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ORIGINAL RESEARCH

Negative Facebook experiences among Taiwanese gay and bisexual men in emerging adulthood: associations with traditional harassment victimization and quality of life

Wei-Hsin Lu[1]
Yu-Ping Chang[2]
Chien-Ho Lin[3]
Cheng-Fang Yen[4,5]

[1]Department of Psychiatry, Ditmanson Medical Foundation Chia-Yi Christian Hospital, Chia-Yi, Taiwan; [2]School of Nursing, The State University of New York, University at Buffalo, New York, USA; [3]Department of Psychiatry, Chimei Medical Center, Tainan, Taiwan; [4]Graduate Institute of Medicine, Department of Psychiatry, School of Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan; [5]Department of Psychiatry, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan

Purpose: To examine the prevalence of negative Facebook (FB) experiences among gay and bisexual men in emerging adulthood in Taiwan and their association with traditional harassment victimization and quality of life (QOL).

Materials and methods: In total, 302 gay or bisexual men aged 20–25 years old with experience of FB use in the preceding year were recruited. We measured the types, severities, and prevalence of negative FB experiences by self-report questionnaires. Traditional harassment victimization experiences were assessed using the adapted form of Chinese-version School Bullying Experience Questionnaire (C-SBEQ). QOL was evaluated by The World Health Organization (WHO) Questionnaire on Quality of Life: Short Form (WHOQOL-BREF). Regression analysis was used to assess respective associations.

Results: Among the study participants, 26.5% reported having negative FB experiences in the preceding year. Negative FB experiences were significantly associated with victimization of verbal ridicule and relational exclusion, but not physical aggression or theft of belongings. Negative FB experiences were also significantly associated with unsatisfactory QOL in all domains except social relationships, even the effects of traditional bullying victimization were controlled.

Conclusion: Negative FB experiences are closely associated with both real life victimization and QOL in gay and bisexual men. Subjective experiences on social networking sites require consideration in conception of measures to reduce bullying victimization as well as improve QOL in this population.

Keywords: bullying, social networking sites, sexual minorities, well-being, negative online experiences

Correspondence: Chien-Ho Lin
Department of Psychiatry, Chimei Medical Center, No. 442, Shulin Street, Section 2, South District, Tainan 702, Taiwan
Tel +8 866 222 8116 ext. 58604
Fax +8 866 220 3702
Email alholin@gmail.com

Cheng-Fang Yen
Department of Psychiatry, Kaohsiung Medical University Hospital, No. 100, Tzyou 1st Rd, Kaohsiung 807, Taiwan
Tel +8 867 312 1101 ext.6816
Fax +8 867 313 4761
Email chfaye@cc.kmu.edu.tw

Introduction

With the increase in Internet accessibility, social media use has increasingly become part of daily life in numerous populations worldwide. Facebook (FB) is currently the most popular social networking site (SNS),[1] with nearly one-fifth of the world's population being its daily active users.[2] In Taiwan, the use of social media is common, with FB predominating among the various online social networks.[3] Among Taiwanese Internet users, 85% visited FB more than three times per week.[3]

SNSs may cause users to encounter potentially harmful events. In a national online survey, 15% of the youths reported experiencing sexual solicitation on the

Internet during the previous year; moreover, approximately 33% reported experiencing harassment, among which 9% stated that their negative experiences occurred on SNSs.[4] Negative events occurring on SNSs, such as negative interaction quality, experience of negative social events, and cyberbullying, were associated with the risk of depression, low self-esteem, and low life-satisfaction.[5–7] Rosenthal specifically studied negative FB experiences, defined as either bullying or meanness, unwanted contact, or misunderstanding, and found that these experiences were associated with depression.[7] Despite FB being the most popular SNS, current knowledge on the prevalence and effect of negative FB experiences remains limited. Herein, we selected FB as our target and used the definition of negative FB experience outlined by Rosenthal.[7]

Lesbian, gay, bisexual, and transgender (LGBT) populations may socially interact online more than non-LGBT populations do. Young people from sexual minority use SNSs for exploring and expressing their identity more than heterosexual youth do.[8] Using SNSs for developing sexual identity, such as learning about their sexuality, engaging with the LGBT community and discussing sexual identity, predicts better psychological outcome.[8] Moreover, compared with non-LGBT youths, LGBT youths use SNSs more for social communication and finding partners,[8] have a higher proportion of online friends, and obtain a higher subjective quality of social support online.[9] Nonetheless, online social interactions have become a new source of potential exposure to additional harm in this population. According to the national survey of LGBT youths in the United States, nearly half of the participants experienced cyberbullying in the preceding year.[10] Cyberbullying predicted psychological distress even when traditional victimization among young LGBT adults was controlled.[11] However, studies about other negative SNSs experiences beyond cyberbullying among sexual minorities have been limited. In addition, although lesbians and gay individuals were more likely to be the victims of bullying than heterosexual individuals were,[12] one study discovered that boys from a sexual minority had a higher risk of encountering negative criticism than did girls from a sexual minority.[13] Moreover, most study populations related to victimization of LGBT individuals have been children or adolescents; nevertheless, early adulthood is a crucial developmental stage for identity consolidation and ego-resiliency.[14] It is also the time when online activity is particularly intensive.[15] Hence, in this study, we explore negative FB experiences among gay and bisexual men in their emerging adulthood.

Some negative online experiences may be linked with negative real-life experiences. For instance, cyberbullying was related to previous or current traditional bullying experiences.[16] A study of students of one high school revealed that nearly two-thirds of the cyberbullying victims experienced concurrent traditional bullying, and more than one-third of victims of traditional bullying experiences cyberbullying.[17] Notably, in the aforementioned study, nonheterosexual students had much higher prevalence of dual victimization (23%) than did heterosexual students (9%). Harassment of sexual minorities was strongly associated with gender or sexual discriminations and personal characteristics,[10] which could be perceived both online and in real life. In contrast to some SNSs featuring anonymity, FB encourages disclosure of real personal information and sharing of real-life activities, which may facilitate the connection between online and offline interactions. In a study, the experience of initial online victimization of LGBT youths later became traditional, in-person bullying.[18] Hence, testing the relationship between negative SNS experiences and traditional harassment is valuable for screening potential victims or creating preventive measures and policies. Current knowledge on the link between negative FB experiences and traditional harassment remains limited; therefore, we intend to help fill this knowledge gap through our study.

SNSs use in sexual minority populations has been linked with mental well-being through group membership, emotional support, and expressed identity.[19] Serious negative online events, such as cyberbullying, predict psychological distress in LGBT adults.[11] Negative FB experiences are also related to depression.[7] However, little is known about the relationship between negative FB experience and quality of life (QOL) in sexual minorities. QOL has been defined by the World Health Organization (WHO) as "an individual's perception of their position in life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards and concerns."[20] LGBT populations report relatively low QOL[21] and personal well-being.[22] A well-being gap is the most significant among bisexual people, who report the lowest life satisfaction and the highest anxiety levels.[21] Disparities in well-being are exhibited in many aspects of life, including higher risk of poor mental health,[23–25] poor physical health,[26,27] and sense of social isolation or not accepted from communities.[22] Thus, addressing the factors associated with QOL is a crucial step toward understanding how disparities in well-being

among sexual minorities develop. Numerous studies have indicated that SNSs use may play some role in affecting QOL or well-being.[28–33] Social support,[28,29] loneliness, and depression[31] are considered possible underlying mechanisms mediating the relationship between SNSs use and QOL. However, most studies examined objective characteristics of SNS use, such as frequency, duration, number of friends, and types of activities. Little research has focused on subjective experiences about SNS use. Therefore, we aim to clarify the association between negative FB experiences and QOL among gay and bisexual men.

In this study, we recruited gay and bisexual men at the age of emerging adulthood to examine their subjective experiences on FB and the association of these experiences with traditional harassment and QOL. We hypothesized that negative FB experiences are positively associated with traditional harassment, namely verbal, social, and physical harassment in gay and bisexual men. We also hypothesized that negative FB experiences were positively associated with lower QOL in gay and bisexual men.

Materials and methods

Participants

Participants were recruited through advertisements on the Internet, including through FB, bulletin board systems, and the home pages of five health promotion and counseling centers for the LGBT community. The advertisements were also mailed to the LGBT student clubs of 25 colleges. Individuals who exhibited any deficits (for example, intellectual disability or substance abuse) that prevented them from understanding the study purpose or completing the questionnaires were excluded. A total of 302 gay or bisexual men aged between 20 and 25 years old with experience of using FB in the previous year were recruited to this study. Written informed consent was obtained from all participants prior to assessment, and the study was approved by the Institutional Review Board of Kaohsiung Medical University Hospital. The research assistants resolved any difficulties encountered by the participants when they were completing the paper questionnaires.

Measures

Negative experiences on Facebook

Types of negative experiences on FB were those outlined by Christofides and Rosenthal, who used thematic analysis to examine qualitative descriptions of negative experiences on FB from group discussion and individual survey.[7,34] Three types of negative FB experiences were identified from the authors' studies: (1) bullying or meanness; (2) unwanted contact; and (3) misunderstandings.[7,34] In this study, participants were first asked, "Have you used *Facebook* in the past year?" All those who responded "yes" were eligible to answer questions about negative FB experiences. Three types of negative FB experience in the year preceding the study were surveyed: (1) "In your time using *Facebook*, have you ever encountered bullying or meanness?"; (2) "In your time using *Facebook*, have you ever encountered unwanted contact?"; and (3) "In your time using *Facebook*, have you ever encountered misunderstandings?".[7] If participants responded "yes," they were further asked, "How upsetting was the experience of (bullying or meanness, unwanted contact, or misunderstandings) on *Facebook* to you on a scale of 1 (not at all upsetting) through 9 (extremely upsetting)?" Because the present study aimed to identify those who had negative FB experience considered upsetting, we selected 5 (a little upsetting) as the cut-off. Participants who rated any item 5 or higher were classified to have experienced considerably negative FB experiences.

Chinese version of the School Bullying Experience Questionnaire

We adapted six items from the self-reported Chinese version of the School Bullying Experience Questionnaire (C-SBEQ) to evaluate experiences of traditional harassment in the previous year[35] at schools, workplaces, socially interactive situations outside school, other situations such as army service, and interaction with families and anyone unknown. Two forms of traditional harassment victimization were evaluated, namely verbal ridicule and relational exclusion (three items for experiencing social exclusion, offensive name-calling, and ill-speaking; for example: "How often have others spoken ill of you?") in addition to physical aggression and theft of belongings (three items for experiencing physical abuse, forced work, and confiscation of money, daily supplies, and snacks; for example: "How often have others beaten you up?"). The responses for these six items were graded on a 4-point Likert scale as follows: 0= never, 1= just a little, 2= often, and 3= all the time. A study on C-SBEQ psychometrics revealed that the C-SBEQ has acceptable reliability and validity.[35] The Cronbach's α of the scale for evaluating traditional

harassment was 0.77. In the original study, the participants whose answers were 2 or 3 on any item were identified as self-reported victims of traditional bullying.[34] However, this study intended to survey a broader range of negative social interaction experiences and therefore identified participants whose answers were not 0 on any item as self-reported victims of traditional harassment.

World Health Organization Questionnaire on Quality of Life: Short Form-Taiwan version

The WHO Questionnaire on Quality of Life: Short Form (WHOQOL-BREF) was developed by the WHO to evaluate health-related QOL and to make cross-cultural comparisons.[36] The WHOQOL-Taiwan group adapted the WHOQOL-BREF for use in Taiwan.[37] The WHOQOL-BREF-Taiwan version contains 28 five-point items that assess general (two items) and four specific domains of QOL, namely seven items in physical health, six in psychological health, four in social relationships, and nine in environmental domains, with well-established validity and reliability.[37] The adapted scores of the four QOL domains were in the range of 4–20. Higher scores on the WHOQOL-BREF-Taiwan version indicate a higher perceived QOL in the previous 2 weeks.

Characteristics of demographics and sexual orientation

The present study evaluated participants' age, level of education (high school or lower vs college or higher), and sexual orientation (bisexual vs gay).

Statistical analyses

Data analysis was performed using SPSS 20.0 (SPSS Inc., Chicago, IL, USA).

The prevalence of negative FB experiences was calculated. The associations of traditional harassment victimization with negative FB experiences were examined using logistic regression analysis by controlling for the effects of age, level of education, and sexual orientation. The odds ratio (OR) and 95% confidence interval (CI) were used to present the significance. The associations of negative FB experiences with four domains of QOL on the WHOQOL-BREF-Taiwan version were examined using multiple regression analysis by controlling for the effects of age, level of education, sexual orientation, and traditional harassment victimization. A p value of 0.05 was considered statistically significant for all tests.

Results

Table 1 presents the demographic data, sexual orientation, negative FB experiences, traditional bullying victimization, and four domains of QOL on the WHOQOL-BREF-Taiwan version. In total, 80 (26.5%) participants reported significant negative FB experiences in the year preceding the present study.

Table 2 presents the results of the logistic regression analysis on the associations of traditional harassment victimization with negative FB experiences. The results indicated that after controlling for the effects of age, level of education, and sexual orientation, victims of verbal ridicule and relational exclusion were more likely to have negative FB experiences than nonvictims (OR=2.868, 95% CI: 1.519–5.413). No difference in negative FB experiences was noted between victims and nonvictims of physical aggression and theft of belongings.

Table 1 Demographic data, sexual orientation, negative FB experiences, harassment victimization, and quality of life (n=302)

	n (%)	Mean (SD)	Range
Age (years)		23.1 (1.7)	20–25
Education level			
High school or lower	27 (8.9)		
College or higher	275 (91.1)		
Sexual orientation			
Bisexuality	78 (25.8)		
Gay	224 (74.2)		
Negative FB experiences			
Bullying or meanness	14 (4.6)		
Unwanted contact	62 (20.5)		
Misunderstandings	48 (15.9)		
Any negative FB experience	80 (26.5)		
Victims of traditional harassment			
Verbal ridicule and relational exclusion	175 (57.9)		
Physical aggression and theft of belongings	67 (22.2)		
Quality of life on the WHOQOL-BREF			
Physical		14.8 (2.3)	8–20
Psychological		12.9 (2.8)	5–20
Social relationship		13.7 (2.6)	6–20
Environment		14.1 (2.3)	7–20

Abbreviation: WHOQOL-BREF, World Health Organization Questionnaire on Quality of Life: Short Form-Taiwan version.

Table 2 Associations of demographic data, sexual orientation, and traditional harassment victimization with negative FB experiences

	B (SE)	Wals	p	OR (95% CI)
Age (years)	0.176 (0.081)	4.650	0.031	1.192 (1.016–1.398)
Education	−0.520 (0.438)	1.410	0.235	0.594 (0.252–1.403)
Sexual orientation	−0.312 (0.307)	1.032	0.310	0.732 (0.401–1.336)
Victims of verbal ridicule and relational exclusion	1.054 (0.324)	10.567	0.001	2.868 (1.519–5.413)
Victims of physical aggression and theft of belongings	0.526 (0.320)	2.710	0.100	1.692 (0.905–3.165)

Abbreviations: CI, confidence interval; FB, Facebook; SE, standard error.

Table 3 presents the results of the multiple regression analysis on the associations of negative FB experiences with QOL by controlling for the effects of age, level of education, sexual orientation, and traditional harassment victimization. The results indicated that compared with those without negative FB experiences, gay and bisexual men with negative FB experiences had lower levels of QOL in physical, psychological, and environmental domains but not social relationships.

Discussion

To the best of our knowledge, this is one of the first studies to specifically focus on the prevalence of negative FB experiences among sexual minorities and its relationship with traditional harassment victimization and QOL. More than a quarter of gay and bisexual men in this study reported having negative FB experiences in the previous year. The types of victimization of verbal ridicule and relational exclusion, but not physical aggression or theft of belongings, were significantly associated with negative FB experiences. Negative FB experiences had significant associations with unsatisfactory QOL in all domains except social relationships, even when controlling for the effects of traditional harassment victimization.

The prevalence of past-year negative FB experiences from our study is approximately half of that from a previous study, in which participants constituted a national representation of young US adults.[7] However, the difference in nationality of the participants of these two studies complicates the interpretation of this result. Therefore, further studies comparing the prevalence of negative FB experiences between general populations and sexual minorities in the same country is warranted.

Victims of verbal or relational harassment were nearly three times more likely to have had negative FB experiences in the previous year, indicating a strong association between these events. According to the definition, negative FB experiences include but are not limited to cyberbullying, and could be viewed as subjective and heterogeneous experiences. Because cyberbullying exhibited a strong relationship with traditional bullying,[16] this study further indicated that the broader concept of negative FB experiences is notably linked with traditional harassment. The fact that FB encourages sharing personal information and usually includes many friends from real life may facilitate a connection between negative FB experiences and traditional harassment. Conversely, the personal traits prone to traditional victimization such as sexual or gender identity

Table 3 Associations of negative Facebook experiences with quality of life: multiple regression analysis

	Physical			Psychological			Social relationship			Environment		
	Beta	t	p	Beta	t	p	Beta	t	p	Beta	t	p
Age (years)	−0.045	−0.825	0.410	−0.045	−0.815	0.416	−0.077	−1.363	0.174	−0.018	−0.330	0.742
Education	0.139	2.546	0.011	0.154	2.773	0.006	−0.008	−0.148	0.883	0.192	3.550	0.000
Sexual orientation	−0.029	−0.525	0.600	−0.088	−1.566	0.118	0.024	0.427	0.669	−0.022	−0.404	0.687
Victims of verbal ridicule and relational exclusion	−0.165	−2.816	0.005	−0.072	−1.198	0.232	−0.203	−3.332	0.001	−0.166	−2.855	0.005
Victims of physical aggression and theft of belongings	−0.141	−2.421	0.016	−0.165	−2.779	0.006	−0.097	−1.606	0.109	−0.155	−2.680	0.008
Negative Facebook experiences	−0.167	−2.955	0.003	−0.127	−2.200	0.029	−0.061	−1.034	0.302	−0.134	−2.396	0.017
Adjusted R^2	0.161			0.109			0.079			0.155		

may expose individuals to a higher risk of both negative FB experiences and traditional harassment. Another possible reason may be that because individuals who suffer from traditional harassment are more likely to have negative emotional states,[38] cognitive distortions, such as a negative view of others and the environment, may follow and result in increased perceptions of negative FB experiences. Victims of traditional physical aggression indicated a positive trend of correlation with negative FB experiences, although it was not statistically significant. A possible explanation might be that FB, being an online platform, allows social interactions mostly by verbal and relational means, rather than direct physical contact. Therefore, the association of physical aggression with negative FB experiences was not as strong as that of victimization verbally or relationally.

Our work reveals that the presence of subjective negative experiences on FB in the previous year was negatively associated with all aspects of QOL except social relationships. The result remains significant after controlling for traditional harassment, which was revealed to be a crucial predictor for negative health-related outcomes.[38] Because studies regarding the association between objective characteristics (such as frequencies and duration) of SNS use and level of life satisfaction have been inconclusive,[5,33] our study contributes to the evidence that subjectivity may play a vital role when using SNSs. This is in line with previous findings that negative interaction quality and emotional support on SNSs are related with lower QOL.[6,39] Our study highlighted the specific aspects of QOL that are associated with negative FB experiences in gay and bisexual men. In addition to the straightforward psychological outcomes discussed in most previous studies,[5,7,8,40,41] the present study revealed that poorer physical and environmental QOL was significantly related to negative FB experiences. Oh et al proposed a model suggesting that supportive interaction on SNSs leads to positive affect, which is then associated with higher general life-satisfaction through companionship, appraisal or esteem support, and sense of community, either directly or indirectly.[29] This is also consistent with the finding that negative FB experiences were indicated to have a clear association with depression.[7] Therefore, negative affect and the quality or quantity of social support or interaction (such as playing sports, having meals, going on trips with friends, and working with colleagues) potentially play a role in the association between negative FB experiences and QOL in physical health or life environment. However,

the QOL of social relationships did not indicate significant associations with negative FB experiences in this study. According to Oh's model, this may be because the various components of social relationships, such as interpersonal interactions, perceived social support, and sexual relationships, may have a distinct effect on QOL.[29]

This study found that younger gay and bisexual men who were not victims of verbal ridicule and relational exclusion were less likely to report negative FB experiences. Further study is recommended to examine whether other factors may protect gay and bisexual men from negative FB experiences. For example, a study based on narrative analysis concluded that the degree of off-line support is associated with vulnerability to negative online experiences among homosexual individuals.[42]

This study had several limitations. Individuals with severe negative online experiences may have decreased their Internet usage, and thus, were not approached by our study, despite our attempts to use varied recruiting methods such as mailing invitations to school clubs for sexual minority students. Our study only included gay or bisexual men; therefore, the result may not be generalizable to all sexual minority groups. The lack of control groups may also limit the validity of our findings. Recruiting heterosexual individuals or other sexual minority populations for comparison should provide more information regarding whether negative FB experiences indicate varying significance levels in populations of different sexual orientation or gender. The data were exclusively self-reported and we did not obtain additional information. The use of only a single data source may result in shared-method variances. Because of the cross-sectional nature of this study, conclusions regarding causal relationships could not be made. Future studies should clarify causal relationships using prospective designs. Further examination to validate the classification of participants rating any item 5 or higher as victims of substantially negative FB experiences is warranted.

Conclusion

This study revealed that negative FB experiences are prevalent among gay and bisexual men in Taiwan. Negative FB experiences are associated with certain types of traditional harassment and inferior QOL. Our study highlighted the value of policies and educations aimed at decreasing hostile behaviors toward and misunderstandings of sexual minority populations on SNSs. Negative experiences on SNSs should be a major consideration when evaluating

health disparities or victimization among gay and bisexual men. Further research to clarify the types of negative events that gay and bisexual men encounter in social media and whether modifying certain FB-related factors, such as usage pattern or specific negative events, may help to improve QOL and decrease traditional victimization is warranted.

Acknowledgments

Disclosure

The authors report no conflicts of interest in this work.

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