

Research Article

Understanding the Darker Side of ICTs: Gender, Sexual Harassment, and Mobile Devices in Pakistan

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Abstract

Much research and practice on gender and digital technologies focus on the potential of ICTs to empower women positively. However, ICTs also have negative impacts on women as well as men. This article explores such implications in the context of mobile device use in Pakistan. While digital harassment is commonplace globally, its extent in Pakistan is interesting because of the country's strong normative values and the complexity of the intersection of patriarchy, religion, and culture. We report on an online survey that examines the influence of personal characteristics on perceptions and experiences of sexual harassment through mobile devices. We conclude that some conventional stereotypes may be misleading.

Keywords: mobiles, sexual harassment, Pakistan

Mobiles and Sexual Harassment in Pakistan

This article reports on the findings of an online survey of 530 people in Pakistan concerning their attitudes toward and experiences of sexual harassment through the use of mobile devices, especially mobile phones. Sexual harassment by information and communication technologies (ICTs) is a global phenomenon, and our research is intended better to understand it through rigorous statistical analysis in one particularly interesting country. The findings reveal significant relationships between aspects of identity and harassment, which require further global comparative research.

Our research provoked some controversy. As one Pakistani woman commented on Facebook:

Sexual harassment is the issue everywhere around the world. . . . stop becoming a part of exclusively defaming my and Your country. Ask this man to conduct this survey world wide. . . . we should discourage these activities being conducted in or for our country instead of making them grounds for that. . . . I hope you'll think as a Pakistani.

It was not at all our intention to defame Pakistan. Two of us are Pakistani, and one of us has herself experienced sexual harassment. Nowhere do we imply that we think the practices in Pakistan are unique.

To cite this article: Hassan, B., Unwin, T., & Gardezi, A. (2018). Understanding the darker side of ICTs: Gender, sexual harassment, and mobile devices in Pakistan. *Information Technologies & International Development (Special Section)*, 14, 1–17.

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Research Origins

Our article builds on insights gathered from our previous qualitative research in Pakistan in which we asked students about how they construct their identities through these technologies (Hassan & Unwin, 2017). This tangentially revealed the considerable sexual harassment to which young people in Pakistan are subjected through their mobile devices. Women especially highlighted how often they were harassed by men through mobile calls and texts as well as online through social media. Our previous study provided graphic details about the methods and consequences of such online sexual harassment, including blackmail, suicides, and honor killings. A further insight was the attribution of causality over digital sexual harassment, with women frequently appearing to be blamed when they are harassed. Six months after our research, the widely reported honor killing of the social media performer Qandeel Baloch by her brother (Gabol & Subhani, 2016) brought this to international public attention (BBC, 2016a). Our research suggests that such incidents are only the tip of an iceberg of abuse and harassment experienced especially by women, but also by some men, across Pakistan through ICTs.

The Global Context

Increasing global attention is being paid to the sinister, or darker (Unwin, 2017), aspects of ICT use, especially on issues such as child online abuse and online harassment. Much literature focuses on the potentially positive and empowering role of ICTs (Donner, 2008; Unwin, 2017), but it is increasingly recognized that such empowerment can only occur effectively in the absence of such negative, or dark, activities (Cheong, Martin, & Macfadyen, 2012; GSMA, 2015; Steyn & van Greunen, 2015; Yan, 2014).

Moreover, there is a groundswell of activity to counter digital violence against women and girls, especially on the Internet. The Broadband Commission (2015) provides a wake-up call for the international community to tackle these issues, and the Association for Progressive Communications (APC, 2015) has produced a set of case studies of technology-related violence against women. The International Telecommunication Union and UN Women also launched the EQUALS (<http://equals.org>) initiative in 2016 as a global coalition to act on all aspects of gender equality, including sexual harassment. Much research in this field, though, has focused on the world's richer countries (Halder & Jaishankar, 2011). Norton by Symantec (2016a, 2016b), for example, recently published important findings relating to online harassment in Australia and New Zealand, which also highlights that men, especially gay men, are subject to such harassment (Norton, 2016c).

Research on digital and online sexual harassment is less frequent in poorer countries, although the APC's (2015) qualitative case studies do relate to six developing countries, including Pakistan. Moreover, the Best Practice Forum on Online Abuse and Gender-Based Violence Against Women of the Internet Governance Forum (IGF, 2015) produced an overview of the issues and recommended solutions. The IGF based its findings on a survey of 56 respondents, largely from poorer countries, designed to ensure that stakeholders take greater cognizance of the issues. This particularly emphasizes that more work is needed to understand and address online abuse, and our article contributes to this end. Many general reviews on sexual harassment in poorer countries pay surprisingly little attention to issues of digital or online harassment (Barth, Bermetz, Heim, Trelle, & Tonia, 2013; Spector, Zhou, & Che, 2014). Nevertheless, there are some case studies on the specific contexts of online sexual harassment in Africa, Asia, and Latin America, although many of these are anecdotal or based on small-sample, qualitative approaches. Very few specifically address the use of mobile devices. In Bangladesh, Nahar, van Reeuwijk, and Reis (2013) note that, despite taboos, adolescents (especially boys) gain information about sex, erotic pleasure, and romance from various digital sources, including computers and mobile phones. The authors also highlight the prevalence of "Eve-teasing," the practice whereby boys publicly harass girls by calling out abusive comments to them on the streets. They suggest that this is a consequence of restrictions on social mixing. They do not, however, examine the links between such traditional behavior and similar forms of harassment through digital technologies. In India, Kumari, Sharma, and Sharma (2015) emphasized the steep increase in cybercrime against women, especially online Eve-teasing, despite the country having been one of the few to enact specific legislation (the IT Act 2000 and its amendments) to curb it.

The paradoxical character of digital technologies has long been recognized, with Morahan-Martin (2004)

emphasizing that the Internet is both a tool of women's empowerment and a means of victimizing them. Although our research focuses primarily on this victimization, it is important to recognize that in some countries social media have been used constructively to counter sexual harassment (Abraham, 2015; Hayes, 2014; Skalli, 2013). The balance between the positive and negative aspects of ICT use owes much to cultural differences. Buskens and Webb (2014) show clearly how culture plays a crucial role in influencing gendered ICT use in Africa and the Middle East. It nevertheless remains difficult to disentangle the complex interrelated influences of various social and cultural factors and how they interact to influence ICT use (Crenshaw, 1989).

Islam, Patriarchy, and Honor in South Asia: The Context of Pakistan

There have not yet been any large-scale, rigorous, and comparable studies of sexual harassment through digital devices in different countries. Much recent publicity has emphasized its particular significance in Islamic cultures across North Africa and the Middle East (BBC, 2016b), emphasizing the importance that family honor and shame play in conservative Arab Islamic societies (Akbari & Tetreault, 2014). In non-Islamic South Asian countries, however, such as India and Sri Lanka, numerous other accounts suggest that sexual harassment remains a pervasive problem (Madan & Nalla, 2015) and that digital technologies are used extensively for such harassment (Cobb, 2016; Nahar et al., 2013; Kumari et al., 2015).

Against this background, it is especially interesting to study digital sexual harassment in Pakistan because of its combination of Islamic and wider South Asian cultural influences, notably the power of patriarchy and family honor. Our work does not show whether digital sexual harassment is necessarily worse in Pakistan than in other countries, but the high frequency with which it was mentioned in our previous research suggested that it warranted further attention. Gelfand et al. (2011) have argued that Pakistan has some of the strongest norms and lowest tolerance for deviant behavior, what they term *tightness*, of any country, and it is therefore interesting to study the intersection of digital technologies, norms, and tolerance of deviant behavior in such a context.

When we began our research, there had been little previous rigorous research on ICTs and sexual harassment in Pakistan. In an early groundbreaking study, Sigal (2006) included Pakistan in her nine-country study of academic sexual harassment. Significantly, she noted that she had had to change the wording of the questions concerning physical touching and "dating" during her empirical research because of the cultural context in Pakistan, which was so different from the others studied. She also noted it was extremely difficult to find information about sexual harassment in Pakistan because of its patriarchal culture. More research and information gathering, especially by civil society organizations, have been undertaken since then. Bukhari (2014a) has provided an overview of technology-driven violence against women in Pakistan based on only three case studies (Bukhari, 2014b). This also provides an overview of the wider policy background in Pakistan, suggesting that the rapid expansion of mobile telephony has exacerbated the pervasiveness of sexual harassment. Indeed, it notes that "The nature of crimes of violence against women emerging now would not have been possible without the technologies being used to perpetrate them" (Bukhari, 2014a, p. 2). More recently, Human Rights Watch (2015) has made strident assertions about the extent of sexual harassment in Pakistan and has claimed that the government has taken inadequate action to protect women and girls from abuses such as rape, honor killings, and forced marriages. Since then the government has begun to take some action with regard to these issues, and Mohsin (2016) suggests that women have also begun to flex their muscles to reclaim their place in society, although insufficient research has yet been done to tackle online abuse and harassment. The Digital Rights Foundation in Pakistan,¹ founded by the charismatic lawyer Nighat Dad, has championed the fight against online sexual harassment. In light of increased complaints of online harassment from women over the preceding two years, in December 2016 it launched a cyber harassment hotline² (Digital Rights Foundation, 2017). It also recently published a report on Pakistani women's experiences of online violence (Hamara Internet, 2017). Nevertheless, there remains a dearth of detailed empirical analyses of the scale and modalities of ICT-based sexual harassment in the country.

1. <http://digitalrightsfoundation.pk>

2. <http://digitalrightsfoundation.pk/home/cyber-harassment-helpline/>

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Perceptions and Experiences of Sexual Harassment Through Mobile Devices in Pakistan

Mobile harassment represents but a small part of the extensive sexual harassment of women in Pakistan, but given the above comments about the ways in which ICTs are transforming the character of such abuse, we suggest it is worthy of further analysis. We explicitly focused on *mobile devices*, since they comprise the main ICT vehicle for such abuse. As background context, it was estimated in 2015 that 79% of the population used a mobile device; 9% of the population were considered active mobile social users (Butt, 2015).

Five issues are of particular interest:

1. The focus on *mobiles* means that our research goes beyond merely online sexual harassment and explores other means by which mobiles are used for harassment. Much research has focused on its *online* character, but our previous work had suggested that tease calls and text messages on mobiles are also a significant element of abuse. We wanted to explore its significance more widely.
2. This article examines both *perceptions* and *experiences* of sexual harassment. Previous research has concentrated primarily on the experiences of people who have been harassed, but to understand the phenomenon more fully it is important to explore wider societal views about it. These views might enable the formulation of better policies aimed at reducing its prevalence (Paluck & Ball, with Poynton & Sieloff, 2010).
3. We explicitly used *qualitative* methods in support of our largely *quantitative* approach. As noted above, we used a large sample and a quantitative approach because previous research has been based on very small sample sizes, which are often criticized by policy makers. We do not claim that our sample is necessarily representative.
4. Previous research has tended to concentrate on the online sexual harassment of women. Our previous work (Hassan & Unwin, 2017) indicated that this was also an issue for men. Therefore, this survey sought to examine the *wider gender dimensions* of sexual harassment.
5. Our previous research pointed to *attribution of blame* as an important issue that has been insufficiently studied in previous research. We therefore address this issue in more detail here.

Research Design

This article reports primarily on quantitative data created through an online survey, the design of which combined findings from our previous research on mobiles and identity in Pakistan (Hassan & Unwin, 2017), as well as evidence from the existing research literature on digital sexual harassment noted above. This section summarizes the definitions used in the survey, its design, the distribution and sampling strategy adopted, and the modes of analysis.

Definitions

Our research focused on *mobile devices* and *sexual harassment*, but situated the latter within the context of *broader harassment* in Pakistan. All these terms are contentious. Therefore, on the introductory page of our survey we included a summary of the purpose of the research, in which we emphasized that (1) it was anonymous, (2) it should take about 20 minutes to complete, and (3) we did not consider any answer to be right or wrong, but rather, we were interested in the views of a diversity of respondents. The summary was followed by definitions of these key terms:

- *Mobile devices* were defined as any digital device such as mobile phones or tablets that can readily be carried with someone (ITU, 2015). We did not want to be too prescriptive at the beginning, but we did ask a detailed question later in the survey to clarify exactly what respondents were referring to.
- *Harassment* was described as “including repeated attempts to impose unwanted communications and contact upon a victim in a manner that could be expected to cause distress or fear in any reasonable person. It can be physical, verbal, or non-verbal.” This definition drew mainly on that used by the UK’s

Crown Prosecution Service (n.d.) and is useful because it emphasizes that the behavior is repeated and unwanted.

- *Sexual harassment* was defined in the survey as “the unwelcome making of sexual advances, requests for sexual favors, or other verbal or physical conduct of a sexual nature.” This drew on the definition used by UN Women Watch, and a link was specifically given to that site³ for people who wanted a more detailed definition.

Survey Design

Our aim was to gain responses from a wide range of ICT users. Many initial questions drawing from our original research and analysis of existing literature were considered for inclusion in the survey. These were whittled down to 10 main questions about perception, eight about experiences, and nine about personal characteristics. Respondents who had not actually experienced sexual harassment could go directly to the final section that asked about their personal characteristics, having completed the section on perceptions. English was used for the survey. Our previous research has indicated that many people in Pakistan, particularly ICT users, have some knowledge of English. We ensured that the questions were written as clearly as possible. We acknowledge, however, that not using Urdu would have excluded some users, particularly the poorest. A freeform text box was also included following relevant questions for people to give additional qualitative comments. This added a rich, and unexpected, source of qualitative material that we used in this analysis.

The final section invited participants to provide information about their personal characteristics, including mobile device usage, experience of several types of harassment, age, gender, the main town or province of residence (subdivided into urban and rural), ethnic and employment groups with which they identify (adapted from the Pakistan Standard Classification of Occupations; Government of Pakistan, 2015), their religion (Islam, Sunni Islam, Shia Islam, and Ahmadi Islam as well as other religions), and whether they could access the Internet with their device. Answers to these questions were used to explore statistically the influence of these variables on participants’ responses (Section 5).

Distribution and Sample

We distributed the survey online in November and December 2016, working closely with government, civil society, private sector, and academic colleagues, who kindly helped disseminate information as widely as possible. Of the 2,028 people who visited the introductory page, 530 completed the survey. Table 1 summarizes the sample characteristics, combining the categories that had only a small number of responses. The numbers do not always total 530 because not all respondents answered every question.

The main respondents were male, Punjabi, Muslim, students, aged 20–24, living in Islamabad, and using smartphones. However, Table 1 shows that people from many backgrounds responded to the survey, providing us with sufficient evidence to disaggregate the data and draw more nuanced conclusions about the social and cultural influences on perceptions and experiences of sexual harassment through mobile devices. This does not mean that it was necessarily representative of Pakistan as a whole. Women represented 40% of the sample, which closely reflects the gender gap between men and women in the use of mobile phones in Pakistan (ITU, 2016).

Modes of Analysis

We represent our data analysis here in three ways.

1. Means and standard deviations (sd) were calculated using a range from 1 (Strongly Disagree/Rarely) to 5 (Strongly Agree/Usually) or the equivalent for the Likert scales.
2. Weighted averages (scores) were calculated using a scale of –2 (Strongly Disagree) to +2 (Strongly Agree) based on the Likert scales, which provided a more intuitive visualization of the data, with negative scores indicating broad disagreement and positive values indicating agreement. Detailed tables of the statistical analyses are provided on our website;⁴ only examples of the most interesting are included here.

3. <http://www.un.org/womenwatch/osagi/pdf/whatish.pdf>

4. <https://unwin.files.wordpress.com/2017/09/itid-tables-annex.pdf> (Tables A–M)

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Table 1. Sample Characteristics.

Age	Frequency (f)	Percentage of Sample
0–14	1	0.2%
15–19	103	19.6%
20–24	304	57.8%
25–29	58	11.0%
30–39	52	9.9%
≥40	8	1.5%

Gender	f	%
Male	313	59.5%
Female	211	40.1%
Other	2	0.4%

Town/Province	f	%
Islamabad Capital Territory	219	41.6%
Karachi	21	4.0%
Khyber Pakhtunkhwa	22	4.2%
Lahore	34	6.5%
Punjab rural	57	10.8%
Punjab urban other than Lahore	108	20.5%
Sindh rural	21	4.0%
Other	45	8.5%

Note: The only province from which no replies were received was Balochistan; nine respondents were not currently living in Pakistan.

Ethnic Group	f	%
Muhajir	45	8.6%
Pashtun	52	9.9%
Punjabi	326	62.0%
Seraiki	20	3.8%
Sindhi	26	4.9%
Other	57	10.8%

Note: The sample included two people who identified themselves as non-Pakistani.

Employment Group	f	%
Legislators, senior officials, managers	17	3.2%
Professionals	93	17.7%
Armed forces	19	3.6%
Students	345	65.8%
Others	50	9.1%

Note: All 13 employment categories had some respondents in them; 12 people identified themselves as unemployed.

Religion	f	%
Islam	362	68.7%
Sunni Islam	120	22.8%
Shia Islam	28	5.3%
Ahmadi Islam	4	0.8%
Christianity	3	0.6%
Hinduism	4	0.8%
Other	6	1.1%

3. The modal class was also examined to clarify the dominant responses to any question and to highlight the polarization of views represented by bimodal distributions. The tables rank responses by means and scores. They also indicate the modal figures and the absolute frequencies and percentages. The qualitative comments in the survey were grouped into thematic categories, with detailed comments that provided added information where appropriate.

Perceptions of Sexual Harassment Through Mobile Devices

Our survey began with a general question about respondents' perceptions of seven types of harassment through mobile devices. The answers indicated that sexual harassment was the most frequent type of harassment encountered, but it was striking that most types of harassment had positive scores, suggesting that respondents saw them as frequent or very frequent;⁵ only disability harassment had a slightly negative score. Both sexual and relationship harassment had modal values of very frequent, indicating by our sample that these are indeed considered to be widespread in Pakistan. The responses showed that people also thought that women were far more frequently sexually harassed than men: The score for women's harassment was 1.18, compared with that for men of -0.31; 52.6% of respondents thought women were very frequently harassed sexually, compared with only 6.8% who thought men were very frequently harassed sexually.

Views about the reasons for sexual harassment in general in Pakistan were more diverse. The most common explanations were that social factors encourage it, and that all types of harassment are common in Pakistan.⁶ Interestingly, the patriarchal character of Pakistani society was not seen as a factor that strongly influenced sexual harassment, and the suggestion that religious factors encouraged it was strongly rejected, with a score of -1.13. Surprisingly, in light of the responses to a later question, 47.5% of respondents also strongly disagreed with the suggestion that those who are sexually harassed deserved it.

The additional qualitative comments from 242 of the respondents helped refine these broad conclusions and provide a more nuanced interpretation. Although one female Punjabi student aged 25–29 commented that "There is no harassment in Pakistan through mobile devices," most respondents identified a plethora of factors that contributed to sexual harassment, with illiteracy and lack of education being the most common. Social factors, including male domination, gender roles within the family, late marriage, and patriarchy, were also seen as important as was the influence of social media, films, broadcasting, and the Internet. Sexual frustration was also articulated as a factor leading to sexual harassment. As one male professional aged 20–24 from Lahore stated:

Because of sexual frustration. Most people don't marry until well into their twenties or thirties, and hence stay virgin for almost half of their lives (statistically). The sexual energy has got to come out somewhere, so it comes out in the form of harassment and cat calling and same-sex sexual liberties. It doesn't happen as often through phones as it does through social media and on the streets.

Also interestingly, there were a few comments suggesting that if people truly followed Islamic teaching, there would be no sexual harassment and that it was caused by a loss of traditional values.

A comment from a 25–29-year-old Punjabi professional woman living in Islamabad is worth citing at length since it integrates many of the reasons why respondents considered sexual harassment through mobile devices to be so common:

Sexual harassment might be common in Pakistan due to socio-cultural norms . . . our society isn't open to the any relationship between men and women except marital. Those who date or go out, are not considered respectable, and there is a lot of family pressure on young boys and girls of refraining from dating, as a result many would go out illegally (according to the socio cultural norms here/and unacceptability) . . . many men would then harass or torture their ex girlfriends using Mobile device by sharing their photos, leaking messages . . . they use this element as the biggest threat and torture to these women, (In case they apart or breakup) knowing that the society will ridicule them and judge them based on their illegal relationship, and

5. <https://unwin.files.wordpress.com/2017/09/itid-tables-annex.pdf> (Table A)

6. <https://unwin.files.wordpress.com/2017/09/itid-tables-annex.pdf> (Table B)

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Table 2. *Who Is to Blame When Men and Women Are Harassed (n=530).*

Ranked in order of mean and weighted average score	Mean	Standard deviation	Score	Mode (frequency and percentage)
Who is to blame when men are being harassed				
A man doing the harassing	3.93	1.24	0.93	Usually 233 (44%)
A woman doing the harassing	3.28	1.43	0.47	Sometimes 146 (27.5%)
The man being harassed	2.82	1.40	-0.18	Rarely 137 (25.85)
Who is to blame when women are being harassed				
A man doing the harassing	4.28	1.20	1.28	Usually 340 (64.2%)
A woman doing the harassing	3.33	1.43	0.32	Sometimes 176 (33.2%)
The woman being harassed	3.34	1.53	0.34	Usually 171 (32.3%)

the effectee is mostly women owing to the patriarchal setting. Many girls have been reported to commit suicide when their nude photos or videos were leaked by their ex boyfriends. . . . As a result we are encounter sexual harassment even strongest!

The most frequent means through which mobile devices are used for sexual harassment were perceived to be twofold: through social media, particularly Facebook and WhatsApp, and through more traditional uses of phones, such as calls and text messages.⁷ We suggest that by focusing largely on online harassment (Hamara Internet, 2017) much research has heretofore ignored a substantial amount of the harassment perceived by Pakistanis through calls and texts. The qualitative answers to this question again reinforced these conclusions and raised many further examples of harassment. Blackmail was widely cited as a common means of harassment through mobile devices, and the following comment by a 25–29-year-old professional woman from Islamabad typifies what happens:

Often ex boyfriends would leak the relationship content or use photos torture or harass the girls, demanding them more favours or money or at times out of jealousy if they get in a relationship again.

We suggest four main reasons why mobiles are perceived as used for sexual harassment: (1) it is easy to send multimedia content using mobiles, (2) mobiles can target people at a distance, (3) it can be done quickly, and (4) the perpetrators can hide their identities.⁸

One of our most interesting findings concerns the attribution of blame (Table 2). Men are generally seen as being most to blame when either men or women are harassed, with the former being explained in part because they are gay. Same-gender harassment is perceived to be somewhat less frequent among women. Significantly, 54% of respondents perceived that women who were sexually harassed as being sometimes or usually responsible for their harassment, in contrast to only 37.9% of the men when they were harassed. These figures for attribution are high for both genders, but women are blamed far more often when they are sexually harassed than men are when they are harassed.

As a way to link perceptions with experiences, all respondents were asked whether they knew people who had suffered from the effects of sexual harassment through mobile devices.⁹ Although there is no way to

7. <https://unwin.files.wordpress.com/2017/09/itid-tables-annex.pdf> (Table C)

8. <https://unwin.files.wordpress.com/2017/09/itid-tables-annex.pdf> (Table D)

9. <https://unwin.files.wordpress.com/2017/09/itid-tables-annex.pdf> (Table E)

check the wider applicability of these figures, they are striking, indicating perceptions of a considerable extent of misery and violence experienced by those who have been sexually harassed through their mobiles. More than two thirds of respondents said they knew people who had suffered depression (79.1%), had their mobile device removed from them (71.9%), felt restricted in their social mobility (68.5%), or forced to marry someone else (67%). Generally, social boycotts and threats were higher among family members than among friends, but even so 45.7% of respondents said they knew people who had faced threats and abuse from friends. Most striking of all, 40.9% said they knew people who had committed suicide, 53.4% knew people who had wanted to kill themselves, and 51.5% knew people whose death had been an honor killing as a result of mobile sexual harassment.

The following are typical of the comments made in the qualitative part of the survey on this issue: "Just because a girl talk to a guy friend online, she was threatened by her family and her cell phones were snatched and her family didn't let her join the university" (15–19-year-old man from Islamabad) and "i Have many friends who have suffered different types of Diseases their Hearts become black they felt no happines in Namaz or any other content of Islam" (20–24-year-old male Punjabi).

Experiences of Sexual Harassment Through Mobile Devices

Among survey responses, 160 respondents said they had been sexually harassed through their mobile devices, representing 30.2% of the sample; 103 (64%) of whom were women. This again reinforces the point that it is women who are most affected by such harassment, although around one fifth of men in our overall sample also suffered.

The experiences of our respondents show that direct messages and phone calls were the most frequent modes of sexual harassment, rather than online social media: 17.5% of respondents who were harassed claim to be receiving daily text messages harassing them sexually, and 11.9% receive daily phone calls.¹⁰ It is also interesting to note that written comments on social media are experienced more frequently than social media harassment through images. One 25–29-year-old Muhajir woman not currently living in Pakistan provided a detailed comment about the evolution of mobile harassment:

Before the time all sims were required to be registered by NIC, I found myself on the receiving end of pornographic images and text messages. These sims used to be bought from resellers on the road rather than authorized sellers. This maybe one reason why one's number would fall prey to sexual predators. Another reason may have been the top-up mechanism of prepaid sims. There were instances when your number would be circulated among people because you had to give it to the shopkeeper for adding credit to your account. Once i bought a post-paid sim registered under my NIC i found these instances to disappear altogether.

Some 14.6% of respondents reported they kept silent and told no one about the sexual harassment, even though it is generally recognized that one way of coming to terms with harassment is to talk about it with friends and family. Given the stigma that exists within Pakistani families (Khan & Hussain, 2008), it is unsurprising that 57.9% of those experiencing sexual harassment through their mobile devices have never told their parents, and 43% have never told their siblings. Many people do, though, confide in friends: 70% of respondents said they sometimes or always tell their friends about the harassment. Moreover, fewer than 20% of respondents told police, teachers, religious figures, or community leaders about their harassment. This illustrates how little authority figures are trusted to resolve the issue. Sufferers also fear retribution from those who might be seen as able to take action to reduce such harassment. Furthermore, few people inform mobile operators or app companies about the harassment they suffer. One respondent, a 30–39-year-old professional woman from Lahore, provided the following comment about her response to being sexually harassed: "I usually take a snapshot of the conversation along with user's number or facebook/Twitter account and post it to Twitter and dare him/her to do it again while tagging relevant authorities."

Respondents were also asked about their feelings when they had been sexually harassed, so that

10. <https://unwin.files.wordpress.com/2017/09/itid-tables-annex.pdf> (Table F)

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their responses could be compared with the perceptions noted above about friends who had been harassed. Responses to these questions used a 4-point scale (Never, Rarely, Sometimes, Always) since a midpoint Unsure category carries little meaning in such circumstances. Feelings of anger, stress, unhappiness, and mistrust in others predominate,¹¹ but, surprisingly, 54.4% of respondents who had been sexually harassed said they sometimes or always did not care. Moreover, it was also surprising that more people claimed only rarely or never to have experienced feelings such as embarrassment, betrayal, shame, or guilt, compared with those who said they felt these feelings sometimes or always. Likewise, 64.4% said they never felt suicidal. These findings suggest that many of those who suffer sexual harassment are more robust than is sometimes perceived. This may be because they are only experiencing relatively mild forms of harassment, such as non-explicit tease calls, but it does suggest that the experience of such harassment is much more varied and nuanced than it is often portrayed. The 25–29-year-old Muhajir woman cited above also commented perceptively about this as follows:

As a teenager, such messages scare the hell out of you. You don't know who to report it to. Whether you will be blamed. I have changed 3 numbers in the past. But as you grow up you realize this isn't your fault. you don't give these creeps your number, and that it is best to block and ignore such creeps. And so you don't care. Once or twice they might be a hoot but mostly these are just annoying and it's unnerving how a private number can so easily go into unwanted hands.

Interestingly, only about half the respondents have considered discontinuing their use of mobile phones as a result of sexual harassment, 43.1% have never changed their phone number, 56.9% have never changed their email address, and 66.9% have not disposed of their mobile device. These figures must reassure mobile companies and could be one reason why they have generally done little to prevent harassment.

Just under half (49%) of those who had been sexually harassed through their mobile devices had also been sexually harassed in other ways. We asked these respondents how these types of experience varied.¹² Our data indicate that people have indeed been harassed more through their mobile devices than in other ways and that some people felt that other forms of sexual harassment were worse than that experienced through mobiles. A Pashtun woman aged 30–39 from Lahore commented:

It's worse when it's done in person or you are sought out by someone who knows you rather than someone from social media or someone who got your business card and is doing it just because he has nothing better to do. The impact is much less in case of [the latter].

Interpreting Perceptions and Experiences: The Intersecting Influences of Socioeconomic and Cultural Characteristics

This section uses the information about respondents' personal characteristics to explore the complex relationships between individual identity and perceptions and experiences of sexual harassment, focusing on those questions for which there is evidence that such factors have significantly influenced responses. Contingency tables were constructed to examine the relationships among the answers given by respondents to the 154 elements of the main survey questions discussed above and the six characteristics of gender, age, ethnicity, religion, location, and occupation. Where necessary, categories were amalgamated so the significance of these relationships could be tested using Chi-Square; *t*-tests to compare means as well as analyses of variance (ANOVA) were also conducted to provide further insights into the data.

The primary conclusion from these analyses is that few relationships showed statistically significant differences in terms of the social, economic, and cultural characteristics of the respondents. However, just under 10% of the Chi-Square tests showed significant relationships. Where such differences were noted, the most usual differentiating factor was gender, with occupation and location sometimes being significant, albeit at low levels. Ethnicity was scarcely ever a significant differentiating factor, nor were age or religion significant differentiators.

11. <https://unwin.files.wordpress.com/2017/09/itid-tables-annex.pdf> (Table G)

12. <https://unwin.files.wordpress.com/2017/09/itid-tables-annex.pdf> (Table I)

Three questions revealed especially interesting insights and are explored further here to illustrate the ways the intersecting characteristics of respondents influenced their views: the reasons why sexual harassment in general exists in Pakistan, the attribution of blame when people are sexually harassed through their mobile devices, and the emotions experienced by people when they are sexually harassed through their mobile devices.

Why Sexual Harassment Exists in Pakistan

Respondents were given the option of scoring their agreement with eight views of why sexual harassment in any form exists in Pakistan.¹³ The most differentiated set of responses, indicating the greatest levels of disagreement, was with the view that it occurs because Pakistan is a *patriarchal society*, for which Chi-Square tests for gender, religion, age, location, and occupation were all significant.¹⁴ Moreover, the means for women's scores were significantly higher than those for men in responding to four suggestions: (1) all forms of harassment are high in Pakistan, (2) it is a way to control someone, (3) social factors encourage it, and (4) Pakistan is a patriarchal society.¹⁵ Interestingly, while the difference was insignificant, the means for men's views were only higher than women's on one response: those who are sexually harassed deserve it.

Examination of the contributions of different elements of the frequency distributions to the Chi-Square totals helps explain the role of *patriarchy* more fully:¹⁶

- Women, far more frequently than men, strongly agreed with the importance of *patriarchy* in influencing sexual harassment.
- Those over age 25 strongly agreed with it more frequently than those under 25.
- Shia and Ahmadi Muslims as well as the small number of those from other religions strongly agreed that it was an important factor significantly more often than those who simply referred to themselves as Muslims or as Sunni.
- Students saw it as being less significant and professionals much more significant than did other occupations.

This illustrates the complexity of responses, and the ways that different combinations of factors help shape people's perceptions of sexual harassment. Our data suggest in general that professional women over age 25, particularly from a Shia or non-Muslim religion, felt most strongly that patriarchy was a significant factor in explaining sexual harassment in Pakistan.

Further insights into people's perceptions can be garnered by examining the other most significant differentiators. *Women more than men* considered that sexual harassment could be explained because *all types of harassment are common* in Pakistan,¹⁷ and that it is a *way to control someone*.¹⁸ It is more difficult to interpret the high significance of *religion's* influence on the view that *religious factors influence sexual harassment*,¹⁹ which was revealed by both the ANOVA and Chi-Square analyses. However, the data seem to suggest that Shia and Ahmadi Muslims, as well as the small number of Hindu and Christian respondents, believed religious factors were a more important influence on sexual harassment than did Sunni Muslims or those who referred to themselves as associated with Islam in general. The final strongly significant difference was in the relationship between *occupation* and the view that sexual harassment was a *way to control people*.

Who Is to Blame When Men and Women Are Sexually Harassed Through Mobile Devices

The issue of blame attribution when people are sexually harassed is of particular concern, especially because 54% of respondents thought that a woman was sometimes or usually to blame when she was harassed

13. <https://unwin.files.wordpress.com/2017/09/itid-tables-annex.pdf> (Table J)

14. <https://unwin.files.wordpress.com/2017/09/itid-tables-annex.pdf> (Table J, row 8)

15. <https://unwin.files.wordpress.com/2017/09/itid-tables-annex.pdf> (Table K)

16. <https://unwin.files.wordpress.com/2017/09/itid-tables-annex.pdf> (Table K)

17. <https://unwin.files.wordpress.com/2017/09/itid-tables-annex.pdf> (Table K, row 2)

18. <https://unwin.files.wordpress.com/2017/09/itid-tables-annex.pdf> (Table K, row 3)

19. <https://unwin.files.wordpress.com/2017/09/itid-tables-annex.pdf> (Table K, row 7)

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Table 3. Chi-Square Analysis for Allocation of Blame When Men and Women Are Sexually Harassed Through Their Mobile Devices.

Who is to blame when men are sexually harassed?									
A man doing the harassing	Gender			Religion					
	χ^2	df	p	χ^2	df	p	χ^2	df	p
	34.718	4	0.000	21.284	12	0.046			
The man being harassed	Gender			Religion					
	χ^2	df	p	χ^2	df	p	χ^2	df	p
	18.348	4	0.001	23.823	12	0.022			
Who is to blame when women are sexually harassed?									
A man doing the harassing	Gender			Location			Occupation		
	χ^2	df	p	χ^2	df	p	χ^2	df	p
	19.830	4	0.001	44.661	24	0.006	33.418	20	0.002
The woman being harassed							Occupation		
	χ^2	df	p	χ^2	df	p	χ^2	df	p
							43.041	20	0.002

Note: Only significant Chi-Square differences are reported.

(Section 3). Interestingly, no statistically significant difference was found between the views of women and men; both men and women thought women were to blame (Table 3). There were, however, subtle differences in the ways in which men and women attribute blame in response to other questions, particularly when a man was blamed for the harassment. Thus, when the observed and expected values calculated during the Chi-Square tests for *when a man was being sexually harassed* were analyzed in detail, men tended to underemphasize and women tended to overemphasize the fact that another man was *usually to blame* for the harassment, although the reverse was the case with the response to *a man sometimes being to blame*. Likewise, *when a woman was being sexually harassed*, women overemphasized and men underemphasized the suggestion that a man was *usually to blame*, whereas the reverse was true with the *sometimes* category. Overall, men had a slight tendency to underemphasize and women to overemphasize the frequency with which men were blamed for sexual harassment of both men and women. These results were confirmed by *t*-tests, which showed that women significantly more than men tended to suggest that men were more often responsible for sexually harassing both men and women and that men more than women blamed the man being harassed.²⁰ However, it must be emphasized that, overall, 54% of respondents blamed women as being the cause of their own harassment.

Table 3 also indicates that *religion* was significant at the 0.05 level in two of the three options when men were being sexually harassed. Much of the differentiation was generated by the small number of people from religions other than those who adhered to Islam, Sunni Islam, or Shia Islam, reinforcing the view that most people from the main Pakistani Muslim communities tended to respond similarly to these questions.

The Emotions Experienced by People When They Are Sexually Harassed Through Their Mobile Devices

There is considerable uniformity in responses to the survey's 17 feelings and emotions that respondents might have experienced resulting from their sexual harassment through mobile devices, regardless of their personal characteristics. Only seven of the 102 Chi-Square tests were significant, particularly with reference to gender

20. <https://unwin.files.wordpress.com/2017/09/itid-tables-annex.pdf> (Table L)

and age.²¹ Both the Chi-Square and *t*-tests showed that *women* tended to get *angrier* and were *more unhappy* than *men* when they were sexually harassed. The Chi-Square analysis also showed that women felt more *suicidal* than men. *Age* was also a significant influence on the ways people responded to feeling *ashamed*, *frightened*, and *stressed*. Significantly fewer people over age 30 and more people age 20–24 said they always felt more ashamed than would have been expected if there had been an even distribution. Likewise, fewer people age 20–24 and more people over age 30 said they never felt more ashamed than would have been expected. These results reinforce some qualitative findings that indicate older people, especially older women, have become more used to dealing with mobile sexual harassment than have younger people.

The Multiple Dimensions of Sexual Harassment Through Mobile Devices in Pakistan

Five conclusions can be drawn from participant responses. First, the perception of the extent of sexual harassment through mobile devices in Pakistan is much higher than we expected. We cannot yet compare this directly with the levels in many other Asian, African, and Latin American countries because no comparable data exist. However, responses from our survey seem to indicate that the very high levels of sexual harassment in Pakistan, especially sexual and relationship harassment, are widespread and that mobile devices have dramatically facilitated the ease and anonymity with which such harassment can be undertaken.

Second, it is evident that substantial numbers of men also suffer from sexual harassment through their mobiles. While women are undoubtedly more affected by this, just under one fifth of the men in our survey reported that they too had been sexually harassed. It is important that future analyses of this issue address gender in all its diversity, rather than concentrate only on women's experiences.

Third, we have shown that *mobile* sexual harassment is much more extensive than just *online* harassment; the use of mobile devices for calling and messaging is almost as prominent as their use for harassment through online social media. Hence, research that concentrates only on social media and other forms of online interaction, especially in countries such as Pakistan that do not yet have extensive mobile broadband, is likely to underestimate the overall extent of the harassment.

Fourth, we have shown that many interacting factors contribute to the prevalence and practice of mobile sexual harassment in Pakistan. Overall, it was striking how few statistically significant differences there were in the scores given by our respondents from their varied backgrounds. However, based on their characteristics, we have identified significant differences in men's and women's perceptions and experiences. Age also influenced perceptions, and, to a lesser extent, religion and occupation shaped their views. Our findings thus go some way to supporting the previously cited research (Kumari et al., 2015; Nahar et al., 2013) that notes the prevalence of Eve-teasing in South Asia and the way this has recently been transferred into the digital world.

Fifth, we have shown the extent to which women are far more frequently blamed than men when they are sexually harassed. This challenge of attribution is one of the most insidious aspects of mobile sexual harassment, and we believe that it owes much to the traditional patriarchal Islamic character of Pakistan's society, with its strong emphasis on family honor and shame. Although this is not strongly supported by our statistical tests, some of the qualitative comments, both in our previous research and in these survey responses, support this conclusion.

Our survey also examined respondents' perceptions of the relative significance of eight actions that could be taken to counter pervasive mobile sexual harassment. All actions scored positively, suggesting that a holistic multidimensional approach is needed if any impact is to be achieved. However, the top three solutions, which all received strong support, were (1) require social media companies to monitor and delete users who sexually harass others (mean = 4.18), (2) increase penalties for sexual harassment (mean = 4.16), and (3) require mobile operators to provide a free reporting service for people who have been sexually harassed through mobile devices (mean = 4.11). These solutions place more emphasis on the private sector than on the

21. <https://unwin.files.wordpress.com/2017/09/itid-tables-annex.pdf> (Table M)

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government and reflect a belief that companies might be better able to deliver solutions than the courts. Nevertheless, 146 people gave additional qualitative comments in response to this question about possible actions to reduce sexual harassment, which added nuance to these conclusions and highlighted three main things: (1) existing legislation needs to be better implemented and appropriate punishment meted out to perpetrators, (2) considerable effort needs to be put into education and raising public awareness, and (3) social media companies and mobile operators need to take forceful action. Respondents provided many other recommendations for how to deal with this, including “Stay with Islam and follow the rules and regulations,” “Actually there are no other ways to reduce it until you have command on yourself, i.e., self-control,” and “PTA should have a hotline service for entertaining harassment complaints effectively and immediately.” The challenge remains to put such suggestions into action and reduce the negative impacts that the abuse through mobile devices causes. There also needs to be further cross-cultural research in other countries on the experiences of mobile sexual harassment, especially of women. ■

Acknowledgments

We are grateful to all those who shared details of our online survey through their networks in Pakistan. Without their valuable support, we would not have been able to gather information from so many people.

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References

- Abraham, K. B. (2015). Sex, respect and freedom from shame: Zambian women create space for social change through social networking. In I. Buskens & A. Webb (Eds.), *Women and ICTs in Africa and the Middle East: Changing selves, changing societies* (pp. 195–207). London, UK: Zed Books.
- Akbari, D., & Tetreault, P. (2014). *Honor killing: A professional's guide to sexual relations and Ghayra violence from the Islamic sources*. Bloomington, IN: AuthorHouse.
- Association for Progressive Communications (APC). (2015). *Cases on women's experiences of technology-related VAW and their access justice*. Johannesburg, South Africa: Author. Retrieved from <https://www.apc.org/en/pubs/cases-women%E2%80%99s-experiences-technology-related-vaw-a>
- Barth, J., Bermetz, L., Heim, E., Trelle, S., & Tonia, T. (2013). The current prevalence of child sexual abuse worldwide. *International Journal of Public Health*, 58, 469–483.
- British Broadcasting Corporation (BBC). (2016a). Part 1: The model and the mullah—Pakistan's “Kim Kardashian”; Part 2: Murdered for her selfies: Pakistan's “Kim Kardashian”; Part 3: The naming and shaming of a sex symbol. Part 1 retrieved from http://www.bbc.co.uk/news/video_and_audio/features/magazine-37720690/37720520; Part 2 retrieved from http://www.bbc.co.uk/news/video_and_audio/features/magazine-37720525/37720525; Part 3 retrieved from http://www.bbc.co.uk/news/video_and_audio/features/magazine-37720690/37720690
- British Broadcasting Corporation (BBC). (2016b). *Shame: Sex, honour and blackmail in an online world*. Retrieved from <http://bbc-arabic-shame.pilots.bbcconnectedstudio.co.uk/#/>

- Broadband Commission. (2015). *Cyber violence against women and girls: A worldwide wake-up call*. Geneva, Switzerland: UN Broadband Commission for Digital Development Working Group on Broadband and Gender. Retrieved from http://www2.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2015/cyber_violence_gender%20report.pdf?v=1&d=20150924T154259
- Bukhari, G. (2014a). *Technology driven violence against women. Country report: Pakistan, 2014*. Islamabad, Pakistan: Bytes for All, Pakistan in partnership with Association for Progressive Communications. Retrieved from http://www.genderit.org/sites/default/upload/tech_driven_violence_against_women1.pdf
- Bukhari, G. (2014b). *Access to justice: For technology driven violence against women case studies (Case Studies 2014)*. Islamabad, Pakistan: Bytes for All, Pakistan in partnership with Association for Progressive Communications. Retrieved from <http://content.bytesforall.pk/sites/default/files/CaseStudies-TechnologyDrivenViolenceAgainstWomen.pdf>
- Buskens, I., & Webb, A. (Eds.). (2014). *Women and ICTs in Africa and the Middle East: Changing selves, changing societies*. London, UK: Zed Books.
- Butt, S. Z. (2015). *Mobile & smartphone statistics of Pakistan 2015*. Retrieved from <http://twittistaan.com/digital-media/mobile-smartphone-statistics-pakistan-2015/>
- Cheong, P. H., Martin, J. N., & Macfadyen, L. P. (Eds.). (2012). *New media and intercultural communications: Identity, community and politics*. New York, NY: Peter Lang Publishing Group.
- Cobb, J. (2016). The silent crime: Sexual harassment and online gender-based violence hinders progress in Sri Lanka. *Internews: Information changes lives*. Retrieved from <https://medium.com/local-voices-global-change/the-silent-crime-15161eb0c17b#.7k6hydwx>
- Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *The University of Chicago Legal Forum*, 140, 139–167.
- Crown Prosecution Service. (n.d.). *Stalking and harassment*. Retrieved from http://www.cps.gov.uk/legal/s_to_u/stalking_and_harassment
- Digital Rights Foundation. (2017). *Cyber harassment helpline. Six month report December 2016–May 2017*. Islamabad, Pakistan: Author.
- Donner, J. (2008). Research approaches to mobile use in the developing world: A review of the literature. *The Information Society*, 24(3), 140–159.
- Gabol, I., & Subhani, T. (2016, July 23). Qandeel Baloch murdered by brother in Multan: Police. *Dawn*. Retrieved from <http://www.dawn.com/news/1271213>
- Gelfand, M. J., Raver, J. L., Nishil, L., Leslie, L. M., Lun, J., Lim, B. C., . . . Yamaguchi, S. (2011). Differences between tight and loose culture: A 33-nation study. *Science*, 332(6033), 1100–1104.
- Government of Pakistan. (2015). *Pakistan standard classification of occupations*. Islamabad, Pakistan: Pakistan Bureau of Statistics, Statistics Division.
- GSMA. (2015). *Bridging the gender gap: Women's mobile access and usage in low and middle income countries*. London, UK: GSMA.
- Halder, D., & Jaishankar, K. (2011). *Cyber crime and the victimization of women: Laws, rights and regulations*. Hershey, PA: IGI Global.
- Hamara Internet. (2017). *Measuring Pakistani women's experiences of online violence*. Islamabad, Pakistan: Digital Rights Foundation.

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- Hassan, B., & Unwin, T. (2017). Mobile identity construction by male and female students in Pakistan. *Information Technologies & International Development*, 13, 87–102.
- Hayes, C. (Ed.). (2014). *Tackling gender-based violence with technology: Case studies of mobile and Internet technology interventions in developing contexts*. Hong Kong, People's Republic of China: STATT. Retrieved from <http://hirondeusa.org/wp-content/uploads/2014/09/STATT-Tackling-GBV-with-Technology.pdf>
- Human Rights Watch. (2015). *Pakistan events of 2015*. Retrieved from <https://www.hrw.org/world-report/2016/country-chapters/pakistan#87015e>
- Internet Governance Forum (IGF). (2015). *Internet Governance Forum (IGF) 2015: Best Practice Forum (BPF) on online abuse and gender-based violence against women*. Retrieved from <http://www.intgovforum.org/cms/documents/best-practice-forums/623-bpf-online-abuse-and-gbv-against-women/file>
- International Telecommunication Union (ITU). (2015). *m-Powering Development initiative report 2015*. Geneva, Switzerland: Author.
- International Telecommunication Union (ITU). (2016). *Measuring the information society 2016*. Geneva, Switzerland: Author.
- Khan, A., & Hussain, R. (2008). Violence against women in Pakistan: Perceptions and experience of domestic violence. *Asian Studies Review*, 32, 239–253.
- Kumari, A., Sharma, K., & Sharma, M. (2015). Predictive analysis of cyber crime against women in India and laws prohibiting them. *International Journal of Innovations & Advancement in Computer Science*, 4(3), 1–6.
- Madan, M., & Nalla, M. K. (2015). Sexual harassment in public spaces: Examining gender differences in perceived seriousness and victimization. *International Criminal Justice Review*, 26(2), 80–97.
- Mohsin, M. (2016). The cyber harassment of women in Pakistan. *The Diplomat*. Retrieved from <http://thediplomat.com/2016/04/the-cyber-harassment-of-pakistans-women>
- Morahan-Martin, J. (2004). Paradoxes in the impact of the Internet on women. In K. Morgan, C. A. Brebbia, J. Sanchez, & A. Voiskounsky (Eds.), *Human perspectives in the Internet society: Culture, psychology and gender* (pp. 275–285). Southampton, UK: WIT Press.
- Nahar, P., van Reeuwijk, M., & Reis, R. (2013). Contextualising sexual harassment of adolescent girls in Bangladesh. *Reproductive Health Matters*, 21(31), 78–86.
- Norton by Symantec. (2016a). *Online harassment: The New Zealand woman's experience*. Sydney, Australia: Symantec.
- Norton by Symantec. (2016b). *Online harassment: The Australian woman's experience*. Sydney, Australia: Symantec.
- Norton by Symantec. (2016c). *Online harassment: The Australian man's experience*. Sydney, Australia: Symantec.
- Paluck, E. L., & Ball, L. with Poynton, C., & Sieloff, S. (2010). *Social norms marketing aimed at gender based violence*. New York, NY: International Rescue Committee.
- Sigal, J. (2006). International sexual harassment. *Annals of the New York Academy of Sciences*, 1087, 103–120.
- Skalli, L. H. (2013). Young women and social media against sexual harassment in North Africa. *The Journal of North African Studies*, 19(2), 244–258.

- Spector, P. E., Zhou, Z. E., & Che, X. X. (2014). Nurse exposure to physical and nonphysical violence, bullying and sexual harassment: A quantitative review. *International Journal of Nursing Studies*, 51(1), 72–84.
- Steyn, J., & van Greunen, D. (Eds). (2015). *ICTs for inclusive communities in developing societies*. Newcastle upon Tyne, UK: Cambridge Scholars Publishing.
- Unwin, T. (2017). *Reclaiming ICT4D*. Oxford, UK: Oxford University Press.
- Yan, Z. (Ed.). (2014). *Encyclopedia of mobile phone behavior*. Hershey, PA: Information Science Reference.