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Connections Between Online Harassment and Offline Violence among Youth in Central Thailand

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Abstract

Increasing evidence indicates that face-to-face (offline) youth violence and online harassment are closely interlinked, but evidence from Asian countries remains limited. This study was conducted to quantitatively assess the associations between offline violence and online harassment among youth in Central Thailand. Students and out-of-school youth ($n = 1,234$, age: 15-24 years) residing, studying, and/or working in a district in Central Thailand were surveyed. Participants were asked about their involvement in online harassment and in verbal, physical, sexual, and domestic types of offline violence, as perpetrators, victims, and witnesses within a 1-year period. Multivariable logistic regression was used to assess independent associations between different kinds of involvement in offline violence and online harassment. Perpetration and victimization within the past year were both reported by roughly half of the youth both online and offline. Over three quarters had witnessed violence or harassment. Perpetrating online harassment was independently associated with being a victim online (adjusted odds ratio [AOR] = 10.1; 95% CI [7.5, 13.6]), and perpetrating offline violence was independently associated with being a victim

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offline (AOR = 11.1; 95% CI [8.1, 15.0]). Perpetrating online harassment was independently associated with perpetrating offline violence (AOR = 2.7; 95% CI [1.9, 3.8]), and being a victim online was likewise independently associated with being a victim offline (AOR = 2.6; 95% CI [1.9, 3.6]). Online harassment and offline violence are interlinked among Thai youth, as in other countries studied so far. Interventions to reduce either might best address both together.

Keywords

youth violence; online harassment; offline violence; cyberbullying; Thailand

Defining youth violence and bullying

World Health Organization (WHO, 2011) defines youth violence as including “a range of acts from bullying and physical fighting, through more severe sexual and physical assault to homicide.” Overall, the various types of youth violence “not only contribute greatly to the global burden of premature death, injury and disability, but also have a serious, often lifelong, impact on a person's psychological and social functioning” (WHO).

Bullying is most often defined as a subset of aggressive behavior, characterized by not just engaging in behaviors intended to cause injury or discomfort to another individual (which defines aggressive behavior overall), but also by repetition and a power imbalance between the bully and the victim (Olweus, 2013). However, sometimes “results from studies based on questionnaires designed to measure general aggression are reported as being research on bullying” (Olweus, p. 761), which Olweus has cautioned causes confusion in the field. Olweus has emphasized the importance of maintaining a clear “distinction between a bullying perpetration/bullying victimization research line on the one hand and a general aggression/general victimization line on the other” (p. 760). This distinction is reflected in the WHO (2011) definition of youth violence, which includes bullying a subtype (rather than as a synonym) of youth violence.

However, such a distinction is by no means universally made in the field. A systematic review has recently found that only 4 of 41 reviewed bullying measures corresponded to all expert-defined criteria in their operationalization of the topic (Vivolo-Kantor, Martell, Holland, & Westby, 2014). The extent to which bullying is thought to be distinct from youth violence thus varies from study to study, and sometimes no distinction is made at all. In this article, we do distinguish between the two, following Olweus' (2013) definition of bullying as aggression in a context of power imbalance and repetition.

Defining online harassment and cyberbullying

Research in the last 10 years has documented the emergence of intentionally hurtful acts committed by youth using digital communications technologies, such as mobile phones and the Internet. These behaviors have variably been conceptualized as cyberbullying (Kowalski, Giumetti, Schroeder, & Lattanner, 2014), digital bullying (Olweus, 2013), online bullying (Microsoft, 2012), Internet harassment (Tokunaga, 2010), electronic aggression (Hertz & David-Ferdon, 2008), electronic bullying (Raskauskas & Stoltz, 2007), cyber

aggression or c-aggression (Pornari & Wood, 2010), or as online harassment (Wolak, Mitchell, & Finkelhor, 2007).

These terms reflect differences in how the phenomenon is defined (Tokunaga, 2010). Many studies have defined the phenomenon using the three criteria borrowed from traditional bullying (or offline bullying) literature: intent to harm, power imbalance between victim and perpetrator, and repetition (Dooley, Py alski, & Cross, 2009; Grading, Strohmeier, & Spiel, 2010; Kowalski, Limber, & Agatston, 2012; Olweus, 2013; Tokunaga). Smith, del Barrio, and Tokunaga (2012) have discussed the issue at length and argued that these three criteria are largely appropriate for the study of cyberbullying.

Others have argued that the criteria may be overly restrictive (e.g., Wolak et al., 2007). Only including repeated acts overlooks single incidents that have lasting negative consequences if the material involved remains online and may be forwarded on and on by others (Dooley et al., 2009; König, Gollwitzer, & Steffgen, 2010; Olweus, 2013). Furthermore, victimizing others online may not require greater power, whereas in the offline world it is often crucial (Dooley et al.; Shariff, 2008). However, some have asserted that the criterion of power imbalance is meaningful for cyberbullying if it is understood as “differences in technological know-how between perpetrator and victim, relative anonymity, social status, number of friends, or marginalized group position” (Smith et al., 2012, p. 36) rather than the more traditional forms of power imbalance, such as those related to bigger body size or greater physical strength.

As in the traditional bullying literature, intentionally hurtful online behaviors comprise a larger phenomenon of intentionally hurtful behaviors per se, and a narrower subset of such behaviors that occur in the context of power imbalances and are typically repeated (Olweus, 2013). Olweus has argued that to avoid confusion, the term “bullying” should be reserved for the narrower subset of behaviors-in-context. Correspondingly, Wolak, Mitchell, and Finkelhor (2007) introduced the term “online harassment” to refer to the larger phenomenon of intentional behaviors to harm others through the Internet or mobile devices that may or may not involve power imbalances and repetition. We follow their usage (see Ojanen et al., 2014), reserving the term “cyberbullying” for intentionally harmful behaviors that occur in the context of power imbalance and repetition, except when referring to works of other authors using the term.

Linkages between online and offline forms of aggression

A number of studies have investigated the overlap between traditional bullying and cyberbullying (e.g., Beran & Li, 2007; Pornari & Wood, 2010; Sourander et al., 2010; Ybarra, Diener-West, & Leaf, 2007). One online survey of students in the United States (Juvonen & Gross, 2008) found that 85% of youth who reported at least one incident of online bullying also reported at least one school-based incident in the past year. Furthermore, students who experienced repeated school-based bullying were almost seven times more likely to also experience repeated online incidents (Juvonen & Gross). A longitudinal study conducted in Australia found that being both a victim and perpetrator of cyberbullying in young adulthood was predicted by perpetration of traditional bullying,

perpetration of cyberbullying, and cyberbullying victimization four years earlier (Hemphill & Heerde, 2014). König et al. (2010) reported that in a German sample, cyberbullying often seemed to be motivated by a desire to revenge offline victimization, as their findings indicated that cyberbullies tended to bully those who had previously bullied them in the offline world. Furthermore, a recent meta-analysis of the cyberbullying literature found that cyberbullying perpetration had an overall correlation of 0.45 with traditional bullying perpetration, and of 0.21 with traditional bullying victimization (Kowalski et al., 2014).

Online harassment and cyberbullying worldwide

Both online harassment and offline violence are global phenomena. The software corporation Microsoft recently conducted a 25-nation survey of online and offline bullying incidents among 8-17 year old children, also including non-Western countries, but not Thailand (Microsoft, 2012). Of note, this study focused on involvement in specific behaviors regardless of context (power imbalance or repetition), so the findings might rather apply to offline youth violence and online harassment than to bullying, which was the term used by the study. Although every included country had some online bullying, China and Singapore had the highest self-reported victimization rates (70% and 58%, respectively), and were the only countries to have a higher rate of online than offline victimization (though offline victimization was also common, at 64% and 56%, respectively). In comparison, in the United States, 83% had been victimized offline, and 29% reported online victimization. Similarly, Zhou et al. (2013) reported that in their mainland Chinese sample of high school students, a higher proportion were involved in cyberbullying than in traditional bullying.

These differences might be related to cultural differences. For example, Kowalski et al. (2014) have argued that collectivistic countries with high power distance could be expected to have higher rates of cyberbullying than individualistic countries with low power distance; this analysis would seem to explain the relatively high levels of cyberbullying in China and Singapore.

Though the Microsoft (2012) study suggested that online harassment might be most common in some Asian countries, most of the research has been conducted in Western settings – North America, Europe, or Australia (Tokunaga, 2010; Dooley et al., 2009). Few studies published in international journals have focused on online harassment in non-Western contexts, such as Taiwan (Huang & Chou, 2010), China (Zhou et al., 2013), or Turkey (Akbulut & Eristi, 2011). The review and meta-analysis by Kowalski et al. (2014) included only seven studies (out of a total of 131) conducted in Asian countries, and none conducted in Africa or South America. This indicates that online harassment and cyberbullying remain understudied in Asia, where they might be particularly pertinent problems.

Electronic media use, violence, bullying, cyberbullying, and online harassment in Thailand

A 2010 media use survey among Asian youth by the market research company Synovate (now called Ipsos) indicated that Thai youth were the region's most avid mobile media users,

speaking on a mobile phone twice the regional average, and having a higher than average number of social network contacts (Ipsos Marketing, 2010). This intensity of electronic media use means that at least technologically, online harassment could occur on a large scale among Thai youth.

Previous research has documented that online harassment does occur among Thai youth. However, to our knowledge, only one primary research article on cyberbullying in Thailand has been published in English so far (Songsiri & Musikaphan, 2011). This article focused on 1,200 secondary school students, 52.4% of whom had experienced cyberbullying (Songsiri & Musikaphan). However, specific perpetration and victimization rates were not reported. Three master's theses (Rungsakorn, 2011; Songsiri, 2010; Surat, 2010) and two Thai-language research reports are also available (The Wisdom Society for Public Opinion Research of Thailand, 2009, 2010). Following the distinction between online harassment and cyberbullying, all these studies, except Surat's (2010) qualitative study, in fact have focused on the former, though these studies use the term cyberbullying. In other words, they have measured the phenomenon based on behavioral checklists and not used repetition or power imbalance as criteria.

On the other hand, offline youth violence is a well-recognized and more extensively researched social and health issue in Thailand (Pradubmook Sherer & Sherer, 2011; Pradubmook-Sherer et al., 2008; Trangkasombat, 2006). However, most studies on youth violence in Thailand have been reported in Thai only. One internationally disseminated survey of Bangkok youth found that 28.9% had been involved in a violent event in school and 31.5% outside school within the past year (Ruangkanchanasetr, Plitponkarnpim, Hetrakul, & Kongsakon, 2005).

Some studies on offline bullying in Thailand are also available in English (e.g., Laeheem, Kuning, McNeil, & Besag, 2008; Mahidol University, Plan International Thailand & UNESCO Bangkok Office, 2014; Pengpid & Peltzer, 2013). Pengpid and Peltzer's study used a definition of bullying corresponding to the criteria recommended by Olweus (2013), whereas the studies by Laeheem et al. and Mahidol University et al. used only behavioral checklists. A review article has summarized Thai studies on both offline bullying and cyberbullying, covering many of the studies cited above (Sittichai, 2013).

However, to our knowledge, no previously published studies have quantitatively evaluated the linkages between online harassment/cyberbullying and offline violence/ bullying among Thai youth. No such studies have been included in recent international reviews and meta-analyses of the topic (Barlett & Coyne, 2014; Cassidy, Faucher, & Jackson, 2013; Kowalski et al., 2014; Modecki et al., 2014). Furthermore, we have also found no such studies in the Thai-language literature.

Hence, to examine whether the kinds of associations found between online harassment/ cyberbullying and offline types of violence/bullying documented in other countries are also found in Thailand, this study investigates such associations among 15-24 year-old students and out-of-school youth in a district in Central Thailand.

Method

This article reports quantitative findings from a geographically-focused, mixed-methods study of youth in a district bordering Thailand's capital, Bangkok. We have described the methodology and discussed methodological issues of the study elsewhere in detail (Ojanen et al., 2014). The data were collected from September 2011 to March 2012 using a computerized survey.

Participants and sampling

Participants were 15-24 year-olds living, studying, and/or working in the district. Youth participants belonged to one of three groups: 1) current university students, 2) current secondary school students including vocational college students, or 3) youth currently not attending any educational institution (out-of-school youth). Students were sampled through educational institutions and out-of-school youth from communities. The secondary school subsample was a probability-based, stratified random sample of students in secondary educational institutions within the district. The out-of-school youth and university student subsamples were essentially convenience samples.

Measures

The research team created a computerized survey instrument to collect mostly numeric data on 1) demographics, 2) online harassment, and offline violence, 3) online and mobile media use, and 4) sexual life and partnerships.

Most items on offline youth violence were adopted or adapted from a recent large-scale Thai study (Pradubmook-Sherer et al., 2008). Many items on online harassment were adopted or adapted from a Thai master's thesis (Rungsakorn, 2011) that used the same set of questions that most quantitative Thai cyberbullying studies have used so far. These two existing instruments formed the basis of our measurement of online harassment and offline youth violence so as to enable us to examine connections between phenomena described by these two streams of previous research in Thailand. Table 1 lists all violence and harassment items asked in the survey. Some of the original items described two distinct behaviors and were split to describe only one distinct behavior each. We also added some items to measure phenomena described by our focus group or interview participants. The questions were behaviorally defined, so the participants' perception of what might constitute violence or harassment was not at issue. The question was "in the past one year, have you had the following experiences", and the participants were requested to tick the number of times (if any) they had been involved in each type of incident as perpetrators, victims, and/or witnesses.

In this article, any participant who responded in the affirmative about having perpetrated, been victimized, or witnessed at least one type of incident listed in Table 1, at least once in the past one year, was categorized as having perpetrated, been victimized, or witnessed online harassment or offline violence, respectively. Cronbach's alpha for the dichotomized scale for offline violence perpetration was 0.66; for the dichotomized scale for offline victimization it was 0.69. For the dichotomized scale for online harassment perpetration,

Cronbach's alpha was 0.75, and for the dichotomized scale for online harassment victimization it was 0.77.

The survey program was created in collaboration with an outsourced programmer. Context-specific animations portraying youth were added to make the task more engaging. The program was pilot tested with youth from educational institutions and local communities. Based on their comments, the order of the questions was changed, some items were reworded, and some were deleted to reduce the length of the questionnaire. The completed survey took from 15 minutes to an hour to complete (depending on the participant's literacy and computer skills).

Procedure

Universities and secondary schools were first requested to participate by telephoning them, then sending them a formal request letter, and when appropriate, making a follow-up visit. All identified educational institutions in the district were contacted, and all except one secondary school participated. At participating secondary institutions, students in the classrooms sampled were given the participant information sheet and a consent form, and asked by their teachers if they would like to participate. Some university students were directly approached in their faculties by research team members to request their participation. All data from educational institutions were collected in the premises of these institutions. Participation in the study was voluntary and all data were kept confidential.

Most out-of-school participants were approached directly within each geographical community or introduced to the research team by other participants. In some cases, community members volunteered to help recruit participants, even if they themselves did not participate. The community data were collected in diverse contexts including various kinds of shops, Internet cafés, snooker halls, factories, food courts, markets, housing developments, private homes, sport venues, district council election sites, a temple fair, and a golf course. Recruitment and the informed consent process usually took place immediately prior to data collection.

In both settings, 18-24 year old participants decided by themselves whether to participate, and gave written informed consent if they did participate. For 15-17 year old participants, written informed consent was requested from their guardians and informed assent was obtained from the participants. All participants were verbally briefed about the study and that all data would be kept confidential. They also received a participant information sheet. Participants completed the computerized survey on their own, using netbook computers provided by the research team, and received further assistance if they requested it. All participants were given an incentive payment of 50 baht (1.7 USD) in cash. The study was reviewed and approved by institutional review boards at Mahidol University and University of Pittsburgh.

Statistical analysis

Pearson's correlation coefficients were used to evaluate the associations between perpetration, victimization, and witnessing of offline violence and online harassment. Multivariable logistic regression was further used to evaluate the independent associations

between perpetration and victimization, online and offline, while controlling for age, current educational status, sex, mother's highest educational achievement, partnership status, total daily duration of Internet use, and for other violence and harassment experiences. We chose to control for these variables because in our exploratory analyses, they were significantly correlated with our outcome variables of interest. Recent meta-analyses have also found sex, age, frequency of Internet use, and other bullying experiences to be associated with cyberbullying and traditional bullying (Bartlett & Coyne, 2014; Kowalski et al., 2014). IBM SPSS 19.0 (Armonk, NY: IBM Corp.) was used to obtain descriptive statistics and Pearson's correlation coefficients, and STATA 11.0 (College Station, TX: StataCorp LP) was used for the multivariable logistic regression.

Results

The dataset comprised 595 men, 554 women, and 84 participants who self-identified with other locally recognized gender/sexuality categories (e.g., *gay*, *kathoei*, *tom*, or *dee*), totaling 1,234 participants. They represented Thai mainstream society: all spoke Thai and 1,165 (94.4%) stated they had Thai ethnicity, while 29 (2.4%) indicated Chinese and 32 (2.6%) mixed ethnicity. 1,193 (96.7%) indicated they were Buddhist, while 15 (1.2%) were Muslim and 19 (1.5%) were Christian. See Table 2 for other characteristics of the sample.

Perpetration and victimization of offline violence and online harassment were each reported by roughly half of all participants (see Table 2). Repeated perpetration of offline violence (7 or more incidents of violence in the past one year as defined by Juvonen & Gross, 2008; not tabulated) was reported by 144 (11.7%) participants, while 155 (12.6%) stated they had been repeatedly victimized offline, and 550 (44.6%) had repeatedly witnessed offline violence. Repeated perpetration of online harassment was indicated by 84 (6.8%) participants, repeated online victimization by 117 (9.5%), and repeated witnessing of online harassment by 554 (44.9%) participants.

Considerable overlap between online harassment and offline violence was found: 373 (30.2%) participants reported they had perpetrated, and 415 (33.6%) indicated they had been victimized both online and offline. Correspondingly, 68.3% of those victimized online (415 participants) had also been victimized offline, and 70.0% (373 participants) of those who had harassed someone online had also perpetrated violence offline.

Table 3 shows the correlations between perpetration, victimization, and witnessing offline violence and online harassment, separately for 15-17 and 18-24 year-olds. In both groups, perpetration and victimization were correlated with each other, both online, offline, and across the two contexts. Correlations across the two contexts were lower than within-context, but were nevertheless statistically significant at the same level ($p < 0.001$). Being a perpetrator in one context was correlated with also perpetrating in the other, and likewise, being a victim in one context was correlated with being a victim in the other. Witnessing violence or harassment was correlated with both perpetration and victimization, within and across the two contexts. Witnessing online harassment had a lower correlation with offline perpetration among both groups; this correlation was statistically significant only among 15-17 year-olds ($r = 0.098$, $p < .05$).

Overall, correlations were generally similar for 15-17 and 18-24 year-olds, but among the older group, between-context (online/offline) correlation coefficients were lower than for 15-17 year-olds.

When obtained for other subsamples (different genders; university students, secondary school students vs. out-of-school youth; data not shown), all these correlations remained significant. Likewise, when obtained for repeated measures of harassment and violence (data not shown), all but one of the correlations shown in Table 3 (offline perpetration-online witnessing) remained significant.

Online and offline perpetration and victimization were further tested for independent associations with each other, while controlling for the other violence/harassment and sociodemographic variables (Table 4). Witnessing violence or harassment was not included in these analyses because both online and offline, most participants had witnessed violence or harassment (offline violence: 84.5%; online harassment: 76.6%); witnessing would thus be unlikely to discriminate between participants with and without other violence or harassment experiences. This multivariable logistic regression analysis shows that the independent associations of the greatest magnitude were between being a victim and a perpetrator either online (AOR: 10.1) or offline (AOR: 11.1), but not across the two contexts, indicating multiple roles in the same context. On the other hand, being a victim in one context was also associated with being a victim in the other (AOR: 2.6), and perpetrating in one context was likewise associated with perpetrating in the other (AOR: 2.7); indicating involvement in the same role across contexts. Being an offline victim and online perpetrator, or vice versa, were not significantly associated with each other in the multivariable analyses.

Discussion

In this study, the linkages between online harassment and offline violence were investigated quantitatively among 15-24 year old youth in a district in Central Thailand. The results demonstrated that offline violence and online harassment were quite pervasive in their lives: The 1-year prevalence of perpetration and victimization in each context was around 50%, and over three quarters reported having witnessed violence/harassment in each context. Offline violence and online harassment experiences, across all the roles youth have in such experiences (perpetrators, victims, or witnesses), were almost all correlated with each other in bivariate analyses. Multivariable logistic regression modeling suggested that victims were over 10 times as likely to also be perpetrators within the same context (online or offline) and vice versa; and that those who perpetrated or were victimized in one context were 2.6-2.7 times as likely to also have the same role in the other context.

Prevalence comparisons with other studies

In this study, online harassment victimization and perpetration rates were similar to offline youth violence perpetration and victimization. This suggests that Thailand may be closer to the general picture of Asian countries like China and Singapore, where cyberbullying (or online harassment) appears to be more common than its offline equivalents (Microsoft, 2012; Zhou et al., 2013), rather than Western countries where traditional bullying is

considerably more common than its online equivalents (Olweus, 2013). Kowalski et al. (2014) have interpreted this difference between Western and Asian countries (or research participants) in terms of the individualistic/collectivist culture dimension, and in terms of power distance.

The prevalence of overlapping victimization and perpetration found in this study falls within the range found in other countries. In the present study, 30.3% had perpetrated and 33.6% had been victimized both online and offline. In a recent Irish study (O'Moore, 2012, p. 209), 29.8% reported having been bullied both offline and online, and 24.4% said they had bullied others both online and offline. In a US-based study, 36% experienced both online and offline bullying (Ybarra et al., 2007). Yet, in an Australian study, only 7% were both cyberbullies and traditional bullies (Hemphill, Kotevski, & Tollit, 2012). The 25-country average in the Microsoft (2012) study was 23% for concurrent online and offline victimization and 13% for concurrent perpetration.

The role of definitions in estimating the prevalence of violence, bullying, and harassment

The above figures may not make permit stating that one context or country has more concurrent victimization or perpetration than another, because different age groups and different conceptualizations of the phenomenon are involved (e.g., violence vs. bullying vs. harassment; one or more incidents vs. repeated incidents only). Following Wolak et al. (2007), the present study focused on violence/harassment behaviors rather than on bullying as a behavior-in-context (Olweus, 2013); in other words, repetition and power imbalance between perpetrator and victim were not criteria for being counted as having been involved in a violence/harassment incident. .

Our use of a behavioral checklist (see Table 1) is likely to have captured a relatively higher proportion of those with violence or harassment experiences than if they had been asked about any involvement in “violence,” “bullying,” or “harassment,” which youth might define more narrowly than researchers (Grading et al., 2010; Ybarra, Boyd, Korchmaros & Oppenheim, 2012). Our qualitative findings from the same study (Ojanen et al., 2014, p. 12) indicated that youth in our context had narrow definitions of violence, and so, had we asked about “violence” experiences, many of the behaviors we included in our survey as violent behaviors would probably not have been counted had we asked specifically about “violence” experiences.

Correspondingly, a higher proportion of our participants reported offline perpetration and victimization than those of Pengpid and Peltzer (2013), whose data on Thai students on grades 7-10 were collected using a Global School-Based Health survey, which used the word “bullying” and gave a definition of it. In their study, 27.8% had been bullied (though their time period for this variable was also much shorter - the past 30 days), whereas 33.3% had been in a physical fight in the past 12 months. However, the comparison is also complicated by the fact that our sample included out-of-school youth (unlike the sample of Pengpid & Peltzer), who had generally higher levels of violence and harassment involvement both as victims and as perpetrators than students (data not shown).

Within-context cyclicity and cross-context role consistency

The findings of our study correspond to findings from previous studies (Juvonen & Gross, 2008; Kowalski et al., 2014; Kowalski & Limber, 2011, cited in Kowalski et al., 2012, p. 106-107; Microsoft, 2012; Sourander et al., 2010) indicating that those with one kind of involvement in violence, bullying, or harassment are more likely to also have other kinds of involvement. The modeling conducted in this study suggests two key concepts: 1) *within-context cyclicity of violence/harassment* (within a context, perpetrators also tend to be victims, and vice versa); and 2) *cross-context role consistency* (victims in one context also tend to be victims in the other; perpetrators in one context also tend to be perpetrators in the other).

These concepts have implications for our understanding of the dynamics of both online harassment and offline violence. One previous German study (König et al., 2010) has argued that taking revenge for offline victimization may be an important motivation behind cyberbullying, as 83.3% of those bullied offline were themselves cyberbullies. A similar pattern was seen in the present study: 57.8% of those victimized offline (versus 27.3% of those not victimized offline) were themselves perpetrators online.

Yet, in the multivariable modeling, the adjusted odds ratios for violence/harassment cross-context *and* across roles were statistically non-significant. Thus, rather than implying online revenge for offline slights, these figures might be better explained by the other roles the same individuals hold. More specifically, those victimized offline might be more likely to harass others online because they are *also* being victimized online (online-only cyclicity: AOR 10.1). Alternatively, the harassment they perpetrate online might in fact be a continuation of the violence they are also perpetrating offline (cross-context perpetrator role consistency: AOR 2.7).

The importance of within-context role consistency seen in this study replicates findings from a study conducted in Finland, in which the greatest (and in some cases, only significant) AORs in a similar logistic regression model generally were between the same role across the two contexts (Sourander et al., 2010). Similarly, in a meta-analysis of the cyberbullying literature (Kowalski et al., 2014), the correlations across roles *and* contexts (i.e., between cybervictimization and traditional bullying perpetration, or cyberbullying perpetration and traditional bullying victimization) were lower than for pairs involving at least the same context (e.g., between cyberbullying perpetration and cyberbullying victimization) or the same role (e.g., cyberbullying perpetration and traditional bullying perpetration). Our findings also correspond to those of Kowalski et al. in the sense that in both studies, the highest correlations were observed between perpetration and victimization within the same context (either online or offline).

However, youth perceptions obtained qualitatively within our project (data not shown) suggest that spillover across the offline and online contexts, and the perpetrator and victim roles sometimes does happen; this is motivated by a desire to take revenge, as suggested by König et al. (2010). Yet, such perceptions also emphasize that spillover is only likely between people who have previous offline contact. This seems to fit Olweus' (2013, p. 767) view that "to be cyberbullied or to cyberbully others seems to a large extent to be part of a

general pattern of bullying, where use of the electronic media is only one possible form.” By extension, our findings suggest that there may be a similar continuity between the more inclusively defined youth violence and online harassment (so, online harassment between youth can be seen as a subtype or online equivalent of youth violence).

Witnessing violence/harassment and its consequences

Our participants were also asked about witnessing violence and harassment. This was not only done to assess the extent to which violence or harassment experienced as a third party forms a part of the participants' daily lives, but also to assess associations between involvement as a witness and involvement as a perpetrator or a victim. Being exposed to violence may in itself be detrimental to health (Graham-Bermann & Seng, 2005), but it can also contribute to a culture of violence in which violence (or, by extension, online harassment) is seen as normal and inevitable, and thus more easily perpetrated and tolerated (Galtung, 1990; Pradubmook Sherer & Sherer, 2011).

Our results demonstrate that the majority of youth in our context have witnessed offline violence and online harassment within a one-year time frame, and that witnessing is correlated with perpetration and victimization. However, because witnessing experiences were so common, they would not be particularly useful as predictors of violence/harassment. Culture of violence (or cultural violence) is best seen as a societal-level explanation of violence. On the individual level, culture of violence can arguably be operationalized in terms of moral disengagement and normative beliefs about aggression, which a recent meta-analysis (Kowalski et al, 2014) indicated were associated with cyberbullying perpetration.

The role of sexuality and gender norms in violence, harassment, and bullying

One previous qualitative study conducted in the Thai context has suggested that cyberbullying may particularly often be motivated by sexual jealousy in the offline context (Surat, 2010). Sensitized by this, we included partnership status as one of the controlled variables in our multivariable modeling, because our data exploration indeed indicated that youth with partners were considerably more likely to perpetrate offline violence and online harassment, as well as be victimized in both contexts. This elevated prevalence might have to do with conflicts between partners as well as with possible competitors in their love lives.

We also had to control for the sex of our participants because our findings indicated that male participants were more likely than female participants to perpetrate violence/harassment and be victimized, both online and offline (data not shown). This is likely to do with norms of masculinity and femininity. More generally, previous bullying studies conducted in Thailand also point at the role of sexuality and gender themes in bullying motivations and behaviors: Mahidol University et al (2014) reported that prejudice against same-sex attracted or transgender students was a common motivation of bullying, whereas Pengpid and Peltzer (2013) found that sexual jokes, comments, and gestures were the most common subtype of bullying behaviors.

Limitations and avenues for future research

Regarding the limitations of the study, the present study was cross-sectional, not longitudinal. Thus, the sequence of events cannot be inferred from the associations found. Furthermore, all participants were sampled from one district in Central Thailand. Future longitudinal investigations with a nationally representative sample (or preferably, several cross-cultural samples) would help to overcome these limitations. One further limitation of the present study was that the out-of-school and university subsamples were convenience samples. Nevertheless, the findings for these subsamples were essentially the same as for the more rigorously sampled secondary school subsample; this suggests that the sampling technique did not have a major impact on the findings.

The findings suggest that further studies on youth violence should cover both online harassment and offline types of violence. Longitudinal studies would shed more light on causal pathways. The assertion by Kowalski et al. (2014) that the individualistic/collectivistic culture dimension and power distance explain differences in the relative prevalence of online and offline forms of aggression (violence, harassment, or bullying) should be empirically investigated through cross-cultural studies. Furthermore, future studies especially in Thailand and in culturally similar countries should focus more closely on the role of gender and sexuality norms, sexual jealousy, and partnership conflicts as factors influencing offline violence, online harassment, and their interconnections; this might provide clues for designing more contextually-informed violence, harassment, and bullying prevention approaches.

Conclusion

Perpetration and victimization, online and offline, were both reported by roughly half of the participants, and over three quarters had witnessed offline violence or online harassment. This finding points at the urgency of stepping up violence and harassment prevention programs in Thailand. All kinds of offline violence or online harassment involvement, as a perpetrator, victim, or witness, were interrelated. The greatest associations were between being both a perpetrator and a victim, either online or offline, but not between the two contexts. However, having the same role (perpetrator or victim) both online and offline was also common. Violence and bullying prevention programs should tackle both online harassment and offline violence (or cyberbullying and traditional bullying) as interconnected problems.

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Abbreviations

AOR	Adjusted odds ratio
CI	Confidence intervals
USD	U.S. Dollar
WHO	World Health Organization

Table 1
Survey items on offline violence and online harassment

In the past year, have you had the following experiences? How many times?

Offline

- 1 Verbally threatening others^a
- 2 Threatening others with a weapon^a
- 3 Hitting or slapping others^a
- 4 Engaging in a group fight^a
- 5 Sexually harassing others (for example, use a wording, touch or grope in a way that person does not want)^a
- 6 Hurting, hitting, slapping the body of a *faen* [steady partner], *kik* [casual partner] or *khu non* [sexual partner].^a
- 7 Forcing a *faen* or *kik* to have sex^a
- 8 Forcing a person who is not a *faen* or *kik* to have sex
- 9 Parents violently abusing each other verbally [*only witnessing*]
- 10 Father physically attacking mother [*only witnessing*]
- 11 Mother physically attacking father [*only witnessing*]
- 12 Parent physically attacking child [*only witnessing and victimization*]^a

Online

- 1 Attack with harsh or vulgar messages sent through the Internet/a mobile phone^b
 - 2 Repeatedly sending offensive messages through a mobile phone/the internet^b
 - 3 Spreading false and harmful information about others through a mobile phone/the Internet^b
 - 4 Spreading confidential information about others through a mobile phone/the Internet^b
 - 5 Impersonating others through a mobile phone/the Internet to harm them^b
 - 6 Repeatedly threatening others through a mobile phone/the Internet^b
 - 7 Pressurizing others through a mobile phone/the Internet to have sex or to make a sexual performance over a webcam
 - 8 Covertly video recording or forwarding a clip of others slapping/hitting others to embarrass them
 - 9 Covertly photographing/video recording or forwarding a photo/video of others engaged in sexual activities to embarrass them
 - 10 Video recording or photographing/distributing a photo or video of someone who is in the photo or video and does not want it to be distributed
 - 11 Video recording or photographing/distributing a photo or video of a man to make him look like he's gay
 - 12 Video recording or photographing/distributing a photo or video of women slapping each other
-

Note.

^a Adopted or adapted from Pradabmook-Sherer et al. (2008).

^b Adopted or adapted from Rungsakorn (2011).

Table 2Demographics and prevalence of violence and harassment experiences ($N = 1234$).

Characteristics	Total (n, %)
Age, mean (SD, range)	18.8 (2.49, 15-24)
Current educational status, n (%)	
University student	489 (39.6)
Secondary school student	354 (28.7)
Out-of-school youth	391 (31.7)
Male, n (%)	633 (51.3)
Mother's highest educational achievement, n (%) ^a	
Junior high school or lower	580 (49.0)
Senior high school / lower vocational diploma	198 (16.7)
Higher vocational diploma	107 (9.0)
University	298 (25.2)
Has a steady partner (<i>faen</i>)	615 (49.8)
<i>Violence/harassment experiences in the past one year</i>	
Victimized offline, n (%)	590 (47.8)
Victimized online, n (%)	608 (49.3)
Perpetrated offline, n (%)	624 (50.6)
Perpetrated online, n (%)	533 (43.2)
Witnessed offline, n (%)	1043 (84.5)
Witnessed online, n (%)	945 (76.6)

^aDue to missing values, $N = 1183$

Table 3

Pearson's correlations between perpetration, victimization, and witnessing online harassment or offline violence among 15-17 year olds and 18-24 year olds.

	Offline			Online		
	Perpetrator	Victim	Witness	Perpetrator	Victim	Witness
15-17 year olds (<i>n</i> = 430)						
Offline						
Perpetrator	—	.570 ***	.264 ***	.354 ***	.338 ***	.098 *
Victim		—	.346 ***	.406 ***	.422 ***	.249 ***
Witness			—	.214 ***	.307 ***	.295 ***
Online						
Perpetrator				—	.636 ***	.335 ***
Victim					—	.377 ***
Witness						—
18-24 year olds (<i>n</i> = 804)						
Offline						
Perpetrator	—	.539 ***	.303 ***	.327 ***	.193 ***	.042
Victim		—	.351 ***	.254 ***	.260 ***	.090 *
Witness			—	.205 ***	.192 ***	.285 ***
Online						
Perpetrator				—	.499 ***	.264 ***
Victim					—	.347 ***
Witness						—

Note. *N* = 1234.

* *p* < 0.05,

*** *p* < 0.001.

Table 4

Multivariable adjusted odds ratios (AOR)^a and 95% confidence intervals^b associated with offline and online perpetration and victimization.

	Offline		Online	
	Perpetrator	Victim	Perpetrator	Victim
Offline				
Perpetrator	—	11.1***	2.7***	0.9
Victim		—	1.4	2.6***
Online				
Perpetrator			—	10.1***
Victim				—

Note. N = 1183.

^a All odds ratios were adjusted for age, current educational status, sex, mother's highest educational achievement, partnership status, total daily duration of Internet use, and other violence/harassment experiences.

^b Confidence intervals (CI): 11.1 (8.1 – 15.0), 10.1 (7.5 – 13.6), 2.7 (1.9 – 3.8), 2.6 (1.9 – 3.6), 1.4 (1.0 – 1.9), 0.9 (0.7 – 1.3)

p < 0.001.