$H_{1.1}$ The level of social support derived from LGBT forums will be positively associated with well-being.

A Shapiro-Wilk test was found to be significant for both the Forum MSPSS scale ($p<.001$) and the well-being (SWLS) scale ($p=.001$). Therefore, a Spearman's rho was used to investigate the relationship between social support from LGBT forums (*M*=4.49 *SD*=1.38) and well-being (*M*=20.86 *SD*=8.04). There was no significant

correlation between social support from LGBT forums and well-being, r = -0.126, n = 46, p = .402. A scatterplot summarizes the results below (Figure 1). The scatterplot does not show any relationship between social support from LGBT forums and well-being. Hence no regression line was fitted.
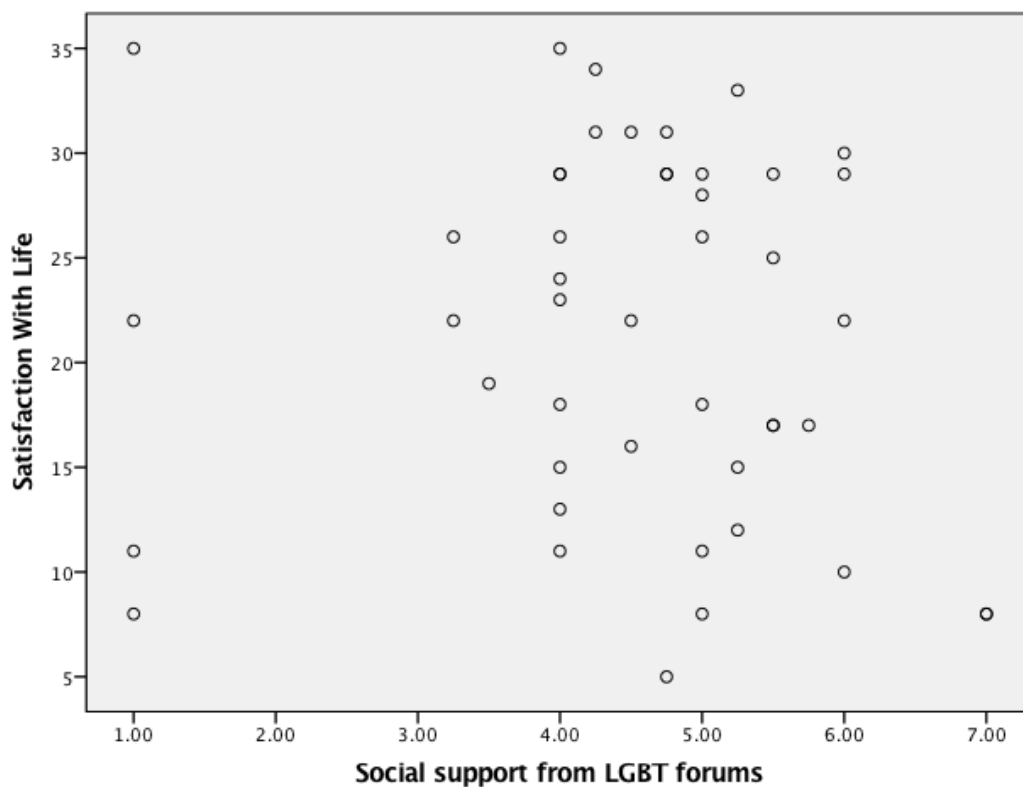
Figure 1. Relationship between social support from LGBT forums and well-being.

$H_{1.2}$ The level of social support derived from LGBT Facebook groups will be positively associated with well-being.

A Shapiro-Wilk test was found to be significant for both the FB MSPSS scale (p<.001) and the well-being (SWLS) scale (p=.001). Since neither scale met the assumption of normality, a Spearman's rho was used to investigate the relationship between social support from LGBT Facebook groups (M=4.30 SD=1.18) and well-being (M=20.86 SD=8.04). There was no significant correlation between social support from LGBT forums and well-being, r = -0.073, n = 77, p = 0.527. A scatterplot summarizes the results below (Figure 2). The scatterplot does not show any

relationship between social support from LGBT Facebook groups and well-being, and no regression line was fitted.

Figure 2. Relationship between social support from LGBT Facebook groups and well-being.

H_2: LGBT forum members will report higher levels of in-group identification than Facebook LGBT group members.

In order to test this hypothesis, the relevant in-group identification scores of those who were exclusive users of either LGBT Facebook groups or forums were compared. Respondents who used both platforms were not included. As the sample size of the group who exclusively use LGBT forums is small (n<30) and a Shapiro-Wilk test for the in-group identification (IOS) scale was found to be significant (p<.001), an independent samples Mann-Whitney test was selected. A statistically significant difference was found between the level of in-group identification experienced by users of LGBT forums (*Md*=2.00, *n*=20) and users of LGBT Facebook groups

(Md=2.00, n=63), U=459.000, z=-1.963, p=.049, r=-0.21. Members of LGBT forums reported a significantly higher rank than LGBT Facebook group users. Note: the p value was calculated using the exact method as recommended for samples with poorly distributed data or small sample sizes (Field, 2013).

$H_{3.1}$: Higher levels of in-group identification on LGBT forums will be associated with higher levels of well-being.

A Shapiro-Wilk test was found to be significant for both the in-group identification (IOS) scale (p<.001) and the well-being (SWLS) scale (p=.001). Since neither scale met the assumption of normality, a Spearman's rho was used to investigate the relationship between in-group identification on LGBT forums (M=2.46 SD=1.42) and well-being (M=20.86 SD=8.04). There was no significant correlation between in-group identification on LGBT forums and well-being, r = -0.032, n = 50, p = .823. A scatterplot summarizes the results below (Figure 3). The scatterplot does not show any relationship between in-group identification on LGBT forums and well-being, and no regression line was fitted.
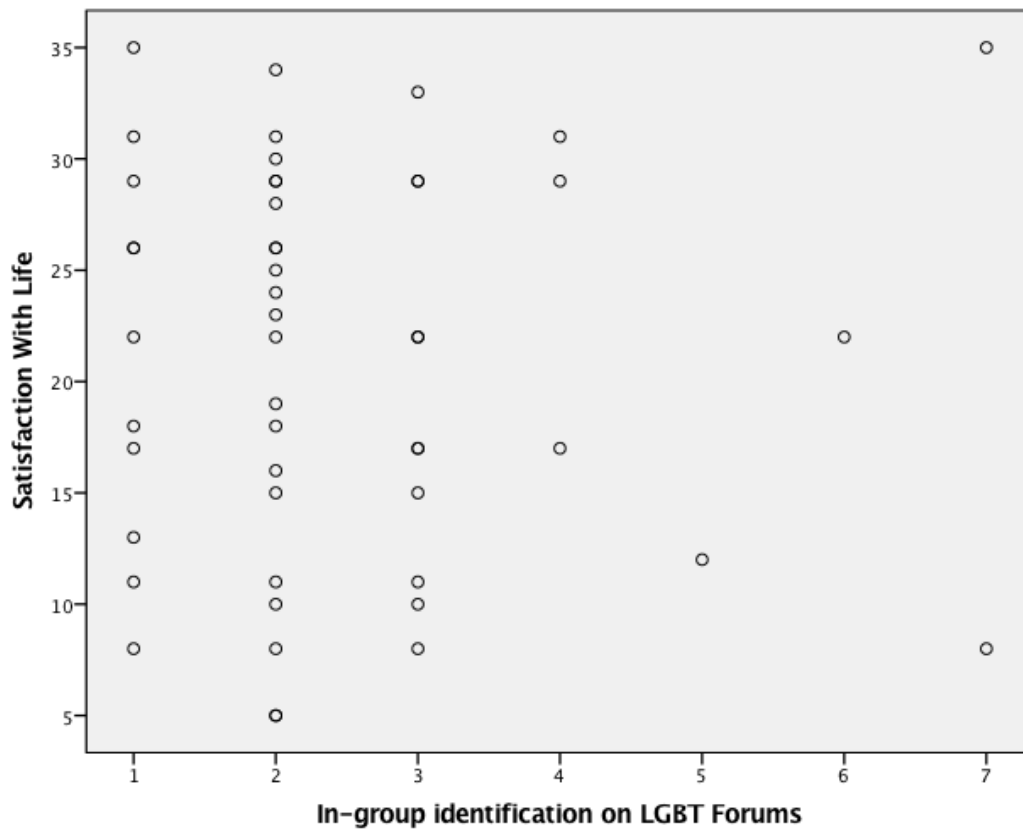
Figure 3. Relationship between in-group identification on LGBT forums and well-being.

$H_{3.2}$: Higher levels of in-group identification on LGBT Facebook groups will be associated with higher levels of well-being.

A Shapiro-Wilk test was found to be significant for both the in-group identification (IOS) scale ($p<.001$) and the well-being (SWLS) scale ($p=.001$). Since neither scale met the assumption of normality, a Spearman's rho was used to investigate the relationship between in-group identification on LGBT Facebook groups (M=1.97 SD=1.19) and well-being (M=20.86 SD=8.04). There was no significant correlation between in-group identification on LGBT Facebook groups and well-being, $r = -0.018$, $n = 92$, $p = .867$. A scatterplot summarizes the results below (Figure 4). The scatterplot does not show any relationship between in-group identification on LGBT Facebook groups and well-being, and no regression line was fitted.
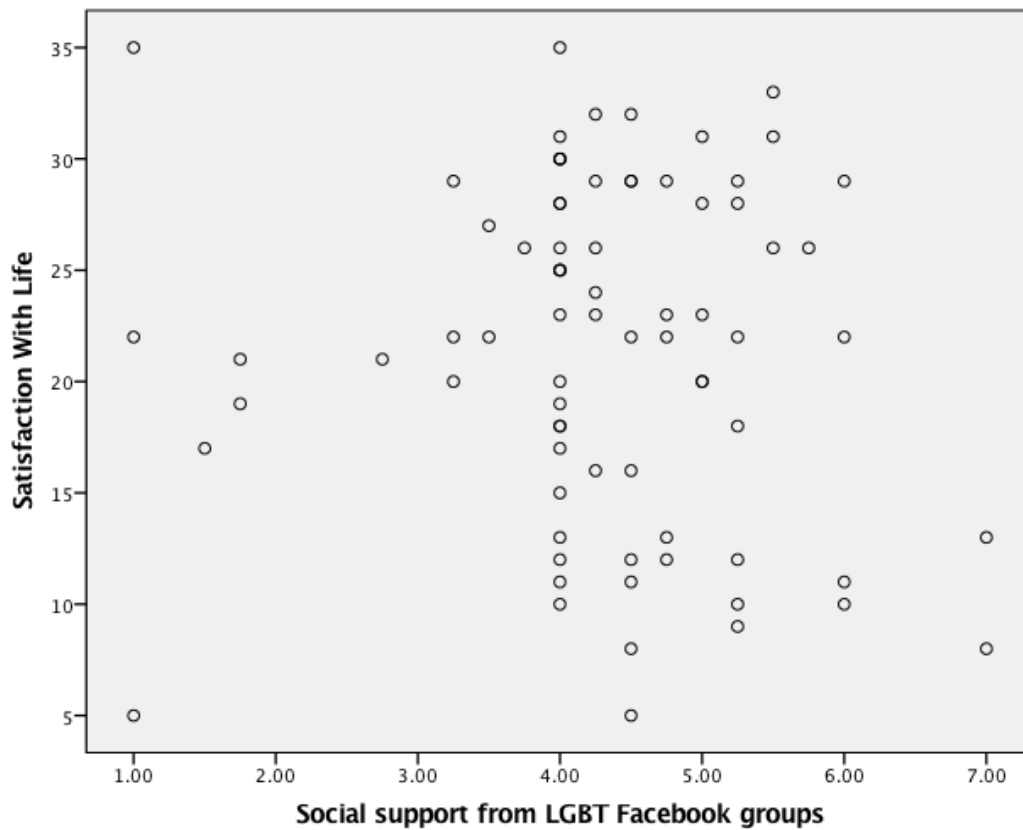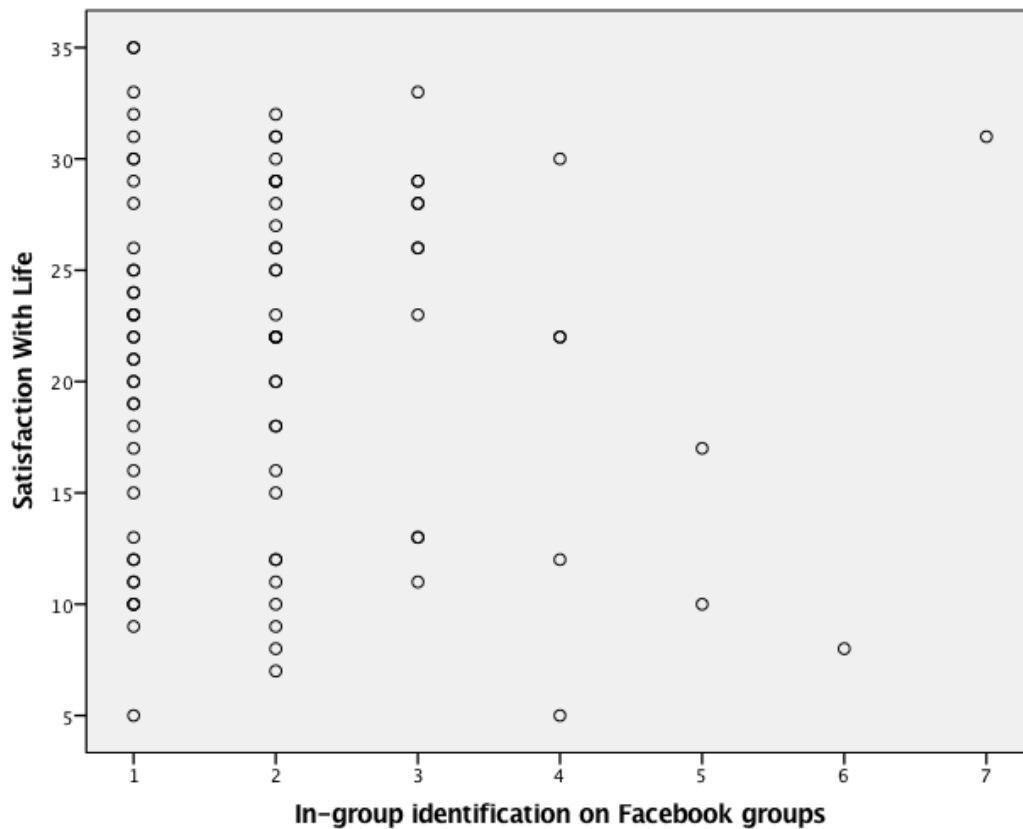
Figure 4. Relationship between in-group identification on LGBT Facebook groups and well-being.

Appendix E contains SPSS output for all quantitative analysis reported above.

Qualitative analysis

The survey included four open-ended questions that allowed participants to provide a detailed account on the following topics: the availability of LGBT support in the local community, the impact of location on coming out, feelings about sexual orientation, and concerns about disclosing sexual identity. The data from these questions were downloaded into an Excel file and analysed by the researcher to produce the themes outlined below. An anonymised summary of the data can be found in Appendix F.

LGBT support in the local community

Approximately one third of respondents felt there was sufficient LGBT support in their local community, while a similar number felt there was no support at all. The absence of local support was linked to a rural setting by several respondents. For example, "There's not really local LGBT community here but I feel like there's a lot in Dublin..." (P87) The remainder were either unsure what support was available or had not investigated the matter.

Impact of location on coming out

The majority of respondents who commented on this issue felt location did influence their willingness to disclose their sexual identity, with city-dwellers nearly all acknowledging that coming out was far easier in an urban environment. Most respondents from a rural environment stated that they did not come out until they had moved away to college or a city:

> "I didn't come out until college and now never return because I'm the gay and it's just an unwelcoming area. Friends in towns and cities came out 5/6 years before me and got to and still get to live their true lives" (P 48).

Two respondents reported they found coming out in a rural area a positive experience.

Feelings about sexual orientation

Only 34 participants responded in detail about their feelings concerning their sexual orientation. In general, responses indicated that the degree of comfort with their identity was highly contextual and varied between individuals. Concern regarding the reaction of particular groups of people such as family and work colleagues were common. For example:

> "I am comfortable with peers but don't feel it would be understood by my family" (P103).

"I'm gay and I'm openly out to family and friends. But When I join a

new job i don't say it I tend to not say it in formal setting" (P15).

Some respondents were comfortable with their identity but still found discussing the topic difficult at times while others voiced no concerns at all: "Proud to be gay" (P91).

Concerns about sexual identity disclosure

Similar to the responses above, fear about the reaction of family and workplace colleagues were the most common concerns of respondents who were not fully out. Other participants also raised the issue of rejection on the basis of religious and cultural beliefs while still others worried more generally about non-acceptance or rejection. Furthermore, several participants did not want to disclose this information to everyone and others were not out to some because the subject just hadn't come up.

Discussion

No significant correlation was found between the level of social support derived from either LGBT forums or LGBT Facebook groups and well-being. This contrasts with previous research concerning both mental and physical health issues (Pendry & Salvatore, 2015; Rains & Young, 2009) and may be understood by positioning the characteristics of the sample against the backdrop of previous research concerning the value of online social support to LGBT individuals. Both American and Australian studies have found that respondents typically relied on online support when they first became aware of their sexual orientation and were not able to elicit support from family and friends because they were not out offline (Hillier et al., 2010; Hillier et al., 2012; Ybarra et al., 2015). Furthermore, this dependence on online support was found to decline as respondents came out offline (Hillier et al., 2010; Hillier et al., 2012). As can be seen from Table 3, respondents in the current study were mostly out to family and friends with only one person in the entire sample saying they were not out to any friends. Only 14.4% declared they were not out to either parent and a clear majority, over 70%, were out to all friends, all siblings, and both parents. Moreover, Table 4 reveals that 83.3% of participants were either comfortable or very comfortable with their sexual orientation while only 5.3% registered any degree of discomfort. Because respondents are overwhelmingly out offline and generally feel comfortable with their sexual identity, social support, and ultimately well-being, may be primarily derived from offline sources. As illustrated by Table 7, only moderate levels of social support were reported by users of LGBT forums (M=4.49) and LGBT Facebook groups (M=4.30). In contrast, participants reported high levels of social support from friends and significant others.

Another factor that may determine the need for online support is the availability of LGBT community support. Online support was found to be particularly important when respondents were located in an area where they could not access traditional LGBT support (Higgins et al., 2016; Hillier et al., 2010; Mayock et al., 2009). As acknowledged by participants in the current study, LGBT community support tends to be located in city areas. The vast majority of the current sample

(75.4%) are based in an urban environment (Table 1) and so presumably do have access to such communities, thus further reducing the need for online support. Finally, the finding (Table 6) that only 12% of LGBT forum users and 8.5% of LGBT Facebook group users spent more than one hour per day on these sites further suggests the sample are not heavily dependent on online social support. Thus, in conclusion, viewing the characteristics of the respondents through the lens of previous research, strongly suggests that the absence of a relationship between social support and well-being may be due to the degree to which the current cohort are out offline, and the availability of traditional social support.

LGBT forum members reported significantly higher levels of in-group identification than Facebook LGBT group members. Since it was theorised that anonymity increases the perceived level of similarity with other group members (Tanis, 2007), the lower level of in-group identification reported by users of LGBT Facebook groups may reflect this characteristic of the platform. As noted in the literature review, even secret Facebook groups allow members to view the names and profile images of other members, thus increasing cues of individuality while lowering group salience. Since in-group identification is considered to be the mechanism by which social support facilitates well-being (Pendry and Salvatore, 2015), this finding suggests that the use of real names and profile images on Facebook may render them less suitable to host support groups. It is notable that the median score for both platforms (*Md*=2.00) suggests a relatively low level of identification with other members of online LGBT groups. This may further reflect the earlier suggestion that the current cohort are not particularly reliant on online support, regardless of platform.

Higher levels of in-group identification on either LGBT forums or LGBT Facebook groups were not significantly associated with higher levels of well-being. Previous research had found a positive association between in-group identification and well-being in relation to online support groups for stigmatised conditions (Pendry & Salvatore, 2015), transgender identity (Moody et al., 2015), LGBT identity (Chong et al., 2015) and offline transgender support groups (Barr et al., 2016; Bith-Melander et al., 2010). Therefore it was theorised that a similar association would be found between in-group identification and well-being on both platforms. However,

since Pendry and Salvador (2015) suggest that in-group identification is a mechanism through which social support is translated into well-being, it may be that the absence of any relationship between these constructs in the current study removes the context in which this relationship exists.

Limitations

The use of convenience and snowball sampling techniques may have generated a very similar cohort and thus limited the representativeness of the results. The sample was primarily composed of white, gay or lesbian individuals, located in an urban setting, of whom a large majority were educated to third-level. Furthermore, because the study was mainly advertised via LGBT networks, it is possible that it failed to get the attention of those who are not out or who are too uncomfortable with their sexual orientation to have any contact with these networks. The representativeness of study findings was also limited by the use of a cross-sectional design. Other limitations included the small sample size (n=114), the treatment of all sexual and gender orientations as a single group, and the small number of forum only users (n=20). Finally, the study did not distinguish between different types of Facebook groups. It is possible that different privacy settings might engender different levels of social support, in-group identification and ultimately well-being.

Future research

Since research has suggested that online support is more important to those who are not out offline, future studies should seek to focus on LGBT youth, particularly those from rural areas where traditional community support is less available. As suggested by Chong et al. (2015), future research should also focus on a single sexual orientation in order to explore how individual orientations differ in their experience of social support and well-being. A transgender specific study would also be useful in this regard. New research would also benefit from the adoption of a longitudinal design that would allow a better understanding of how social support and well-being operate over time. Additionally, the inclusion of a qualitative approach in future research would allow a more nuanced analysis of quantitative

data regarding the relationship between LGBT social support and well-being. Finally, further research might compare Facebook support groups to other platforms that facilitate anonymity such as Reddit and YouTube.

Conclusion

No study to date has explored the association between online social support, in-group identification and well-being in relation to LGBT forums and Facebook groups. Although no relationship was found between social support and well-being, or between in-group identification and well-being, on either platform, it seems likely that the characteristics of the sample contributed to this outcome and the study informs future research by suggesting a need to focus on a younger, more rural, cohort, for whom online support may be more crucial. The finding that forum users reported a higher level of in-group identification suggests the lack of anonymity on Facebook groups may reduce their effectiveness in promoting well-being when compared to anonymous channels such as forums. This finding is important since the popularity of forums as a platform for online support groups is in decline. Since studies have found that online support was crucial in allowing LGBT youth to explore their sexuality and build resilience before coming out offline, this finding may be of particular importance to the LGBT community.

References

Aron, A., Aron, E., & Smollan, D. (1992). Inclusion of Other in the Self Scale and the structure of interpersonal closeness. *Journal Of Personality And Social Psychology*, *63*(4), 596-612. http://dx.doi.org/10.1037/0022-3514.63.4.596

Ballantine, P., & Stephenson, R. (2011). Help me, I'm fat! Social support in online weight loss networks. *Journal Of Consumer Behaviour*, *10*(6), 332-337. http://dx.doi.org/10.1002/cb.374

Barak, A., Boniel-Nissim, M., & Suler, J. (2008). Fostering empowerment in online support groups. *Computers In Human Behavior*, *24*(5), 1867-1883. http://dx.doi.org/10.1016/j.chb.2008.02.004

Barr, S., Budge, S., & Adelson, J. (2016). Transgender community belongingness as a mediator between strength of transgender identity and well-being. *Journal Of Counseling Psychology*, *63*(1), 87-97. http://dx.doi.org/10.1037/cou0000127

Bith-Melander, P., Sheoran, B., Sheth, L., Bermudez, C., Drone, J., Wood, W., & Schroeder, K. (2010). Understanding Sociocultural and Psychological Factors Affecting Transgender People of Color in San Francisco. *Journal Of The Association Of Nurses In AIDS Care*, *21*(3), 207-220. http://dx.doi.org/10.1016/j.jana.2010.01.008

Central Statistics Office. (2017). *Census of Population 2016 – Profile 10 Education, Skills and the Irish Language*. Retrieved from http://www.cso.ie/en/releasesandpublications/ep/p-cp10esil/p10esil/

Chong, E., Zhang, Y., Mak, W., & Pang, I. (2015). Social Media as Social Capital of LGB Individuals in Hong Kong: Its Relations with Group Membership, Stigma,

and Mental Well-Being. *American Journal Of Community Psychology*, *55*(1-2), 228-238. http://dx.doi.org/10.1007/s10464-014-9699-2

Cipolletta, S., Votadoro, R., & Faccio, E. (2017). Online support for transgender people: an analysis of forums and social networks. *Health & Social Care In The Community*, *25*(5), 1542-1551. http://dx.doi.org/10.1111/hsc.12448

Cole, D., Nick, E., Zelkowitz, R., Roeder, K., & Spinelli, T. (2017). Online social support for young people: Does it recapitulate in-person social support; can it help?. *Computers In Human Behavior*, *68*, 456-464. http://dx.doi.org/10.1016/j.chb.2016.11.058

Coulson, N. S. (2015). Exploring patients' engagement with web-based peer support for Inflammatory Bowel Disease: forums or Facebook?. *Health Psychology Update*, *24*(2), 3-9.

Coulson, N., & Knibb, R. (2007). Coping with Food Allergy: Exploring the Role of the Online Support Group. *Cyberpsychology & Behavior*, *10*(1), 145-148. http://dx.doi.org/10.1089/cpb.2006.9978

Craig, S., McInroy, L., McCready, L., & Alaggia, R. (2015). Media: A Catalyst for Resilience in Lesbian, Gay, Bisexual, Transgender, and Queer Youth. *Journal Of LGBT Youth*, *12*(3), 254-275. http://dx.doi.org/10.1080/19361653.2015.1040193

Cserni, R. T., & Talmud, I. (2015). To know that you are not alone: The effect of internet usage on LGBT youth's social capital. In *Communication and Information Technologies Annual* (pp. 161-182). Emerald Group Publishing Limited.

De Choudhury, M., & De, S. (2014, June). Mental Health Discourse on reddit: Self-Disclosure, Social Support, and Anonymity. In *ICWSM*.

Department of Children and Youth Affairs. (2017). *Report of the consultations with YOUNG PEOPLE in Ireland*. Dublin. Retrieved from https://www.dcya.gov.ie/documents/publications/20171208LGBTIConsultationStrategyReport.pdf

Dibble, J., Levine, T., & Park, H. (2012). The Unidimensional Relationship Closeness Scale (URCS): Reliability and validity evidence for a new measure of relationship closeness. *Psychological Assessment*, *24*(3), 565-572. http://dx.doi.org/10.1037/a0026265

Diener, E. (2006). *Understanding Scores on the Satisfaction with Life Scale. Internal.psychology.illinois.edu*. Retrieved 23 January 2018, from http://internal.psychology.illinois.edu/~ediener/Documents/Understanding%20SWLS%20Scores.pdf

Diener, E. (2009). *SWLS - Ed Diener, Subjective Well-Being. Internal.psychology.illinois.edu*. Retrieved 23 January 2018, from http://internal.psychology.illinois.edu/~ediener/SWLS.html

Diener, E., Emmons, R., Larsen, R., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal Of Personality Assessment*, *49*(1), 71-75. http://dx.doi.org/10.1207/s15327752jpa4901_13

Duguay, S. (2016). "He has a way gayer Facebook than I do": Investigating sexual identity disclosure and context collapse on a social networking site. *New Media & Society*, *18*(6), 891-907. http://dx.doi.org/10.1177/1461444814549930

Ellison, N., Steinfield, C., & Lampe, C. (2007). The Benefits of Facebook "Friends:" Social Capital and College Students' Use of Online Social Network

Sites. *Journal Of Computer-Mediated Communication*, *12*(4), 1143-1168.
http://dx.doi.org/10.1111/j.1083-6101.2007.00367.x

European Union Agency for Fundamental Rights. (2013). *EU LGBT survey -
European Union lesbian, gay, bisexual and transgender survey - Results at a
glance*. Luxembourg: Publications Office of the European Union. Retrieved from
http://fra.europa.eu/en/publication/2013/eu-lgbt-survey-european-union-lesbian-
gay-bisexual-and-transgender-survey-results

Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. London [etc.]: Sage
Publications.

Flickinger, T., DeBolt, C., Waldman, A., Reynolds, G., Cohn, W., & Beach, M. et al.
(2016). Social Support in a Virtual Community: Analysis of a Clinic-Affiliated
Online Support Group for Persons Living with HIV/AIDS. *AIDS And
Behavior*, *21*(11), 3087-3099. http://dx.doi.org/10.1007/s10461-016-1587-3

Frost, D., & Meyer, I. (2012). Measuring Community Connectedness among Diverse
Sexual Minority Populations. *Journal Of Sex Research*, *49*(1), 36-49.
http://dx.doi.org/10.1080/00224499.2011.565427

Gächter, S., Starmer, C., & Tufano, F. (2015). Measuring the Closeness of
Relationships: A Comprehensive Evaluation of the 'Inclusion of the Other in the
Self' Scale. *PLOS ONE*, *10*(6), e0129478.
http://dx.doi.org/10.1371/journal.pone.0129478

Gaysynsky, A., Romansky-Poulin, K., & Arpadi, S. (2014). "My YAP Family":
Analysis of a Facebook Group for Young Adults Living with HIV. *AIDS And
Behavior*, *19*(6), 947-962. http://dx.doi.org/10.1007/s10461-014-0887-8

Halpern, D., & Gibbs, J. (2013). Social media as a catalyst for online deliberation? Exploring the affordances of Facebook and YouTube for political expression. *Computers In Human Behavior*, *29*(3), 1159-1168. http://dx.doi.org/10.1016/j.chb.2012.10.008

Hicks, M. (2018). *Facebook Tips: What's the Difference between a Facebook Page and Group?*. *Facebook.com*. Retrieved 27 April 2018, from https://www.facebook.com/notes/facebook/facebook-tips-whats-the-difference-between-a-facebook-page-and-group/324706977130/

Higgins, A., Doyle, L., Downes, C., Murphy, R., Sharek, D., DeVries, J., ... & Smyth, S. (2016). The LGBTIreland Report: national study of the mental health and wellbeing of lesbian, gay, bisexual, transgender and intersex people in Ireland. *Dublin, Ireland: Gay and Lesbian Equality Network (GLEN) and BeLonG To Youth Services*.

Hillier, L., Jones, T., Monagle, M., Overton, N., Gahan, L., Blackman, J., & Mitchell, A. (2010). Writing themselves in 3: the third national study on the sexual health and wellbeing of same sex attracted and gender questioning young people.

Hillier, L., Mitchell, K. J., & Ybarra, M. L. (2012). The internet as a safety net: Findings from a series of online focus groups with LGB and non-LGB young people in the united states. *Journal of LGBT Youth, 9*(3), 225-246. doi:10.1080/19361653.2012.684642

Howard, M. (2014). An epidemiological assessment of online groups and a test of a

typology: What are the (dis)similarities of the online group types?. *Computers In

Human Behavior*, *31*, 123-133. http://dx.doi.org/10.1016/j.chb.2013.10.021

Kosciw, J. G., Greytak, E. A., Giga, N. M., Villenas, C., & Danischewski, D. J.

(2016). *The 2015 National School Climate Survey: The experiences of lesbian,

gay, bisexual, transgender, and queer youth in our nation's schools*. New York:

GLSEN.

Kummervold, P., Gammon, D., Bergvik, S., Johnsen, J., Hasvold, T., & Rosenvinge,

J. (2002). Social support in a wired world: Use of online mental health forums in

Norway. *Nordic Journal Of Psychiatry*, *56*(1), 59-65.

http://dx.doi.org/10.1080/08039480252803945

Leung, L., & Lee, P. (2005). Multiple determinants of life quality: the roles of Internet

activities, use of new media, social support, and leisure activities. *Telematics And

Informatics*, *22*(3), 161-180. http://dx.doi.org/10.1016/j.tele.2004.04.003

López, M. L., & Cooper, L. (2011). Social support measures review. *National Center

for Latino Child & Family Research*.

McConnell, E., Birkett, M., & Mustanski, B. (2016). Families Matter: Social Support

and Mental Health Trajectories Among Lesbian, Gay, Bisexual, and Transgender

Youth. *Journal Of Adolescent Health*, *59*(6), 674-680.

http://dx.doi.org/10.1016/j.jadohealth.2016.07.026

Mayock, P., Bryan, A., Carr, N., & Kitching, K. (2009). *Supporting LGBT lives: a

study of the mental health and well-being of lesbian, gay, bisexual and transgender

people*. Dublin: Gay and Lesbian Equality Network/BeLonG to Youth Service.

Meng, J., Martinez, L., Holmstrom, A., Chung, M., & Cox, J. (2017). Research on

    Social Networking Sites and Social Support from 2004 to 2015: A Narrative

    Review and Directions for Future Research. *Cyberpsychology, Behavior, And*

    Social Networking, *20*(1), 44-51. http://dx.doi.org/10.1089/cyber.2016.0325

Meyer, I. (2003). Prejudice, social stress, and mental health in lesbian, gay, and

    bisexual populations: Conceptual issues and research evidence. *Psychological*

    Bulletin, *129*(5), 674-697. http://dx.doi.org/10.1037/0033-2909.129.5.674

Moody, C., Fuks, N., Peláez, S., & Smith, N. (2015). "Without this, I would for sure

    already be dead": A qualitative inquiry regarding suicide protective factors

    among trans adults. *Psychology Of Sexual Orientation And Gender*

    Diversity, *2*(3), 266-280. http://dx.doi.org/10.1037/sgd0000130

Nambisan, P. (2011). Information seeking and social support in online health

    communities: impact on patients' perceived empathy. *Journal Of The American*

    Medical Informatics Association, *18*(3), 298-304.

    http://dx.doi.org/10.1136/amiajnl-2010-000058

Obst, P., & Stafurik, J. (2010). Online we are all able bodied: Online psychological

    sense of community and social support found through membership of disability-

    specific websites promotes well-being for people living with a physical

    disability. *Journal Of Community & Applied Social Psychology*, *20*(6), 525-531.

    http://dx.doi.org/10.1002/casp.1067

Pendry, L., & Salvatore, J. (2015). Individual and social benefits of online discussion

    forums. *Computers In Human Behavior*, *50*, 211-220.

    http://dx.doi.org/10.1016/j.chb.2015.03.067

Pew Research Center. (2017). *Gay Marriage Around the World*. Retrieved from

    http://www.pewforum.org/2017/08/08/gay-marriage-around-the-world-2013/

Rains, S., & Young, V. (2009). A Meta-Analysis of Research on Formal Computer-

    Mediated Support Groups: Examining Group Characteristics and Health

    Outcomes. *Human Communication Research*, *35*(3), 309-336.

    http://dx.doi.org/10.1111/j.1468-2958.2009.01353.x

Snapp, S., Watson, R., Russell, S., Diaz, R., & Ryan, C. (2015). Social Support

    Networks for LGBT Young Adults: Low Cost Strategies for Positive

    Adjustment. *Family Relations*, *64*(3), 420-430.

    http://dx.doi.org/10.1111/fare.12124

Steadman, J., & Pretorius, C. (2014). The impact of an online Facebook support group

    for people with multiple sclerosis on non-active users. *African Journal Of*

    Disability, *3*(1). http://dx.doi.org/10.4102/ajod.v3i1.132

Taiminen, H., & Taiminen, K. (2016). *Usage of Facebook-and Anonymous Forum–*

    Based Peer Support Groups Online and Their Influence on Perceived Social

    Support Types in Weight Loss. Paper presented at the Hawaii International

    Conference on System Sciences HICSS-49, Hawaii. Retrieved from

    https://www.researchgate.net/publication/281745298_Usage_of_Facebook-

    _and_Anonymous_Forum-

    Based_Peer_Support_Groups_Online_and_Their_Influence_on_Perceived_Social_

    Support_Types_in_Weight_Loss

Tanis, M. (2007). Online Social Support Groups. In A. N. Joinson (Ed.), The oxford

    handbook of internet psychology (pp. 139-153). Oxford: Oxford University Press.

Tanis, M., Das, E., & Fortgens-Sillmann, M. (2011). Finding care for the caregiver? Active participation in online health forums attenuates the negative effect of caregiver strain on wellbeing. *Communications*, *36*(1). http://dx.doi.org/10.1515/comm.2011.003

Trepte, S., & Scharkow, M. (2016). How social capital and social support received in media environments contribute to well-being. *The Routledge handbook of media use and well-being: International perspectives on theory and research on positive media effects*, 304-316.

What are the privacy settings for Facebook groups? | Facebook Help Centre | Facebook. (2018). *Facebook.com*. Retrieved 27 April 2018, from https://www.facebook.com/help/220336891328465?helpref=about_content

What names are allowed on Facebook? | Facebook Help Centre | Facebook. (2018). *Facebook.com*. Retrieved 27 April 2018, from https://www.facebook.com/help/112146705538576/

Ybarra, M., Mitchell, K., Palmer, N., & Reisner, S. (2015). Online social support as a buffer against online and offline peer and sexual victimization among U.S. LGBT and non-LGBT youth. *Child Abuse & Neglect*, *39*, 123-136. http://dx.doi.org/10.1016/j.chiabu.2014.08.006

Zimet, G. *Multidimensional Scale of Perceived Social Support. Docs.wixstatic.com*. Retrieved 6 March 2018, from http://docs.wixstatic.com/ugd/5119f9_2f88fadcd382463daf5821e8af94a865.pdf

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of personality assessment*, *52*(1), 30-41.

Appendices

Appendix A

Survey as it appears on SurveyMonkey

LGBT sources of support in a heteronormative world

Information sheet

Title: LGBT sources of support in a heteronormative world

Purpose and benefits of the research
This study considers whether there are any differences between levels of social support derived from LGBT forums and Facebook LGBT groups, and examines how this social support may affect well-being. This research is important because it may help inform policy decisions concerning how best to deliver online support to LGBT people in the future. This study has been approved by the Department of Technology and Psychology Ethics Committee (DTPEC) in IADT.

Do I have to take part?
Participation in this study is entirely voluntary, and you can leave the questionnaire unfinished if you wish by simply closing the web browser. As the survey is anonymous, you cannot withdraw any submitted data as it can never be linked back to you personally.

If I take part, what do I have to do?
Participation in the study will involve:
- Checking a consent box to acknowledge you are over 18 years old and that your participation is voluntary and informed.
- Completing an anonymous online survey that will include:
    - background demographic data,
    - questions on sexual orientation, gender identity and coming out,
    - a set of rating scales that measure the level of social support you feel you receive from offline (family/friends/partner) and online sources (Facebook LGBT groups/LGBT forums),
    - a set of five simple rating scales that measure well-being. For example: "I am satisfied with my life".

The survey generally takes less than 10 minutes to complete.

What are the risks of involvement?
One risk of taking part in this study is that some questions might make you feel uncomfortable. You may skip any question that you do not wish to answer.

What if there is a problem?
If you are concerned about any aspect of this study or if something is unclear, you may wish to speak to the researcher who will do their best to answer your query. You can contact Miriam Hand, (N00146624@student.iadt.ie), or her supervisor Dean McDonnell, (dean.mcdonnell@iadt.ie), with any questions or concerns you may have.

Thank you for considering participating in this research.

LGBT sources of support in a heteronormative world

Please indicate your consent by ticking each of the boxes below.

* 1. I understand that my participation in this research is voluntary and that I can withdraw at any point, I understand my rights, the nature and purpose of this study, and that data collected from me is anonymous. I confirm that I am over 18 years old.

☐ Yes

LGBT sources of support in a heteronormative world

About You

2. What is your age in years?

[   ]

3. Where do you currently live?

○ Republic of Ireland

○ Northern Ireland

○ Outside the island of Ireland

4. What is your nationality? If you have more than one nationality, please list up to two below.

Nationality 1	[ ]
Nationality 2	[ ]

5. How would you describe your race or ethnicity?

[   ]

6. Do you live in, or close to....

○ A city

○ A suburb

○ A town

○ A village

○ Don't know

Something else (please specify)

[   ]

7. Do you feel there is much LGBT support in your local community?

[   ]

8. Which of the following best describes your main status?

○ Enrolled in school

○ Enrolled in college

○ Employed full-time

○ Employed part-time

○ Unemployed

○ Looking after home/family

○ Retired from work

○ Unable to work due to sickness or disability

9. What was your highest level of complete education at the end of August 2017?

◯ No formal education

◯ Primary education

◯ Secondary education

◯ Technical education (e.g. Apprenticeship)

◯ Third level certificate/diploma

◯ Third level primary degree

◯ Postgraduate certificate or diploma

◯ Postgraduate Degree (Masters)

◯ Doctorate (PhD)

LGBT sources of support in a heteronormative world

Your sexual orientation and gender identity

10. Please indicate your gender

[   ]

11. Is this the gender that was assigned to you at birth?

◯ Yes

◯ No

◯ Other (please specify)

[   ]

12. How would you describe your sexual orientation?

◯ Gay or Lesbian

◯ Bisexual

◯ Questioning

◯ Heterosexual

◯ Pansexual

◯ Something else (please specify)

[   ]

13. How comfortable do you feel about your sexual orientation?

◯ Very comfortable

◯ Comfortable

◯ Neither comfortable nor uncomfortable

◯ Uncomfortable

◯ Very uncomfortable

Would you like to provide a more detailed answer?

[   ]

14. Do you identify as transgender?

◯ Yes

◯ No

LGBT sources of support in a heteronormative world

Gender identity

15. Do you identify as...

◯ Male-to-female

◯ Female-to-male

◯ Something else (please specify)

[   ]

16. How comfortable do you feel about your transgender identity?

◯ Very comfortable

◯ Comfortable

◯ Neither comfortable nor uncomfortable

◯ Uncomfortable

◯ Very uncomfortable

Would you like to provide a more detailed answer?

[   ]

LGBT sources of support in a heteronormative world

Coming out

17. Are you 'out' to at least one other person? In other words, have you ever disclosed to anyone else that you are LGBT?

◯ Yes

◯ No

18. Are you 'out'...?

	None	Some	All
to friends	◯	◯	◯
to parent(s)	◯	◯	◯
to siblings (brothers/sisters)	◯	◯	◯
to work colleagues	◯	◯	◯
at school/college	◯	◯	◯
at youth/other organisations(s)	◯	◯	◯
to friends you only know in an online setting	◯	◯	◯

19. If you are not out to everyone, what are your main concerns about coming out?

[   ]

20. Do you feel your geographic location affected your experience of coming out?

[text box]

LGBT sources of support in a heteronormative world

Traditional support

Before you begin...

The purpose of questions 22 to 30 is to determine whether you perceive online social support as being of more value than offline social support. Please answer these questions as truthfully as possible. You may skip any question that you do not wish to answer.

21. Please indicate how you feel about the following statements concerning support from family, friends and a significant other.

	Very Strongly Disagree	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree	Very Strongly Agree
1. There is a special person who is around when I am in need.	○	○	○	○	○	○	○
2. There is a special person with whom 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 to 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.	○	○	○	○	○	○	○

LGBT sources of support in a heteronormative world

Facebook LGBT groups

22. Are you a member of any Facebook LGBT groups?

○ Yes

○ No

LGBT sources of support in a heteronormative world

Facebook LGBT groups

23. Please indicate how you feel about the following statements concerning FRIENDS YOU FIRST MET ON FACEBOOK LGBT GROUPS:

	Very Strongly Disagree	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree	Very Strongly Agree
My friends on Facebook LGBT groups really try to help me.	○	○	○	○	○	○	○
I can count on my friends from Facebook LGBT groups when things go wrong.	○	○	○	○	○	○	○
I have friends on Facebook LGBT groups with whom I can share my joys and sorrows.	○	○	○	○	○	○	○
I can talk about my problems with my Facebook LGBT group friends.	○	○	○	○	○	○	○

24. In the past week, on average, approximately how many minutes per day have you spent on Facebook LGBT groups?

[   ]

25. Please select the pair of circles that best represents your relationship with others on your primary LGBT Facebook group.

○   ○   ○   ○   ○   ○   ○

LGBT sources of support in a heteronormative world

LGBT forums

26. Are you a member of any LGBT forums?

○ Yes

○ No

LGBT sources of support in a heteronormative world

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LGBT forums

27. Please indicate how you feel about the following statements concerning FRIENDS YOU FIRST MET ON LGBT FORUMS:

	Very Strongly Disagree	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree	Very Strongly Agree
My friends on LGBT forums really try to help me.	○	○	○	○	○	○	○
I can count on my LGBT forum friends when things go wrong.	○	○	○	○	○	○	○
I have LGBT forum friends with whom I can share my joys and sorrows.	○	○	○	○	○	○	○
I can talk about my problems with my LGBT forum friends.	○	○	○	○	○	○	○

28. In the past week, on average, approximately how many minutes per day have you spent on LGBT forums?

[   ]

29. Please select the pair of circles that best represents your relationship with others on your primary LGBT forum.

○	○	○	○	○	○	○

LGBT sources of support in a heteronormative world

Well-being

30. Below are five statements that you may agree or disagree with. Using the scale below, indicate your agreement with each item by selecting the appropriate option. Please be open and honest in your responding.

	Strongly Disagree	Disagree	Slightly Disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly Agree
In most ways my life is close to my ideal.	○	○	○	○	○	○	○
The conditions of my life are excellent.	○	○	○	○	○	○	○
I am satisfied with my life.	○	○	○	○	○	○	○
So far I have gotten the important things I want in life.	○	○	○	○	○	○	○
If I could live my life over, I would change almost nothing.	○	○	○	○	○	○	○

LGBT sources of support in a heteronormative world

7

Debriefing statement

Thank you very much for participating in this study.

Please remember to click the "Done" button at the bottom of the screen to save your survey responses.

Who will have access to information about me?
Because all questionnaires are filled in anonymously, the data can never be traced back to you. IP address tracking is switched off and the website on which this survey is hosted employs encryption to protect your responses. Furthermore, the following data protection procedures will be followed:

- All information will be stored on an encrypted memory stick. Encryption will use Apple Mac disk encryption software.
- The data collected will only be accessible to the researcher and their supervisor, and will not be shared with any other party.
- Data collected will be securely disposed of and destroyed after a maximum period of five years.

What will happen to the results of the study?
The results of this research will be available to IADT students and staff through the college library. Only the researcher and their supervisor will have access to data not included in the final report.

If you have any questions regarding your participation in this study, please don't hesitate to contact me or my supervisor, Dean McDonnell. As previously mentioned, all information and results received are completely anonymous.

Contact Details:
Researcher: Miriam Hand. Email: N00146624@student.iadt.ie
Supervisor: Dean McDonnell. Email: dean.mcdonnell@iadt.ie

Should you feel you are upset or distressed in any way after your participation in this study you can call any of the numbers listed below or visit their websites.

Organisation	Phone Number	Website
Samaritans	116123	www.samaritans.org
Aware	1800 80 48 48	www.aware.ie
Pieta House 24/7 Suicide Helpline	1800 247 247	www.pieta.ie
Gay Switchboard Ireland	01-8721055	www.gayswitchboard.ie
LGBT HELPLINE	1890 929 539	http://lgbt.ie/our-services/lgbt-helpline

Before you go
You are encouraged to forward this survey to friends, family, and acquaintances that also identify as LGBT. Please be aware that sharing could potentially expose your participation or those who you send it to if they share e-mail accounts.

Appendix B

Link to Satisfaction with Life Scale scoring sheet.

https://internal.psychology.illinois.edu/~ediener/Documents/Understanding%20SW
LS%20Scores.pdf

Appendix C

The list of survey invitees are provided below.

Student societies

- Dublin Institute Technology LGBT society
- DCU LGBT society
- Dundalk Institute Technology Pride society
- IADT LGBT society
- Institute Technology Carlow LGBT society
- Institute Technology Sligo LGBT Society
- Limerick Institute Technology LGBT society
- Limerick University LGBT society
- Maynooth LGBT society
- NCAD Students Union
- NUIG LGBT society
- Queens University LGBT society
- UCD LGBT society
- UCC LGBT society
- TCD LGBT society
- Waterford Institute Technology LGBT society

Forums

- Boards LGBT thread
- Empty closets
- Gaire
- LGBTChat

Facebook pages and groups

- Amach LGBT Galway

- Durham LGBT+ Association

- GayCork.com

- LGBT Noise

- Limerick LGBTQ Pride

- Los Angeles LGBT Centre

- LQBTwentiesThirties Ladies

Organisations and magazines

- BelongTo

- Dundalk Pride

- GCN magazine

- LGBT Helpline (LGBT.ie)

- National LGBT Federation

- Outhouse

Appendix D

Invitation to post the survey

iadt
DUN LAOGHAIRE

Dun Laoghaire Institute of Art, Design, and Technology (IADT)

Faculty of Film, Art and Creative Technologies,
Department of Technology and Psychology.
Kill Avenue,
Dun Laoghaire,
Co. Dublin.

29/01/2018

Request to post a link to a research survey

To whom it may concern,

You are invited to consider participating in a study by posting a link to an online survey on your social media page and forwarding the link to your members via email, if possible. The study is part of a Cyberpsychology MSc degree in Dun Laoghaire Institute of Art, Design, and Technology (IADT), and is being conducted by Miriam Hand, a Cyberpsychology student.

Before you decide whether or not you wish to agree to this request, it is important for you to understand why this research is being conducted and what it will involve. If any part of this research study is unclear, or if additional questions or concerns arise, either now or at a later date, please do not hesitate to seek clarification from the researcher or their supervisor via the contact details provided below.

Purpose and Benefits of the Research
This study primarily considers whether there are any differences between levels of social support derived from LGBT forums and Facebook LGBT groups, and examines how this social support may affect well-being.

Traditional forums are increasingly being replaced by social media based support groups. However recent research has suggested that the anonymous nature of forums may be associated with greater levels of social support and that this anonymity may also affect the relationship between social support and well-being when users are members of a marginalized group. In contrast to forums, Facebook mandates the use of real names and even secret Facebook groups are not anonymous. This research is important because it may help inform policy decisions concerning the provision of online support to LGBT people in the future.

Is Participation Voluntary?

Participation in this study is entirely voluntary and respondents can leave the questionnaire unfinished if they wish by simply closing the web browser. All participants must be over 18 to take part in the study.

What Will Participation Involve?

Participation in the study will involve:

- Checking a consent box to acknowledge the respondent is over 18 years old and that their participation is voluntary and informed.
- Completing an anonymous online survey that will include:
  - demographic data,
  - questions on sexual orientation, gender identity and coming out,
  - a set of rating scales that measure perceived levels of social support received from offline (family/friends/partner) and online sources (Facebook LGBT groups/LGBT forums),
  - a set of five simple rating scales that measure well-being. For example: "I am satisfied with my life".

The estimated time needed to complete the questionnaire is 10 minutes.

What are the Risks of Involvement?

One risk of taking part in this study is that some questions may make participants feel uncomfortable. In view of this, all questions in the study are optional and the survey will conclude with a debrief segment that includes phone numbers for help agencies such as the Samaritans and the LGBT helpline.

Is Participation Confidential?

Because all questionnaires are filled in anonymously, the data can never be traced back to a single respondent. The survey will be securely hosted by SurveyMonkey. Survey Monkey encrypts respondent traffic and IP address tracking will be switched off.

Furthermore, the following data protection procedures will be followed:

1. All information will be stored on an encrypted memory stick. Encryption will use Apple Mac disk encryption software.

2. The data collected will only be accessible to the researcher and their supervisor. No other party will have access to this data.

3. Data collected will be securely disposed of and destroyed after a maximum period of five years.

Who owns the data and how will it be disseminated?

The results of this research will be available to IADT students and staff through the college library. Only the researcher and their supervisor will have access to data not included in the final report. Respondents cannot withdraw any submitted data since the survey is anonymous.

Who has reviewed the study?

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

The link to the survey is: https://www.surveymonkey.com/r/KMTTL78

Thank you for taking the time to consider this request.

I look forward to your response.

Best regards,

Miriam Hand

Contact Information

Researcher: Miriam Hand

Phone: +353861702139

Email: N00146624@student.iadt.ie

IADT supervisor: Dean McDonnell

Email: dean.mcdonnell@iadt.ie

Appendix E

SPSS Output

This appendix contains the following SPSS output:
- normality output for scales
- scale reliability output
- hypotheses output
- descriptive tables

Scales

	Skewness		Kurtosis		Shapiro-Wilks
	Statistic	Std. Error	Statistic	Std. Error	
Satisfaction With Life Scale	-.249	.227	-1.046	.451	.001
MSPSS Offline Scale Score	-.847	.234	.290	.463	.000
MSPSS Family Subscale Score	-.456	.231	-.857	.459	.000
MSPSS Friends Subscale Score	-1.140	.227	1.268	.451	.000
MSPSS Sig Other Subscale Score	-1.095	.229	.120	.455	.000
FB MSPSS Score	-.793	.274	1.823	.541	.000
Forum MSPSS Score	-1.069	.350	1.681	.688	.000
IOS Scale FB Groups	1.783	.251	3.960	.498	.000
IOS Scale Forums	1.675	.337	3.194	.662	.000
IOS score for participants who use one platform exclusively	1.131	.264	1.234	.523	.000

Descriptive Statistics

	N Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Mean Std. Error	Std. Deviation Statistic	Skewness Statistic
Satisfaction With Life Scale Total	113	5	35	20.86	.756	8.037	-.249
MSPSS Offline Scale Score	107	1.00	7.00	5.1612	.13163	1.36164	-.847
MSPSS Family Subscale Score	109	1.00	7.00	4.4450	.17510	1.82807	-.456
MSPSS Friends Subscale Score	113	1.00	7.00	5.5376	.12513	1.33012	-1.140
MSPSS Sig Other Subscale Score	111	1.00	7.00	5.5180	.16128	1.69917	-1.095
FB MSPSS Score	77	1.00	7.00	4.2987	.13427	1.17823	-.793
Forum MSPSS Score	46	1.00	7.00	4.4891	.20412	1.38439	-1.069
IOS Scale FB Groups	92	1	7	1.97	.124	1.190	1.783
IOS Scale Forums	50	1	7	2.46	.200	1.417	1.675
IOS score for participants who use only one platform	83	1	5	1.84	.099	.904	1.131
Valid N (listwise)	1						

Descriptive Statistics

	Skewness Std. Error	Kurtosis Statistic	Kurtosis Std. Error
Satisfaction With Life Scale Total	.227	-1.046	.451
MSPSS Offline Scale Score	.234	.290	.463
MSPSS Family Subscale Score	.231	-.857	.459
MSPSS Friends Subscale Score	.227	1.268	.451
MSPSS Sig Other Subscale Score	.229	.120	.455
FB MSPSS Score	.274	1.823	.541
Forum MSPSS Score	.350	1.681	.688
IOS Scale FB Groups	.251	3.960	.498
IOS Scale Forums	.337	3.194	.662
IOS score for participants who use only one platform	.264	1.234	.523
Valid N (listwise)			

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Satisfaction With Life Scale Total	113	99.1%	1	0.9%	114	100.0%

Descriptives

		Statistic	Std. Error
Satisfaction With Life Scale Total	Mean	20.86	.756
	95% Confidence Interval for Mean Lower Bound	19.36	
	Upper Bound	22.36	
	5% Trimmed Mean	20.95	
	Median	22.00	
	Variance	64.587	
	Std. Deviation	8.037	
	Minimum	5	
	Maximum	35	
	Range	30	
	Interquartile Range	15	
	Skewness	-.249	.227
	Kurtosis	-1.046	.451

Extreme Values

			Case Number	Value
Satisfaction With Life Scale Total	Highest	1	4	35
		2	88	35
		3	32	34
		4	40	33
		5	69	33
	Lowest	1	72	5
		2	49	5
		3	37	5
		4	60	7
		5	110	8[a]

a. Only a partial list of cases with the value 8 are shown in the table of lower extremes.

	Tests of Normality					
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Satisfaction With Life Scale Total	.105	113	.004	.955	113	.001

a. Lilliefors Significance Correction

Satisfaction With Life Scale Total

Histogram

Mean = 20.86
Std. Dev. = 8.037
N = 113
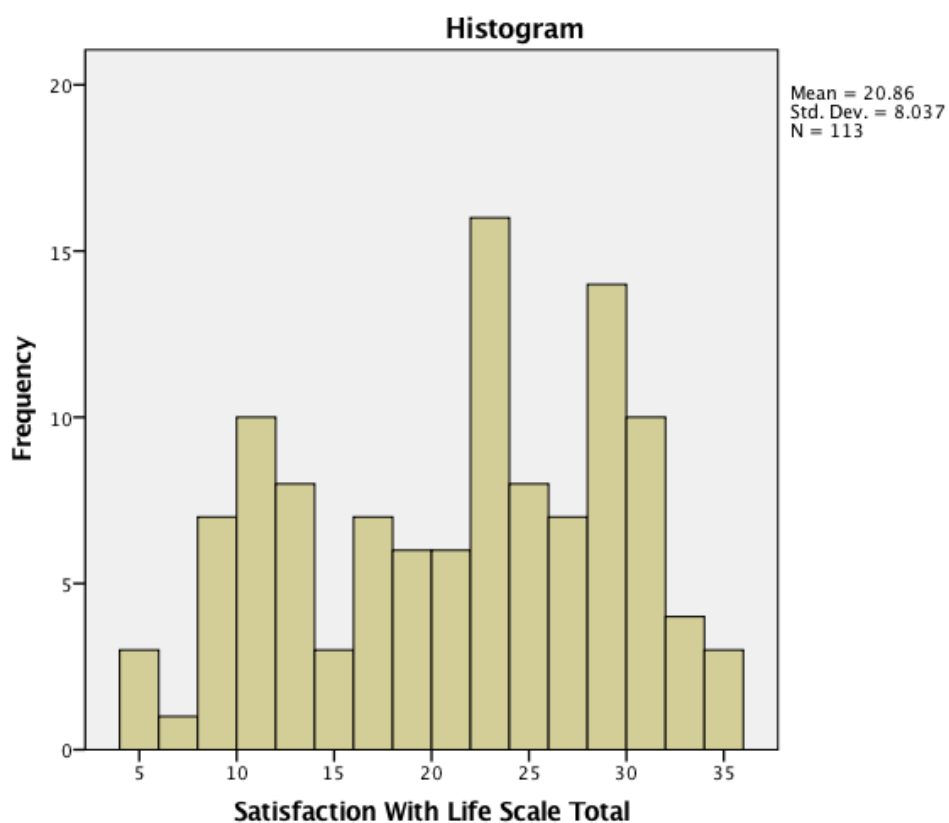
Satisfaction With Life Scale Total Stem-and-Leaf Plot

 Frequency   Stem & Leaf

   3.00   0 . 555

```
 1.00      0 .  7
 7.00      0 .  8888899
10.00      1 .  0000011111
 8.00      1 .  22222333
 3.00      1 .  555
 7.00      1 .  6677777
 6.00      1 .  888999
 6.00      2 .  000011
16.00      2 .  2222222222233333
 8.00      2 .  44455555
 7.00      2 .  6666667
14.00      2 .  88889999999999
10.00      3 .  0000011111
 4.00      3 .  2233
 3.00      3 .  455
```

Stem width: 10
Each leaf: 1 case(s)

Normal Q–Q Plot of Satisfaction With Life Scale Total

Detrended Normal Q–Q Plot of Satisfaction With Life Scale Total
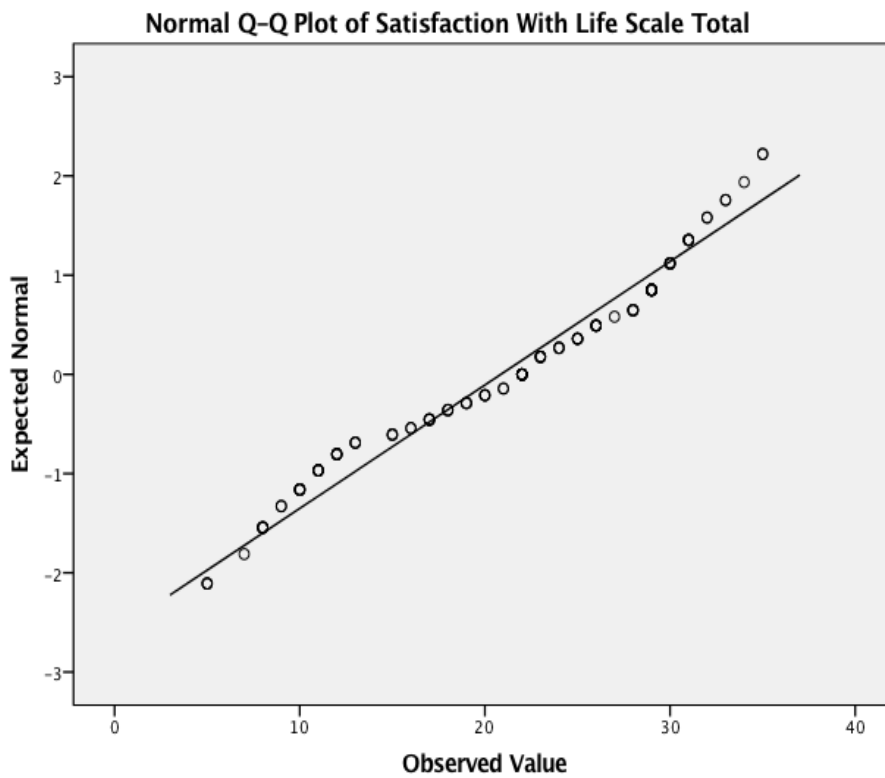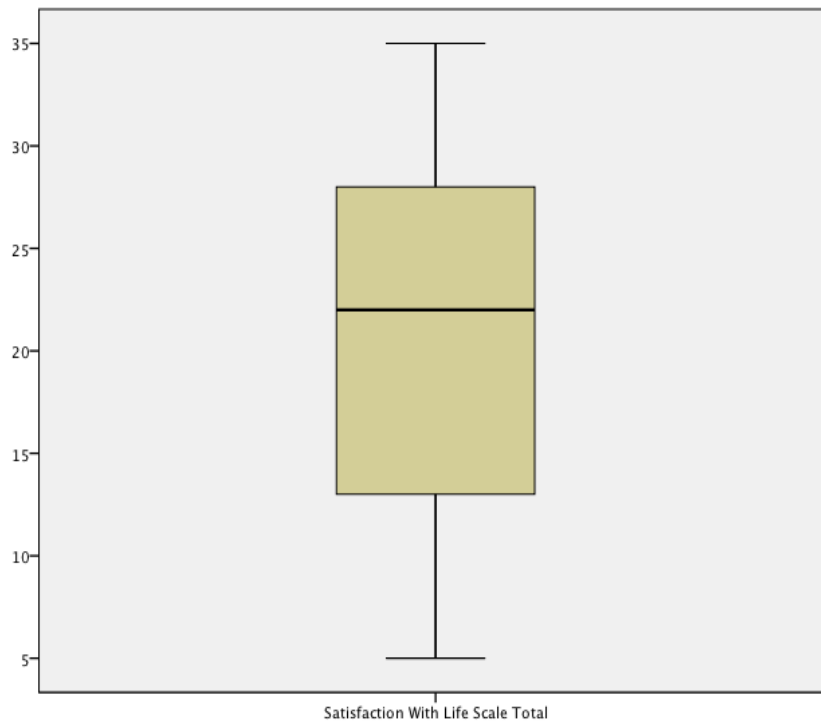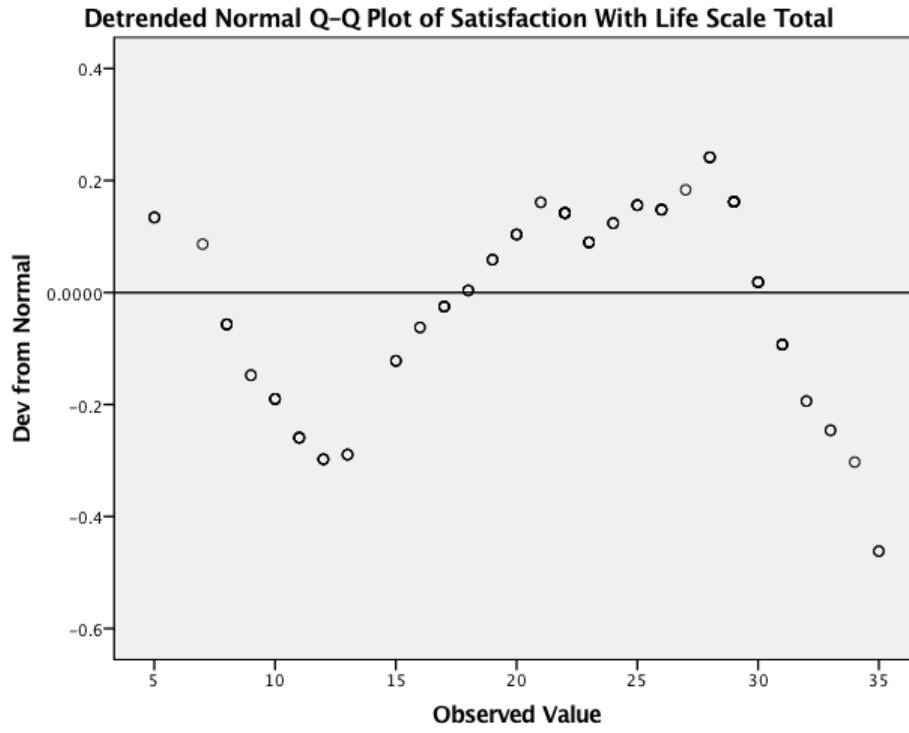
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
MSPSS Offline Scale Score	107	93.9%	7	6.1%	114	100.0%

Descriptives

			Statistic	Std. Error
MSPSS Offline Scale Score	Mean		5.1612	.13163
	95% Confidence Interval for Mean	Lower Bound	4.9002	
		Upper Bound	5.4222	
	5% Trimmed Mean		5.2441	
	Median		5.4167	
	Variance		1.854	
	Std. Deviation		1.36164	
	Minimum		1.00	
	Maximum		7.00	
	Range		6.00	
	Interquartile Range		1.92	
	Skewness		-.847	.234
	Kurtosis		.290	.463

Extreme Values

			Case Number	Value
MSPSS Offline Scale Score	Highest	1	43	7.00
		2	56	7.00
		3	60	7.00
		4	68	7.00
		5	81	7.00[a]
	Lowest	1	88	1.00
		2	65	1.67
		3	53	1.67

| | 4 | 47 | 2.25 |
| | 5 | 14 | 2.33 |

a. Only a partial list of cases with the value 7.00 are shown in the table of upper extremes.

Tests of Normality

| | Kolmogorov-Smirnov[a] | | | Shapiro-Wilk | | |
	Statistic	df	Sig.	Statistic	df	Sig.
MSPSS Offline Scale Score	.102	107	.008	.938	107	.000

a. Lilliefors Significance Correction

MSPSS Offline Scale Score

Histogram

Mean = 5.16
Std. Dev. = 1.362
N = 107
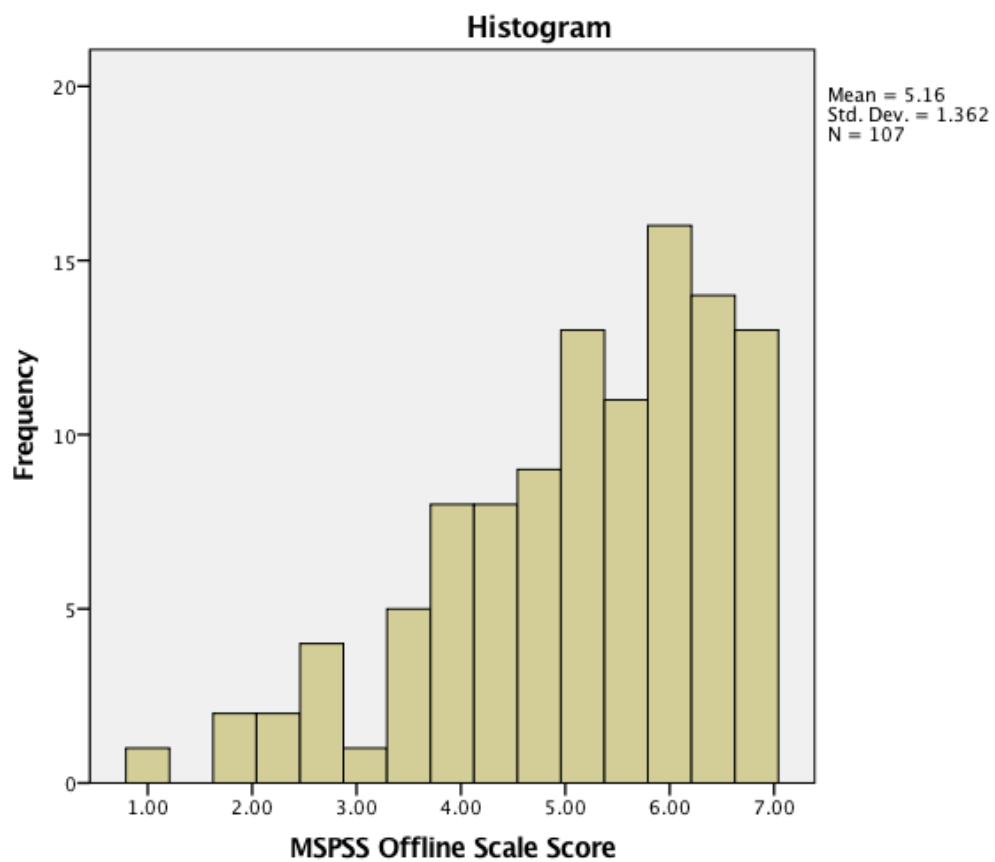
MSPSS Offline Scale Score Stem-and-Leaf Plot

 Frequency   Stem & Leaf

   1.00 Extremes   (=<1.0)
   2.00   1 . 66
   2.00   2 . 23
   5.00   2 . 55689
   2.00   3 . 33
   8.00   3 . 55577888
   8.00   4 . 00023334
  12.00   4 . 555566778999
  14.00   5 . 00001122333334
  20.00   5 . 55555566778888999999
  17.00   6 . 00001122233333334
   8.00   6 . 55566889
   8.00   7 . 00000000

Stem width: 1.00
Each leaf: 1 case(s)

Normal Q–Q Plot of MSPSS Offline Scale Score

Detrended Normal Q–Q Plot of MSPSS Offline Scale Score
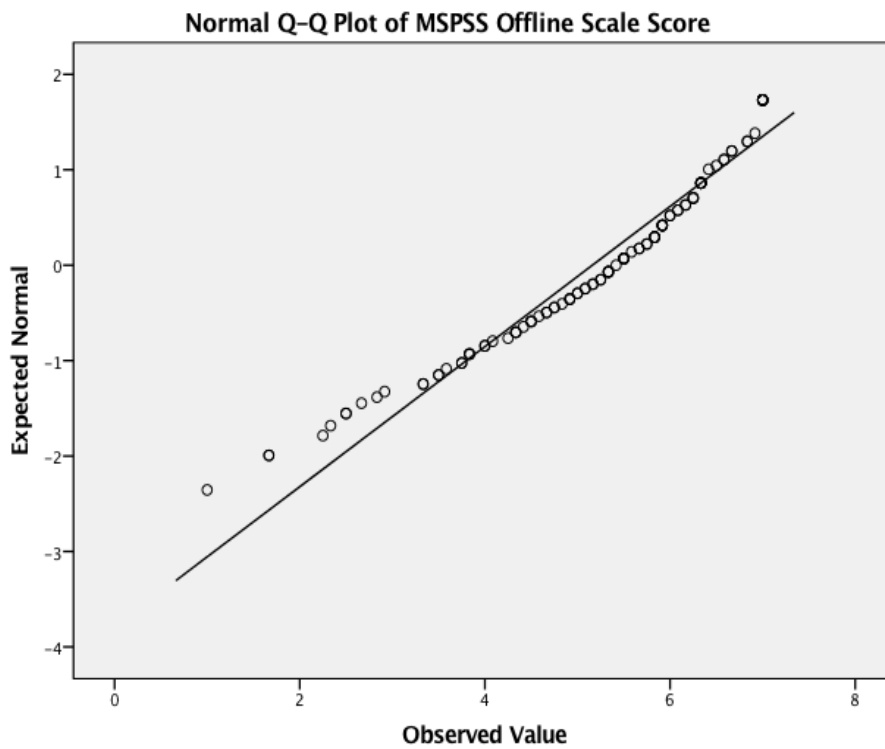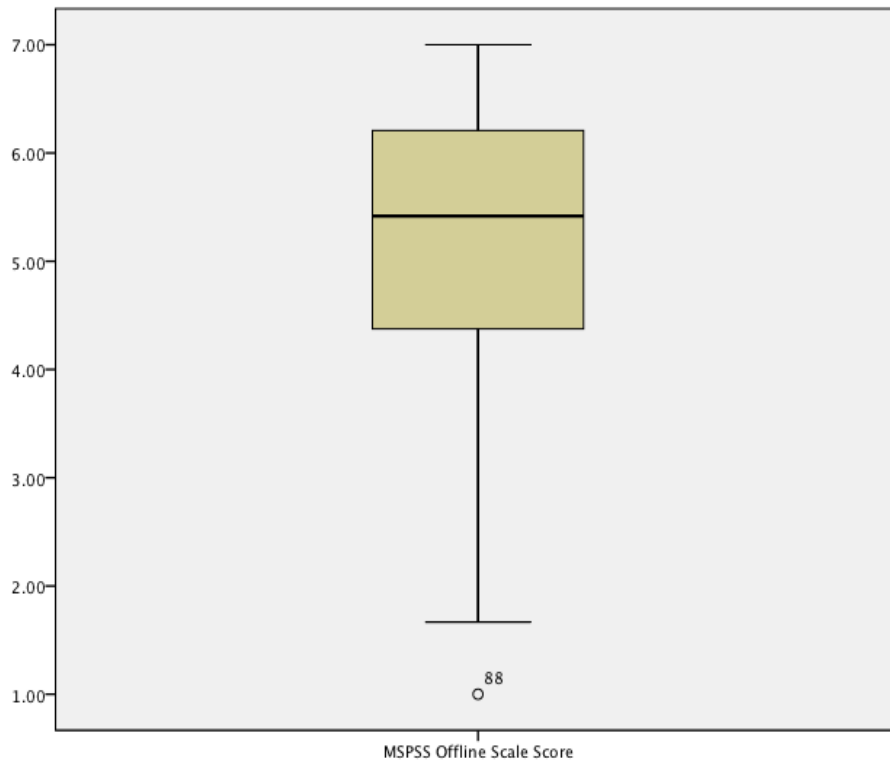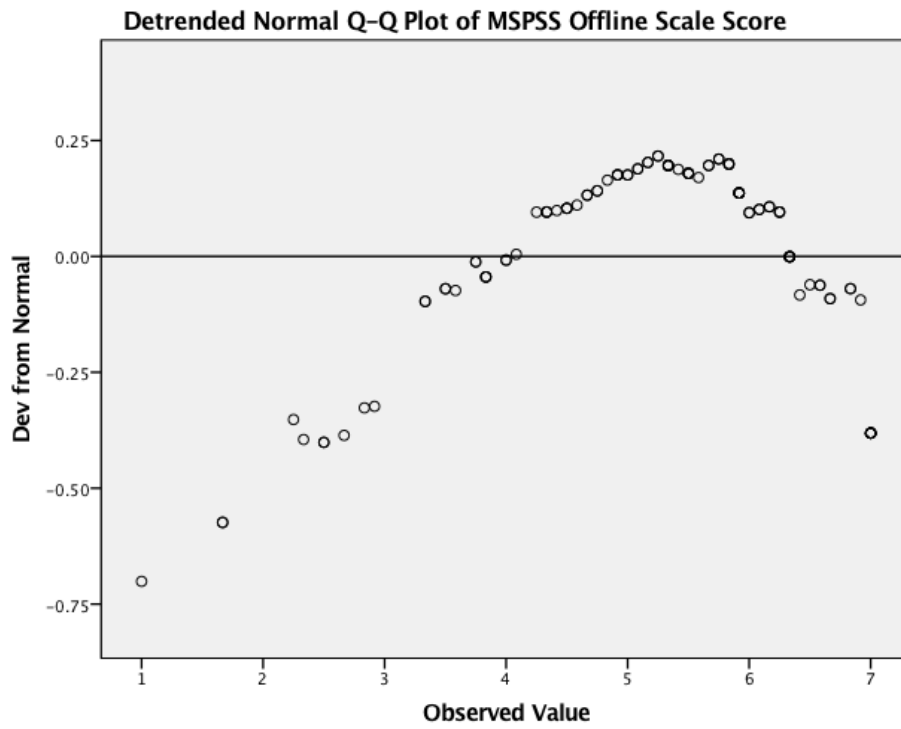
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
MSPSS Family Subscale Score	109	95.6%	5	4.4%	114	100.0%

Descriptives

			Statistic	Std. Error
MSPSS Family Subscale Score	Mean		4.4450	.17510
	95% Confidence Interval for Mean	Lower Bound	4.0979	
		Upper Bound	4.7920	
	5% Trimmed Mean		4.4944	
	Median		5.0000	
	Variance		3.342	
	Std. Deviation		1.82807	
	Minimum		1.00	
	Maximum		7.00	
	Range		6.00	
	Interquartile Range		2.88	
	Skewness		-.456	.231
	Kurtosis		-.857	.459

Extreme Values

			Case Number	Value
MSPSS Family Subscale Score	Highest	1	23	7.00
		2	43	7.00
		3	56	7.00
		4	57	7.00
		5	60	7.00[a]
	Lowest	1	109	1.00
		2	88	1.00
		3	80	1.00
		4	67	1.00
		5	65	1.00[b]

a. Only a partial list of cases with the value 7.00 are shown in the table of upper extremes.

b. Only a partial list of cases with the value 1.00 are shown in the table of lower extremes.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
MSPSS Family Subscale Score	.124	109	.000	.934	109	.000

a. Lilliefors Significance Correction

MSPSS Family Subscale Score
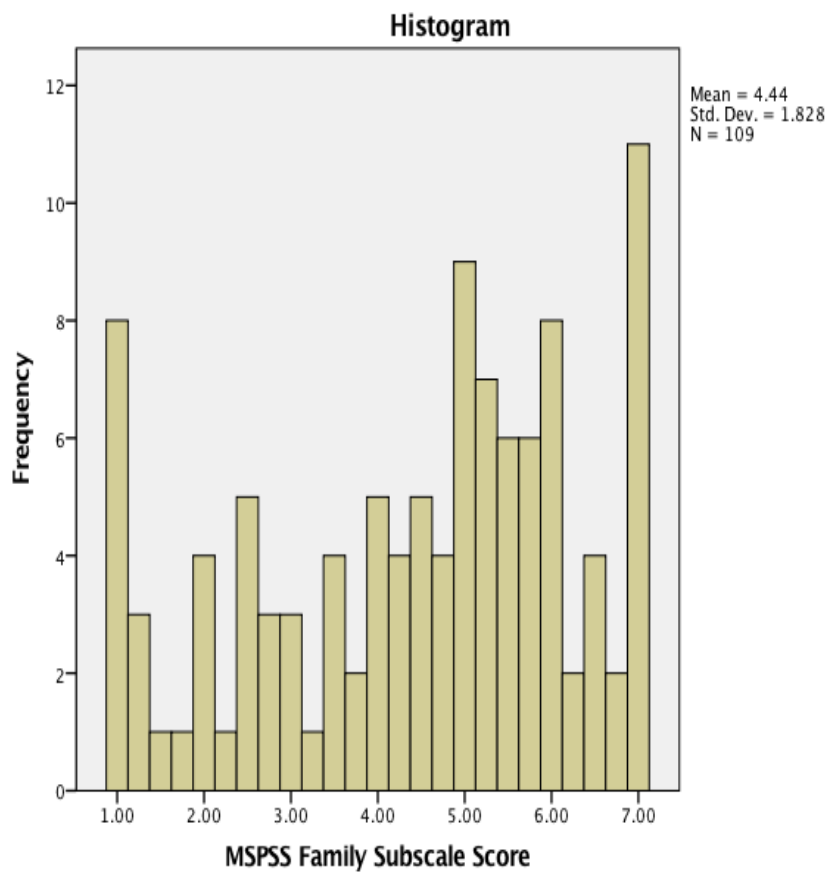
MSPSS Family Subscale Score Stem-and-Leaf Plot

 Frequency   Stem & Leaf

   11.00   1 . 00000000222
    2.00   1 . 57
    5.00   2 . 00002

```
 8.00      2 .  55555777
 4.00      3 .  0002
 6.00      3 .  555577
 9.00      4 .  000002222
 9.00      4 .  555557777
16.00      5 .  0000000002222222
12.00      5 .  555555777777
10.00      6 .  0000000022
 6.00      6 .  555577
11.00      7 .  00000000000
```

Stem width: 1.00
Each leaf: 1 case(s)

Normal Q–Q Plot of MSPSS Family Subscale Score

Detrended Normal Q–Q Plot of MSPSS Family Subscale Score

MSPSS Family Subscale Score
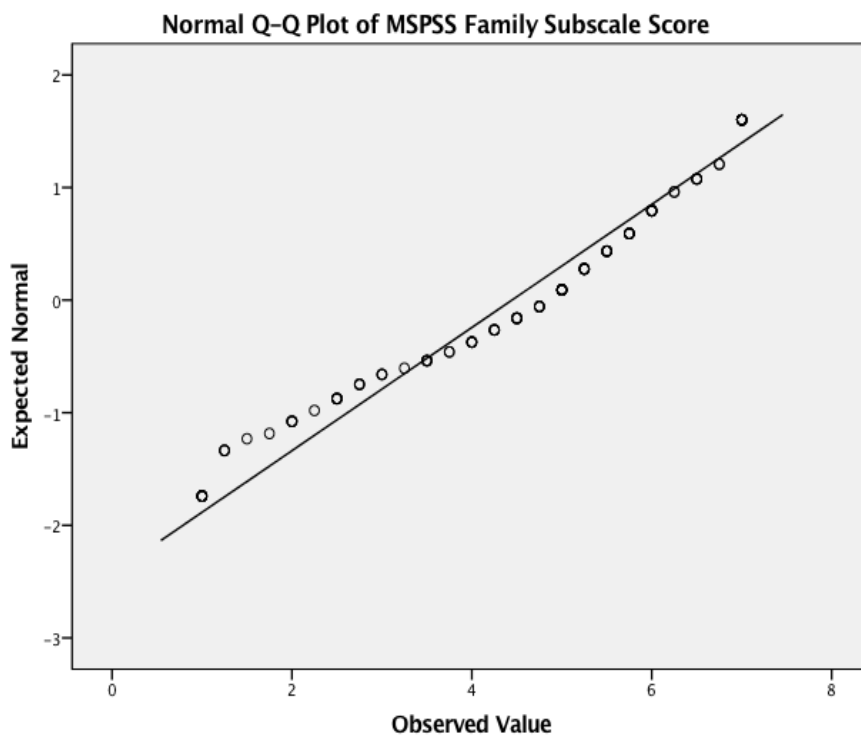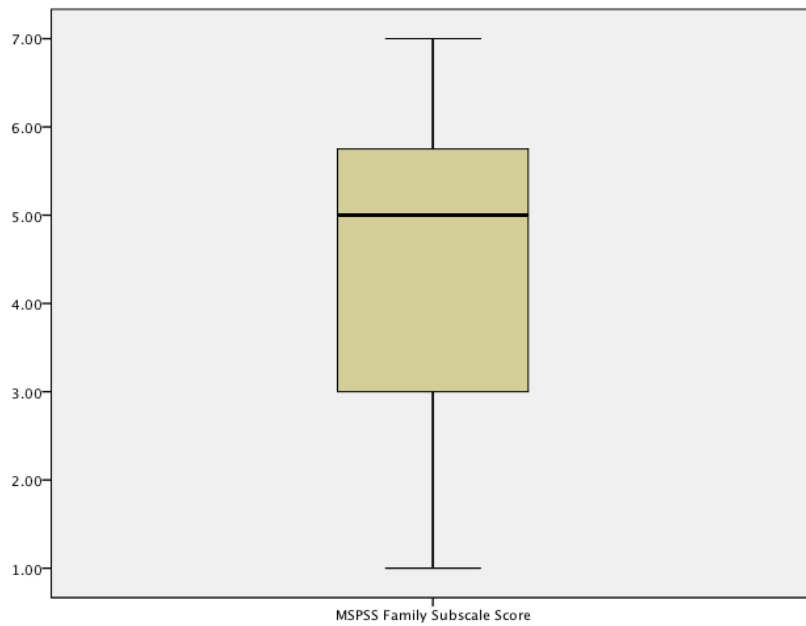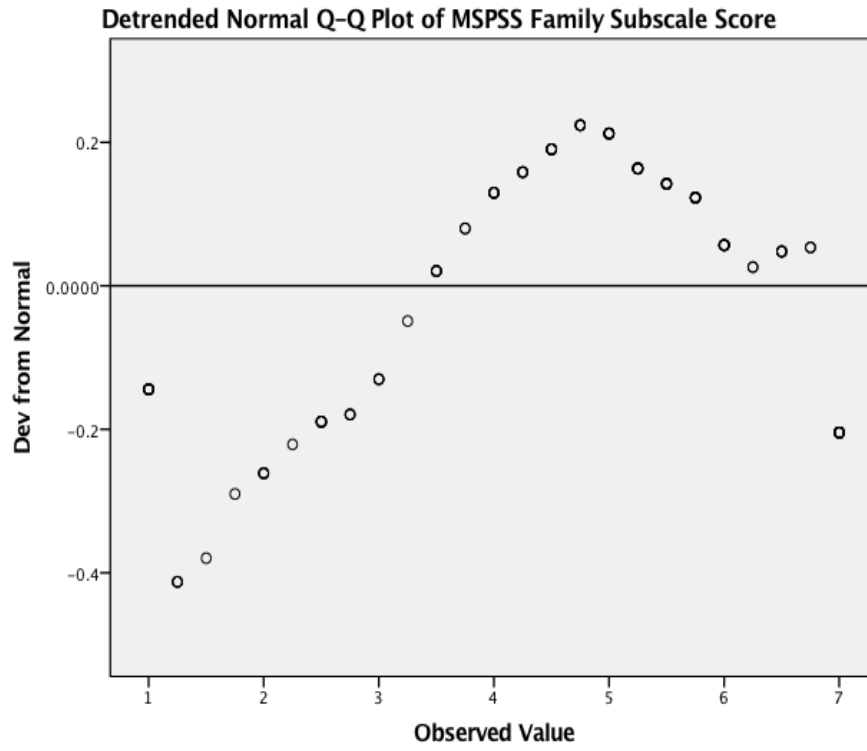
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
MSPSS Friends Subscale Score	113	99.1%	1	0.9%	114	100.0%

Descriptives

			Statistic	Std. Error
MSPSS Friends Subscale Score	Mean		5.5376	.12513
	95% Confidence Interval for Mean	Lower Bound	5.2897	
		Upper Bound	5.7855	
	5% Trimmed Mean		5.6597	
	Median		5.7500	
	Variance		1.769	
	Std. Deviation		1.33012	
	Minimum		1.00	
	Maximum		7.00	
	Range		6.00	
	Interquartile Range		1.63	
	Skewness		-1.140	.227
	Kurtosis		1.268	.451

Extreme Values

			Case Number	Value
MSPSS Friends Subscale Score	Highest	1	6	7.00
		2	7	7.00
		3	9	7.00
		4	18	7.00
		5	24	7.00[a]
	Lowest	1	88	1.00
		2	65	1.50
		3	53	2.00
		4	47	2.00
		5	39	2.00

a. Only a partial list of cases with the value 7.00 are shown in the table of upper extremes.

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Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
MSPSS Friends Subscale Score	.139	113	.000	.893	113	.000

a. Lilliefors Significance Correction

MSPSS Friends Subscale Score
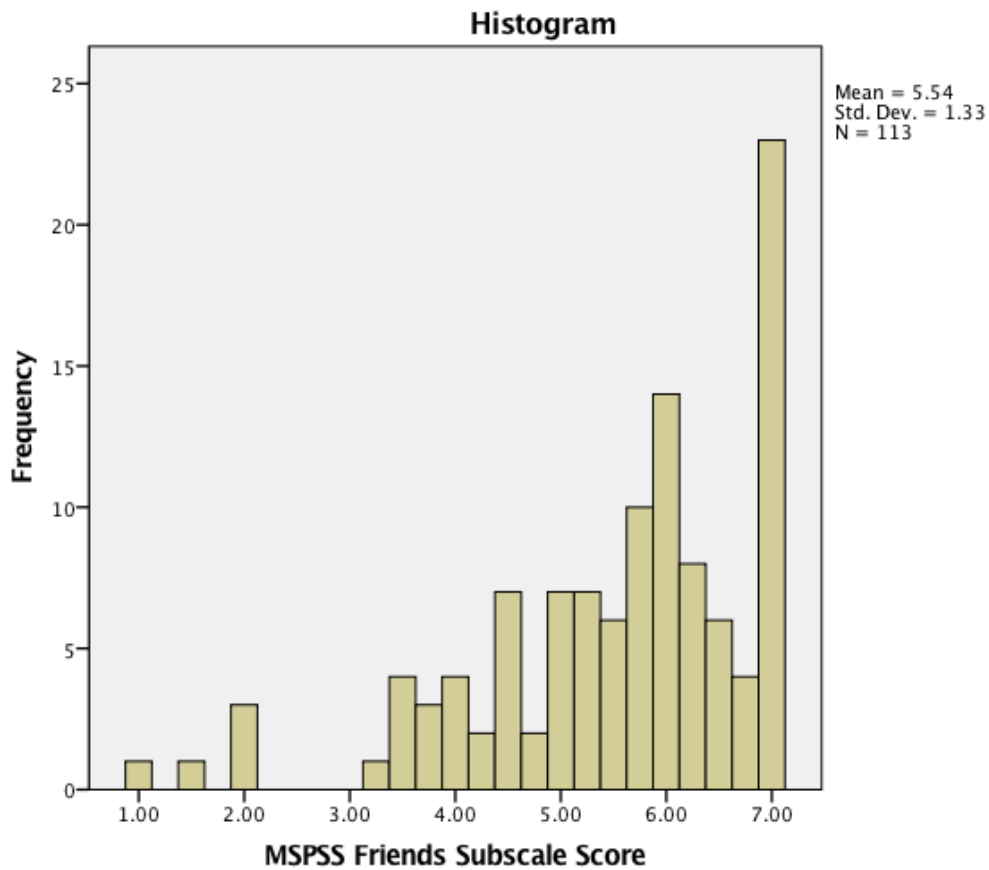
MSPSS Friends Subscale Score Stem-and-Leaf Plot

 Frequency   Stem & Leaf

     5.00 Extremes   (=<2.0)
     1.00   3 . 2

```
 7.00      3 . 5555777
 6.00      4 . 000022
 9.00      4 . 555555577
14.00      5 . 00000002222222
16.00      5 . 5555557777777777
22.00      6 . 0000000000000022222222
10.00      6 . 5555557777
23.00      7 . 00000000000000000000000
```

Stem width: 1.00
Each leaf: 1 case(s)

Normal Q–Q Plot of MSPSS Friends Subscale Score

Detrended Normal Q–Q Plot of MSPSS Friends Subscale Score

MSPSS Friends Subscale Score
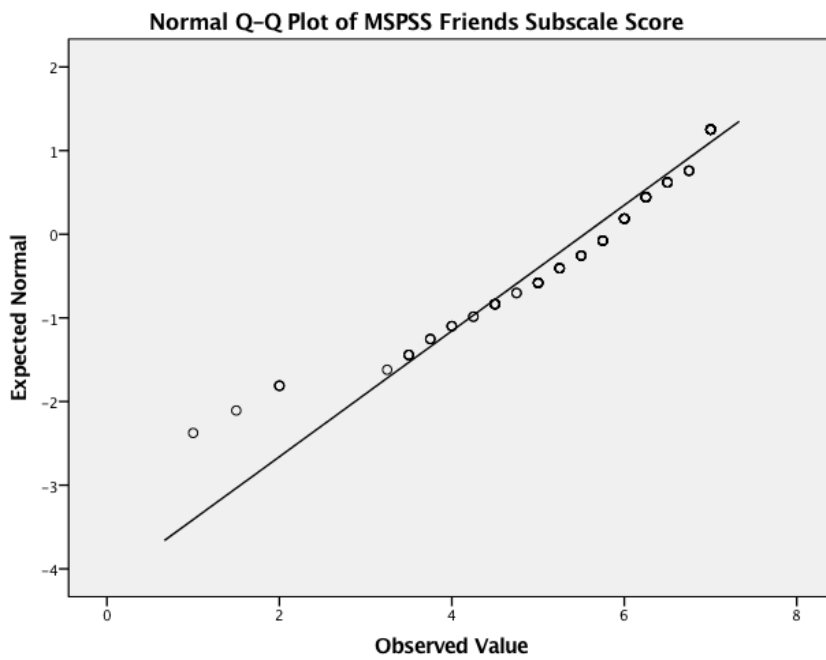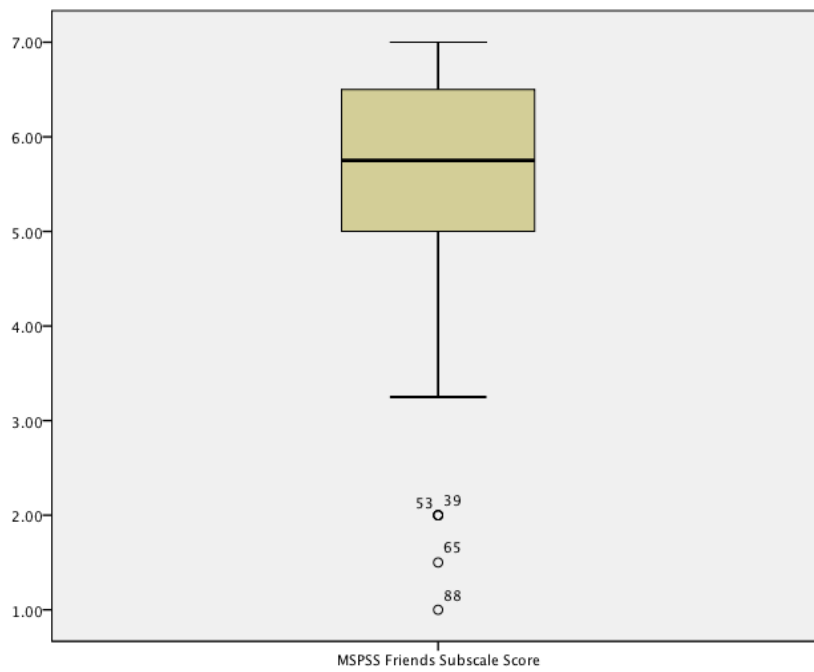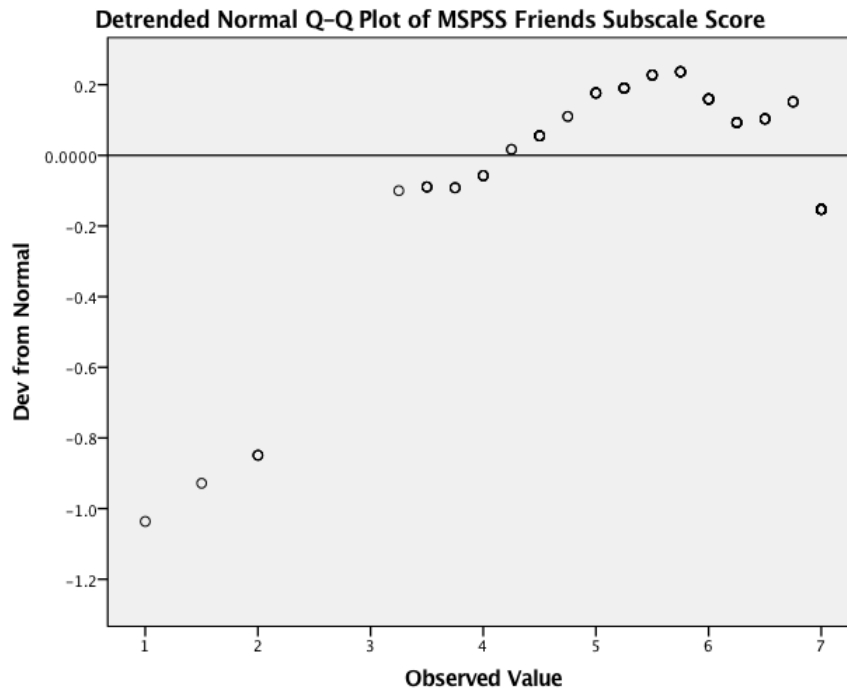
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
MSPSS Sig Other Subscale Score	111	97.4%	3	2.6%	114	100.0%

Descriptives

			Statistic	Std. Error
MSPSS Sig Other Subscale Score	Mean		5.5180	.16128
	95% Confidence Interval for Mean	Lower Bound	5.1984	
		Upper Bound	5.8376	
	5% Trimmed Mean		5.6637	
	Median		6.0000	
	Variance		2.887	
	Std. Deviation		1.69917	
	Minimum		1.00	
	Maximum		7.00	
	Range		6.00	
	Interquartile Range		2.50	
	Skewness		-1.095	.229
	Kurtosis		.120	.455

Extreme Values

			Case Number	Value
MSPSS Sig Other Subscale Score	Highest	1	4	7.00
		2	5	7.00
		3	6	7.00
		4	7	7.00
		5	18	7.00[a]
	Lowest	1	88	1.00
		2	40	1.00
		3	14	1.00
		4	53	1.75
		5	73	2.00[b]

a. Only a partial list of cases with the value 7.00 are shown in the table of upper extremes.

b. Only a partial list of cases with the value 2.00 are shown in the table of lower extremes.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
MSPSS Sig Other Subscale Score	.197	111	.000	.825	111	.000

a. Lilliefors Significance Correction

MSPSS Sig Other Subscale Score
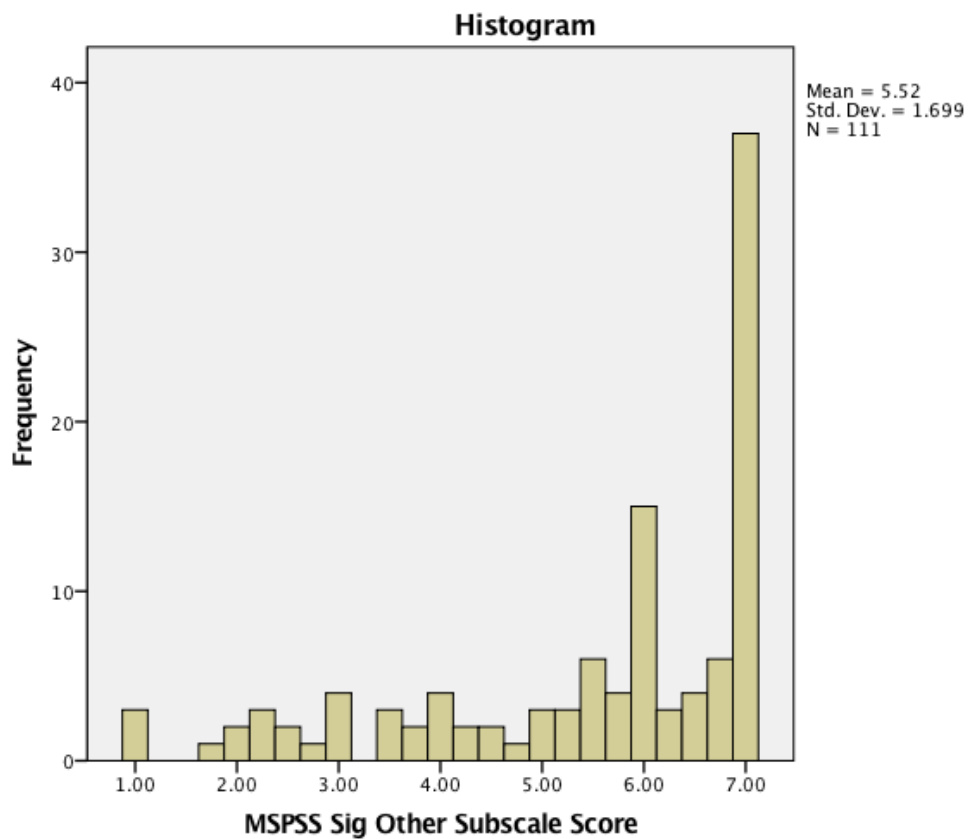
MSPSS Sig Other Subscale Score Stem-and-Leaf Plot

Frequency   Stem & Leaf

   3.00   1 . 000
   1.00   1 . 7
   5.00   2 . 00222

```
 3.00      2 .  557
 4.00      3 .  0000
 5.00      3 .  55577
 6.00      4 .  000022
 3.00      4 .  557
 6.00      5 .  000222
10.00      5 .  5555557777
18.00      6 .  000000000000000222
10.00      6 .  5555777777
37.00      7 .  0000000000000000000000000000000000000
```

Stem width: 1.00
Each leaf: 1 case(s)

Normal Q–Q Plot of MSPSS Sig Other Subscale Score

Detrended Normal Q-Q Plot of MSPSS Sig Other Subscale Score

MSPSS Sig Other Subscale Score
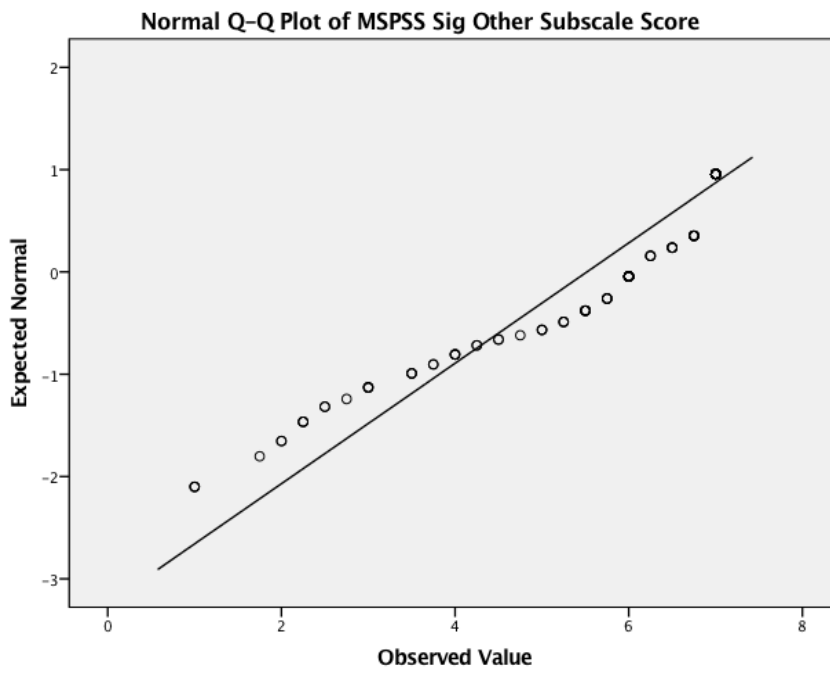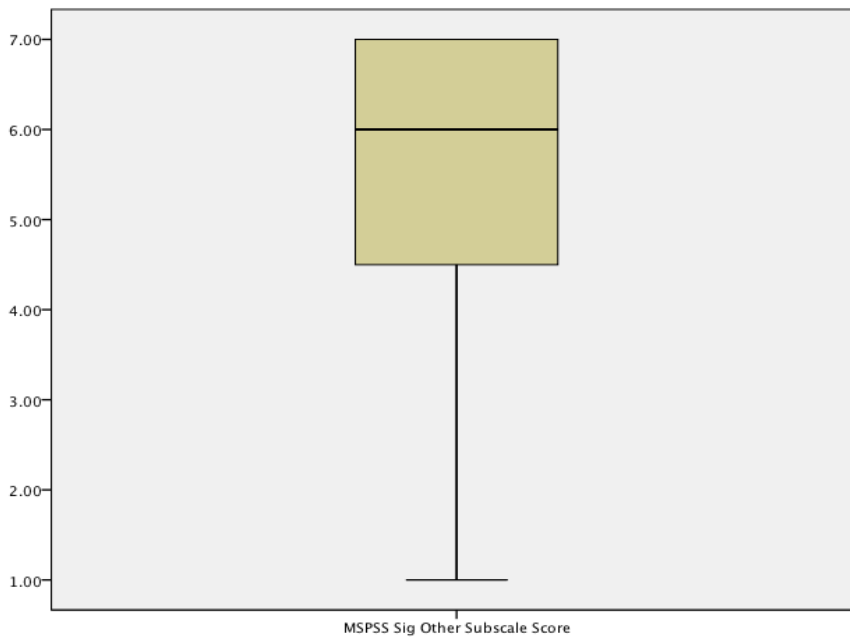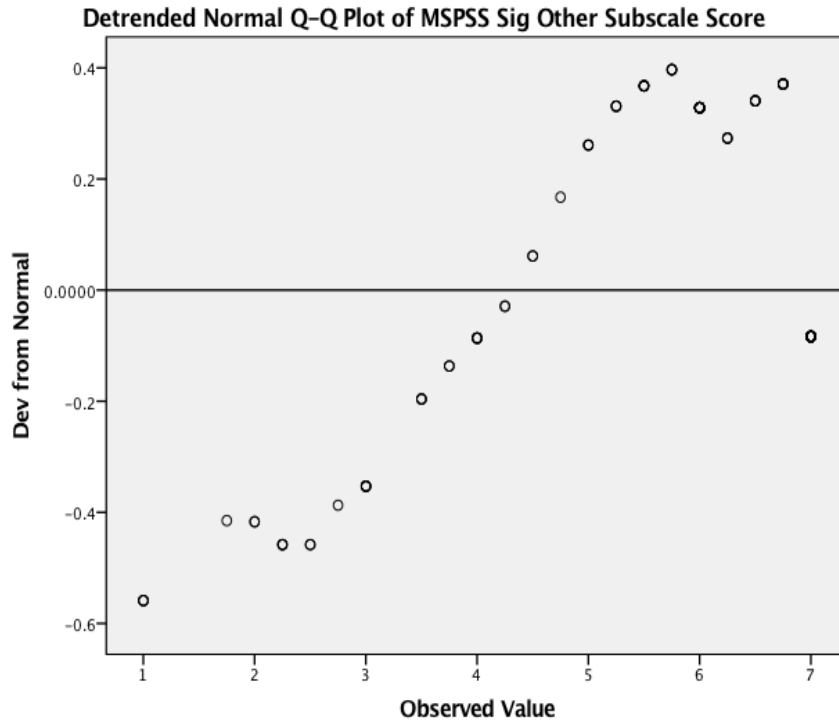
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
FB MSPSS Score	77	67.5%	37	32.5%	114	100.0%

Descriptives

			Statistic	Std. Error
FB MSPSS Score	Mean		4.2987	.13427
	95% Confidence Interval for Mean	Lower Bound	4.0313	
		Upper Bound	4.5661	
	5% Trimmed Mean		4.3525	
	Median		4.2500	
	Variance		1.388	
	Std. Deviation		1.17823	
	Minimum		1.00	
	Maximum		7.00	
	Range		6.00	
	Interquartile Range		1.00	
	Skewness		-.793	.274
	Kurtosis		1.823	.541

Extreme Values

			Case Number	Value
FB MSPSS Score	Highest	1	52	7.00
		2	64	7.00
		3	17	6.00
		4	28	6.00
		5	80	6.00[a]
	Lowest	1	88	1.00
		2	70	1.00
		3	37	1.00
		4	71	1.50
		5	85	1.75[b]

a. Only a partial list of cases with the value 6.00 are shown in the table of upper extremes.

b. Only a partial list of cases with the value 1.75 are shown in the table of lower extremes.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
FB MSPSS Score	.231	77	.000	.906	77	.000

a. Lilliefors Significance Correction

FB MSPSS Score
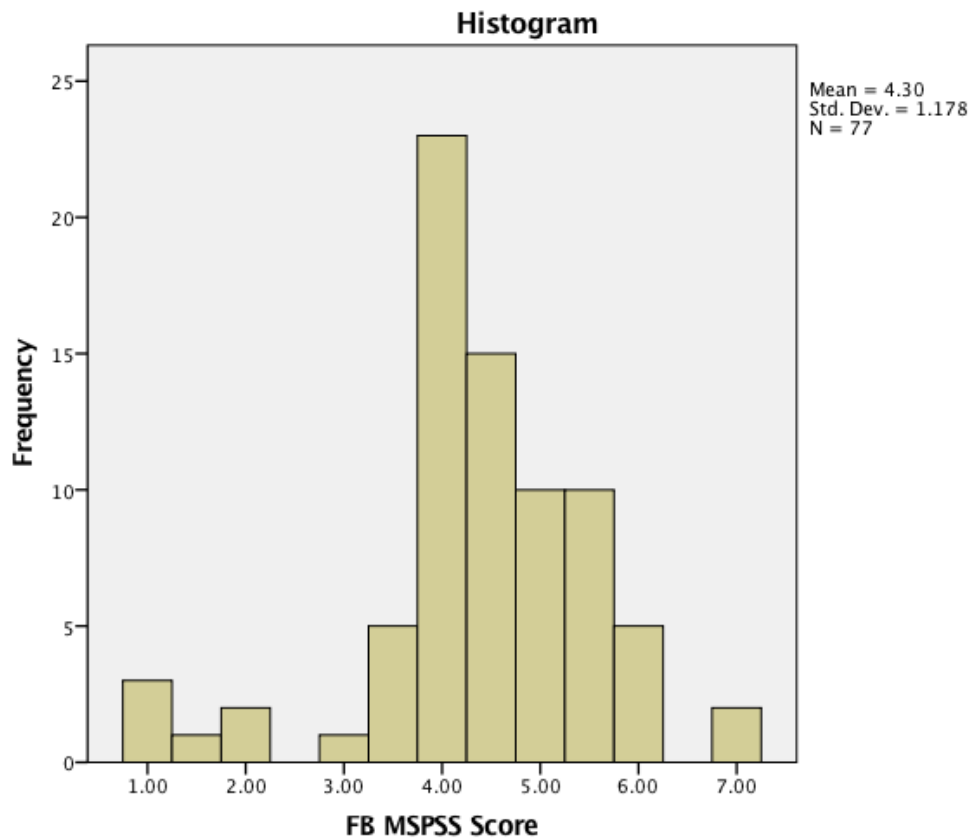
FB MSPSS Score Stem-and-Leaf Plot

Frequency   Stem & Leaf

```
  6.00 Extremes    (=<1.8)
  1.00      2 .  7
  3.00      3 .  222
  3.00      3 .  557
 28.00      4 .  0000000000000000000000222222
 14.00      4 .  55555555577777
 12.00      5 .  000002222222
  4.00      5 .  5557
  4.00      6 .  0000
  2.00 Extremes    (>=7.0)
```

Stem width: 1.00
Each leaf: 1 case(s)

Normal Q–Q Plot of FB MSPSS Score

Detrended Normal Q–Q Plot of FB MSPSS Score

FB MSPSS Score
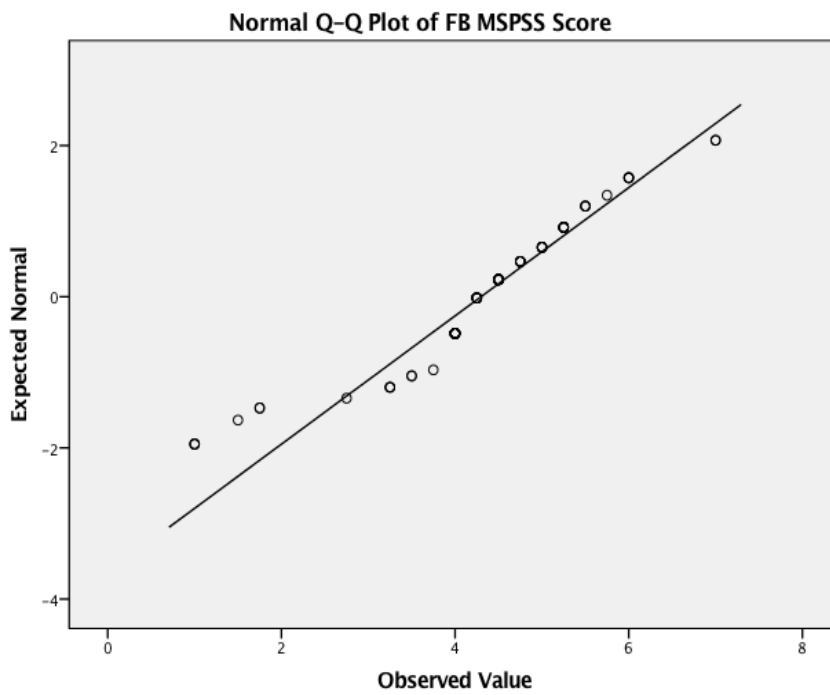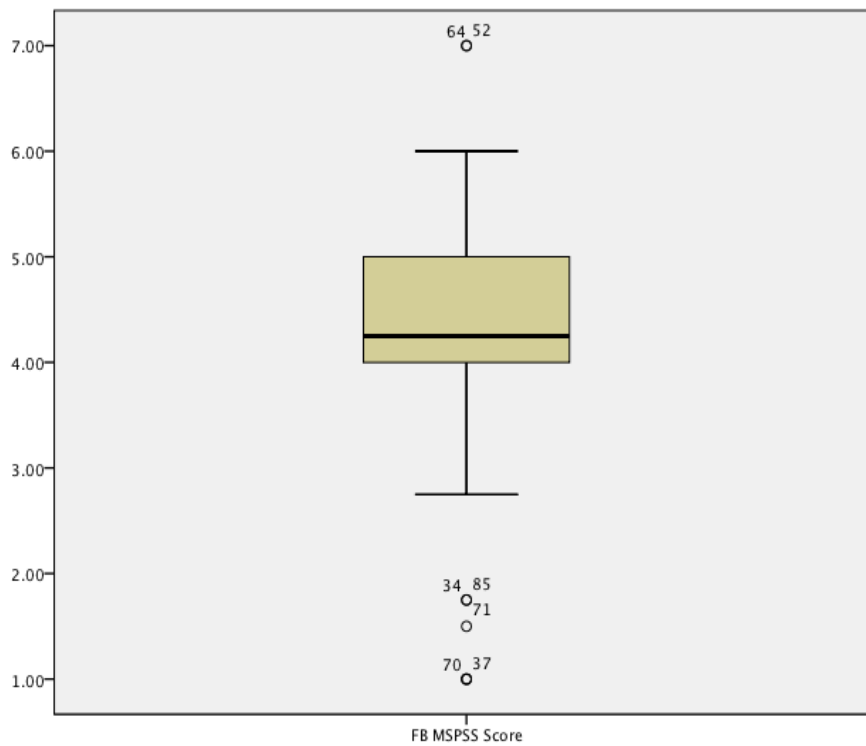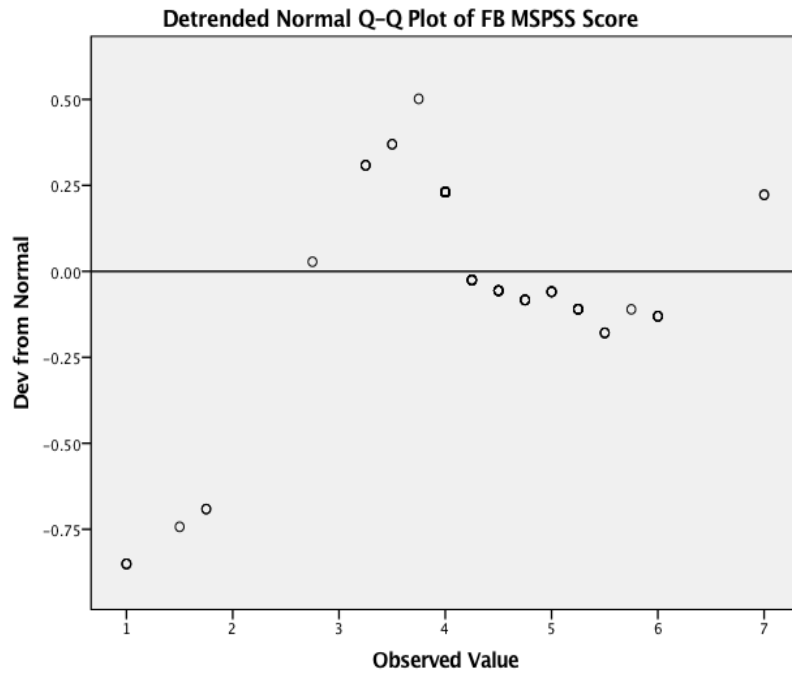
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Forum MSPSS Score	46	40.4%	68	59.6%	114	100.0%

Descriptives

			Statistic	Std. Error
Forum MSPSS Score	Mean		4.4891	.20412
	95% Confidence Interval for Mean	Lower Bound	4.0780	
		Upper Bound	4.9002	
	5% Trimmed Mean		4.5507	
	Median		4.7500	
	Variance		1.917	
	Std. Deviation		1.38439	
	Minimum		1.00	
	Maximum		7.00	
	Range		6.00	
	Interquartile Range		1.31	
	Skewness		-1.069	.350
	Kurtosis		1.681	.688

Extreme Values

			Case Number	Value
Forum MSPSS Score	Highest	1	52	7.00
		2	110	7.00
		3	8	6.00
		4	97	6.00
		5	100	6.00[a]
	Lowest	1	88	1.00
		2	70	1.00
		3	65	1.00
		4	48	1.00
		5	98	3.25[b]

a. Only a partial list of cases with the value 6.00 are shown in the table of upper extremes.

b. Only a partial list of cases with the value 3.25 are shown in the table of lower extremes.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Forum MSPSS Score	.210	46	.000	.886	46	.000

a. Lilliefors Significance Correction

Forum MSPSS Score
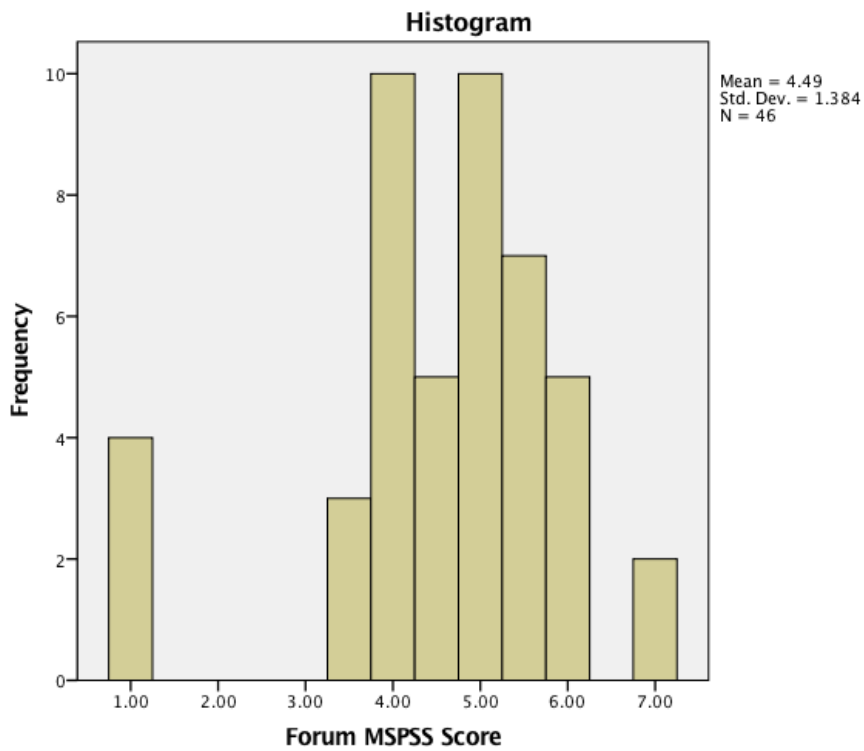
Forum MSPSS Score Stem-and-Leaf Plot

```
 Frequency   Stem &  Leaf

    4.00 Extremes    (=<1.0)
    2.00      3 .  22
    1.00      3 .  5
   12.00      4 .  000000000022
    7.00      4 .  5557777
    9.00      5 .  000000222
    5.00      5 .  55557
    4.00      6 .  0000
     .00      6 .
```

2.00   7 . 00

Stem width: 1.00
Each leaf: 1 case(s)
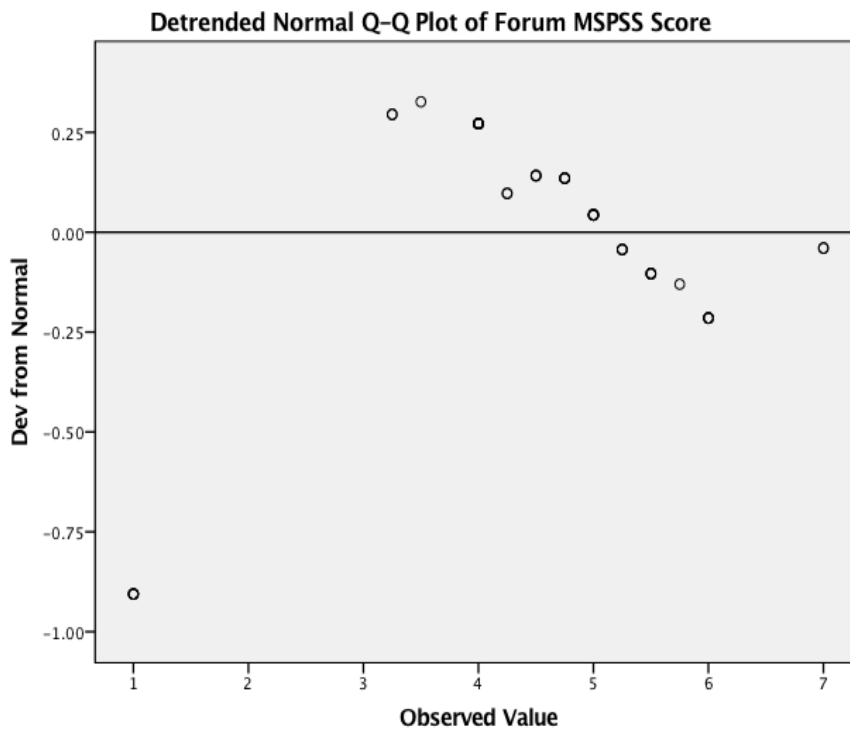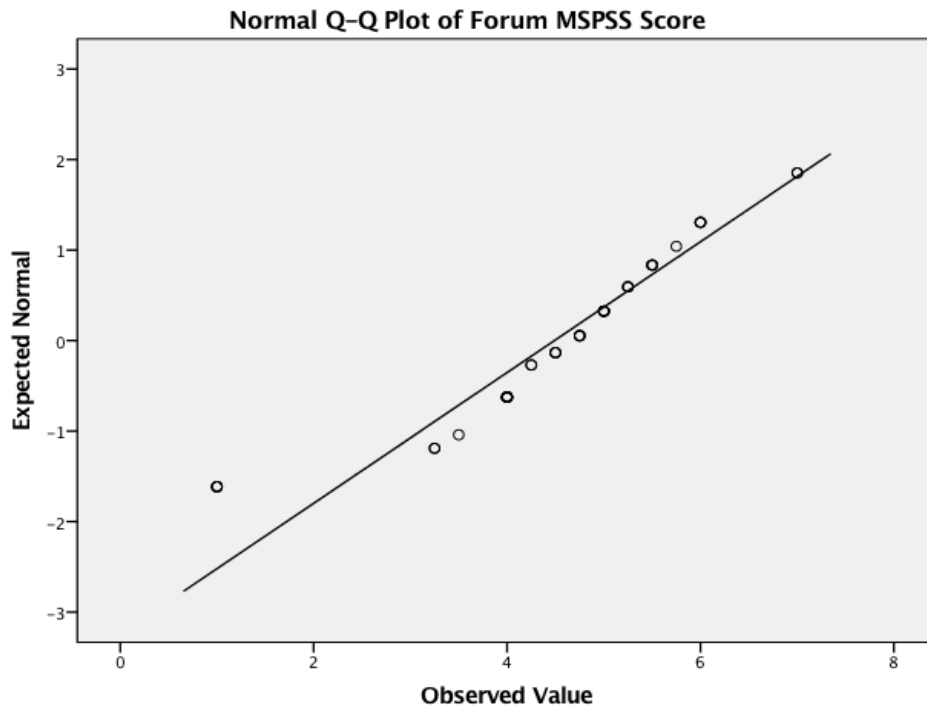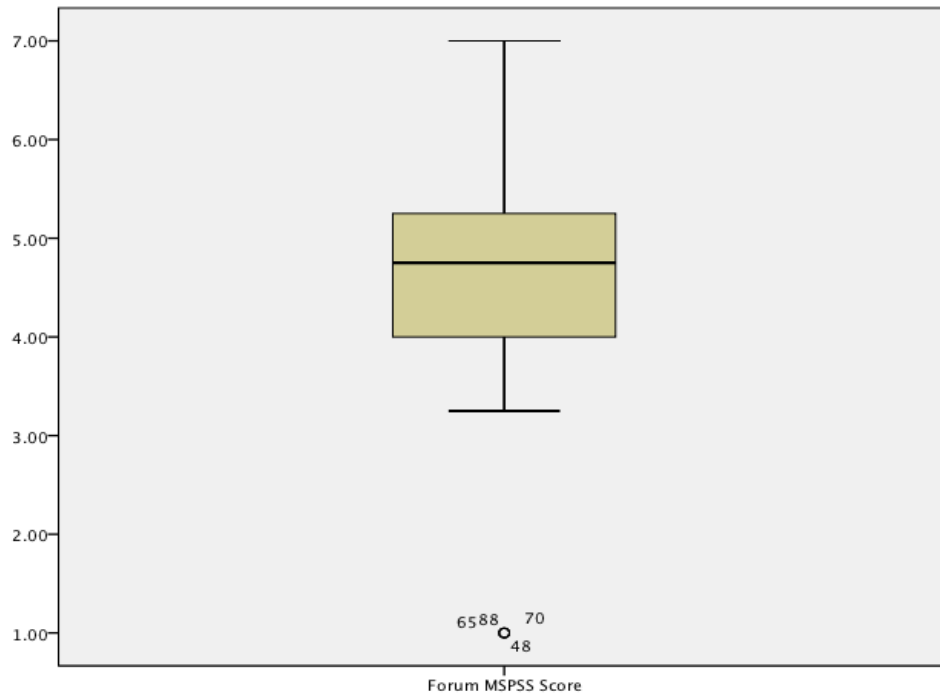
Normal Q-Q Plot of Forum MSPSS Score

(Plot: Expected Normal vs Observed Value)

Detrended Normal Q-Q Plot of Forum MSPSS Score

(Plot: Dev from Normal vs Observed Value)

Forum MSPSS Score

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
IOS Scale FB Groups	92	80.7%	22	19.3%	114	100.0%

Descriptives

			Statistic	Std. Error
IOS Scale FB Groups	Mean		1.97	.124
	95% Confidence Interval for Mean	Lower Bound	1.72	
		Upper Bound	2.21	
	5% Trimmed Mean		1.82	
	Median		2.00	
	Variance		1.417	
	Std. Deviation		1.190	
	Minimum		1	
	Maximum		7	
	Range		6	
	Interquartile Range		1	
	Skewness		1.783	.251
	Kurtosis		3.960	.498

Extreme Values

			Case Number	Value
IOS Scale FB Groups	Highest	1	99	7
		2	52	6
		3	11	5
		4	47	5
		5	8	4[a]
	Lowest	1	114	1
		2	113	1
		3	112	1
		4	108	1
		5	101	1[b]

a. Only a partial list of cases with the value 4 are shown in the table of upper extremes.

b. Only a partial list of cases with the value 1 are shown in the table of lower extremes.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
IOS Scale FB Groups	.272	92	.000	.761	92	.000

a. Lilliefors Significance Correction

IOS Scale FB Groups
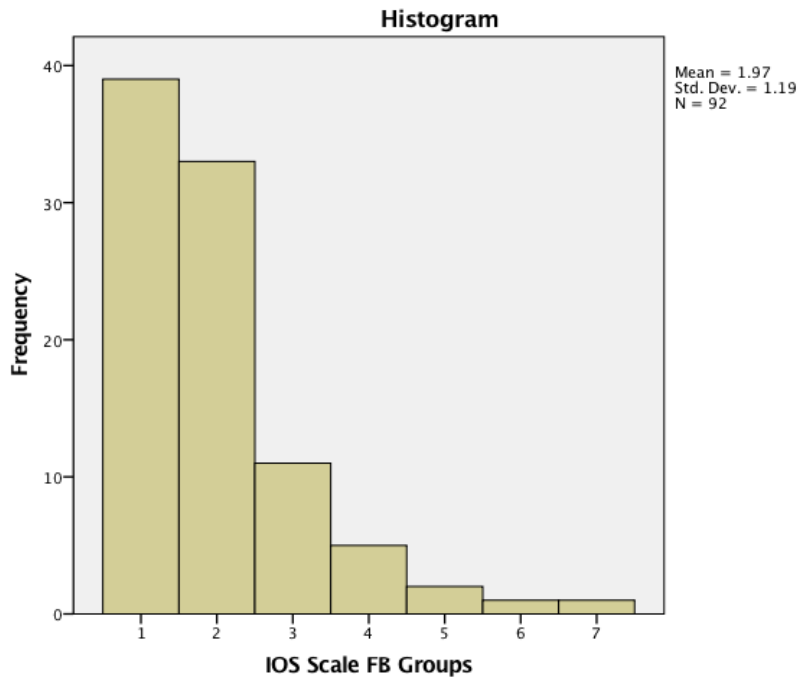
IOS Scale FB Groups Stem-and-Leaf Plot

 Frequency   Stem & Leaf

   39.00   1 . 000000000000000000000000000000000000000
    .00   1 .
    .00   1 .
    .00   1 .
    .00   1 .
   33.00   2 . 000000000000000000000000000000000
    .00   2 .
    .00   2 .
    .00   2 .
    .00   2 .
   11.00   3 . 00000000000
    9.00 Extremes   (>=4.0)

 Stem width: 1
 Each leaf: 1 case(s)

Normal Q–Q Plot of IOS Scale FB Groups

Detrended Normal Q–Q Plot of IOS Scale FB Groups

IOS Scale FB Groups
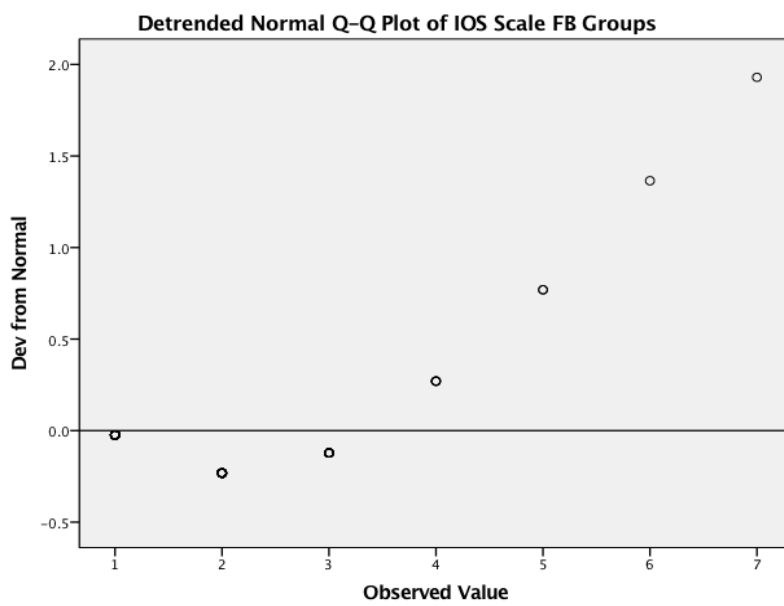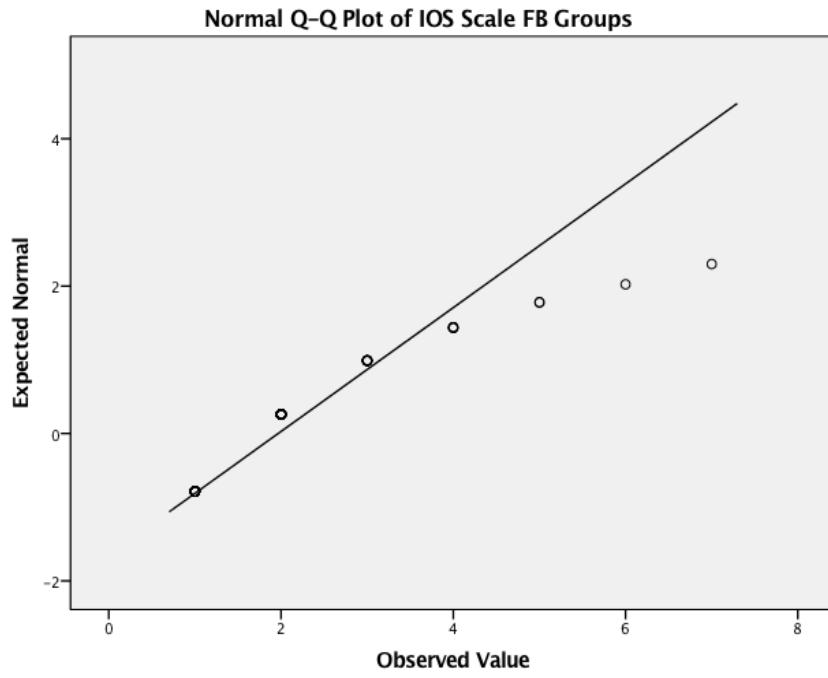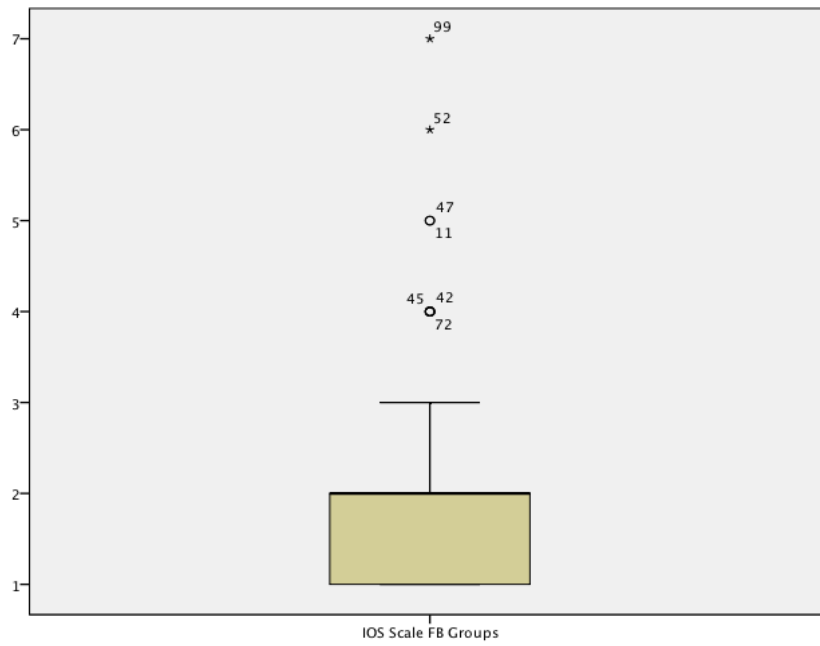
Explore

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
IOS Scale Forums	50	43.9%	64	56.1%	114	100.0%

Descriptives

			Statistic	Std. Error
IOS Scale Forums	Mean		2.46	.200
	95% Confidence Interval for Mean	Lower Bound	2.06	
		Upper Bound	2.86	
	5% Trimmed Mean		2.30	
	Median		2.00	
	Variance		2.009	
	Std. Deviation		1.417	
	Minimum		1	
	Maximum		7	
	Range		6	
	Interquartile Range		1	
	Skewness		1.675	.337
	Kurtosis		3.194	.662

Extreme Values

			Case Number	Value
IOS Scale Forums	Highest	1	52	7
		2	88	7
		3	8	6
		4	76	5
		5	16	4[a]
	Lowest	1	112	1
		2	107	1
		3	106	1
		4	102	1
		5	70	1[b]

a. Only a partial list of cases with the value 4 are shown in the table of upper extremes.

b. Only a partial list of cases with the value 1 are shown in the table of lower extremes.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
IOS Scale Forums	.267	50	.000	.793	50	.000

a. Lilliefors Significance Correction

IOS Scale Forums
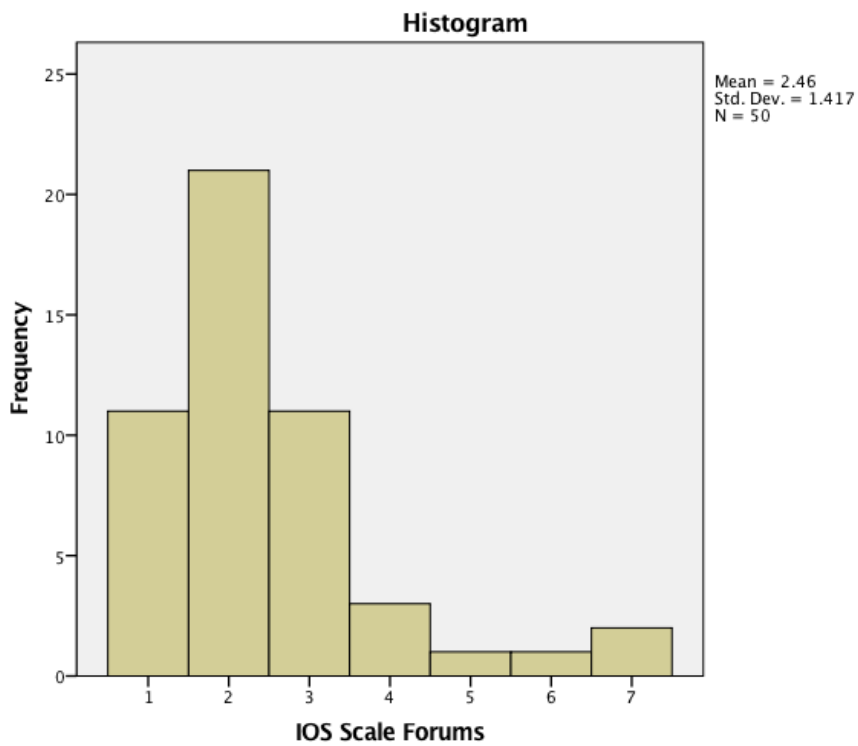
IOS Scale Forums Stem-and-Leaf Plot

 Frequency   Stem & Leaf

   11.00   1 . 00000000000
    .00   1 .
    .00   1 .
    .00   1 .
    .00   1 .
   21.00   2 . 000000000000000000000
    .00   2 .
    .00   2 .
    .00   2 .
    .00   2 .
   11.00   3 . 00000000000
    .00   3 .
    .00   3 .
    .00   3 .
    .00   3 .
    3.00   4 . 000
    4.00 Extremes   (>=5.0)

 Stem width: 1
 Each leaf: 1 case(s)

Normal Q–Q Plot of IOS Scale Forums

Detrended Normal Q–Q Plot of IOS Scale Forums
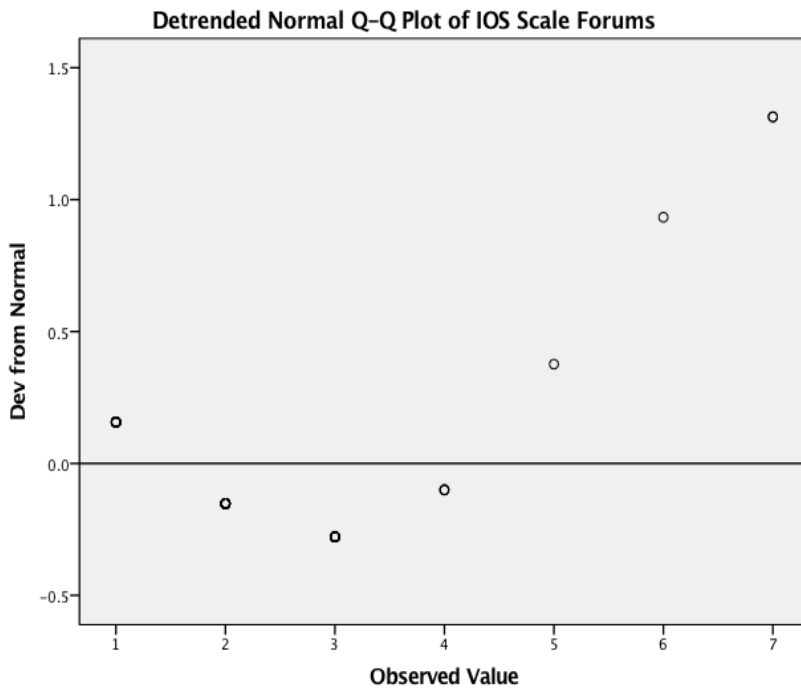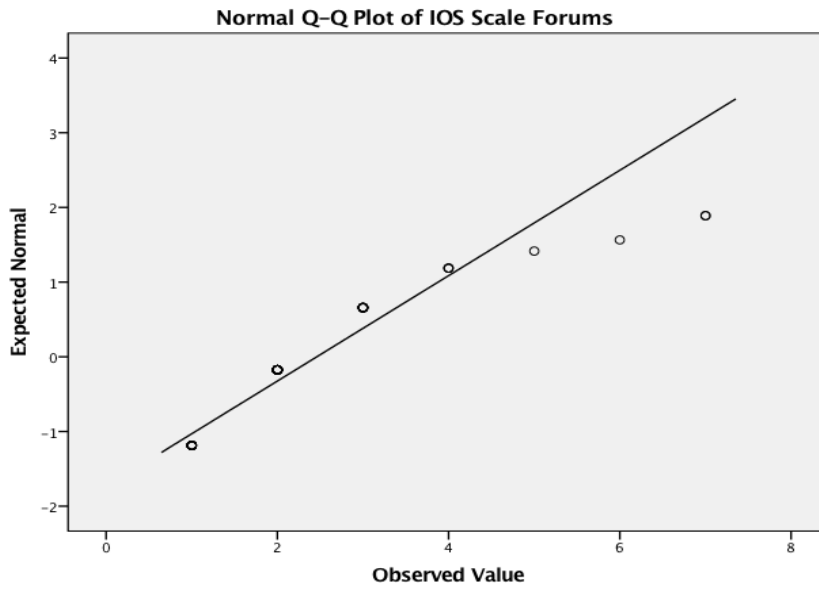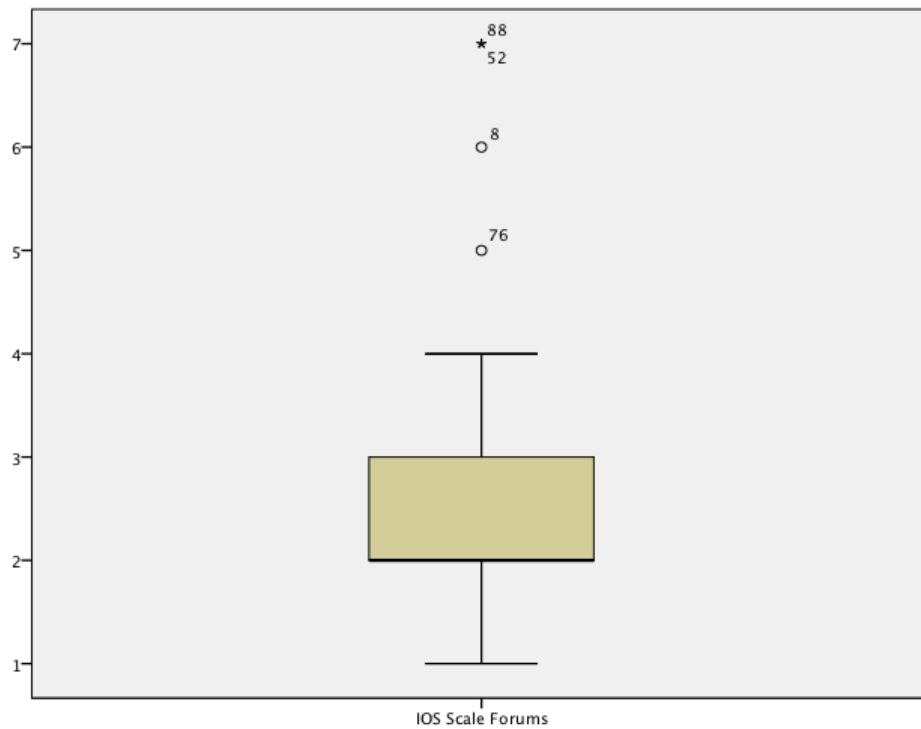
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
IOS score for participants who use only one platform	83	72.8%	31	27.2%	114	100.0%

Descriptives

			Statistic	Std. Error
IOS score for participants who use only one platform	Mean		1.84	.099
	95% Confidence Interval for Mean	Lower Bound	1.65	
		Upper Bound	2.04	
	5% Trimmed Mean		1.76	
	Median		2.00	
	Variance		.817	
	Std. Deviation		.904	
	Minimum		1	
	Maximum		5	
	Range		4	
	Interquartile Range		1	
	Skewness		1.131	.264
	Kurtosis		1.234	.523

Extreme Values

			Case Number	Value
IOS score for participants who use only one platform	Highest	1	11	5
		2	42	4
		3	45	4
		4	72	4
		5	78	4
	Lowest	1	113	1
		2	108	1
		3	107	1
		4	102	1
		5	87	1[a]

a. Only a partial list of cases with the value 1 are shown in the table of lower extremes.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
IOS score for participants who use only one platform	.250	83	.000	.800	83	.000

a. Lilliefors Significance Correction

IOS score for participants who use only one platform

Histogram

Mean = 1.84
Std. Dev. = .904
N = 83
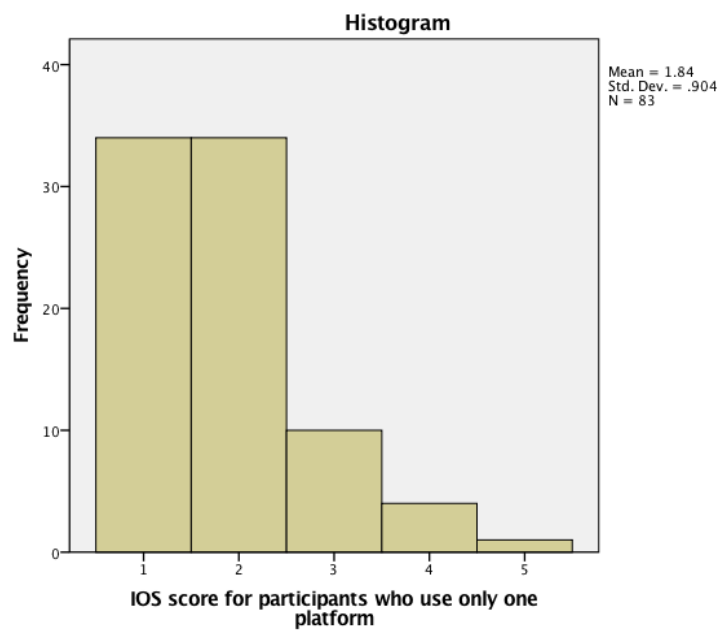
IOS score for participants who use only one platform Stem-and-Leaf Plot

 Frequency   Stem & Leaf

   34.00   1 . 0000000000000000000000000000000000
    .00   1 .
    .00   1 .
    .00   1 .
    .00   1 .
   34.00   2 . 0000000000000000000000000000000000
    .00   2 .
    .00   2 .
    .00   2 .
    .00   2 .
   10.00   3 . 0000000000
    5.00 Extremes   (>=4.0)

Stem width: 1
Each leaf: 1 case(s)

Normal Q–Q Plot of IOS score for participants who use only one platform

Detrended Normal Q–Q Plot of IOS score for participants who use only one platform
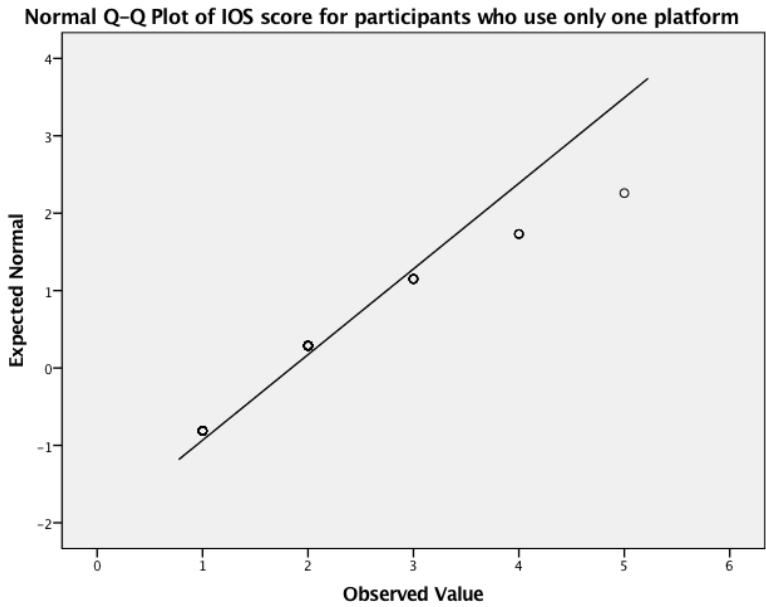
IOS score for participants who use only one platform
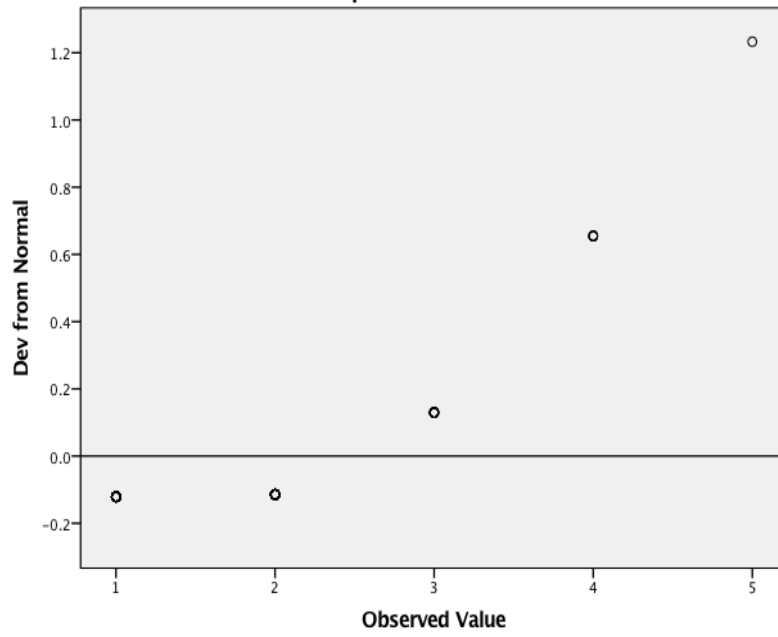
Cronbach Alpha output

SPSS Cronbach Alpha output for all the scales in the survey are listed below.

Scale: FB MSPSS

Case Processing Summary

		N	%
Cases	Valid	77	67.5
	Excluded[a]	37	32.5
	Total	114	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
.904	.906	4

Item Statistics

	Mean	Std. Deviation	N
@MSPSS_FB1	4.57	1.208	77
@MSPSS_FB2	4.19	1.328	77
@MSPSS_FB3	4.12	1.432	77
@MSPSS_FB4	4.31	1.369	77

Inter-Item Correlation Matrix

	@MSPSS_FB1	@MSPSS_FB2	@MSPSS_FB3	@MSPSS_FB4
@MSPSS_FB1	1.000	.750	.569	.742
@MSPSS_FB2	.750	1.000	.652	.842
@MSPSS_FB3	.569	.652	1.000	.685
@MSPSS_FB4	.742	.842	.685	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
@MSPSS_FB1	12.62	13.922	.758	.606	.887
@MSPSS_FB2	13.00	12.500	.846	.750	.854
@MSPSS_FB3	13.08	13.020	.691	.491	.913
@MSPSS_FB4	12.88	12.131	.860	.761	.848

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
17.19	22.212	4.713	4

Reliability

Scale: Forum MSPSS

Case Processing Summary

		N	%
Cases	Valid	46	40.4
	Excluded[a]	68	59.6
	Total	114	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
.948	.948	4

Item Statistics

	Mean	Std. Deviation	N
@MSPSS_Forum1	4.61	1.483	46
@MSPSS_Forum2	4.17	1.435	46
@MSPSS_Forum3	4.50	1.546	46
@MSPSS_Forum4	4.67	1.492	46

Inter-Item Correlation Matrix

	@MSPSS_Forum1	@MSPSS_Forum2	@MSPSS_Forum3	@MSPSS_Forum4
@MSPSS_Forum1	1.000	.795	.882	.825
@MSPSS_Forum2	.795	1.000	.812	.816
@MSPSS_Forum3	.882	.812	1.000	.786
@MSPSS_Forum4	.825	.816	.786	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
@MSPSS_Forum1	13.35	17.387	.896	.825	.924
@MSPSS_Forum2	13.78	18.129	.858	.744	.936
@MSPSS_Forum3	13.46	17.009	.884	.812	.928
@MSPSS_Forum4	13.28	17.674	.858	.751	.936

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
17.96	30.665	5.538	4

Reliability

Scale: Satisfaction With Life Scale

Case Processing Summary

		N	%
Cases	Valid	113	99.1
	Excluded[a]	1	.9
	Total	114	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
.934	.935	5

Item Statistics

	Mean	Std. Deviation	N
Satisfaction With Life 1	4.23	1.747	113
Satisfaction With Life 2	4.42	1.806	113
Satisfaction With Life 3	4.30	1.817	113
Satisfaction With Life 4	4.49	1.783	113
Satisfaction With Life 5	3.42	1.875	113

Inter-Item Correlation Matrix

	Satisfaction With Life 1	Satisfaction With Life 2	Satisfaction With Life 3	Satisfaction With Life 4	Satisfaction With Life 5
Satisfaction With Life 1	1.000	.860	.824	.769	.646
Satisfaction With Life 2	.860	1.000	.802	.754	.628
Satisfaction With Life 3	.824	.802	1.000	.778	.688
Satisfaction With Life 4	.769	.754	.778	1.000	.669
Satisfaction With Life 5	.646	.628	.688	.669	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Satisfaction With Life 1	16.63	41.843	.871	.800	.911
Satisfaction With Life 2	16.44	41.517	.851	.775	.914
Satisfaction With Life 3	16.56	41.052	.869	.761	.911
Satisfaction With Life 4	16.37	42.236	.827	.686	.919
Satisfaction With Life 5	17.43	43.426	.714	.524	.940

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
20.86	64.587	8.037	5

Reliability

Scale: MSPSS Offline

Case Processing Summary

		N	%
Cases	Valid	107	93.9
	Excluded[a]	7	6.1
	Total	114	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
.941	.944	12

Item Statistics

	Mean	Std. Deviation	N
@MSPSS1	5.40	1.898	107
@MSPSS2	5.61	1.763	107
@MSPSS3	4.81	1.838	107
@MSPSS4	4.29	2.000	107
@MSPSS5	5.53	1.766	107
@MSPSS6	5.57	1.318	107
@MSPSS7	5.42	1.428	107
@MSPSS8	4.20	2.007	107
@MSPSS9	5.68	1.438	107
@MSPSS10	5.48	1.880	107
@MSPSS11	4.43	1.996	107
@MSPSS12	5.51	1.430	107

Inter-Item Correlation Matrix

	@MSPSS1	@MSPSS2	@MSPSS3	@MSPSS4	@MSPSS5	@MSPSS6	@MSPSS7	@MSPSS8	@MSPSS9
@MSPSS1	1.000	.950	.476	.538	.828	.552	.606	.408	.659
@MSPSS2	.950	1.000	.449	.506	.792	.519	.565	.374	.642
@MSPSS3	.476	.449	1.000	.874	.400	.473	.541	.836	.538
@MSPSS4	.538	.506	.874	1.000	.455	.470	.548	.839	.498
@MSPSS5	.828	.792	.400	.455	1.000	.476	.561	.388	.591
@MSPSS6	.552	.519	.473	.470	.476	1.000	.894	.396	.793
@MSPSS7	.606	.565	.541	.548	.561	.894	1.000	.465	.819
@MSPSS8	.408	.374	.836	.839	.388	.396	.465	1.000	.473
@MSPSS9	.659	.642	.538	.498	.591	.793	.819	.473	1.000
@MSPSS10	.853	.834	.441	.470	.894	.510	.575	.383	.594
@MSPSS11	.422	.394	.860	.836	.403	.433	.495	.827	.495
@MSPSS12	.559	.530	.546	.452	.462	.824	.822	.435	.810

Inter-Item Correlation Matrix

	@MSPSS10	@MSPSS11	@MSPSS12
@MSPSS1	.853	.422	.559
@MSPSS2	.834	.394	.530
@MSPSS3	.441	.860	.546
@MSPSS4	.470	.836	.452
@MSPSS5	.894	.403	.462
@MSPSS6	.510	.433	.824
@MSPSS7	.575	.495	.822
@MSPSS8	.383	.827	.435
@MSPSS9	.594	.495	.810
@MSPSS10	1.000	.390	.484
@MSPSS11	.390	1.000	.451
@MSPSS12	.484	.451	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
@MSPSS1	56.53	219.006	.790	.924	.934
@MSPSS2	56.33	223.977	.756	.908	.935
@MSPSS3	57.12	221.976	.760	.861	.935
@MSPSS4	57.64	217.684	.768	.855	.935
@MSPSS5	56.40	225.658	.720	.833	.937
@MSPSS6	56.36	236.706	.704	.834	.938
@MSPSS7	56.51	231.365	.773	.858	.935
@MSPSS8	57.74	222.063	.684	.779	.938
@MSPSS9	56.25	230.870	.779	.779	.935
@MSPSS10	56.46	222.081	.738	.854	.936

@MSPSS 11	57.50	221.139	.705	.798	.938
@MSPSS 12	56.42	233.982	.708	.791	.937

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
61.93	266.986	16.340	12

Reliability

Scale: MSPSS sig other

Case Processing Summary

		N	%
Cases	Valid	111	97.4
	Excluded[a]	3	2.6
	Total	114	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
.959	.959	4

Item Statistics

	Mean	Std. Deviation	N
@MSPSS1	5.41	1.876	111
@MSPSS2	5.62	1.738	111
@MSPSS5	5.56	1.741	111
@MSPSS10	5.48	1.848	111

Inter-Item Correlation Matrix

	@MSPSS1	@MSPSS2	@MSPSS5	@MSPSS10
@MSPSS1	1.000	.944	.825	.842
@MSPSS2	.944	1.000	.792	.830
@MSPSS5	.825	.792	1.000	.888
@MSPSS10	.842	.830	.888	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
@MSPSS1	16.66	25.300	.921	.908	.939
@MSPSS2	16.45	26.904	.903	.896	.944
@MSPSS5	16.51	27.270	.874	.811	.953
@MSPSS10	16.59	25.898	.897	.833	.946

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
22.07	46.195	6.797	4

/* family
Reliability
Scale: MSPSS family

Case Processing Summary

		N	%
Cases	Valid	109	95.6
	Excluded[a]	5	4.4
	Total	114	100.0

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

116

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.953	.954	4

Item Statistics

	Mean	Std. Deviation	N
@MSPSS3	4.85	1.845	109
@MSPSS4	4.28	1.986	109
@MSPSS8	4.20	1.990	109
@MSPSS11	4.44	1.983	109

Inter-Item Correlation Matrix

	@MSPSS3	@MSPSS4	@MSPSS8	@MSPSS11
@MSPSS3	1.000	.858	.828	.853
@MSPSS4	.858	1.000	.833	.826
@MSPSS8	.828	.833	1.000	.827
@MSPSS11	.853	.826	.827	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
@MSPSS 3	12.93	31.458	.899	.812	.935
@MSPSS 4	13.50	30.141	.889	.794	.938
@MSPSS 8	13.58	30.320	.876	.767	.942
@MSPSS 11	13.34	30.263	.883	.784	.939

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
17.78	53.470	7.312	4

/* friends

Reliability Scale: MSPSS friends

Case Processing Summary

		N	%
Cases	Valid	113	99.1
	Excluded[a]	1	.9
	Total	114	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	.944	4

Item Statistics

	Mean	Std. Deviation	N
@MSPSS6	5.58	1.314	113
@MSPSS7	5.44	1.445	113
@MSPSS9	5.65	1.475	113
@MSPSS12	5.47	1.518	113

Inter-Item Correlation Matrix

	@MSPSS6	@MSPSS7	@MSPSS9	@MSPSS12
@MSPSS6	1.000	.888	.787	.806
@MSPSS7	.888	1.000	.776	.767
@MSPSS9	.787	.776	1.000	.827
@MSPSS12	.806	.767	.827	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
@MSPSS6	16.57	16.944	.891	.828	.919
@MSPSS7	16.71	16.173	.864	.804	.924
@MSPSS9	16.50	16.074	.851	.737	.929
@MSPSS12	16.68	15.719	.854	.748	.928

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
22.15	28.308	5.320	4

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
MSPSS Offline Scale Score	107	6.00	1.00	7.00	5.1612	1.36164
MSPSS Family Subscale Score	109	6.00	1.00	7.00	4.4450	1.82807
MSPSS Friends Subscale Score	113	6.00	1.00	7.00	5.5376	1.33012
MSPSS Sig Other Subscale Score	111	6.00	1.00	7.00	5.5180	1.69917
FB MSPSS Score	77	6.00	1.00	7.00	4.2987	1.17823
Forum MSPSS Score	46	6.00	1.00	7.00	4.4891	1.38439
IOS Scale FB Groups	92	6	1	7	1.97	1.190
IOS Scale Forums	50	6	1	7	2.46	1.417
IOS score for participants who use only one platform	83	4	1	5	1.84	.904
Valid N (listwise)	1					

Hypotheses SPSS output

Hypothesis 1.1 and 1.2

Descriptive Statistics

	Mean	Std. Deviation	N
Satisfaction With Life Scale Total	20.86	8.037	113
FB MSPSS Score	4.2987	1.17823	77
Forum MSPSS Score	4.4891	1.38439	46

Correlations

		Satisfaction With Life Scale Total	FB MSPSS Score	Forum MSPSS Score
Satisfaction With Life Scale Total	Pearson Correlation	1	-.084	-.089
	Sig. (2-tailed)		.470	.557
	N	113	77	46
FB MSPSS Score	Pearson Correlation	-.084	1	.634**
	Sig. (2-tailed)	.470		.001
	N	77	77	25
Forum MSPSS Score	Pearson Correlation	-.089	.634**	1
	Sig. (2-tailed)	.557	.001	
	N	46	25	46

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

Correlations

			Satisfaction With Life Scale Total	FB MSPSS Score	Forum MSPSS Score
Spearman's rho	Satisfaction With Life Scale Total	Correlation Coefficient	1.000	-.073	-.126
		Sig. (2-tailed)	.	.527	.402
		N	113	77	46
	FB MSPSS Score	Correlation Coefficient	-.073	1.000	.665**
		Sig. (2-tailed)	.527	.	.000
		N	77	77	25
	Forum MSPSS Score	Correlation Coefficient	-.126	.665**	1.000
		Sig. (2-tailed)	.402	.000	.
		N	46	25	46

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

Hypothesis 2 Mann-Whitney output

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
IOS score for participants who use only one platform	83	1.84	.904	1	5
Type of Support Platform Use	114	2.07	.661	1	3

Ranks

	Type of Support Platform Use	N	Mean Rank	Sum of Ranks
IOS score for participants who use only one platform	LGBT Forum only users	20	50.55	1011.00
	LGBT Facebook groups only users	63	39.29	2475.00
	Total	83		

Test Statistics[a]

	IOS score for participants who use only one platform
Mann-Whitney U	459.000
Wilcoxon W	2475.000
Z	-1.963
Asymp. Sig. (2-tailed)	.050
Exact Sig. (2-tailed)	.049
Exact Sig. (1-tailed)	.026
Point Probability	.001

a. Grouping Variable: Type of Support Platform Use

Case Processing Summary

IOS score for participants who use only one platform		Cases					
		Valid		Missing		Total	
	Type of Support Platform Use	N	Percent	N	Percent	N	Percent
	LGBT Forum only users	20	95.2%	1	4.8%	21	100.0%
	LGBT Facebook groups only users	63	98.4%	1	1.6%	64	100.0%

Descriptives[a]

	Type of Support Platform Use			Statistic	Std. Error
IOS score for participants who use only one platform	LGBT Forum only users	Mean		2.10	.176
		95% Confidence Interval for Mean	Lower Bound	1.73	
			Upper Bound	2.47	
		5% Trimmed Mean		2.06	
		Median		2.00	
		Variance		.621	
		Std. Deviation		.788	
		Minimum		1	
		Maximum		4	
		Range		3	
		Interquartile Range		1	
		Skewness		.531	.512
		Kurtosis		.490	.992
	LGBT Facebook groups only users	Mean		1.76	.117
		95% Confidence Interval for Mean	Lower Bound	1.53	
			Upper Bound	2.00	
		5% Trimmed Mean		1.66	
		Median		2.00	
		Variance		.862	
		Std. Deviation		.928	
		Minimum		1	
		Maximum		5	
		Range		4	
		Interquartile Range		1	
		Skewness		1.375	.302
		Kurtosis		1.862	.595

a. There are no valid cases for IOS score for participants who use only one platform when Type of Support Platform Use = 3.000. Statistics cannot be computed for this level.

Hypothesis 3.1 and 3.2

Correlational output

Descriptive Statistics

	Mean	Std. Deviation	N
Satisfaction With Life Scale Total	20.86	8.037	113
IOS Scale FB Groups	1.97	1.190	92
IOS Scale Forums	2.46	1.417	50

Correlations

		Satisfaction With Life Scale Total	IOS Scale FB Groups	IOS Scale Forums
Satisfaction With Life Scale Total	Pearson Correlation	1	-.043	-.012
	Sig. (2-tailed)		.682	.936
	N	113	92	50
IOS Scale FB Groups	Pearson Correlation	-.043	1	.336
	Sig. (2-tailed)	.682		.070
	N	92	92	30
IOS Scale Forums	Pearson Correlation	-.012	.336	1
	Sig. (2-tailed)	.936	.070	
	N	50	30	50

Correlations

			Satisfaction With Life Scale Total	IOS Scale FB Groups	IOS Scale Forums
Spearman's rho	Satisfaction With Life Scale Total	Correlation Coefficient	1.000	.018	-.032
		Sig. (2-tailed)	.	.867	.823
		N	113	92	50
	IOS Scale FB Groups	Correlation Coefficient	.018	1.000	.339
		Sig. (2-tailed)	.867	.	.067
		N	92	92	30
	IOS Scale Forums	Correlation Coefficient	-.032	.339	1.000
		Sig. (2-tailed)	.823	.067	.
		N	50	30	50
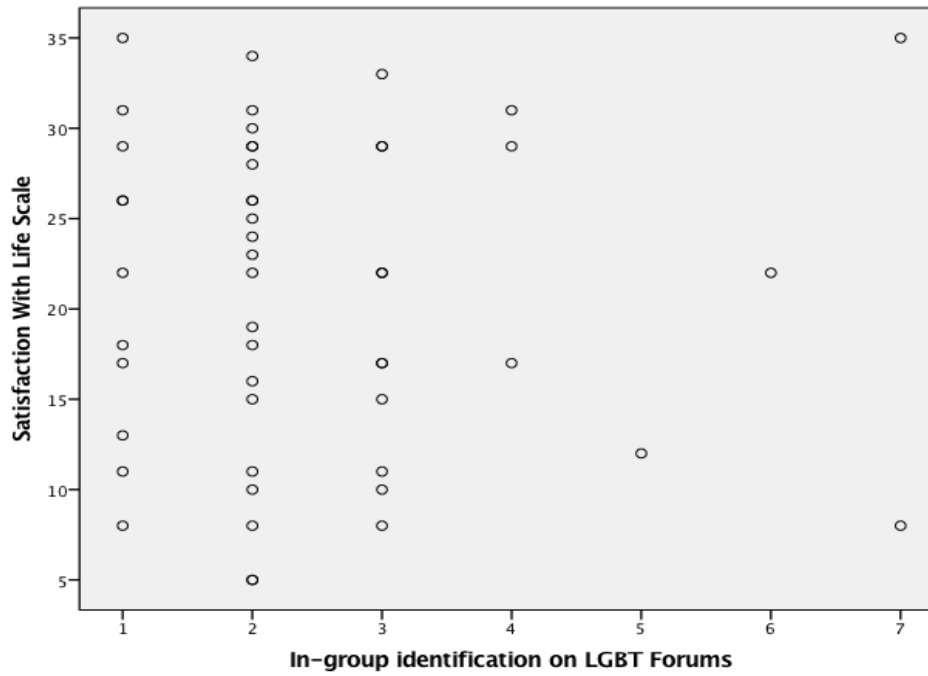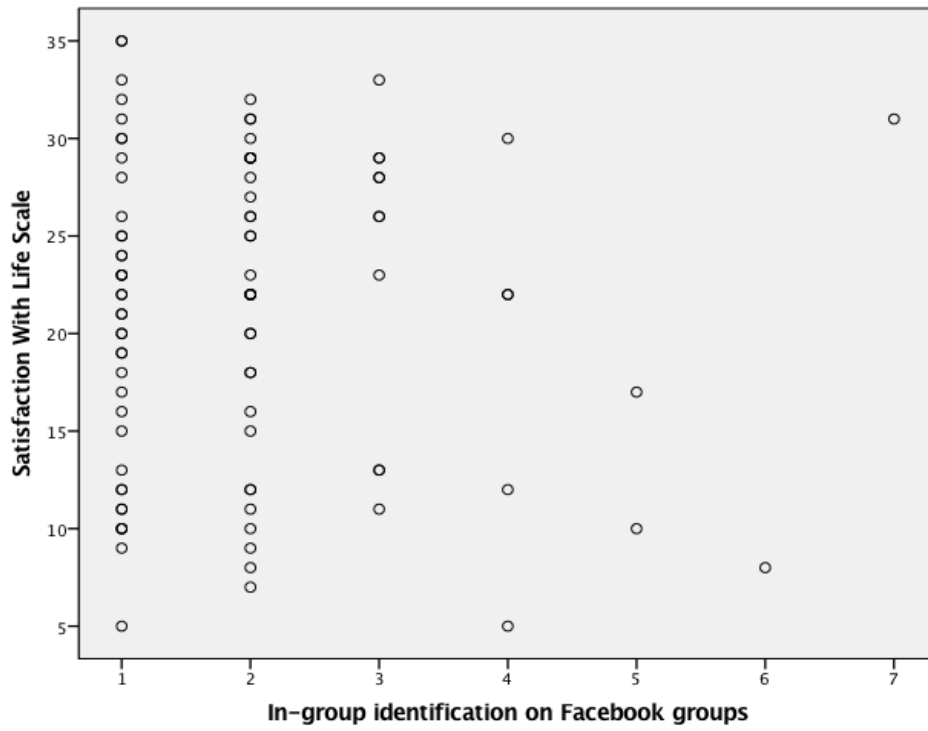
Descriptive output for Tables 1-8

FREQUENCIES VARIABLES=Nationality CurrentlyLive RaceEthnicity LocationType Gender
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  OutAtLeastOneOtherPerson OutToFriends OutToParents OutToSiblings OutToWork OutToSchoolCollege
  OutToYouthOrganisations OutToFriendsOnlineSetting sexualOrientationComfortable
  transgenderComfortable TimeSpentLGBTForums_grouped TimeSpentFBLGBT_grouped typesSupportPlatformUse
  SWLS_Total_grouped
 /ORDER=ANALYSIS.

Frequencies

Table 1.

Statistics

		Nationality	Currently live in	Race Ethnicity	Currently live in or close to...	Gender	Highest level of education	Main occupation status
N	Valid	113	114	112	114	113	113	110
	Missing	1	0	2	0	1	1	4

Statistics

		Transgender identity (Y/N)	Sexual Orientation	Out to at least one other person	Out To Friends	Out To Parents	Out To Siblings
N	Valid	114	113	111	114	111	114
	Missing	0	1	3	0	3	0

Statistics

		Out To Work	Out To School College	Out To Youth Organisations	Out To Friends Online Setting	Comfort with sexual orientation	Comfort with transgender identity
N	Valid	112	103	102	108	114	13
	Missing	2	11	12	6	0	101

Statistics

		Time spent on forums	Time spent on Facebook groups	Type of Support Platform Use	SWLS Grouped
N	Valid	50	82	114	113
	Missing	64	32	0	1

Table 1.

Nationality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	American	10	8.8	8.8	8.8
	Belgian	2	1.8	1.8	10.6
	Brazilian	1	.9	.9	11.5
	British	6	5.3	5.3	16.8
	Canadian	1	.9	.9	17.7
	Dutch	1	.9	.9	18.6
	Irish	89	78.1	78.8	97.3
	Indian	1	.9	.9	98.2
	Iraqi	1	.9	.9	99.1
	Polish	1	.9	.9	100.0
	Total	113	99.1	100.0	
Missing	-9999	1	.9		
Total		114	100.0		

Currently live in

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Republic of Ireland	98	86.0	86.0	86.0
	Outside the island of Ireland	16	14.0	14.0	100.0
	Total	114	100.0	100.0	

Race Ethnicity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	White	103	90.4	92.0	92.0
	Black	2	1.8	1.8	93.8
	Hispanic/Latino	1	.9	.9	94.6
	Asian	2	1.8	1.8	96.4
	Mixed race	2	1.8	1.8	98.2
	Unknown	2	1.8	1.8	100.0
	Total	112	98.2	100.0	
Missing	-9999	2	1.8		
Total		114	100.0		

Currently live in or close to...

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A city	56	49.1	49.1	49.1
	A suburb	30	26.3	26.3	75.4
	A town	15	13.2	13.2	88.6
	A village	13	11.4	11.4	100.0
	Total	114	100.0	100.0	

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	55	48.2	48.7	48.7
	Female	55	48.2	48.7	97.3
	Non-binary	3	2.6	2.7	100.0
	Total	113	99.1	100.0	
Missing	-9999	1	.9		
Total		114	100.0		

Highest level of education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary education	3	2.6	2.7	2.7
	Secondary education	21	18.4	18.6	21.2
	Technical education (e.g. Apprenticeship)	3	2.6	2.7	23.9
	Third level certificate/diploma	14	12.3	12.4	36.3
	Third level primary degree	26	22.8	23.0	59.3
	Postgraduate certificate or diploma	12	10.5	10.6	69.9
	Postgraduate Degree (Masters)	29	25.4	25.7	95.6
	Doctorate (PhD)	5	4.4	4.4	100.0
	Total	113	99.1	100.0	
Missing	-9999	1	.9		
Total		114	100.0		

Main occupation status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Enrolled in school	2	1.8	1.8	1.8
	Enrolled in college	30	26.3	27.3	29.1
	Employed full-time	55	48.2	50.0	79.1
	Employed part-time	13	11.4	11.8	90.9
	Unemployed	4	3.5	3.6	94.5
	Retired from work	3	2.6	2.7	97.3
	Unable to work due to sickness or disability	3	2.6	2.7	100.0
	Total	110	96.5	100.0	
Missing	-9999	4	3.5		
Total		114	100.0		

Table 2.

Transgender identity (Y/N)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	13	11.4	11.4	11.4
	No	101	88.6	88.6	100.0
	Total	114	100.0	100.0	

Sexual Orientation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Gay or Lesbian	83	72.8	73.5	73.5
	Bisexual	17	14.9	15.0	88.5
	Questioning	1	.9	.9	89.4
	Heterosexual	2	1.8	1.8	91.2
	Pansexual	2	1.8	1.8	92.9
	Queer	8	7.0	7.1	100.0
	Total	113	99.1	100.0	
Missing	-9999	1	.9		
Total		114	100.0		

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Table 3.

Out to at least one other person

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	111	97.4	100.0	100.0
Missing	-9999	3	2.6		
Total		114	100.0		

Out To Friends

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	1	.9	.9	.9
	Some	32	28.1	28.1	28.9
	All	81	71.1	71.1	100.0
	Total	114	100.0	100.0	

Out To Parents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	16	14.0	14.4	14.4
	Some	17	14.9	15.3	29.7
	All	78	68.4	70.3	100.0
	Total	111	97.4	100.0	
Missing	-9999	3	2.6		
Total		114	100.0		

Out To Siblings

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	16	14.0	14.0	14.0
	Some	13	11.4	11.4	25.4
	All	85	74.6	74.6	100.0
	Total	114	100.0	100.0	

Out To Work

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	21	18.4	18.8	18.8
	Some	39	34.2	34.8	53.6
	All	52	45.6	46.4	100.0
	Total	112	98.2	100.0	
Missing	-9999	2	1.8		
Total		114	100.0		

Out To School College

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	15	13.2	14.6	14.6
	Some	29	25.4	28.2	42.7
	All	59	51.8	57.3	100.0
	Total	103	90.4	100.0	
Missing	-9999	11	9.6		
Total		114	100.0		

Out To Youth Organisations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	23	20.2	22.5	22.5
	Some	22	19.3	21.6	44.1
	All	57	50.0	55.9	100.0
	Total	102	89.5	100.0	
Missing	-9999	12	10.5		
Total		114	100.0		

Out To Friends Online Setting

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	11	9.6	10.2	10.2
	Some	25	21.9	23.1	33.3
	All	72	63.2	66.7	100.0
	Total	108	94.7	100.0	
Missing	-9999	6	5.3		
Total		114	100.0		

Table 4.

Comfort with sexual orientation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very comfortable	57	50.0	50.0	50.0
	Comfortable	38	33.3	33.3	83.3
	Neither comfortable nor uncomfortable	13	11.4	11.4	94.7
	Uncomfortable	4	3.5	3.5	98.2
	Very uncomfortable	2	1.8	1.8	100.0
	Total	114	100.0	100.0	

Table 5.

Comfort with transgender identity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very comfortable	2	1.8	15.4	15.4
	Comfortable	5	4.4	38.5	53.8
	Neither comfortable nor uncomfortable	3	2.6	23.1	76.9
	Very uncomfortable	3	2.6	23.1	100.0
	Total	13	11.4	100.0	
Missing	-9999	101	88.6		
Total		114	100.0		

Table 6.

Type of Support Platform Use

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LGBT Forum only users	21	18.4	18.4	18.4
	LGBT Facebook groups only users	64	56.1	56.1	74.6
	LGBT Facebook groups and forum users	29	25.4	25.4	100.0
	Total	114	100.0	100.0	

Time spent on forums

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 10 minutes	11	9.6	22.0	22.0
	10 to 30 minutes	26	22.8	52.0	74.0
	31 to 60 minutes	7	6.1	14.0	88.0
	1-2 hours	2	1.8	4.0	92.0
	2-3 hours	4	3.5	8.0	100.0
	Total	50	43.9	100.0	
Missing	-9999	64	56.1		
Total		114	100.0		

Time spent on Facebook groups

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 10 minutes	40	35.1	48.8	48.8
	10 to 30 minutes	26	22.8	31.7	80.5
	31 to 60 minutes	9	7.9	11.0	91.5
	1-2 hours	2	1.8	2.4	93.9
	2-3 hours	3	2.6	3.7	97.6
	more than 3 hours	2	1.8	2.4	100.0
	Total	82	71.9	100.0	
Missing	-9999	32	28.1		
Total		114	100.0		

Table 7. Based on Scale normality output above.

Table 8.

SWLS Grouped

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Extremely Dissatisfied	11	9.6	9.7	9.7
	Dissatisfied	18	15.8	15.9	25.7
	Slightly below average in life satisfaction	16	14.0	14.2	39.8
	Average score	25	21.9	22.1	61.9
	Very high score	26	22.8	23.0	85.0
	Highly satisfied	17	14.9	15.0	100.0
	Total	113	99.1	100.0	
Missing	-9999	1	.9		
Total		114	100.0		

Appendix F

Summary of qualitative themes per survey question and id of respondents who mentioned each.

LGBT support in the local community

Participants felt there was sufficient LGBT support in the local community	"Yes, very much so. But I live in the city centre, so that colours my experiences a lot." (P69)	P1 P4 P5 P7 P8 P9 P11 P12 P14 P17 P18 P21 P30 P33 P34 P35 P36 P39 P40 P42 P43 P45 P53 P54 P55 P56 P59 P62 P65 P66 P69 P70 P81 P82 P86 P93 P95 P103 P104 P106 P108 P109 P111 P112
Participants felt there was insufficient LGBT support in the local community	"There's not really local LGBT community here but I feel like there's a lot in Dublin, where I'm going to meet people from the community." (P87)	P2 P3 P6 P10 P13 P15 P16 P20 P22 P28 P31 P47 P48 P50 P52 P58 P60 P61 P63 P64 P71 P72 P73 P74 P75 P76 P79 P80 P83 P84 P87 P88 P89 P90 P92 P96 P97 P100 P102 P105 P110 P113 P114
Participants were unsure about, or hadn't investigated, local LGBT support	"I haven't investigated but I haven't noticed any." (P24)	P24 P25 P27 P38 P78 P99 P107

Thoughts on sexual orientation

Participants were concerned about how their family or work colleagues would react to their sexual orientation	"I am comfortable with peers but don't feel it would be understood by my family." (P103)	P15 P37 P103
Participants weren't concerned about reactions to their sexual orientation	"Proud to be gay." (P91)	P91 P93

Concerns about coming out

Participants were concerned about how their family or work colleagues would react following sexual identity disclosure	"How people see me at work. Nervous about the colleague not liking me or respecting me." (P77)	P3 P6 P14 P19 P27 P28 P39 P41 P42 P44 P48 P53 P59 P71 P77 P87 P100
Participants were concerned about rejection on the basis of religious or cultural beliefs following sexual identity disclosure	"Since LGBT is not a common practice in India it's unorthodox and people judge you." (P62)	P62 P87 P88 P99
Participants were concerned about general non-acceptance following sexual identity disclosure	"That it will change how people see me, that it will repulse people, that it will affect my friendships with other women who may feel threatened." (P23)	P9 P10 P13 P15 P23 P24 P29 P36 P49 P57 P60 P61 P63 P66 P73 P74 P76 P78 P82 P89 P97 P102 P107 P108
Participants felt disclosing their sexual identity was unnecessary	"Some people I just don't feel that its any of their business. With others it's fear of their reaction." (P102)	P25 P67 P102 P110 P112

Effect of geographical location on coming out

Participants felt their location affected their coming out, and that it was easier in a city or after moving to a city or college	"I didn't come out until college and now never return because I'm the gay and it's just an unwelcoming area." (P48)	P1 P4 P8 P9 P11 P14 P15 P19 P21 P24 P25 P26 P27 P29 P44 P48 P55 P77 P91 P93 P94 P95 P107 P109
Participants found coming out in a rural area a positive experience	"I came out originally in a rural community and while I was more cautious then, I found people largely accepting and progressive." (P35)	P35 P105