# Relationships between traditional and cyber harassment and self-identity confusion among Taiwanese gay and bisexual men in emerging adulthood

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## ABSTRACT

*Background:* Harassment victimization is prevalent among gay and bisexual men and may negatively impact the victims' mental health.

*Aims:* To examine the relationships between traditional and cyber harassment and self-identity confusion among Taiwanese gay and bisexual men in emerging adulthood.

*Procedures:* A total of 305 gay or bisexual men (age, 20–25 years) in Taiwan were recruited. Participants' self-identity confusion and the experiences of traditional and cyber harassment were assessed. The relationships of experiences of harassment victimization, number of places at which traditional harassment occurred, and type of harassment victimization with self-identity confusion were examined using multiple regression analysis.

*Results:* Both victims of verbal ridicule and relational exclusion and victims of physical aggression and theft of belongings had higher levels of disturbed identity and lack of identity than did non-victims. Those who experienced traditional harassment at multiple places had higher levels of unconsolidated identity and lack of identity than did those who experienced traditional harassment at only one place. Those who experienced multiple types of harassment had higher levels of unconsolidated identity than those who experienced only one type of harassment.

*Discussions:* Victimization of traditional harassment and multisite and multitype harassments were significantly related to self-identity confusion in gay and bisexual men.

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## 1. Introduction

Identity formation is a crucial developmental task that begins in early childhood and typically stabilizes during the young adult years [1–3]. According to Erikson [3], adolescents begin to make commitments to others and take on self-defining roles, and "consolidated identity" develops during young adulthood. Individuals become autonomous, achieve major life tasks, and develop intimacy with others because of consolidated identity [3,4]. Occasionally, the processes of normative identity development may go awry, and result in identity confusion. One common type of identity confusion is "disturbed identity," which can cause an inability to commit to typical roles and a tendency to acquire the thoughts, feelings, beliefs, and problems of others in adulthood [5–7]. Disturbed identity may result in an impaired capacity to engage in intimate relationships, indecisiveness concerning major life choices, and a sense of inner emptiness [5,6]. Researchers have also identified another type of identity confusion called "lack of identity" [8]. The typical presentation of lack of identity is characterized by sudden and dramatic shifts in self-image with respect to goals, values, vocational aspirations, sexual identity, and types of friends, and is commonly displayed in individuals with borderline personality disorder [9]. Researchers also identified another type of identity confusion called "unconsolidated identity" [10]. Persons with unconsolidated identity may fail to make commitments to others, take on self-defining roles, and demonstrate stable beliefs, attitudes, and values [10].

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Although self-identity confusion is not included as a psychiatric disorder in the Diagnostic and Statistical Manual for Mental Disorders [9], research has found self-identity confusion to be related to psychosocial problems and behaviors, such as suicidality [11], substance abuse [12], aggression [13], unsafe sex [14], and delinquent behavior [15]. Erikson [3] proposed that making initial identity resolutions is one of the key developmental tasks of adolescence, but identity remains open to further changes throughout adult life. A meta-analysis of published studies on changes to identity status from late adolescence through adulthood found that a mean of 49% of individuals remained identity-status stable over this time period, 36% made progressive identity status changes, and 15% made regressive changes [16].

According to Bronfenbrenner's developmental ecological theory [17], self-identity is the result of interaction between the individuals and the most immediate environments in which the individuals live, named the microsystem. Interactions within the microsystem typically involve personal relationships with family members, classmates, and teachers, in which influences go back and forth [17]. How these groups or individuals interact with the individuals will affect how they grow; similarly, how the individuals react to people in their microsystem will also influence how they treat the individuals in return [17]. Research has explored the types of circumstances that are associated with identity status change. Helson and Roberts [18] determined that receiving an optimal level of accommodative challenge is critical for adult ego development, whereas Anthis [19] found stressful life events were associated with high levels of identity exploration and decreases in identity commitments. The results from previous studies that examined events associated with self-identity give rise to a serious health inquiry: What is the relationship between identity confusion and the experience of being harassed among gay and bisexual men in emerging adulthood?

Being the victim of harassment is one of the unpleasant experiences that an individual can have; such victimization may result in long-term adverse psychological and physical consequences [20]. Bullying may especially deflate a victim's self-esteem [21]. A meta-analysis study revealed that youths in a sexual minority group, including lesbian, gay, bisexual, and transgender (LGBT) youths, reported higher rates of harassment than their heterosexual peers [22]. Being the victim of harassment is a major factor contributing to mental disorders, suicidality, and deliberate self-harm in sexual minorities [23]. According to the minority stress hypothesis [24], the stigma, prejudice, and discrimination experienced by LGBT individuals create a hostile social environment that can lead to chronic stress and mental health problems [24]. The aforementioned study findings thus support the premise that being the victim of harassment may be sufficiently stressful to negatively affect the cognitive and social mechanisms related to the development of self-identity in LGBT persons.

Several issues concerning the relationship between self-identity confusion and the experience of being harassed in gay and bisexual men warrant further study. First, previous studies examined the relationship between being the victim of harassment and sexual and gender identity [25] rather than LGBT persons' core sense of self. Yet such sexual and gender identity may or may not reflect general identity problems. General identity disturbance in LGBT persons should be explored independent from investigations into particular identity uncertainty (e.g., sexual orientation, religious beliefs, and political viewpoints). Second, cyber harassment victimization in LGBT youths has been investigated to a lesser extent than traditional forms of harassment such as teasing, social exclusion, and physical assault; however, almost half of LGBT youths experience online harassment from peers [26]. Research indicated that victims of childhood homophobic cyberbullying had more severe depression, anxiety, and physical pain in emerging adulthood than nonvictims [27]. The effect of cyber harassment victimization on self-identity confusion in gay and bisexual men should be investigated. Third, gay and bisexual men may encounter multiform harassment. Research determined that victims of both traditional and cyber homophobic bullying had more severe anxiety in adulthood than victims of only either traditional or cyber homophobic bullying [27]. Moreover, gay and bisexual men may experience harassment not only at schools but also in other environments, such as part-time workplaces, army service, and tutoring schools, simultaneously. However, further investigation is needed to determine if and how the effect of multiform and multisite harassment differs from single-form and single-site harassment in the context of self-identity confusion.

The present study examined the relationships between traditional and cyber harassment and self-identity confusion among Taiwanese gay and bisexual men in emerging adulthood. We hypothesized that being the victim of traditional and cyber harassment is significantly associated with self-identity confusion among gay and bisexual men in emerging adulthood. We further hypothesized that compared with victims of single-form and single-site harassment, gay and bisexual men who experienced multiform and multisite harassment exhibit higher levels of self-identity confusion.

## 2. Material and methods

### 2.1. Participants

We recruited participants through advertisements on the Internet, including Facebook, bulletin board systems, and the homepages of five health promotion and counseling centers for the LGBT community from July 2016 to May 2017. The advertisements stated that the purpose of this study was to examine the relationships between traditional and cyber harassment and self-identity confusion among Taiwanese gay and bisexual men aged between 20 and 25 years. We also mailed the advertisement to the LGBT student clubs at 25 colleges. Individuals who exhibited any deficits (e.g., intellectual disability or substance use) that prevented them from understanding the study purpose or completing the questionnaires were excluded. A total of 305 gay or bisexual men aged between 20 and 25 years in the past year were recruited for this study. We obtained written informed consent from all participants prior to conducting assessments of them. This study was approved by the institutional review board of Kaohsiung Medical University Hospital.

### 2.2. Measures

#### 2.2.1. Self-concept and identity measure

We used the Self-Concept and Identity Measure (SCIM) to assess the level of self-identity confusion [8]. The 27-item SCIM contained three subscales: disturbed identity, unconsolidated identity, and lack of identity. An exploratory factor analysis revealed a 3-factor structure of the SCIM in college students. A confirmatory factor analysis validated the 3-factor structure in the community sample. Correlations between the three subscales ranged from 0.32 to 0.53 [8]. Each item was rated using a 7-point rating scale ranging from "strongly disagree" (1) to "strongly agree" (7). High total scores on the three subscales indicated tendencies for disturbed identity, unconsolidated identity, and lack of identity. The Cronbach's α of the subscales in the present study was 0.74–0.82.

#### 2.2.2. Chinese version of the school bullying experience questionnaire

We used six items from the Chinese self-report version of the School Bullying Experience Questionnaire (C-SBEQ) to evaluate experiences of traditional harassment during the past year [28] at schools, workplaces, socially interactive situations outside school, and other situations such as army service and interactions with family members and strangers. The C-SBEQ was translated from the Korean version of the SBEQ [29]. Taiwan and Korea have similar social and educational backgrounds, and thus the items on the SBEQ exploring the experiences of traditional harassment are suitable for use in Taiwan. We evaluated two forms of traditional harassment victimization: (1) verbal ridicule and relational exclusion (the C-SBEQ included three items that evaluated the

experiences of social exclusion, mean name-calling, and ill-speaking; for example, "How often have others spoken ill of you?") and (2) physical aggression and theft of belongings (the C-SBEQ included three items that evaluated the experiences of physical abuse, forced work, and confiscation of money, daily supplies, and snacks; for example, "How often have others beaten you up?"). The responses to these six items were graded on a 4-point Likert scale in which 0 = never, 1 = just a little, 2 = often, and 3 = all the time. A previous study of C-SBEQ psychometrics concluded that the C-SBEQ is a valid and reliable measurement tool [28]. The Cronbach's α of the scale for evaluating traditional harassment was 0.77. Participants in our study who checked a response option other than 0 on any item were classified as self-reported victims of traditional harassment. We also investigated the places at which traditional harassment occurred, and harassment that occurred at two or more places was defined as multisite harassment.

### 2.2.3. Cyberbullying experiences questionnaire

We used three items from the Cyberbullying Experiences Questionnaire to assess the experience of cyber harassment in the past year [30]. The three items addressed the following experiences: being the object of mean or hurtful posted comments; being the object of upsetting posted pictures, photos, or videos; and being the object of online rumor-spreading through emails, blogs, social media (e.g., Facebook, Twitter, Plurk), and posted pictures or videos; for example, "How often have others made mean or hurtful comments on you through e-mails, blogs, or social media?" Responses to these items were graded using a 4-point Likert scale, ranging from 0 (never) to 3 (all the time). The Cronbach's α of the scales for evaluating cyber harassment victimization were 0.72. Participants who checked a response option other than 0 on any item were identified as self-reported victims of cyber harassment. Those who experienced both traditional and cyber harassment were classified as victims of multiple harassment. Those who only experienced either traditional or cyber harassment were classified as victims of single harassment.

### 2.2.4. Demographic and sexual orientation characteristics

We evaluated the following characteristics of participants: age, level of education (high school or lower vs. college or higher), sexual orientation (bisexuality vs. homosexuality), self-rated level of gender role self-identity, and perceived social acceptance of homosexuality and bisexuality. The self-rated level of gender role self-identity was rated on a 9-point Likert scale, and scores ranged from 1 (extreme femininity) to 9 (extreme masculinity). The level of perceived social acceptance of homosexuality and bisexuality by general population was rated on a 9-point Likert scale, and scores ranged from 1 (very acceptable) to 9 (very unacceptable).

### 2.3. Procedures

Research assistants explained the procedures and methods for completing the research questionnaires to the participants individually. The research assistants resolved any difficulties encountered by the participants while completing the questionnaires. Data analysis was performed using SPSS 20.0 statistical software (SPSS Inc., Chicago, IL, USA).

### 2.4. Statistical analysis

We used two-step statistical methods. Firstly, we examined the relationships between the three dimensions of self-identity confusion and age, level of education, sexual orientation, perceived social acceptance of homosexuality and bisexuality, self-rated level of gender role self-identity, and traditional and cyber harassment victimization using Pearson's correlation, t-testing, and analysis of variance (ANOVA). Secondly, the factors significantly related to self-identity confusion in the first step (independent variables) were further examined using multiple regression analysis to determine their relationships with three dimensions of self-identity confusion (dependent variables). We also used multiple regression analysis to examine the effects of number of places at which traditional harassment occurred and type of harassment on self-identity confusion. A p value of 0.05 was considered statistically significant for all tests.

## 3. Results

Table 1 presents demographic data, sexual orientation, gender role identity, harassment victimization, and the level of self-identity confusion of the participants. Table 2 and Table 3 display the results from our examination, using Pearson's correlation, t-testing, and ANOVA, of

**Table 1**
Demographic data, sexual orientation and gender role identity, harassment victimization and self-identity disturbance (N = 305).

| | n (%) | Mean (SD) | Range |
|---|---|---|---|
| Age (years) | | 23.1 (1.7) | 20–25 |
| Education level | | | |
|   High school or lower | 29 (9.5) | | |
|   College or higher | 276 (90.5) | | |
| Sexual orientation | | | |
|   Bisexuality | 78 (25.6) | | |
|   Homosexuality | 227 (74.4) | | |
| Self-rating level of gender role self-identity | | 5.8 (1.3) | 2–9 |
| Perceived social acceptance toward homo/bisexuality | | 5.2 (1.7) | 1–9 |
| Harassment victimization | | | |
|   Victims of traditional harassment | 184 (60.3) | | |
|     Verbal ridicule and relational exclusion | 177 (58.0) | | |
|     Physical aggression and theft of belongings | 68 (22.3) | | |
|     Place of traditional harassment occurred | | | |
|       At single place | 90 (29.5) | | |
|       At multiple places | 86 (28.2) | | |
|   Victims of cyber harassment | 105 (34.4) | | |
|   Types of harassment | | | |
|     Victims of single harassment | 109 (35.7) | | |
|     Victims of multiple harassment | 90 (29.5) | | |
| Self-identity disturbance on the SCIM | | | |
|   Disturbed identity | | 40.1 (8.9) | 16–72 |
|   Unconsolidated identity | | 30.7 (8.2) | 10–61 |
|   Lack of identity | | 19.1 (6.9) | 6–41 |

SCIM: Self-Concept and Identity Measure.

**Table 2**
Associated factors of self-identity disturbance: Pearson's correlation.

| | Disturbed identity | | Unconsolidated identity | | Lack of identity | |
|---|---|---|---|---|---|---|
| | Pearson's r | p | Pearson's r | p | Pearson's r | p |
| Age | 0.036 | 0.532 | 0.004 | 0.946 | 0.117 | 0.041 |
| Self-rating level of gender role self-identity | −0.129 | 0.025 | −0.111 | 0.052 | −0.201 | <0.001 |
| Perceived social unacceptance of homo/bisexuality | 0.070 | 0.224 | 0.112 | 0.049 | 0.161 | 0.005 |

**Table 3**
Associated factors of self-identity disturbance: t-test and analysis of variance: t-test and ANOVA.

| | Disturbed identity | | | Unconsolidated identity | | | Lack of identity | | |
|---|---|---|---|---|---|---|---|---|---|
| | Mean (SD) | t or F | p | Mean (SD) | t or F | p | Mean (SD) | t or F | p |
| Education level | | | | | | | | | |
| Low (high school or lower) | 43.8 (8.3) | 2.365 | 0.019 | 32.3 (8.3) | 1.085 | 0.279 | 21.2 (7.0) | 1.793 | 0.074 |
| High (college or higher) | 39.7 (8.9) | | | 30.6 (8.2) | | | 18.8 (6.9) | | |
| Sexual orientation | | | | | | | | | |
| Bisexuality | 41.3 (9.0) | 1.440 | 0.151 | 30.3 (7.9) | −0.530 | 0.596 | 19.7 (7.1) | 0.960 | 0.338 |
| Homosexuality | 39.6 (8.9) | | | 30.9 (8.3) | | | 18.8 (6.9) | | |
| Victims of verbal ridicule and relational exclusion | | | | | | | | | |
| No | 36.9 (7.9) | −5.516 | <0.001 | 28.9 (8.0) | −3.385 | 0.001 | 16.5 (6.0) | −5.744 | <0.001 |
| Yes | 42.3 (9.0) | | | 32.1 (8.1) | | | 20.9 (7.0) | | |
| Victims of physical aggression and theft of belongings | | | | | | | | | |
| No | 38.7 (8.3) | −5.308 | <0.001 | 30.0 (8.2) | −2.982 | 0.003 | 18.1 (6.6) | −4.797 | <0.001 |
| Yes | 44.9 (9.3) | | | 33.3 (8.0) | | | 22.5 (7.0) | | |
| Victims of cyber harassment | | | | | | | | | |
| No | 38.9 (8.7) | −3.281 | 0.001 | 29.9 (8.3) | −2.435 | 0.015 | 18.2 (6.7) | −3.072 | 0.002 |
| Yes | 42.3 (8.7) | | | 32.3 (8.0) | | | 20.7 (7.0) | | |
| Number of places of traditional harassment occurred | | | | | | | | | |
| None | 37.8 (8.5) | 9.703 | <0.001 | 29.0 (8.4) | 7.272 | 0.001 | 16.9 (6.4) | 15.957 | <0.001 |
| At single place | 40.3 (8.6) | | | 30.7 (7.7) | | | 19.3 (6.7) | | |
| At multiple places | 43.1 (9.1) | | | 33.3 (7.9) | | | 22.0 (6.8) | | |
| Number of various types of harassment | | | | | | | | | |
| None | 36.9 (7.8) | 12.275 | <0.001 | 29.2 (8.1) | 5.399 | 0.005 | 16.5 (5.6) | 13.538 | <0.001 |
| Single harassment | 40.7 (9.3) | | | 30.3 (8.3) | | | 19.6 (7.6) | | |
| Multiple harassment | 43.0 (8.7) | | | 33.0 (7.9) | | | 21.4 (6.5) | | |

the factors related to self-identity confusion. The results indicated that high disturbed identity was significantly correlated with a low level of self-rated masculinity ($p = .025$). High unconsolidated identity was significantly correlated with a high level of perceived social unacceptance of homosexuality and bisexuality ($p = .049$). High lack of identity was significantly correlated with relatively old age ($p = .041$), low self-rated masculinity ($p < .001$), and high perceived social rejection of homosexuality and bisexuality ($p = .005$).

The correlates of higher levels of disturbed identity included a low education level ($p = .019$), being victims of verbal ridicule and relational exclusion ($p < .001$), being victims of physical aggression and theft of belongings ($p < .001$), and being victims of cyber harassment ($p = .001$). The correlates of higher levels of unconsolidated identity included being victims of verbal ridicule and relational exclusion ($p = .001$), being victims of physical aggression and theft of belongings ($p = .003$), and being victims of cyber harassment ($p = .015$). The correlates of higher levels of lack of identity included being victims of verbal ridicule and relational exclusion ($p < .001$), being victims of physical aggression and theft of belongings ($p < .001$), and being victims of cyber harassment ($p = .002$). The results of ANOVA revealed differences in the levels of the three dimensions of self-identity confusion among the participants depending on the number of places in which traditional harassment occurred ($p$: range from <0.001 to 0.001) and the types of harassment experienced ($p$: range from <0.001 to 0.005).

Table 4 depicts the results from multiple regression analysis of the factors related to self-identity confusion. The results indicated that high disturbed identity was significantly related to being the victim of verbal ridicule and relational exclusion ($p = .003$) and being the victim of physical aggression and theft of belongings ($p = .001$). High lack of identity was significantly related to low self-rated masculinity ($p = .007$), high perceived social unacceptance of homosexuality and bisexuality ($p = .026$), being the victim of verbal ridicule and relational

**Table 4**
Associations of demographic data, sexual orientation, gender role identity and harassment victimization with self-identity disturbance: multiple regression analysis.

| | Disturbed identity | | | Unconsolidated identity | | | Lack of identity | | |
|---|---|---|---|---|---|---|---|---|---|
| | Beta | t | p | Beta | t | p | Beta | t | p |
| Age | 0.002 | 0.045 | 0.964 | −0.030 | −0.536 | 0.593 | 0.072 | 1.347 | 0.179 |
| Education | −0.074 | −1.346 | 0.179 | −0.016 | −0.276 | 0.782 | −0.042 | −0.787 | 0.432 |
| Sexual orientation | −0.041 | −0.740 | 0.460 | 0.059 | 1.025 | 0.306 | −0.025 | −0.460 | 0.646 |
| Self-rating level of gender role self-identity | −0.091 | −1.650 | 0.100 | −0.077 | −1.341 | 0.181 | −0.148 | −2.738 | 0.007 |
| Perceived social acceptance toward homo/bisexuality | 0.039 | 0.718 | 0.474 | 0.094 | 1.672 | 0.096 | 0.119 | 2.242 | 0.026 |
| Victims of verbal ridicule and relational exclusion | 0.185 | 3.018 | 0.003 | 0.118 | 1.836 | 0.067 | 0.202 | 3.350 | 0.001 |
| Victims of physical aggression and theft of belongings | 0.194 | 3.333 | 0.001 | 0.113 | 1.858 | 0.064 | 0.157 | 2.743 | 0.006 |
| Victims of cyber harassment | 0.053 | 0.912 | 0.363 | 0.066 | 1.071 | 0.285 | 0.047 | 0.811 | 0.418 |
| Adjusted $R^2$ | | 0.127 | | | 0.047 | | | 0.154 | |

**Table 5**
Associations of multisite and multiple harassment victimization with self-identity disturbance: multiple regression analysis[a].

| | Disturbed identity | | | Unconsolidated identity | | | Lack of identity | | |
|---|---|---|---|---|---|---|---|---|---|
| | Beta | $t$ | $p$ | Beta | $t$ | $p$ | Beta | $t$ | $p$ |
| Number of places at which traditional harassment occurred | | | | | | | | | |
|   Single place vs. no traditional harassment | 0.119 | 1.754 | 0.081 | 0.084 | 1.229 | 0.221 | 0.148 | 2.279 | 0.024 |
|   Multiple places vs. single place | 0.134 | 1.773 | 0.078 | 0.180 | 2.371 | 0.019 | 0.172 | 2.340 | 0.020 |
| Number of harassment victimization | | | | | | | | | |
|   Victims of single harassment vs. Nonvictims | 0.207 | 3.070 | 0.002 | 0.069 | 1.003 | 0.317 | 0.210 | 3.154 | 0.002 |
|   Victims of multiple harassment vs. victims of single harassment | 0.100 | 1.452 | 0.148 | 0.148 | 2.090 | 0.038 | 0.100 | 1.452 | 0.148 |

[a] : Controlling for the effects of demographic data, sexual orientation and gender role identity.

exclusion ($p = .001$), and being the victim of physical aggression and theft of belongings ($p = .006$). Being the victim of cyber harassment was not significantly related to any dimension of self-identity confusion.

Table 5 presents the associations between multisite and multiple harassment victimization and self-identity confusion. The results indicated that after controlling for the effects of other factors, gay and bisexual men who experienced traditional harassment at a single place had higher levels of lack of identity than did nonvictim participants ($p = .024$). Participants who experienced traditional harassment at multiple places had higher levels of unconsolidated identity ($p = .019$) and lack of identity ($p = .020$) than did those who experienced traditional harassment at only one place. Those who experienced a single type of harassment had higher levels of disturbed identity ($p = .002$) and lack of identity ($p = .002$) than did nonvictim participants. Those who experienced multiple types of harassment had higher levels of unconsolidated identity than did those participants who experienced only one type of harassment ($p = .038$).

## 4. Discussion

We discovered that both victims of verbal ridicule and relational exclusion and victims of physical aggression and theft of belongings had higher levels of disturbed identity and lack of identity than did nonvictims. Moreover, gay and bisexual men who experienced traditional harassment at multiple places had higher levels of unconsolidated identity and lack of identity than did those who experienced traditional harassment at only one place. Gay and bisexual men who experienced multiple types of harassment had higher levels of unconsolidated identity than those who experienced only one type of harassment. The cross-sectional research design limited our ability to determine the causal relationship between the experience of being the victim of harassment and self-identity confusion, but the results of our study provided a glimpse of the correlates of self-identity formation in gay and bisexual men.

The interactions between harassment victimization and self-identity confusion among gay and bisexual men may be bidirectional. First, being the victim of harassment may impede normal development of consolidated identity among gay and bisexual men. Erikson proposed that the developmental task of determining an identity requires a synthesis of past experiences, present meaning, and future directions [2,3,31]. The ecological framework [32] holds that identify formation is the result of multiple systematic interactions. Being the victim of harassment is a negative social interaction experience that can result in a victim feeling unsafe in a social environment. Moreover, research determined that a high proportion of harassment victims are persistently the target of bullying [33]. We examined the experiences of harassment in the past year, but it is highly probable that the participants who were victims may have suffered from harassment since their childhoods and adolescences because of their sexual orientations or nonconforming gender roles. A 3.5-year follow-up study observed that experiences of homophobic harassment predicted later psychological distress in LGBT youths, and the more instances of harassment they experienced, the more distress they experienced [34]. Persistent and intractable harassment may distort a victim's perceived self-

worth and future expectations for themselves. For those who did not experience harassment during childhood, harassment during early adulthood is still related to identity formation. Anthis [19] proposed the "calamity theory of growth" model and argued that stressful life events are related to high levels of identity exploration and low levels of identity commitment. Helson and Roberts [18] determined that some optimal level of challenging stimulation is critical for development of the adult ego, but the mechanisms through which harassment may stimulate or impair ongoing self-identity development among gay and bisexual men are in need of further study.

A second mechanism that may account for the relationship between harassment and identity confusion is that identity confusion may increase the risk of being harassed among gay and bisexual men. Research has found that self-identity confusion is related to isolation during late adolescence and young adulthood [35]. Social isolation may corrode the level of social support for the individual, and thereby increase the risk of harassment [36]. Moreover, self-identity confusion is related to anxiety during late adolescence and young adulthood [37]. Research determined that youths with significant anxiety symptoms may exhibit self-limiting and fearful behaviors because of a significant harm avoidance tendency, which may make youths appear out of the ordinary and more vulnerable to bullying [38]. However, further study is needed to examine the actual directional interactions between harassment and self-identity confusion, and the mediating factors among gay and bisexual men.

This study determined that gay and bisexual men who experienced multitype and multisite harassment had higher unconsolidated identity than those who experienced single-type and single-site harassment. Multisite traditional harassment was also significantly related to lack of identity. Research has indicated that co-occurrence of multiple types of harassment puts victims at high risk for poor physical and psychological outcomes, including severe depression and frequent injuries that require medical attention and prescriptions of medicine [39]. Moreover, harassment that occurs in two or more environments is related to comprehensive and persistent social difficulties in the lives of victims. The victims may develop persistent psychological and physiological responses to multisite harassment incidences, which may impede their development of self-identity. Because of the cross-sectional design of this study we could not rule out the possibility that gay and bisexual men with unconsolidated self-identity or lack of identity were more likely to be the victims of multitype and multisite harassment than those with intact self-identity. We contend that survey and intervention programs for self-identity development need to focus on victims of multitype and multisite harassment, regardless of the causal relationship between being a victim of harassment and self-identity confusion.

Research has demonstrated that adolescent victims of cyber bullying are more likely to experience depression [40] and anxiety [40,41] than adolescent nonvictims. We found no difference in any dimension of self-identity confusion between victims and nonvictims of cyber harassment, but victims who experienced both traditional and cyber harassment had higher unconsolidated identity than those who only experienced either traditional or cyber harassment. Research discerned that multiple marginalization indicators interact synergistically and therefore degrade the health status of a population [42]. For gay and bisexual men in early adulthood, the Internet may be one of the most

important sites of social interaction. The results of our study indicated that cyber harassment may interact synergistically with traditional harassment and further compromise the normal development of self-identity in harassment victims.

In this study, the significant relation between unconsolidated identity and harassment was only found among gay and bisexual men who experienced multitype and multisite harassment, whereas the significant relation between lack of identity and harassment was found among those who experienced single-type, single-site and multisite harassment. The results demonstrated that unconsolidated identity and lack of identity may have different etiologies and paths of development. Given that persons with unconsolidated identity may suffer from poor psychological wellbeing [43], an investigation into unconsolidated identity and its related mental problems in gay and bisexual men who have experienced multitype and multisite harassment should be conducted.

Our study has some limitations that should be addressed. First, the data were exclusively self-reported and we did not obtain additional information regarding the experiences of participants being harassed. The use of only a single data source may result in shared-method variances. Second, the study was cross-sectional and could not ascertain the causal relationship between the experience of being the victim of harassment and self-identity confusion. Third, we did not follow up with the participants to survey whether any changes to self-identity resulted from the persistence or remission of harassment.

*4.1. Conclusion*

Being the victim of verbal ridicule and relational exclusion and being the victim of physical aggression and theft of belongings were significantly related to disturbed identity and lack of identity in gay and bisexual men. Unconsolidated identity and lack of identity were significantly related to multisite harassment. Unconsolidated identity was significantly related to multitype harassment. Substantial evidence indicates that gay and bisexual men experience more severity of mental health problems compared with their heterosexual peers [44,45]. Moreover, self-identity confusion is related to psychosocial problems and behaviors [11,12]. Therefore, effective preventive measures and interventions for gay and bisexual men are required to reduce their risk of being harassed. Schools should provide LGBT students the critical resources, including gay-straight alliances, inclusive curricular resources, supportive educators, and comprehensive bullying/harassment policies [46]. Research found that media is a powerful institution that influences public attitudes toward lesbian and gay youth. Inclusion of sexual minority characters in television programs can reinforce a positive image of sexual minorities and decrease homophobic bullying [47]. Moreover, policies and laws that effectively address homophobia-based bullying and harassment can create a safe living environment for LGBT. Mental-health services providers need to routinely evaluate the experiences of harassment, identity confusion, and their effects on mental health manifestations among gay and bisexual men with mental health disturbances. Appropriate psychological interventions should be made for gay and bisexual men with identity confusion and the experience of harassment to enhance the development of identity and attenuate the adverse impacts of harassment on identity and mental health.

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