THE PUBLIC HEALTH IMPACT OF EVE TEASING: PUBLIC SEXUAL

HARASSMENT AND ITS ASSOCIATION WITH COMMON

MENTAL DISORDERS AND SUICIDE IDEATION

AMONG YOUNG WOMEN IN RURAL

PUNJAB, INDIA

by

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STATEMENT OF DISSERTATION APPROVAL

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ABSTRACT

The purpose of this study was to characterize sexual harassment in public, or 'eve teasing', in rural India, develop a measurement tool, and to estimate its prevalence and association with common mental disorders (CMD) and suicide ideation (SI) among young women. Mixed methods included focus group discussions, direct observation of questionnaire administration, and both qualitative and quantitative data gathering with a novel questionnaire. Females ages 14–26 were recruited through purposive sampling in nine villages for the initial pretest (N=89). Using the finalized questionnaire, we conducted a cross-sectional survey using a randomized cluster sample of 19 villages and recruited 198 women ages 15-24 using house-to-house probability sampling. Eve teasing was described as staring, stalking, passing comments, or inappropriate physical touch. Most participants perceived significant negative consequences, including tight restrictions on girls' mobility, inability to attend school or work, girl's being blamed, and causing family problems. Among those who reported eve teasing victimization, psycho-social responses included feelings of fear (88%), anger (78%), and shame (68%) (N=59). The internal reliability of the questionnaire was high for key measures (Cronbach's alpha: .65 to .84) and principal components analysis suggested two underlying constructs in the eve teasing instrument. Nearly 30% of participants reported ever having been eve teased, 21% screened positive for a CMD, and 27% reported recent suicide ideation (N=198). In multivariate analyses, spending more than 1 hour in public daily was associated with

reported eve teasing (OR: 3.1 (CI: 1.26-7.49) p=0.016). The odds of screening positive for CMD were significantly higher if eve teased, but only among participants who reported adverse childhood events (ACEs) (OR: 4.5 (CI: 1.18-11.43) p=0.003). Eve teasing was significantly associated with SI among participants who reported ACEs when CMD were included in the model (OR: 3.1 (CI: 1.119-8.472) p=0.032). This is the first study, to our knowledge, to assess the association between eve teasing victimization and mental health outcomes in a community setting. We found that eve teasing may negatively impact the mental health of young women, especially victims of child abuse, and offer a reliable and valid questionnaire for future research.

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CHAPTER 1

INTRODUCTION

This dissertation reflects my five-year inquiry into issues that affect the public's

health in rural Punjab, India. I spent the first two years engaging with nine rural villages,

in partnership with academic and community partners who work in this area, to identify

and prioritize community health needs. During this process, my work with young

women, and, to some extent, young men, painted a vivid picture of the disadvantages of

being a girl. This study focuses on the phenomenon of sexual and gender-based

harassment and explores its consequences on the health and social well-being of young

women.

1.1 Unwelcome and Unwanted: Sexual Harassment in Public Spaces

Sexual harassment generally entails nonverbal, verbal, physical, or visual sexual

attention, intimidation, or coercion that is unwelcome and unwanted. Men and women

can be victims or perpetrators, and it often has a negative psycho-social impact on the

victim.[1,2] Most often studied in the occupational or academic setting, sexual harassment

victimization in these settings ranges globally from 40-60%.[3,4] Longitudinal studies from

North American populations suggest a causal link between institutional-based sexual

harassment and poor mental health outcomes, such as common mental disorders and

suicide behaviors.[3,4] Much less is known about the health consequences of sexual

harassment in other contexts, such as in the public setting.

Sexual harassment in public spaces is gaining global attention as a women's

safety issue, prompting safety audits and policy changes in cities like Quito, Cairo, and

New Delhi.[5-7] Because this is a common problem for women who commute, metro

systems in Quito and New Delhi have instituted women-only metro cars. Sexual

harassment in public spaces is often unlawful in many parts of the world, typically in

relation to indecency laws, but because of the often subtle and fleeting nature of these

acts, the cases are difficult to prosecute.

In 2011, the World Health Organization called for more research on neglected

topics of violence against women, including sexual harassment.[8] Given the limited

amount of research on sexual harassment in the public setting, I examined established

models and constructs from research in the occupational and education settings, including

types of harassment, proclivities of perpetrators, and ecological conditions conducive to

harassment.

Categories of sexual harassment, as examined in the occupational and educational

settings, have been assessed empirically, resulting in a well-established three-factor

model as well as an emerging two-factor model. Fitzgerald's model includes gender

harassment, unwanted sexual attention, and sexual coercion, while Nye's includes gender

harassment and sexualized harassment.[9-11] Fitzgerald's Sexual Experiences Questionnaire

has been modified for use in Pakistan in the workplace setting and has yielded high

internal reliability in all three constructs.[12,13] More recently, a two-factor aggregate

model consisting of gender harassment and sexualized harassment is thought to be

superior to the three-factor model.[11]

In terms of sexual harassment perpetration, O'Hare and O'Donahue's[14] four-factor theory of sexual harassment in the workplace, which may be applicable and adaptable to the public setting, identifies four basic conditions necessary for sexual harassment to take place. First, the individual must be motivated to harass (e.g., power, control, or sexual attraction). Second, the individual must overcome internal inhibitions not to harass (e.g., moral restraints). Third, the individual must overcome external inhibitions to harassment (e.g., organizational barriers such as professionalism). Lastly, the individual must overcome the victim's resistance (e.g., assertiveness or the victim's relative status in the workplace).

1.2 Eve Teasing: A Euphemism for Sexual Harassment in India

In the wake of the 2012 brutal gang rape and murder of a woman on a public bus in New Delhi, India has gained global attention for its "rape culture".[15] Rape culture is characterized by Buchwald, Fletcher, and Roth as societal norms that encourage male aggression and support violence against women, ranging from harassing remarks to rape itself.[16] Oftentimes, such tragedies in India begin with sexual harassment in public spaces, commonly referred to as "eve teasing".

Accounts of eve teasing are a mainstay of Indian news outlets, detailing the offence, and related disputes between the families of the victims and perpetrators, and sometimes sharing sexist details, such as the type of dress the victim wore.[17-19] Dhillon describes eve teasing behavior as making passes, obscene gestures, whistling, staring, and stalking. Small studies in Bangladesh, India, and Pakistan report that 50 – 90% of

women report eve teasing victimization, and a large population-based study in New Delhi found that 82% reported 'ever' having been eve teased and that 67% had been targets of repeated eve teasing in the past year.[7,20-22] Eve teasing victimization begins at an early age. Nearly 70% of girls in a study from Kashmir reported first being eve teased between the ages of 14 and 16 (N=300).[21] Often conveyed as an urban problem, little is known about the prevalence of eve teasing in rural areas of India.

The term "eve teasing" has colonial roots in reference to the Biblical "Eve", known for her original sin. Use of the term is decried by women's advocates because it implies women are to blame and that the term "teasing" trivializes the act.[19,23] Additionally, Baxi describes it as *"a culturally sanctioned practice that normalizes and escalates violence against women in public spaces"* and provides *"a means to legitimize harassment by positioning the very presence of women in public as provocative".[23]*

While a more suitable term is desirable, we use the term as an authentic representation of how it is described and understood by our study population. We have considered and sometimes used alternate terms, such as "public sexual harassment", "gender-based harassment", and "street harassment", but in our opinions, none convey the true meaning. For example, "sexual harassment" may lead one to assume that nonsexual, gender-based insults are excluded. Secondly, the term "street harassment" is more applicable in an urban setting, rather than the rural context of this study.

1.3 The Cultural Context of Rural Punjab

The World Health Organization and others suggest that strict patriarchal norms that favor family honor over the well-being of girls is a community-level risk factor for

sexual violence.[24] Patriarchy is particularly prominent in Pakistan, Bangladesh, and Northern India, particularly Punjab, Haryana, and Uttar Pradesh.[25] In Punjab, men typically inherit land, family wealth, and responsibility for their elders while women move into the home and family of their husbands, taking with them a substantial dowry. Because of this custom, parents often favor sons because girls will eventually belong to another family and their dowry can be very expensive. This patriarchal system has fostered a strong preference for sons. This, paired with illegal, yet prolific, sex-selected abortion services, has resulted in Punjab having the lowest child sex ratio of all Indian per 1000 boys in rural Punjab.[26]

Indian women tend to be valued by society in relation to their role in the family, namely as a chaste and modest wife, daughter-in-law, and mother.[27] Women who fall outside expected gender roles, such as widows and single women, face social sanctions. Premarital sex and romance for young people are taboo, placing a great deal of stress, anxiety, and potential social stigma as a result of even the perception of impropriety between boys and girls. In some cases, perceived impropriety, including cases of eve teasing, have prompted families to preempt the potential damage to a girl's reputation by marrying her off, sometimes resulting in child marriage.[21] Because girls are held to a higher standard than boys in upholding the family honor, they are more likely to be the target of blame and shame. The repression of healthy interaction between boys and girls (e.g., nonsexual intimacy and respect) may help explain why boys and young men eve tease.

1.4 The Safety and Health Consequences of Eve Teasing

The WHO defines health as a complete state of physical, mental, and social well-being, not merely the absence of disease.[28] Whether victimization is due to the behavior of an individual or small group of men or the generalized threat to all women, eve teasing has serious impacts on the safety, psycho-social well-being, and human rights of women. The day-to-day threat of eve teasing in India and other parts of south Asia is significant enough that women and girls curb their participation in public activities. These avoidance tactics may reduce their risk of sexual violence, but at a cost to their education, employment, political participation, and their ability to move about freely without reasonable fear of harm.[24,29] This deterrent to full participation by women in the public sphere may explain, in part, India's poor performance on global measures of gender equality.

While this investigation is an exploration of women's safety in general, we move a step further to explore its impact on mental health using epidemiologic methods and its impact on social well-being using a human rights framework. Globally, it is well known that other forms of sexual violence lead to poor mental and physical health outcomes.[24,30-32] Specifically, longitudinal studies on violence against women suggest a causal relationship with suicide attempts[33], depression[34], mortality among girls[35], and violent death. [36] Given these facts and numerous media reports that suggest that eve teasing can lead to suicide, interfamily violence, forced marriage, and even honor killing, the mental health and human rights aspects of eve teasing also deserves attention.[37,38]

1.5 Suicide and Common Mental Disorders

Unlike many places in the world, young Indian women far outpace their male peers in suicide, with suicide rates ranging from 102-168/100,000 and 78-96/100,000, respectively.[39-41] Furthermore, studies in south India have found that gender disadvantages, such as negative attitudes towards women's empowerment, young age of marriage, and dowry disputes, are risk factors for suicidal behavior and common mental disorders like anxiety and depression.[42-45] Common mental disorders (CMDs) are among the leading causes of morbidity for young women in south Asia. Approximately half a billion women in south Asia are subject to unsafe climates for women, for which eve teasing is a common contributor. Despite a host of anecdotes that eve teasing causes depression and suicide, upon review of the literature, no epidemiological studies have been conducted on its mental health consequences.[39-44]

1.6 Human Rights and Social Change

A culture of discrimination against women, beginning before birth, is evident in India's high child sex ratio, an indicator of sex selected abortion favoring sons. It is especially high in North India where more than 100 fewer girls are born per 1000 boys.[46] Famed economist, Amartya Sen, describes India's *"many faces of gender inequality"* across the lifespan including pronounced inequalities in mortality among women and girls compared to their African peers in countries with little gender bias.[25]

Martha Nussbaum's Human Capabilities framework provides a list of basic freedoms needed to live a humane life.[47] This list can be used to assess the cost of eve teasing. Bodily integrity or being able to move about freely from place to place, secure

against violence is one basic freedom relevant to this study. Another is to have control over one's environment, such as ability to participate effectively in political choices, freedom of speech, and freedom of association, all of which are affected when freedom of mobility is suppressed. A more subtle, yet compelling capability is the ability to have attachments to other people, including romantic attachment. When this natural human response is controlled by social sanctions for premarital romance, it is plausible that a woman's ability to develop such attachment would be blighted.

While parents or guardians in rural India may restrict girls to the home to protect girls from eve teasing, we must also consider other possible motivations for restrictions, such as perceived risk to the girl's reputation and her family's honor simply for moving about freely in public. Secondly, there may be other options for keeping girls safe, including increased supervision and community policing. While parents have less influence on community-level safety, they have more control over the sanctions they choose to impose in relation to family honor. While not very common, it is relevant to report that honor killings do occur in parts of northern India and Pakistan because of strong taboos against unsanctioned romantic relationships.[48] Given this cultural context, girls may fear this consequence regardless of whether or not her family would commit such an act. Therefore, it is important for family members to recognize and curb more subtle forms of sanctions and convey social support of their girls.

While seemingly intractable, the good news is that culture is not static and social norms do evolve, especially when family honor is the driver. Kwame Appiah describes how dueling in Europe and foot binding in China met a quick demise, not due to appeals of morality, but when the practice was no longer fashionable and shed poor light on

families who continued the practice.[48]   Change is also supported when a new, positive practice becomes more acceptable to a critical mass than the previous practice, as seen with female genital cutting (FGC) in West Africa. Through the work of the Tostan organization, the harmful practice of FGC, a prerequisite to marriageability, was abandoned within a short span of several years within hundreds of villages.[49,50] Preceded by human-rights-based education at the village level and in a style that supported community dialogue and empowerment, communities took it upon themselves to abandon the practice, replacing it with noninvasive ceremonial practices.

This knowledge offers realistic hope in the ability of community organizations to shift gender expectations in North India that place young women at a disadvantage. In the case of eve teasing, there is an immediate safety and security threat that requires stronger policing, prosecution, and the creation of safe spaces for women and girls. However, a better understanding of the underlying social conditions that perpetuate the phenomenon, particularly as it relates to family honor, is needed to develop permanent solutions. It is my hope that this dissertation will offer important insight into the design of interventions at the individual, family, and community levels for health and development professionals. With a human-rights-based approach and informal education style, transformational learning can occur that will make eve teasing the exception, not the norm,and minimize stigma for victims by separating its occurrence from family honor.

1.7 Study Purpose, Approach, and Specific Aims

The purpose of this study was to understand the phenomenon of eve teasing in a rural Indian context, to develop and pilot a questionnaire for its measurement, and to explore correlates of eve teasing and its association with mental health outcomes among young women. We also sought insight into eve teasing as a human rights issue and explored participants' ideas about possible solutions. In order to develop strategies to minimize eve teasing, public health workers need to better understand its component parts, and conditions at the individual, community, and societal levels conducive to its occurrence.

The impetus for this study emerged from a previous community-engaged process with nine rural villages in the district of Fategarh Sahib in Punjab, India. Barbara Israel's community-based participatory research (CBPR) approach was used to assess various levels and types of community health needs among different groups of people in the community.[51] Concerns about eve teasing, women's safety, and other gender disadvantages for young women was a common theme that emerged from dialogue with male and female youth. Due to the sensitivity of these issues, we first studied the gender equality in secondary education because it had broad community support within multiple groups, including elder men and women and community leaders. We learned that issues of women's safety, family honor, and 'harassment from boys' or eve teasing, was a leading contributor to girl's discontinuation of school, in addition to economic and transportation problems.

The three research aims of this dissertation were conducted in an iterative manner with much overlap between June 2013 and June 2015. With guidance from faculty and

the leaders of a civil society organization, I led a diverse research team comprised of students and community workers from the PGIMER School of Public Health (PGI) in Chandigarh, India, the University of Utah, USA, and the Mehar Baba Charitable Trust (MBCT) in Bassi Pathana, India. Most team members were female youth, some with similar cultural backgrounds to our study population. Community workers from the MBCT served as gatekeepers to the communities and have a long-term interest in serving community needs. The three research aims of this study use a variety of qualitative and quantitative, or mixed research methods and are listed next.

1.7.1 Aim 1

Using a mixed methods approach, this study aims to characterize public sexual harassment, or 'eve teasing', in the rural Indian context and develop an instrument to measure its occurrence, perceived severity, perceived consequences, possible risk factors, and coping strategies among women ages 15-24 in rural Punjab, India.

1.7.2 Aim 2

The study aims to develop a questionnaire that includes a novel eve teasing instrument based on previously validated tools for the assessment of suicidal behavior (SB), common mental disorders (CMDs), and a range of potential confounding variables, through qualitative and quantitative pilot testing of the questionnaire.

<u>1.7.3 Aim 3</u>

The study aims to describe the prevalence of eve teasing, SB, and CMDs, and bivariate and multivariate association among eve teasing, SB, and CMDs, using cross-sectional data from 300 completed questionnaires by women ages 15-24 in rural Punjab, India. Based on these findings, we propose policy and intervention recommendations.

1.8 Dissertation Overview

An overview of the study design is provided in Figure 1.1. Chapter 2 focuses on the meaning of eve teasing (Aim 1) and includes findings from qualitative and quantitative data gathered in stages one and two of the study. Chapter 3 focuses on the measurement of eve teasing and design of an epidemiologic questionnaire (Aim 2), using data collected across all three study stages, including a pretest (N=89) of the draft questionnaire (multiple versions) and a pilot study of the final questionnaire (N=198). Chapter 4 presents the prevalence of reported eve teasing victimization and mental health findings (Aim 3) using data collected in stage three of the study. I refer to this stage as the pilot study in reference to its relationship to a planned larger study.

The PGI has been awarded funding from the Indian Council of Medical Research to develop and conduct a larger epidemiologic survey using my questionnaire and methodologies, and to develop and test eve teasing educational interventions among youth in Fategarh Sahib. All research described herein was approved by either the University of Utah Internal Review Board or the PGIMER Ethics Committee.

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Stage 1: Problem identification and questionnaire development (Qualitative study)
Purposive sampling in 9 villages with high community engagement

July 2013

Focus Group Discussions
2 with adolescent males, 2 with adolescent females, and 2 with females age 18-26

N = 34

Individual face-to-faceInterviews
with draft questionnaire and direct observation of interviews

n = 23

Stage 2: Draft questionnaire administration (Pretest)
Purposive sampling in 9 villages with high community engagement (CE)

May 2014

Individual face-to-faceInterviews
with draft questionnaire
(Multiple versions)

n = 66

N = 89
RR~90%

Stage 3: Revised questionnaire administration (Pilot study)
Randomized Cluster with probability sampling, 19 villages, low CE

Mar-Apr 2015

Individual face-to-faceInterviews
with revised questionnaire
(Single version)

N = 198
RR 75%

*RR = Response rate

Figure 1.1 Overview of Study Design: Eve Teasing Meaning, Measurement, and Its Association with Common Mental Disorders and Suicide Ideation

CHAPTER 2

EVE TEASING MEANING AND MEASUREMENT: A MIXED METHODS

STUDY OF PUBLIC SEXUAL HARASSMENT

IN RURAL PUNJAB, INDIA

2.1 Abstract

The purpose of this study was to characterize sexual harassment in public, or 'eve teasing', in rural India, and develop a means to measure its occurrence. Eve teasing is a euphemism for sexual harassment of women by men in south Asia and is characterized as a common threat that curbs women's ability to move about freely and safely in public. Eve teasing was identified as a problem, especially by female youth, using a community-based participatory approach with nine Indian villages. We used mixed methods, including focus group discussions, direct observation of questionnaire administration, and qualitative and quantitative data gathering with a novel questionnaire. Females ages 14–26 years were recruited through purposive sampling for the questionnaire pretest (N=89). Interviews were conducted face-to-face in the home and school settings. Eve teasing was described as staring, stalking, passing comments, and inappropriate physical touch. Most participants perceived significant negative consequences, including tight restrictions on girls' mobility, inability to attend school or work, girls being blamed, and causing family problems. Among the 59 women who reported eve teasing victimization, psychosocial

responses included feelings of fear (88%), anger (78%), and shame (68%). In conclusion, we found that eve teasing may negatively impact the mental health of young women and curb their ability to participate in public life, including school and work.

2.2 Background: The Phenomenon of Eve Teasing

Sexual harassment entails nonverbal, verbal, physical, or visual sexual attention, intimidation, or coercion that is unwelcome and unwanted and often has a negative impact on the psycho-social health of the victim.[1,2] Eve teasing is a euphemism in south Asia for a common form of sexual harassment that typically occurs in public places.[3,4] Although prevalence studies are sparse and measurement methods vary, eve teasing is thought to be very common with 50-100% of women reporting victimization.[3,5-7] Specific examples include making passes, obscene gestures, whistling, stalking, staring, pinching, fondling, and rubbing against women.[4,8,9]

Use of the term is discouraged by women's advocates because it perpetuates what Baxi describes as 'a culturally sanctioned practice that normalizes and escalates violence against women in public spaces' and is "a means to legitimize harassment by positioning the very presence of women in public as provocative".[3,10,11] As described by the Indian government, eve teasing occurs "when a man by words either spoken or by signs and/or by visible representation or by gesture does any act in public space, or signs, recites or utters any indecent words or song or ballad in any public place to the annoyance of any woman".[4] While the Indian Penal Code does not specify eve teasing per se, section 294 prohibits making a girl or woman the target of obscene gestures, remarks, songs or

recitation punishable by up to three months in prison.[4] It is described by Gosh as "a set of behaviors that is construed as an insult and an act of humiliation of the female sex".[12]

The day-to-day threat of eve teasing in south Asia is significant enough to curb women and girls' participation in public, including school and work, resulting in untold opportunity costs for women and society.[4,13] Not only is it a threat to a woman's safety, prevailing attitudes about gender roles that lay blame with the victim may exacerbate feelings of shame and humiliation. Indian women tend to be valued by society in relation to their role in the family, namely as a chaste and modest wife, daughter, daughter-in-law, and mother. [14]

Qualitative studies from India and Bangladesh report that eve teasing is a ubiquitous threat for women that often occurs in broad daylight, and can lead the victim to feel unsafe, embarrassed, disgusted, objectified, fearful, and humiliated.[4,15] Women from upper-middle-class families in New Delhi reported lesser stigma with being victimized, while adolescent girls from Bangladesh, including urban and rural dwellers from a range of socio-economic backgrounds, said they feared being blamed by society and even their families. More importantly, being harassed and blamed for eve teasing can reduce a girl's chance of being matched with a suitable husband and could drive up the price of her dowry.[15] These fears do not seem unfounded as accounts of marriage proposals being retracted and family's marrying off young girls to preempt damage to a girl's reputation are not uncommon.[16]

The perceived severity of eve teasing, for both victims and perpetrators, is mitigated by a variety of social norms, which can be perpetuated through the media. Hindi films, which are popular among youth, often portray eve teasing as an effective

romantic pursuit. The film industry has been blamed by some for promoting sexual violence.[17] The perceived severity of eve teasing is conveyed in the term "little rape".[4] This is especially pertinent in the wake of the highly publicized cases of violence against women, including the New Delhi gang-rape in 2012.

The World Health Organization suggests that strict patriarchal norms that favor family honor over the well-being of girls is a community-level risk factor for sexual violence.[18] The strength of these norms is evident by frequent media reports of cases where eve teasing leads to suicide, interfamily violence, early or forced marriages to pre-empt or repair the threat to a girl's reputation, and even honor killings.[16,19] Strict patriarchy is particularly prominent in Pakistan, Bangladesh, and northern India, particularly Punjab, Haryana, and Uttar Pradesh.[20] My previous unpublished research with youth in rural Punjab found that eve teasing and the resulting social isolation of adolescent girls is a common problem.

A four-factor theory of sexual harassment helps explain why perpetrators participate in eve teasing.[21] First, the individual must be motivated to harass. Common reasons to harass include power, control, and sexual attraction. Women in Dhillon's study described scenarios where men who harbored negative attitudes about women in public and harassed to assert their power and control over women.[4] In Nahar's study in Bangladesh, power and control were described as reasons boys eve tease, but the study also provided examples of harassment based on sexual attraction, sometimes as romantic expressions of feelings or crude sexualized comments.[12] Since premarital sex and romance are taboo in much of the subcontinent, the repression of healthy interaction

between boys and girls (e.g. nonsexual intimacy and respect) may help explain why boys eve tease when they are motivated by attraction.[15]

In addition to motivation, perpetrators must also overcome internal and external inhibitions to harass, such as one's moral standards as well as socio-cultural norms and expectations.[21] When men were asked why they eve tease, multiple studies report that they believe it is their right, that it is funny or trivial, and that it does not hurt the victim, indicating that moral restraint is easily breached.[4,6,12,15,22] More broadly, societal factors, including victim blaming, apathetic policing, and weak systems for legal redress, may minimize external inhibitions to harass. Lastly, according to O'Hare and O'Donohue, the harasser must overcome the victim's resistance.[21] Evidence is emerging that a common defense tactic is to ignore the harasser, which only leads to more aggressive harassment.[13] Given the social stigma of eve teasing victimization, it is reasonable to assume that women would avoid a confrontation with the harasser(s) to minimize attention to the situation.

The impetus of this study emerged from community concern about eve teasing and its potential impact on the mental health of young women in the rural Fategarh Sahib District of Punjab, India. While the phenomenon is fairly well characterized in urban contexts, we found limited information about the phenomenon in rural contexts. The purpose of this study was to characterize eve teasing in the rural Indian context, including its occurrence, perceived severity, perceived consequences, possible risk factors, and coping strategies, particularly as experienced by young women. Secondly, we aimed to develop a means to quantitatively assess its occurrence through the development of an eve teasing questionnaire.

2.3 Methods

Our community-based participatory research (CBPR) approach included the broader community in problem identification and prioritization.[23] Local co-researchers also participated with the collection of data, questionnaire development, and interpretation of results. Co-researchers included a female leader of a local civil society organization and several young women employed with the organization. Qualitative data gathering methods included focus group discussions (FGDs), semistructured interviews, and direct observation of a subset of interviews. The survey with semistructured interviews is referred to as the questionnaire pretest. Data collection was carried out in July 2013 and May 2014 in nine rural villages in the Fategarh Sahib District of Punjab, India.

2.3.1 Focus Group Discussions

Thirty-four people were recruited for FGDs through purposive sampling with the aid of community-based social workers. Six FGDs were held in total, two with adolescent boys (n=10), two with adolescent girls (n=15), and two with women ages 20-26 (n=9). Discussion topics included eve teasing perceptions, characteristics, experiences, and perceived consequences. FGDs were conducted primarily in Punjabi and observed by bilingual note-takers who recorded notes in English. FGD notes were uploaded into Dedoose Version 4.5 (SocioCultural Research Consultants, LLC, 2013, Los Angeles, CA) and coded for pre-established categories and evaluated for emerging themes. Two female FGD participants spontaneously offered to share more detail of their

experiences through one-on-one interviews after the conclusion of the FGD. These notes were also recorded and included in the analysis as case studies.

2.3.2 Semistructured Interviews (Questionnaire Pretest)

Eighty-nine women age 14-26 year were recruited across nine villages through purposive sampling to participate in an interview using a semistructured questionnaire. We aimed for a broad range of age, socioeconomic status, school-going status, and geographic distribution within each village. Most participants were recruited through home visits, while a small number were recruited at a secondary school.

Interviews were conducted in a private setting, typically in the home, beginning with a semistructured questionnaire. Five versions of the questionnaire evolved over the course of all interviews. The questionnaire included structured and open-ended questions about eve teasing exposure, nature, timing, intensity, severity, emotional reactions, and perpetrator attributes. It also included open-ended questions about what could or should be done to curb eve teasing. Additional sections of the questionnaire, described in Chapter 3, included mental health status, sociodemographics, and covariates pertinent to assessing the relationship between eve teasing and mental health.

Questionnaire responses were entered into Microsoft ACCESS. Quantitative responses were analyzed descriptively in STATA13 (Statacorp, 2013, College Station, TX). Open-ended responses were exported to Microsoft Excel where they were post-coded and summarized numerically.

2.3.3 Direct Observation of Interviews

The first 23 interviews, conducted in July, 2013, were observed by a study team member with attention paid to ease of wording, interviewer techniques, and participant understanding. Observers and interviewers debriefed and made recommendations for questionnaire revisions. An additional 66 participants were recruited and completed interviews in May 2014. We continued to revise the questionnaire through debriefing sessions with the interviewers. We documented the process with a tracked-changes version of the survey in Microsoft Word, and in a log with noes about considerations for interviewer training and implementation.

2.4 Human Subjects Protection

The World Health Organization's Violence Against Women Research Manual was instrumental in guiding the development of the study protocol, in training study team members, and in assuring safety and privacy of participants.[24] Due to the use of community-based 'co-researchers', we took additional measures to provide ethics training to lay researchers and assured close supervision. All interviews and FGDs were conducted in a private setting. Confidentiality was improved by not collecting personal identifiers and using verbal rather than signed consent and assent. This study was approved by the Institutional Review Board at the University of Utah, USA (IRB_00057202).

2.5 Results

Overall, 123 participants were enrolled in the study and participated in one of six

FGDs (N=34) or an interview (N=89), and all were rural dwellers. With the exception of

two FGDs with adolescent boys, all participants were females ages 13-26. A response

rate of 90.8% was achieved with the interview sample (N=89). The interview sample

differed somewhat from the general population in that it over represented women who are

of lower caste, 74% compared to 46% in a recent local census (Table 2.1).

2.5.1 Measurement Tools for Eve Teasing Experiences

The eve teasing module in the ETQ-MH included questions about perceived

exposure (Figure 2.1), characteristics of last experience (Figure 2.2), and attitudes about

eve teasing (Figure 2.3). Question 67 assesses perceived risk of eve teasing in the

community. Questions 67-73 are intended to measure the occurrence and timing of eve

teasing victimization as a means to measure prevalence (Figure 2.1). One question asks

directly about eve teasing victimization; *"Have you ever been eve teased?"* This is

subjective in that the definition of eve teasing is left to the respondent. In another

question, we asked about specific eve-teasing-like behaviors in a yes/no format, offering

a more objective measure.

Types of eve teasing are captured in question 72, based on verbal, nonverbal, and

physical types, or gender-based, sexualized harassment, or coercion (Figure 2.1).

Questions 74-80 are meant to characterize the last episode of eve teasing, including

perpetrator characteristics and emotional and coping responses (Figure 2.2). Questions

81-86 assess young women's attitudes about eve teasing and are based roughly on

O'Hare & O'Donohue's four conditions conducive to sexual harassment (Figure 2.2).[21]

After conducting this study with the eve teasing questions illustrated in Figures 2.1 – 2.3, new information became available, including Nye's theoretical models of sexual harassment and Dhillon's qualitative study of 'street harassment'. Based on this information, the Eve Teasing Questionnaire–12 (ETQ-12) was developed (Figure 2.4) as a potentially superior replacement for question 72 in the existing questionnaire (Figure 2.1). The ETQ-12 is a hybrid of Nye's two-factor and Fitzgerald's three-factor theoretical models of sexual harassment. While it was not used in this study, it may be useful in future research on eve teasing assessment based on sexual harassment theory and culturally relevant examples of eve teasing.

2.5.2 Characterization of Eve Teasing

2.5.2.1 *Definition.* Adolescent boys and young women in FGDs offered a variety of behaviors that describe eve teasing. Behaviors included staring, stalking, touching, making remarks or *"passing a comment"*, winking, and deliberate pushing by a boy into another boy to 'accidentally' push a girl. Email harassment, mobile phone harassment, and cyber-bullying were also noted. These behaviors were described as being perpetrated by single persons or groups of men or boys and perpetrated by strangers, people known to the victims, and even 'within the home'. It was difficult to elicit descriptions of gender-based, or power-based, versus sexualized examples of eve teasing.

2.5.2.2 *Frequency and timing.* Based on interview responses, prevalence of eve teasing was common, ranging from 32.8% to 56.5% (N=89), depending on the version of the question (Table 2.2). Reports of when the last eve teasing episode occurred clustered

around recently, within the past 3 months, and about one year ago (10 months to more than a year ago). It was difficult for respondents to describe the timing of the episode, or report the last time they were eve teased. This may be due to the difference between one time and ongoing episodes. While eve teasing was most often reported as an isolated occurrence, 31% reported the episode as an *"ongoing problem"* (Table 2.2).

2.5.2.3 *Types of eve teasing.* The most common types of eve teasing experienced included nonverbal, such as staring, leering, or stalking (38%), and verbal (40%)(n=36). Twenty-three percent reported some type of physical eve teasing, such as inappropriate touching, pushing, or brushing against. Eve teasing experiences were most often described as a one-time event, rather than ongoing (Table 2.3).

2.5.2.4 *Perpetrators.* Among interview participants, perpetrators were described as equally likely to act as an individual or a group, be known or unknown to the victim, and be of their same age of the participant or older.   In both the questionnaire pretest, and pilot study, perpetrator characteristics were wide-ranging, as seen in Figure 2.5, suggesting that eve teasing is not perpetrated by a specific 'type' of man.

2.5.2.5 *Emotional responses.* In the pretest, anger was the most common single emotional response (61.1%). In the full pilot study, which more consistently queried potential response, emotional responses included feelings of fear or worry (88%), anger (78%), and shame or humiliation (68%) (n=59) (Table 2.3).

Feelings of fear may be a result of how eve teasing is associated with more severe sexual violence, such as rape. Male and female FGD participants associated eve teasing with severe sexual crimes like the 2012 New Delhi gang-rape and instances of rape in

their community and female FGD participants reported being afraid to leave their houses after a girl from the area had been raped.

FGD participants suggested that eve teasing can lead to depression and suicide. Female FGD participants shared a story about an adolescent girl from a nearby village who received an unwanted kiss from a boy while picking mangos. They said she was so ashamed that she fell into a depression, isolated herself from her friends, and committed suicide. In another example, a 22-year-old wife and mother described how she was eve teased at a religious event in New Delhi by being followed by a group of boys in a crowded location or 'crush'. Upon learning about the episode, her mother-in-law became very angry with her and she felt ashamed and humiliated. Her husband was abroad and she could not share her emotions with her in-laws. She described feeling lonely, sometimes depressed and said she often thought of suicide, reporting that she, "*thinks too much* [about] *where does it end?"*

2.5.2.6 *Coping responses.* Reporting the incident to authorities was very rare, but a majority (72.7%) reported telling someone, such as a family member or friend (Table 2.3). A female FGD participant described a positive coping response possibly related to having higher social capital because she was a member of a sports team. This kind of social capital may play a positive role in mitigating the social and emotional impact of eve teasing. A different female FGD participant described an incident where she was walking home with friends on her sports team and was approached by a boy on a motorcycle and harassed. She reported, with enthusiasm, that she threatened him with a stick and was successful in thwarting his harassment. She reported the incident to her coach and parents. She noted that most girls in her village would not respond in this way,

implying they would be more timid. Social capital has to do with the strength of one's social support system. In this case, being on a sports team may have increased her self-esteem and she was therefore more able to defend herself. Furthermore, being associated with girls with similar self-esteem could have enabled her even further.

       2.5.2.7 *Safety and mobility of women and girls.* To understand the opportunity cost of eve teasing, we asked an open ended question in the interview; *"If eve teasing no longer existed, how might your life improve?"* (N=66). The most frequent answers were categorized as much better/enjoyable (23), being free (21), being safe (21), and being able to pursue school or work (8). Safety was described as *"I would feel/be safe"*, *"I would not have fear"*, *"parents would not be afraid for their girls"*, and *"no rapes would occur"*. It is clear that the threat of eve teasing is a significant affront to feeling safe and secure in their community.

2.5.3 Social Context of Eve Teasing

       Eve teasing is just one of many threats to women in rural Punjab. Participants described situations where parents restrict girls to the home to protect them from sexual violence and improper relations with boys or men. As a result, participants described being relegated to the domestic sphere at the expense of school, work, and social activities. Among interview participants who were asked about common problems faced by girls in their community, the most frequent responses were restrictions on mobility in public (n=10), safety (n=8), dowry (n=7), and barriers to education (n=7) (N=66). One participant said that parents restrict girls, not for safety reasons, but due to *"fake family honor"*. Other examples of restrictions included, *"parents don't allow girls to go*

outside" and *"husbands keep a close eye on wife. She is not even allowed to look around while sitting on the back of a bike with her husband."* Specific safety issues included *"physical abuse", "rape", "burning of girls"*, and *"eve teasing"*. Educational barriers included *"No rights to get education", "parents restrict schooling",* and *"not allowed to study in a co-ed school"*.

We noted some variation in how female youth accept prevailing gender expectations. Some girls reported a preference to stay at home rather than be out in public. One participant blamed other girls for not conforming to marriage expectations, saying *"Girls who run off for love marriages ruin it for the rest of the girls in the village, now they face problems."* Another participant vehemently opposed the expectation that girls bear responsibility for the family's honor and called it *"fake family honor"*.

When the survey participants were asked, *"Do you think people in your community would support efforts to stop eve teasing? Why or why not?"* (N=66), approximately half who offered a response provided a positive outlook (n=26) and the others provided a negative response (n=21). Reasons for a positive outlook included *"people have daughters and sisters"*, *"they already stop boys from standing in groups"*, *"for girls safety"*, and *"so that girls can go out freely and live their life"*. Reasons for doubting community support included the tendency for people to blame the victim, go light on perpetrators, lack of empathy for girls outside their own family, views that girls' problems are not important, and feeling helpless against it due to prevailing *"old ways of thinking"*. One person said that getting involved with an eve teasing case could lead to honor killings.

Participants discussed what could be done to prevent eve teasing. Suggestions included having parents and teachers educate boys about eve teasing, advising girls to report eve teasing to a trusted relative, teacher, or friend, and offering more support to victims. Some of the participants said that girls should retaliate against boys who eve tease or boys should be scolded harshly or beaten. They also suggested that girls, parents, the community, broader society, and government, should stand up against eve teasing. Although we did not probe for more detailed solutions, these results provide a basis for future community discussions about how to address the problem.

2.6 Discussion

Our study indicates that eve teasing may be reported less frequently than in other populations. The cause may be underreporting due to the sensitivity of the topic or due to a real difference, such as less time at risk since many young women spend little time in public compared to urban women. While restrictions on women's mobility in public have been noted in multiple studies, restrictions seemed to be much more pronounced among our study population. For instance, while urban women may avoid going out at night, rural young women may avoid going out at all, even dropping out of secondary school. Very few of the women in our study were enrolled in higher education or participated in the labor force.

There was much overlap with other qualitative studies in how participants characterized eve teasing. It differed from urban qualitative studies in that rural women were more likely to know the perpetrator. The most significant difference was in perceived severity, where rural women and girls reported that eve teasing could lead to

depression and even suicide. Young age and stricter patriarchal norms and gender expectations may be contributing factors. This stigma may be exacerbated due to the lack of anonymity in rural communities.

The nature of eve teasing and its broader impact on human rights is described by Akhtar as a means of controlling women through intimidation and an affront to women's freedom of movement, education, and bodily integrity and a major stumbling block for achieving gender equality in India.[6] Our findings fully support this representation of eve teasing as a human rights issue, including her assertion that *"Of all the forms that violence against women can assume, eve teasing is the most ubiquitous and insidious because it is considered normal behaviour and not an assault to females."*[6]

By developing and piloting the ETQ-MH instrument, we advanced a methodology to address a form of gender and sexual harassment that is underrepresented in the literature. By including both direct (subjective) and behavior-based (objective) questions, the instrument, to some extent, disentangles perception from actual behavior. Additionally, the proposed ETQ-12, which we did not use in this study (Figure 2.4), may be superior to question 72 in the ETQ-MH because it discerns sexual harassment theoretical constructs, including gender harassment, sexualized harassment, and sexual coercion. The ETQ-MH additionally characterizes eve teasing experiences to assess frequency, time at risk, chronicity, type of offense, severity, perpetrator characteristics, coping mechanisms, and the participant's attitudes about victim blaming.

Due to participants' reluctance to share the nature of a specific episode, we found it difficult to measure the location of the episode. The specific and graphic nature of the ETQ-12 may prove to be inappropriate for use with our study population due to

participant's nearly universal reluctance to disclose details of eve teasing episodes.

This study was part of a broader community effort to mobilize against eve teasing. While participants' assessment of the community's will to tackle the problem of eve teasing was mixed, it is evident that some people have a vested interest in curbing the behavior and many solutions were recommended that should be the topic of future community discussions. The results offer insight into awareness and prevention messages that could be developed, such as reminders that almost everyone has an interest in the well-being of their family, as evidenced by statements like *"people have daughters and sisters"*.

Our qualitative methods were limited due to a lack of transcripts, lack of back-translation from Punjabi to English, and generally thin description. The participatory nature of this study enhanced our ability to broach a very sensitive topic, develop a culturally relevant questionnaire, and to use findings to foster community action.

2.7 Conclusion

Eve teasing, or public sexual harassment, was described by our study participants as a significant problem that affects their day-to-day lives. Victimization, or the threat of victimization, can induce anger, shame, humiliation, fear of rape, and significant restriction on girls spending time in public. Many young women either choose, or are compelled by their families, to limit their time in public, including opportunities for education, livelihoods, political roles, and social participation. Eve teasing may also lead to depression and suicidal behavior. We developed an instrument to assess eve teasing victimization, details of last experience, and attitudes about eve teasing. We also

developed, but did not test, a 12-question eve teasing questionnaire (ETQ-12) based on multiple constructs in sexual harassment theory. This may be superior to the eve teasing experience component in the ETQ-MH, but requires further study.

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Table 2.1

Demographic Characteristics of Participants in Questionnaire Pretest (N=89)

Variables	Questionnaire Pretest Participants (N=89)	2011 Census[1] of 9 Study Villages (N=1804 Households)
	n (%)	%
Age (mean 19.7)		
Under age 14-17	15 (16.9)	
Age 17 – 19	24 (27.0)	
Age 20-22	31 (34.9)	
Age 23 -25	19 (21.4)	
Household Structure (missing = 11)		
Female head of household)	12 (13.5)	
Joint (extended) family/household structure	38 (45.2)	30.0
Socio-economic Status (missing =5)		
Scheduled caste	61 (72.6)	46.0
She earns any income (missing = 4)	19 (22.4)	
Household income (Annual) (missing = 11)		
<30,000 INR[2] (poverty line)	22 (28.2)	33.8
30,000 – 60,000 INR	26 (33.3)	22.6
60,000 < 1,20,000 INR	15 (19.2)	18.7
> 1,20,000 INR	15 (19.2)	24.9
Education (Highest level completed)		
8th grade or less	14 (15.7)	
9-10th grade	23 (25.8)	
11-12th grade	39 (43.8)	
Higher	13 (14.6)	

[1] Census Data: Demographic and Health Survey of 9 Villages in the Bassi Pathana Community Collaborative Development Project, 2011, MBCT

[2] INR – Indian Rupee. In 2013, 30,000 INR ~= $545.00 US

67. Is eve teasing a problem in your community?	YES / NO
68. How often have you witnessed eve teasing?	1. Often 2. Sometimes 3. Rarely 4. never
69. Have you **EVER** been eve teased?	YES / NO (IF NO SKIP TO Q 72)
70. Have you **EVER** been eve teased in a way that really bothered you, that was difficult to shrug off?	YES / NO
71. When was the last time you were eve teased?	1. Recently, within this week 2. Recently, within the past month 3. 1 to less than 3 months ago 4. 3 to less than 7 months ago 5. 7-12 months ago 6. More than one year ago 7. I can't remember / don't know
72. Now I am going to read a list of behaviors, which you may or may not think to be eve teasing. As I read each one, please tell me if you have been the target of any of these behaviors by men or boys in the <u>past one year.</u> (Check all that apply)	☐ Staring or winking ☐ Stalking or following ☐ Making vulgar gestures ☐ Passing an insulting comment ☐ Passing a threatening comment ☐ Cyber or phone harassment ☐ Pushing or brushing by, seemingly on accident ☐ Inappropriate touching or groping ☐ Any other types of harassment? _____ → If none, and no ET EVER, skip to Q 78.

Figure 2.1 Eve Teasing Exposure Questions in the ETQ-MH Questionnaire

73. When was the last time you experienced any of these behaviors?	1. Recently, within this week 2. Recently, within the past month 3. 1 to less than 3 months ago 4. 3 to less than 7 months ago 5. 7-12 months ago 6. More than one year ago 7. I can't remember / don't know
74. Thinking back to the last time you were you were eve teased or the target of the behaviors listed, was it a stand-alone occurrence, or was it part a continuous problem?	1. Stand-alone/one time 2. A continuous problem
75. Did you have any of these feelings or emotions the last time you were the target of these behaviors or eve teased? Which ones? CHECK ALL THAT APPLY	☐ Humiliation ☐ Shame ☐ Fear ☐ Anger ☐ Worry/tension ☐ I was not bothered ☐ I enjoyed or was flattered ☐ Other _____
76. Who did the harassing behavior or eve teasing?	1. A single person 2. 2 persons 3. A larger group
77. About how old was he / were they?	1. Younger than me 2. About my age 3. Older than me 4. Much older than me
78. Did you know him / them?	1. Yes, quite well 2. Yes, not well 3. No
79. Would you say he/they were of a high, general, or low social status or caste?	1. High caste 2. General caste / middle 3. Low caste
80. Did you tell anyone about your experience? If so, to whom? CHECK ALL THAT APPLY	☐ Told a parent/family member ☐ Told a friend ☐ Told a teacher /mentor ☐ Reported to the authorities ☐ Other _____

Figure 2.2 Questions About Last Eve Teasing Experience in the ETQ-MH

As I read the following statements, please tell me if you Agree, somewhat agree, or disagree....

	Agree	Somewhat agree	Disagree
81. Girls are also to blame for being eve teased................................	Agree	Somewhat agree	Disagree
82. Most boys worry about getting punished for eve teasing...........	Agree	Somewhat agree	Disagree
83. Girls get in trouble with family when they are eve teased...........	Agree	Somewhat agree	Disagree
84. Girls are protected by the law from eve teasing..........................	Agree	Somewhat agree	Disagree
85. I would be willing to report a serious case of eve teasing...........	Agree	Somewhat agree	Disagree
86. My community punishes eve teasers	Agree	Somewhat agree	Disagree

Now I have some questions to help us understand what should be done about eve teasing or other problems faced by young women. (WRITE ON BACK IF NEED MORE SPACE)

87. If eve teasing no longer existed, how might your life improve?

88. Do you think people in your community would support efforts to stop eve teasing? Why or why not?

89. In your opinion, what should be done about eve teasing?

90. Are there other common problems for girls like you that need to be addressed?

Figure 2.3 Attitudes About Eve Teasing Questions in the ETQ-MH

I'm going to read a list of questions about <u>unwanted attention from men or boys</u>, sometimes, called eve teasing. <u>If you have EVER experienced</u> this behavior in any setting, such as in person, or by mobile text or internet, 'Yes'. If not, say 'No'.

Have you EVER been the target of				Factors & Type
1.	Menacing staring, leering, or following?	Yes	No	GB / Non-verbal
2.	Insults or degrading comments based on being a woman or girl?	Yes	No	GB / Verbal
3.	Unwelcome and persistent following and engaging in conversation despite efforts to discourage or avoid the intrusion	Yes	No	GB / Verbal
4.	Comments meant to be funny or romantic, such as 'I love you', singing lines from a love song, or comments about your looks?	Yes	No	GB / Verbal
5.	Vulgar gestures, such as acting out sexual acts?	Yes	No	SH / Non-verbal
6.	Vulgar comments or sexual remarks?	Yes	No	SH / Verbal
7.	Inappropriate touching, seemingly on accident, such as in a crowd or rush?	Yes	No	SH / Physical
8.	Aggressive touching, such as pinching, grabbing, pulling, groping?	Yes	No	SH / Physical
9.	Threats or intimidation to comply with advances or risk damage to your reputation, such as spreading rumors?	Yes	No	SC / Verbal or verbal and physical
10.	Verbal threats or intimidation to comply with advances or risk bodily harm	Yes	No	SC / Verbal or verbal +physical
11.	Any type of harassment by a group of boys or men where you feared for your safety?	Yes	No	GB SH or SC/ Verbal or verbal + physical
12.	Unwanted sexual advance such as kissing, holding, embracing, or fondling	Yes	No	SC / Verbal or Physical

GB = Gender based, SH = Sexualized harassment, SC = Sexual coercion

Figure 2.4 Eve Teasing Experience Questionnaire-12 (ETQ-12)

Table 2.2

Eve Teasing Occurrence Reported by Question Type and Question Version in the
ETQ-MH. Women Ages 14 – 25 in Punjab, India, 2013–2014 (N=89)

Variables and Question Versions	n (%)
Ever eve teased (N=89)	**33 (37.1)**
Question Version 1: Sometimes women receive UNWANTED attention from men such as catcalls, whistling, or blowing kisses. Have you ever received unwanted attention or been eve-teased? (N=28)	13 (46.4)
Question Version 2: Were you ever harassed by boys or men in a way that really bothered you, where it was difficult to shrug off? (N=61)	20 (32.8)
Eve teased in past 1 year (N=89)	**43 (48.3)**
<u>*Question Version 1:*</u> *Have you received any of the following types of unwanted attention from males in the last SIX MONTHS? (N=23)*	13 (56.5)
☐ *Stare*	
☐ *Touch*	
☐ *passing a comment*	
☐ *other gesture*	
☐ *deliberate push, seemingly on accident*	
☐ email/cyber	
Question Versions 2 + Version 3: (N=66)	30 (45.4)
<u>*Version 2:*</u> *(N=5) Were you the target of any of these harassing behaviors by boys or men in the past one year?*	
<u>*Version 3:*</u> *(N=61) Have you ever received/or been a target of unwanted attention from men or boys, like eve teasing, in the PAST 1 YEAR?*	
☐ *Staring or winking*	
☐ *Stalking or following*	
☐ *Making vulgar gestures*	
☐ *Passing a comment*	
☐ *Cyber or phone harassment*	
☐ *Pushing or brushing by, seemingly on accident*	
☐ *Inappropriate touching or groping*	
Types of eve teasing (n=43)	
Non-verbal (staring/leering, stalking, or gesture)	34 (38.2)
Verbal (passing a comment, whistle, cyber, or phone bullying)	36 (40.5)
Physical (pushing, brushing, touching)	21 (23.6)
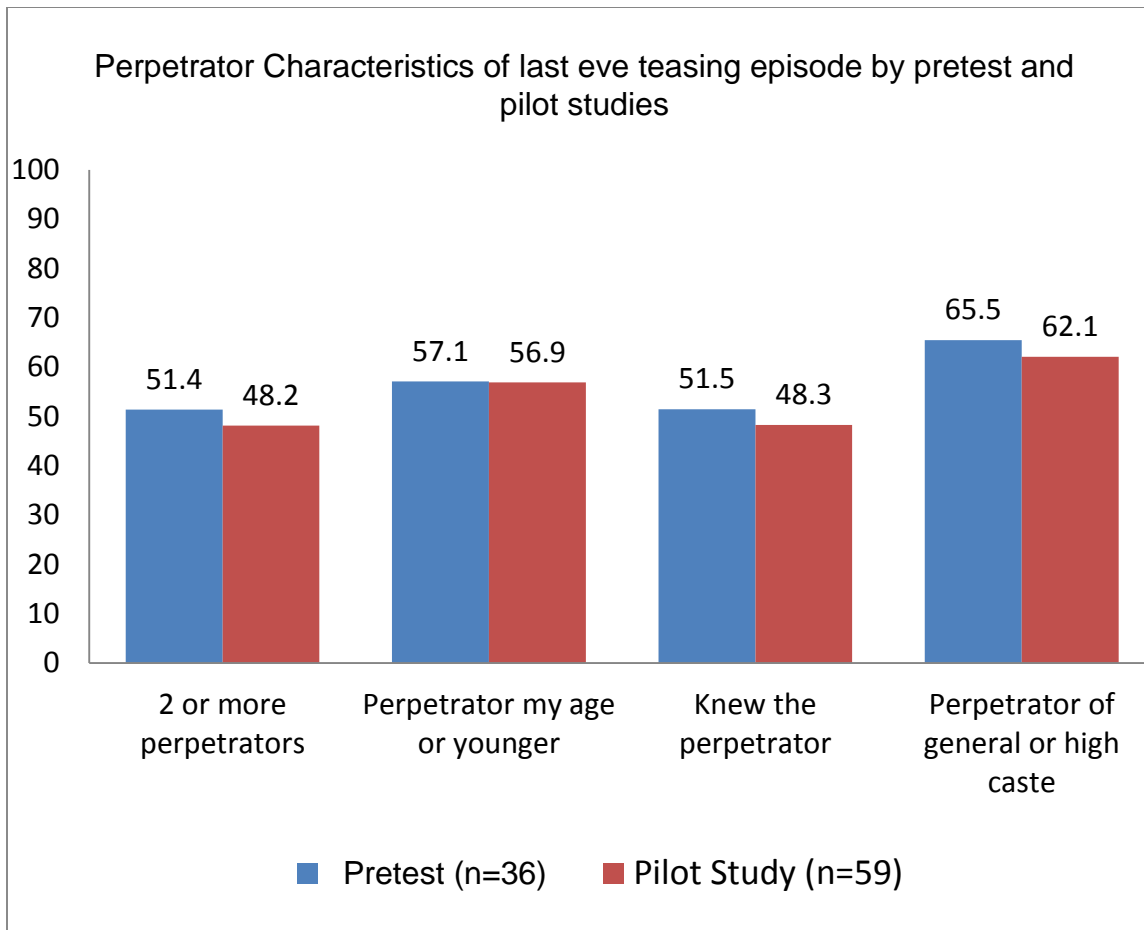
Figure 2.5 Perpetrator Characteristics of Last Eve Teasing Episode

Table 2.3

Characteristics of Last Eve Teasing Experience Among Women Age
14–25 in Punjab, India, 2013 - 2014 (N=36)

Last eve teasing experience (N=36)	n	(%)
One time, compared to continuous problem	25	(69.4)
2 or more perpetrators compared to alone (missing= 1)	18	(51.4)
Perceived perpetrator age (missing= 1)		
Younger than me	6	(17.1)
About my age	14	(40.0)
Older than me	12	(34.0)
Much older	3	(8.6)
Perpetrator known to the victim (missing = 1)		
Yes, Quite well	15	(42.9)
Yes, not well	3	(8.6)
No	17	(48.6)
Social class / caste of the perpetrator (missing = 8)		
High	4	(13.8)
General	14	(51.7)
Low	9	(31.0)
Refused	1	(3.5)
Emotions experienced due to last episode		
Humiliation	4	(11.1)
Shame	13	(36.1)
Fear	6	(16.7)
Anger	22	(61.1)
Worry/tension	8	(22.2)
Coping responses to eve teasing (missing = 3)		
Told a parent	15	(45.4)
Told a friend	10	(30.3)
Told a teacher	0	(0.0)
Told the authorities	1	(3.1)
Any positive coping (Told anyone)	24	(72.7)

CHAPTER 3

VALIDATION OF THE EVE TEASING EXPERIENCES AND

MENTAL HEALTH QUESTIONNAIRE (ETQ-MH)

3.1 Abstract

Eve teasing is a common form of public sexual harassment of women by men in

South Asia and includes making passes, obscene gestures, whistling, staring, and

stalking. Despite concerns about its ubiquity and potential mental health consequences,

assessment methods are in the early stages of development. The primary objective of this

study was to validate our Eve Teasing Experiences and Mental Health Questionnaire

(ETQ-MH). We conducted a questionnaire pretest (N=89) using purposive sampling

methods in nine villages with which we had prior community engagement. We also

conducted a pilot study (N=198) using cluster-probability sampling in a new set of 19

randomly selected villages in the same district without prior community engagement. In

both studies, interviews were conducted with women ages 15-24 years, primarily in the

home. The internal reliability of the 140 item questionnaire was high for key measures

(Cronbach's alpha: .65 to .84) and principal components analysis suggested two

underlying constructs in the eve teasing instrument. In multivariate analyses, the

community-engaged pretest elicited significantly higher prevalence rates of self-reported

eve teasing and mental health outcomes: Eve teasing (OR: 2.4 CI: (1.44-4.12), common

mental disorders (OR: 3.9 CI: (2.28-6.97), and suicide ideation (OR: 1.8 CI: (1.01-3.03).

The current version of the ETQ-MH should elicit valid and reliable results. Additionally, community-engaged approaches may reduce type II errors in the assessment of sensitive topics like gender violence and mental health status.

3.2 Background

Eve teasing is a common form of public sexual harassment in South Asia and is described includes making passes, obscene gestures, whistling, staring, and stalking.[1,2] Despite broad recognition as a problem, the prevalence of eve teasing in south Asia is largely unknown.[3] Current measurement methods of women's experiences vary, and to the best of our knowledge, no eve teasing experiences instrument has been assessed for validity and reliability in the community setting.[4-7] Secondly, the risk of suicide is much greater in India than in upper income countries, especially among young women.[8]

Gender disadvantages in India may explain, in part, why young women are at higher risk than their male peers and compared to women in upper income countries. Two cross-sectional studies of Indian women found positive associations between gender disadvantage and suicide.[9,10] In order to examine the relationship among public sexual harassment experiences, mental health, and suicide behaviors, a valid and reliable questionnaire, based on sound causal theory, is needed.

Eve teasing and its potential to negatively impact the mental health of young women is a concern we identified through a community engagement process with nine villages and a local civil society organization. Through previous qualitative work, we developed a better understanding of the phenomenon in the rural context and developed

an instrument to assess eve teasing experience.

The purpose of this study is to validate our newly developed Eve Teasing Experiences and Mental Health Questionnaire (ETQ-MH). Due to two separate administrations of the questionnaire in our study design, we also had the opportunity to compare results by community-engaged versus non-community-engaged methods.

3.3 Methods

This ETQ-MH is designed to assess both eve teasing experiences as well as mental health outcomes and a host of potential covariates. The initial design and content validation of the ETQ-MH is reported elsewhere (Chapter 2). The methods for this study included 1) the initial design and pretest; 2) an analysis of the internal reliability of the questionnaire, or consistency in how participants answer the questions using Cronbach's alpha; 3) Principal Component Analysis to assess the internal structure, or construct validity, of the questionnaire; and 4) a comparison of key outcomes using chi square analysis to assess the potential influence of different methods used in the two studies, namely community-engaged compared to non-community-engaged.

3.3.1 Questionnaire Design

Initial questionnaire development included a review of the literature. We searched Scopus, Google Scholar, PubMed, and the grey literature using terms such as "eve teasing", "public sexual harassment", "street harassment", "suicide in India", "mental health", "gender disadvantages", "violence against women questionnaire", and "sexual harassment questionnaire". We developed a questionnaire based on known

correlates of common mental disorders and suicide among Indian youth [9, 10] and studies on gender disadvantages and common mental disorders among Indian women.[11,12] The overall structure, general order, and question sources are listed in Table 3.1. Question order was considered carefully to prevent recall bias on outcome by asking about mental health and suicide prior to eve teasing experiences. We used preambles to preface sensitive topics and placed sensitive demographic questions, such as income, later in the questionnaire to improve rapport.

3.3.1.1 *Eve teasing experiences.* We found only one peer reviewed account of an eve teasing questionnaire which focused on girls' and boys' attitudes about eve teasing rather than actual experiences.[13] We found two online questionnaires and related reports that elicited information about eve teasing experiences.[6,11,12] We developed novel questions that asked directly about having been eve teased and developed a set of eve-teasing-like examples to elicit further detail. Questions were also developed to assess timing, severity, and psychological consequences, as well as coping behaviors. Lastly, questions were developed to assess attitudes about eve teasing in terms of who is to blame and perceptions about conditions conducive to eve teasing. We excluded type of dress of the victim to avoid reinforcing victim blaming.

3.3.1.2 *Mental health outcome measurements.* Mental health outcomes were measured using the 20-question Self Report Questionnaire (SRQ-20) to screen for common mental disorders (CMDs) using the recommended cut point, where a score of 8 or more indicates a CMD.[13] The SRQ-20 has been used widely across the globe, including in Punjab, India, and has good validity and reliability.[13] This questionnaire is indicated for use when clinical mental health professionals are not available to conduct

the screen, which was the case for our study. While the SRQ-20 is a screen for CMDs inclusive of anxiety, depression, or psychosomatic problems, it is intended to be used only as an aggregate measure and has only one underlying construct. Suicide ideation is measured by question 17 in the SRQ-20; 'has the thought of ending your life been on your mind?' All 20 questions are framed as 'within the past 30 days'. We added additional questions about ever planning or attempting suicide and when.

3.3.1.3 *Other factors.* Other factors included socio-demographics, physical health, adverse childhood events, social capital, mobility and time spent in public, community-level violence, and attitudes towards women's empowerment. Previously validated tools, with some modification, were used to assess socio-demographics and attitudes toward women's empowerment.[14,15] Questions about adverse childhood events from an existing questionnaire were used, but limited to only 4 of 20 questions on the Childhood Trauma Questionnaire-Short Form.[16] Due to redundancy with the SRQ-20, we reduced the Self-Report Health Short Form-12 (SF-12) to 3 of 12 questions.[17]

Questions of social capital were based on methods by author MK and colleagues. Novel questions were developed to assess time and mobility in public, labor force participation, and community-level factors of violence and unity. Open-ended questions were developed to elicit opinions about what should be done to address eve teasing and to assess other problems facing young women.

3.3.2 Questionnaire Pretest

We conducted a pretest (N=89) of the full questionnaire in nine villages where we had prior engagement for three years using Community-Based Participatory Research

(CBPR) principles (see Chapter 2).[20] We used purposive sampling techniques to achieve adequate representation among a range of socio-demographic characteristics and geographic locations within each village and achieved a response rate of 90.8%. Interviews were conducted in a private setting, typically in the home, and were conducted face-to-face by a female interviewer using a paper questionnaire. We used Converse and Presser's pretesting methods with the first 23 participants, including direct observation of interviews, documenting in the margins, and debriefing with the interview team.[21] Questions to assess eve teasing varied somewhat across three versions and were combined for analysis. Questionnaire responses were entered into Microsoft ACCESS. Quantitative responses were analyzed descriptively in Stata13 (Statacorp Inc, 2013 College Station, TX).

3.3.3 Pilot Study

In the next step, we piloted a single version of the revised questionnaire using a two-stage cluster-probability sampling method. We selected two out of five subdistricts, or blocks, in the Fategarh Sahib District based on rurality, nonadjacency, and having no previous community engagement by the research team. In each block, we randomly selected 10 rural villages (pop <5,000) and aimed to recruit 10 unrelated women in each village using probability sampling with a random start from a village focal point. We reached 19 out of the 20 villages and enrolled 198 women into the study with an estimated response rate of 85%. Methods were similar to those in the pretest and four of the seven interviewers were used in both studies. A notable methodological difference from the pretest was that while the interviewer used a paper script with the participant,

responses were recorded directly into an electronic version of the questionnaire on an Android tablet using the Open Data Kit (ODK) platform.[22]

The final questionnaire comprised of 140 questions and organized into 13 sections took an average of 19 minutes to administer, with a mode of 15 minutes. The 13th section comprised of open-ended questions about solutions to the problem of eve teasing and was not included in this analysis (Table 3.1).

3.3.4 Questionnaire Validation

3.3.4.1 *Face validation.* Face validity was assessed by six individuals: two were experts in psycho-social research and four were female interviewers with familiarity with the population. Each independently reviewed the questionnaire, assessing each question for positioning, appropriateness, and clarity of wording.

3.3.4.2 *Content validation*. Content validation included qualitative data gathering through focus group discussions, direct observation of interviews to assess participant cognition and questionnaire flow, the use of previously validated instruments for certain domains in the questionnaire, and independent assessment of the face validity of the questionnaire by six subject matter experts – including two mental health researchers and four community outreach workers – for question positioning, wording, and appropriateness.

3.3.4.3 *Internal reliability*. We used Cronbach's alpha (CA) to assess internal reliability within domains and conducted exploratory analysis within domains to identify questions with highest correlation and to assess potential item reduction.

3.3.4.4 *Construct validity*. We used Principal Component Analysis (PCA) with

Varimax rotation to assess construct validity and opportunities for item reduction in each section used for composite measures. Only sections with sampling adequacy, as determined by a Kaplan-Meyer-Olkin measure >0.50, are presented. While PCA is intended for use with scaled measures, typically Likert scales with five or more categories, most of our domains were measured with binary outcomes.[23] While not ideal, it is acceptable to use PCA if you can reasonably assume the binary responses, in this case, 'yes/no', have an underlying linear structure.[24]

3.3.4.5 *Comparison of key outcomes by CE and non-CE methods*. To assess differences in key outcomes between by the high and low levels of community engagement in the two samples, we compared key measures, using CA scores and Chi square tests. Controlling for socio-demographic differences, we used multivariate logistic regression to compare key outcomes by community-engaged and non-community-engaged-methods.

All questionnaire validation evaluations were conducted using Stata13 (Statacorp Inc, 2013 College Station, TX).

3.4. Results

3.4.1 Content Validity

Content validation efforts improved flow, wording, and question appropriateness. The six independent questionnaire reviewers were in agreement 85% of the time for question positioning, appropriateness, and clarity of wording. Minor revisions to the ETQ-MH are recommended, but overall, is adequate in its current format.

3.4.2 Internal Reliability

Internal reliability was high for the domains of eve teasing (α=0.71) and mental health (α=0.84) (Table 3.2). All domains that included the use of previously validated questions had high to moderate internal reliability, including social capital, attitudes towards women's empowerment, and adverse childhood events. For measures using single items instead of composite measures, such as general health, different suicide triggers (such as marriage or death), or time in public, we could not assess internal reliability (Table 3.2).

3.4.3 Construct Validity

Results of PCA analysis of the pilot study data (N=198) are presented in Tables 3.3 – 3.5. Eve teasing victimization characterized by any exposure, staring, vulgar gestures loaded on principal component 1 while victimization characterized by threats, insults, and physical touch loaded separately onto principal component 2. Passing a comment loaded onto both components, meaning it may be an adequate overall measure of eve teasing victimization (Table 3.3). This could be explained by Nye's theory that aggregate measures of sexual harassment have two underlying components: 1) gender harassment and 2) sexualized harassment.[25] The SRQ-20, as expected, had a single principal component (Figure 3.2 and Table 3.4). There were two principal components for adverse childhood events and one for attitudes towards women's empowerment (Table 3.5).

In other domains (data not presented), the social capital domain has two principal components; the first correlated strongly with the strength of interpersonal relationships

and the second is characterized by the participant's behavior in terms of participation in the community. In terms of mobility, actual time the participants spent in public yesterday is represented in a different component than the time they spend on specific activities in public.

3.4.4 Comparison of High and Low Community Engaged Methods

Socio-demographic characteristics were fairly consistent with household census data from rural Punjab.[15] While quite similar overall, the participants in each study differed significantly in the proportion of respondents in higher age groups (age 22 and older) and higher level of education completed (11th grade or higher) (Table 3.6). Additional exploratory analysis by interviewer found significant differences in disclosure of mental health symptoms, eve teasing victimization, adverse childhood events, and negative attitudes about women's empowerment, indicating inconsistencies with interview methods and a need for improved interviewer training. After controlling for age and education level, reporting of eve teasing victimization, common mental disorders, and suicide ideation were much more common when CE methods were used; ET (OR: 2.4 CI: (1.44-4.12), CMDs (OR: 3.9 CI: (2.28-6.97), and SI (OR: 1.8 CI: (1.01-3.03).

This may indicate a type II error, or false negatives, due to differences in the participants' willingness to disclose sensitive information without prior community engagement. Underreporting of gender violence and mental health symptoms is not unusual and often attributed to stigma. However, since such stigma is likely to be similar within both our study populations, we had a unique comparison of such variation within

the same population allowing us to isolate and examine the impact of a specific research method.

3.5 Discussion

We have advanced a methodology on a neglected topic in the research on violence against women, including mental health consequences. The Eve Teasing and Mental Health Questionnaire (ETQ-MH) is based on solid epidemiologic theory of suicide in India and is likely to elicit valid and reliable results in a South Asian population. Secondly, we found evidence that supports the use of community engaged research approaches to increase disclosure of victimization and mental health symptoms.

Our use of the SRQ-20 to assess suicide ideation and mental health status was helpful in that it did not rely on availability of clinical researchers. Because it is standardized and well validated, it served as an excellent constant between studies so we could examine the different methodological approaches, namely community engagement and its relationship with disclosure. Researchers involved in community engaged or CBPR approaches, especially on topics with high stigma, should consider these methods when taking a pilot study to scale in a different population.

Through PCA, we have a better understanding of the internal structure of the instrument and therefore insight to whether aggregate measures are appropriate. The way that eve teasing measures loaded onto the first two components could be explained by Nye's theory that aggregate measures of sexual harassment have two underlying components: 1) gender harassment and 2) sexualized harassment, which includes coercion.[25] Secondly, type 1 eve teasing - including staring, following, and passing

insulting comments - correlated with "ever" having been eve teased, while type 2 – which included examples of pasting threatening comments, pushing or brushing by, and inappropriate touching or groping – did not. In the eyes of the study participants, the type 2 behaviors may be viewed as more serious than eve teasing.

There are two key limitations in our study. First, we did not have a gold standard by which to measure key outcomes, and secondly we did not conduct test-retest reliability with a subsample of participants. In subsequent studies, a test-retest should be implemented, including additional mental health screening by a mental health professional.

Alternate methods, such as self-administration and school-based administration, should also be tested, although they would likely exclude a large proportion of the population who are not in school. While self-administration may increase disclosure, due to its anonymity careful consideration should be given to allow for needed counselling and referral. The ETQ-MH could also be modified to include men and assess the relationship between perpetration and mental health.

The current version of the ETQ-MH should elicit valid and reliable results. As with any survey, additional modifications can be made, and we suggest that the eve teasing exposure questions (question 72) be replaced with the 12 item ETQ-12 instrument. Additionally, community-engaged approaches may reduce type II errors in the assessment of gender violence and mental health status. Use of the ETQ-MH and our community-based methods are a supportive step in conducting larger studies in more diverse populations into the epidemiology of public sexual harassment and mental health.

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Table 3.1

Structure and Sources of the Eve Teasing Experiences and Mental Health (ETQ-MH)
Questionnaire

Section	Variables *(Main variables in bold)*	Source
1. Socio / demographic	Age, education level and current attendance, marital status, caste, household income, family structure, village size, material goods inventory	National Family Health Survey 3, with some modification[15]
2. Physical health	Self-rated health (5 point Likert)

Physical/limitations

Physical or emotional limitations
Access to health care | General Health Questionnaire 12 (GHQ-12)[18]

Custom |
| 3. Mental health | **Common mental disorders -** 20 self-report yes/no questions including cognitive problems, anxiety, depressive, and somatic symptoms, within the past 30 days.
Suicide ideation - *'Has the thought of ending your life been on your mind?* (past 30 days)
Suicide Behavior - Suicide plan, attempt, and timing | Self-Report Questionnaire - 20[13]

Score >7 = CMD

Custom |
| 4. Major life events (Suicide triggers) | In past one year: death of a loved one, marriage or engagement, moved away from childhood home, dropped out of school, poor performance on exam | Custom |
| 5. Adverse childhood events | Prior to 15th birthday; Frequent insults by parent/adult, physical abuse, felt unloved, not special, feeling that family would not stick up for you, feeling that parents wished you were never born, loss of parent through death or abandonment, inappropriate touching or sexual abuse | Adapted from the ACE Study questionnaire[19] |
| 6. Interpersonal conflict | Serious conflict with family, friends, neighbors, teachers, or other (past 3 months)
Dowry conflict in past 3 months | Custom |
| 7. Attitudes towards women's empowerment | Attitudes toward wife beating

Earned income and decision-making powers over earned income | National Family Health Survey 3, with some modification[15] |

Table 3.1

(Continued)

Domain	Variables *(Main variables in bold)*	Source
8. Social capital	Participation in community or social groups	Author MK and colleagues at PGIMER
	Earn income (any, formal, informal)	Custom
	Enjoy leisure time outside the home with friends or doing enjoyable activities	Custom
	Social connectedness; Have people they can count on, trust. Community gets along	WHO Violence against Women questionnaire[14]
9. Mobility in public (Time at risk)	Amount of time in public yesterday, and more, less, or same as usual Use of public transportation Travels outside of village Is regularly attending school	Custom/new
10. Safety concerns (and related restrictions)	Avoid going out due to safety concerns? Restricted from going out by family Why restricted; lack of trust in girl, worry about bad people, worry she will be harmed Ever witnessed violence in the community	Custom
11. Recent loss or major life event	Major life event or loss in past one year; death of loved one, marriage/engagement, moved away from childhood home, dropped out of school, failed an exam	Custom
12. Eve teasing experiences and attitudes	**Ever eve teased** **Eve tease in the past 1 year** Characteristics of last eve teasing experience Perpetrator characteristics Attitudes towards eve teasing	Custom
13. Participant's opinions about interventions and women's issues	*How life might improve without eve teasing?* *Would people support efforts to curb eve teasing?* *What should be done about eve teasing?* *Other problems faced by women*	Custom (Open ended)

Table 3.2

Internal Reliability of ETQ-MH Sections using Cronbach's alpha
(N=198)

Section	Number of Items	Internal Reliability (Cronbach's α)
Common mental disorders (SRQ-20)	20	α = .84
Attitudes toward women's empowerment	4	α = .82
Eve teasing experience	9	α = .76
Suicide behaviors	3	α = .65
Adverse childhood events (ACES)	7	α = .65
Social capital - relationships	3	α = .51
Attitudes towards eve teasing	6	α = .28

Table 3.3

Factor Loadings of Principal Components of Eve Teasing Experience Items (N=198)

			Principal Components	
Questions or items	*n*	Eigenvalue	1	2
Eve Teasing Experiences		3.1		
Have you <u>ever</u> been eve teased?			**0.456**	-0.237
Have you been the target of any of these behaviors by men or boys in the <u>past one year?</u> (Check all that apply)				
Staring or winking			**0.429**	-0.125
Stalking or following			**0.429**	-0.088
Making vulgar gestures			**0.314**	-0.166
Passing an insulting comment			**0.411**	**-0.323**
Passing a threatening comment			0.196	**0.446**
Pushing or brushing by, seemingly on accident			0.213	**0.615**
Inappropriate touching or groping			0.268	**0.494**
Proportion of variance explained by component			*0.386*	*0.181*
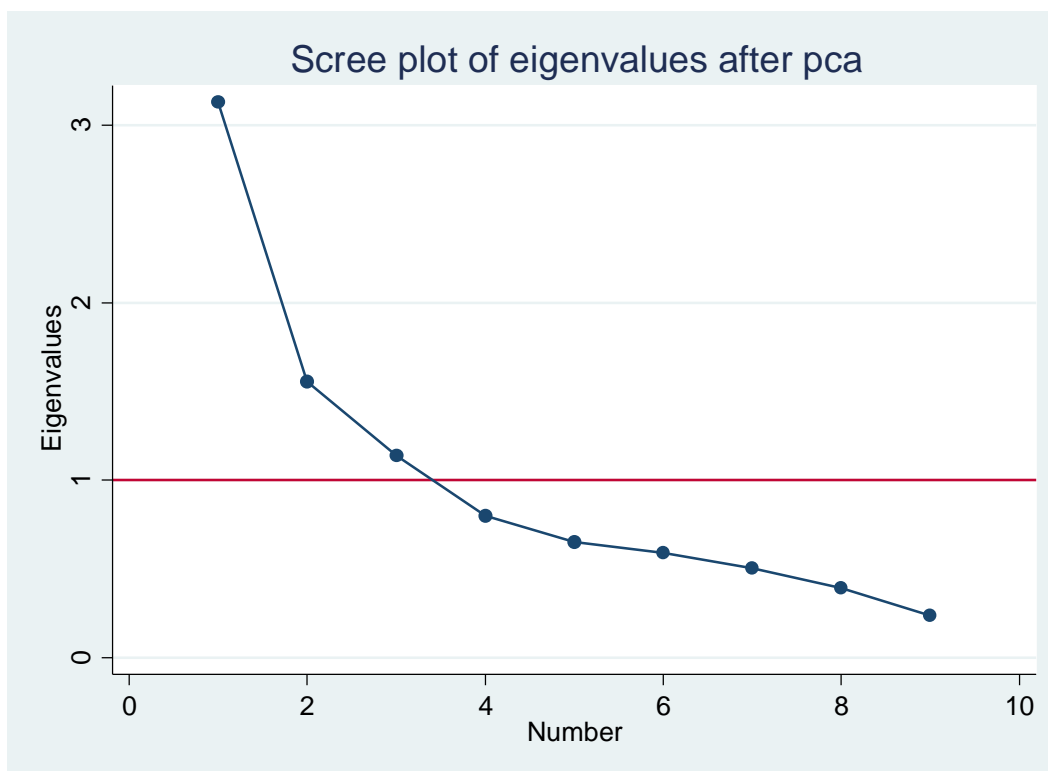
Figure 3.1 Scree Plot of Eigenvalues after PCA for Eve Teasing Module

Table 3.4

Factor Loadings of Principal Components of the SRQ-20 Screening Instrument for
Common Mental Disorders (N=198)

SRQ-20 Mental Health Screen (yes/no)	n	%	Eigenvalue	Principal Components 1	2
Common Mental Disorders			4.9		
1. Do you have headaches?	80	40.4		**0.215**	0.089
2. Is your appetite poor?	31	15.7		**0.183**	0.330
3. Do you sleep badly?	25	12.6		**0.154**	**0.386**
4. Are you easily frightened?	72	36.4		**0.254**	**-0.181**
5. Do your hands shake?	43	21.7		**0.270**	**-0.167**
6. Do you feel nervous, tense, or worried?	73	36.9		**0.225**	0.053
7. Is your digestion poor?	21	10.6		0.094	**0.197**
8. Do you have trouble thinking clearly? (Foggy)	25	12.6		**0.158**	0.125
9. Do you feel unhappy?	39	19.7		**0.282**	0.024
10. Do you cry more than usual?	65	32.8		**0.278**	-0.064
11. Do you find it difficult to enjoy your daily activities?	24	12.1		**0.186**	**0.276**
12. Do you find it difficult to make decisions?	58	29.3		**0.161**	**-0.266**
13. Is your daily work suffering?	13	6.6		**0.178**	**0.313**
14. Are you unable to play a useful part in life?	46	23.2		**0.258**	**-0.272**
15. Have you lost interest in things?	34	17.2		**0.209**	**-0.249**
16. Do you feel that you are a worthless person?	47	23.7		**0.292**	**-0.250**
17. Has the thought of ending your life been on your mind?	54	27.3		**0.299**	**-0.252**
18. Do you feel tired all the time?	40	20.2		**0.257**	**0.201**
19. Do you have uncomfortable feelings in your stomach?	23	11.6		0.109	0.033
20. Are you easily tired?	45	22.7		**0.251**	**0.252**
Proportion of variance explained by component				*0.245*	*0.086*
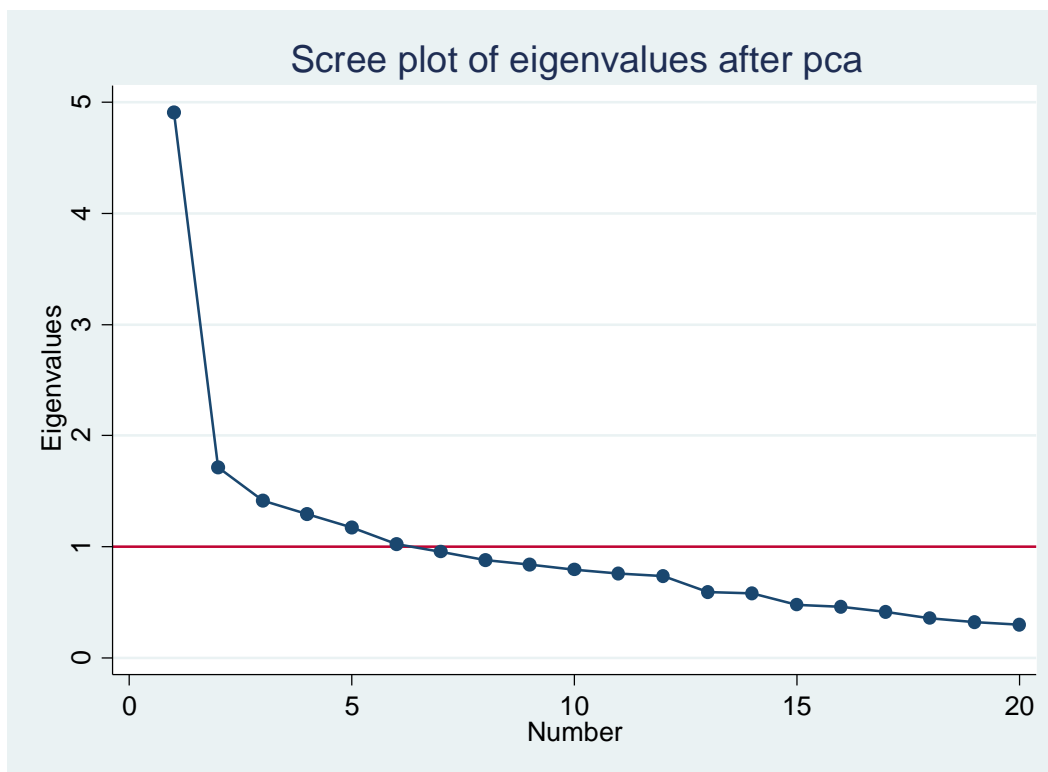
Figure 3.2 Scree Plot of Eigenvalues after PCA for the SRQ-20
Mental Health Screen

Table 3.5

Factor Loadings of Principal Components of Adverse Childhood Events and
Attitudes Towards Women's Empowerment Sections of the ETQ-MH Questionnaire
(N=198)

Section				Principal Components	
Questions or items	*n*	%	Eigen-value	1	2
Adverse childhood events			**2.5**		
Prior to your 15th birthday did you ever experience...					
1. Frequent insults or threats, by a parent or adult?	29	14.7		**0.485**	-0.036
2. Frequent physical abuse, such as hitting, slapping, or pushing by a parent or adult?	37	18.7		**0.335**	0.055
3. Feeling that no one in your family loved you or thought you were special?	43	21.7		**0.410**	0.189
4. Feelings that your family would not stick up for you?	30	15.2		**0.510**	0.145
5. Feeling that your parents wished you were never born?	12	6.1		**0.425**	-0.169
6. The loss of a parent through death, divorce, or abandonment?	21	10.6		0.075	**0.654**
7. Inappropriate touching or sexual abuse?	12	6.1		0.194	**-0.692**
Proportion of variance explained by component				0.143	0.143
Attitudes towards women's empowerment			**2.6**		
In your opinion, is a husband justified in hitting or beating his wife...					
1. If she goes out without telling him?	20	10.1		**0.495**	**0.345**
2. If she neglects the children?	25	12.6		**0.488**	**0.554**
3. If she argues with him?	34	17.2		**0.493**	**-0.744**
4. If she does not perform household work?	18	9.1		**0.523**	-0.143
Proportion of variance explained by component				0.665	0.124

Table 3.6

Sociodemographic Characteristics of the CE Pretest and Low-CE Pilot Study
Participants, Women Ages 15 – 24, Rural Punjab, India

Variables	Pretest N = 89	Pilot Study N = 198	p-value[2]
	n (%)	n (%)	
Mean age	19.7	20.4	0.877
Under age 18	26 (31.7)	37 (21.1)	0.064
Age 19-21	30 (36.6)	55 (31.4)	0.330
Age 22 - 25	26 (31.7)	83 (47.4)	0.049*
Joint (extended) family/household	38 (45.2)	82 (41.6)	0.941
Scheduled (low) caste	61 (72.6)	154 (78.5)	0.128
Household income (Annual)			
<30,000 INR[3] (poverty line)	22 (28.2)	64 (33.2)	0.245
30,000 – 60,000 INR	26 (33.3)	63 (32.6)	0.761
60,000 < 1,20,000 INR	15 (19.2)	40 (20.7)	0.614
> 1,20,000 INR	15 (19.2)	26 (13.5)	0.515
Highest level of education completed			
8th grade or less	14 (15.7)	17 (8.6)	0.110
9-10th grade	23 (25.8)	31 (15.7)	0.060
11-12th grade	39 (43.8)	60 (30.5)	0.036*
Higher	13 (14.6)	89 (45.2)	<0.001***

[1] CE = Community Engaged research approach
[2] *p-value = <0.05 ** = p-value < 0.01 *** p-value <0.001,
[3] INR – Indian Rupee. In 2013, 30,000 INR ~= $545.00 US

Table 3.7

Bivariate Analysis of Key Measures by Community-Engaged (CE)
Pretest (N=89) and Low CE Pilot Study (N=198)

Key Measures	Pretest (High CE)		Pilot Study (Low CE)		p-value
	n	*%*	*n*	*%*	
Ever eve-teased	33	37.1	42	28.8	0.007
Eve teased in past one year	43	48.3	57	28.9	0.002
CMD score >7	43	48.3	41	20.7	<0.001
Suicide ideation	33	37.1	54	27.3	0.125
Justifies wife beating	49	55.1	47	23.7	<0.001

Table 3.8

Multivariate Analysis of Key Measures in Community-Engaged (CE)
Pretest (N=89) Compared to Low CE Pilot Study (N=198), Controlled for
Age and Education

Key Measures	OR	(95% CI)	p-value
Ever eve-teased	1.5	(0.85-2.49)	0.166
Eve teased in past one year	2.4	(1.44-4.12)	0.001
CMD score >7	3.9	(2.28-6.97)	<0.001
Suicide ideation	1.8	(1.01-3.03)	0.044
Justifies wife beating	4.1	(2.39-7.11)	<0.001

CHAPTER 4

THE PREVALENCE OF EVE TEASING VICTIMIZATION AND ITS

ASSOCIATION WITH COMMON MENTAL DISORDERS

AND SUICIDE IDEATION: A PILOT STUDY IN

RURAL PUNJAB, INDIA

4.1 Abstract

Eve teasing is a euphemism for sexual harassment in public places in South Asia
and is thought to be a ubiquitous threat for women in India. While a causal link is well
established between sexual harassment and poor mental health and suicide in the
occupational and academic settings, little is known about its impact in the community
setting. The study purpose was to estimate the prevalence of eve teasing victimization
and its association with common mental disorders (CMD) and suicide ideation (SI)
among young women ages 15-24 in rural Punjab, India. We conducted a cross-sectional
survey using a randomized cluster sample of 19 villages and recruited 198 female youth
using house to house probability sampling. Face-to-face interviews were conducted
using our newly developed Eve Teasing Experiences and Mental Health (ETQ-MH)
questionnaire. Nearly 30% of participants reported ever having been eve teased, 21%
screened positive for a CMD, and 27% reported recent suicide ideation (N=198). The
odds of screening positive for CMD and SI were higher if eve teased but not statistically

significant. However, among participants who reported any adverse childhood event (ACE), the odds that they also reported CMD or SI were higher and statistically significant; (OR: 4.5 (CI: 1.18-11.43) p=0.003) and (OR: 3.1 (CI: 1.12-8.47) p=0.032), respectively. In conclusion, eve teasing is a likely contributor to poor mental health and suicide ideation of its victims, especially among the nearly half of young women who also reported any adverse childhood events.

4.2 Background

For the first time in history, suicide is the leading cause of death globally for adolescent girls. The highest regional rate (27.9 per 100,00) is found in South-East Asia, which is more than double the global average and triple that of some regions.[1] Unlike most places in the world, female youth (age 15-24) in rural India far outpace their male peers in suicide, with rates ranging from 102-168/100,000 compared to 78-96/100,000 respectively.[2-4] While 42% of suicide ideation among female youth is attributable to common mental disorders (CMDs), evidence is mounting that the additional increased risk may be due, at least in part, to gender disadvantages and discrimination.[5-8]

India ranks low on global indices of gender equality, including 132 out of 148 countries polled on the United Nation Development Program's (UNDP) Gender Inequality Index (2012).[9] A culture of discrimination against women, beginning before birth, is evident in India's high child sex ratio, an indicator of sex selected abortion favoring sons. It is especially high in North India where more than 100 fewer girls are born per 1000 boys.[10] Famed economist, Amartya Sen, describes India's *"many faces of gender inequality"* across the lifespan including pronounced inequalities in mortality

among women and girls compared to their African peers in countries with little gender bias.[11] Given the magnitude of suicide among female youth and marked gender inequalities in India, research to unpack and assess the role of gender disadvantages in relation to mental health may lead to policy and interventions that reverse these gender-based health inequities.

A specific facet of gender disadvantage, and a focus of this study, is sexual harassment. Sexual harassment generally entails nonverbal, verbal, physical, or visual sexual attention, intimidation, or coercion that is unwelcome and unwanted and often has a negative impact on the psycho-social health of the victim.[12,13] Studies among European and North American populations suggest a causal relationship between institutional-based sexual harassment and suicide behaviors.[7,12-16] In Goa, India, a population-based cross-sectional study found that for female youth, sexual harassment was an independent risk factor for common mental disorders, but not for suicide ideation.[6,16]

Through our previous community engagement work in rural Punjab (see Chapters 2 and 3), we learned that the threat of sexual harassment in public by boys or men, often called "eve-teasing", contributed to school dropout and social isolation of young women. The phenomenon of eve teasing in South Asia is significant enough to curb women and girls' participation in public activities, resulting in opportunity costs for women and an unknown impact on their mental health.[17,18] In 2011, the World Health Organization (WHO) called for more research on neglected topics of violence against women, including sexual harassment.[19] To our knowledge, no studies have specifically assessed the relationship between eve teasing and mental health outcomes.

Eve teasing in India is characterized by harassing behaviors by men towards

women that typically occur in public places and include acts such as making passes, obscene gestures, whistling, staring, inappropriate touching, and insults or threats that induce fear of rape or retaliation.[18,20,21] Although prevalence studies are sparse and methods vary, eve teasing is thought to be very common with 50-100% of women reporting victimization.[22-25] It is important to note that use of the term is controversial. It is criticized by women's advocates as a means to trivialize the act of harassment and to place blame on the woman, referring to the Biblical Eve. Baxi describes the term as a *"a means to legitimize harassment by positioning the very presence of women in public as provocative"*.[22,26,27] We use the term here because it was the term used and understood by study participants and it differentiates this south Asian phenomenon from the more commonly presented legal, workplace, and educational contexts. However, we acknowledge that a better term is desirable.

The WHO suggests that strict patriarchal norms that favor family honor over the well-being of girls is a community-level risk factor for sexual violence, which could help explain the phenomenon of eve teasing.[28,29] Strict patriarchy is particularly prominent in Pakistan, Bangladesh, and northern India, particularly in the states of Punjab, Haryana, and Uttar Pradesh.[11] As reported previously (Chapter 2), premarital romance in rural Punjab is taboo, which is why female youth are often sequestered at home and socially isolated. Arguably, it is also related to the bias toward male dominance and the risk of being harassed by men. While public sexual harassment may be perceived as trivial in other countries and other regions within India, it can be a very significant problem for young women in the rural north who live under stricter patriarchal norms.[30,31] Unlike urban areas, rural harassment may be less anonymous and therefore more stigmatizing.

Media accounts in the region have reported instances where eve teasing has allegedly led to suicide, interfamily violence, early or forced marriage to the perpetrator, and even honor killing.[32,33] More often, parents of girls with tarnished reputations may face difficulty in finding a suitable husband for their daughter and to do so, may require a more costly dowry.

While gender disadvantage is a suspected risk factor for suicide, there are other well-established risk factors, such as existing common mental disorders (CMDs) like anxiety, depression, and somatic disorders. The research supports complex multifactorial causes for both CMDs and suicidal behavior, including poverty, rurality, social disadvantage, school problems, and major life-events. Specific community-level risk factors include bullying and exposure to violence while protective factors include connectedness to community, involvement in the community, and opportunities for leisure.[34] Additionally, easy access to lethal methods, such as farming pesticides in rural areas, may play a significant role but are not examined in this study. While multifactorial causal models are not fully understood among female youth in India, evidence from such research in Southern India offers the basis of our conceptual model of suicide causation and the role of eve teasing (Figure 4.1).[5,6,16]

Despite a host of anecdotal evidence that eve teasing leads to depression and suicide, no epidemiological studies have been conducted into the mental health consequences of eve teasing.[2-4,7,35-36] The purpose of this study was to, first, assess the point and cumulative prevalence of eve teasing victimization and the point prevalence of suicide ideation, plans, attempts, and common mental disorders. Secondly, we aimed to explore bivariate associations between eve teasing and other factors, eve teasing and

common mental disorders (CMD), and eve teasing and suicide ideation (SI). Lastly, we aimed to discern if eve teasing is a risk factor for suicide ideation and common mental disorders after controlling for potential confounding factors.

4.3 Methods

4.3.1 Study Design, Setting, and Recruitment

This study was conducted in the state of Punjab, India in the District of Fategarh Sahib. The area was chosen because it is in the service area of a local charity, the Mehar Baba Charitable Trust, and the PGIMER School of Public Health in Chandigarh, with whom research efforts were already ongoing. This study served as a pilot test for a larger population-based cross-sectional survey, using cluster randomized sampling methods. Preceding this study, we conducted a community-engaged qualitative study in nine separate, but comparable, villages. Findings included the characterization of eve teasing from the perspective of rural youth, development and validation of the questionnaire for this study (N=89), and initial prevalence estimates to inform sample size calculations.

Two of five blocks, or subdistricts, were purposively selected based on rurality and nonadjacency for a planned randomized controlled trial of an eve teasing awareness and prevention intervention among youth. In each block, we randomly selected 10 rural villages (pop <5,000) and aimed to recruit 10 unrelated women in each village using probability sampling with a random start from a village focal point. We reached 19 out of the 20 villages and enrolled 198 women into the study with an estimated response rate of 85% or higher. While the goal was to recruit an equal number in each village, the actual number ranged from 2 – 19 with an average of 10 per village. We also

documented challenges and needed adjustments for the larger study protocol, such as improvements in documenting nonresponse and clarification of randomized sampling methods within each village.

Recruitment took place between March and April of 2015 by community- and university-based co-researchers through door-to-door visits and sharing a study information sheet. Prior to recruitment, a study team member visited each village to make leaders and community members aware of the study and to enumerate households with potentially eligible participants.

Eligible participants included unrelated women age 15 – 24 without intellectual disability and able to communicate in one of the three study languages, (Punjabi, Hindi, or English). In households with more than one eligible person, we began recruitment with the youngest member since they were underrepresented as they were more likely to be at school than home at the time of the survey. Once recruited, we administered informed consent and sought parental permission for participants under age 18. After moving to a private location for the interview, informed consent was briefly re-administered with minors to prevent potential coercion by family members to participate.

4.3.2 Data Collection and Instrument

Face-to-face interviews were conducted in a private setting, typically within the home, using a structured questionnaire. Interviews typically took 15 to 20 minutes to administer with a range of five to 50 minutes, excluding time needed for informed consent. A lay counselling and referral protocol was initiated immediately after the interview if a participant reported suicide planning or attempts, significant psychological

distress, or reported abuse or fear of abuse. A trained interviewer administered the questionnaire using a paper script while an assistant recorded answers directly onto an electronic version on an Android tablet using the Open Data Kit (ODK) platform.[37] Responses were later uploaded from the devices into Microsoft Excel and Stata/IC 13 for cleaning and analysis (Statacorp, 2013, College Station, TX).

4.3.2.1 *Eve teasing experiences.* Eve teasing was assessed through a single, subjective question that asked: *"have you ever been a target of eve teasing?"* and through a more objective and time-bound series of eight yes/no questions about being the target of different types of eve teasing in the past one year. Cumulative prevalence was assessed using both measures and point prevalence was assessed using the one-year time frame. Additional questions were used to characterize the timing, severity, and psychological consequences, and coping behaviors of the most recent eve teasing experience. Lastly, attitudes about eve teasing were included, such as whether or not girls are to blame and perceptions about community sentiments towards eve teasing.

4.3.2.2 *Mental health outcomes.* Mental health outcomes were measured using the 20 question Self Report Questionnaire (SRQ-20) to screen for common mental disorders (CMDs) using a cut point of 8 or higher indicating a positive screen for CMD.[38] The SRQ-20 has been used widely across the globe, including Punjab, India, and enjoys good validity and reliability. It is indicated for use when clinical mental health professionals are not available to conduct the screen, which was the case for our study. While the SRQ-20 is a screen for CMDs inclusive of anxiety, depression, or psychosomatic problems, it is intended to be used only as an aggregate measure and has only one underlying construct. All 20 questions are framed by events occurring "*within*

the past 30 days". Suicide ideation is measured by question 17 in the SRQ-20; *"has the*

thought of ending your life been on your mind?" We added additional questions about

ever planning or attempting suicide, and when.

4.3.2.3 *Other variables.* Other covariates included socio-demographics, physical

health, adverse childhood events, social capital, mobility and time spent in public,

community-level violence, and attitudes towards women's empowerment. Previously

validated tools (see Chapter 3), with some modification, were used to assess socio-

demographics and attitudes toward women's empowerment.[19,39] We selected 4 of 20

questions on the Childhood Trauma Questionnaire-Short Form to assess adverse

childhood events.[40] Due to redundancy with the SRQ-20, we selected only 3 questions

from the Self-Report Health Short Form-12 (SF-12) to assess general health status.[41]

Questions of social capital were based on three questions from the WHO Violence

Against Women survey and group membership and community participation questions

were developed using a protocol by MK and colleagues. Novel questions were

developed to assess time and mobility in public, labor force participation, and

community-level factors of violence and unity.

4.4 Analysis

We used descriptive analyses to characterize the study population and to report

prevalence of exposure and outcome measures. The Mantel-Haenszel method for simple

logistic regression was used to assess associations among eve teasing, CMDs, suicide

ideation, and a variety of hypothesized risk and protective factors that were measured

using the questionnaire. Bivariate logistic regression analyses were controlled for

clustering of the 19 primary sampling units (villages) using the survey command in Stata. We constructed three directed acyclic graphs, or DAGs (Figures 4.2 – 4.4), to inform the multivariate models, including the minimal sufficient adjustment sets using the Dagitty online platform.[42]   Using Stata, we conducted multivariate logistic regression analyses to estimate 1) the determinants of eve teasing, 2) the effect of eve teasing on CMDs, and 3) the effect of eve teasing on suicide ideation. Since ACE was highly correlated with many variables in the final models, we report our findings stratified by ACE.

4.5 Results

4.5.1 Descriptive Statistics

    4.5.1.1 *Characteristics of the study population.* Younger participants, age 15-16 were underrepresented in the sample (11.6%) compared to higher age groups, which each comprised at least 26% in the other 3 groups. The majority (78.6 %) identified with being of lower caste, such as scheduled caste. Village size in the sample was fairly well distributed and the number of participants who reported household incomes of below 30,000 rupees was similar to census estimates for Punjab (Table 4.1).

    4.5.1.2 *Prevalence estimates and sample statistics.* Cumulative prevalence of eve teasing was 29.8% (95% CI: 22.5 – 38.3), recent common mental disorders was 20.7% (95% CI: 14.9 – 28.1), and suicide ideation in the past 30 days was 27.3% (95% CI: 21.8 – 33.5). Ever planning suicide was 13.5% (95% CI: 8.4 – 20.9) and having ever attempted suicide was 4.0% (95% CI: 1.7 – 9.1) (Table 4.2). Based on these results and cross tabulation of suicide ideation and exposure status of eve teasing exposure, a conservative sample size estimate per stratum, using the lower bounds of confidence, is

834 to detect a risk ratio of 1.5 or higher. Therefore, this pilot study, with a sample size

of 198, lacks sufficient power to detect a risk ratio less than 2.0 (or an odds ratio > 3.1.

Therefore, our tests of association may be prone to type I errors, or false negatives.

4.5.2 Bivariate Analyses

        4.5.2.1 *Correlates of eve teasing.* Variables that correlated significantly (p value

< 0.05), or nearly significantly, (p value < 0.1) with eve teasing experiences are presented

in Table 4.3. Results support the hypothesis that increased time in public or use of public

transportation is positively associated with eve teasing (OR: 3.3 (CI: 1.33-8.13) p=0.010)

and (OR: 2.9 (CI: 1.19-3.86) p=0.001), respectively. Interestingly, being in a household

below the poverty line may be protective (OR: 0.4 (CI: 0.18-0.78) p=0.009). Reporting

adverse childhood events, like abuse and neglect, was also positively correlated with

reported eve teasing (OR: 1.9 (1.02-3.51) p=0.045. Age, caste, education level, and

social capital did not correlate with reported eve teasing.

        In addition to cumulative exposure to eve teasing, we included a measure of

perceiving eve teasing as a problem in the community to assess its potential as a proxy

measure. The two measures correlated similarly with low income, use of public

transportation, adverse childhood events, and ever witnessed violence in the community.

However, there were also many differences in respect to age, mobility in public, recent

interpersonal conflict, social capital, and attitudes about eve teasing, suggesting it is not

an adequate proxy for eve teasing exposure.

        4.5.2.2 *Correlates of common mental disorders.* Variables that correlated

significantly (p value < 0.05), or nearly significantly, (p value < 0.1) with common

mental disorders and suicide ideation are presented in Table 4.4. Most notably, eve teasing experiences did not correlate significantly, but still showed nearly significant positive results for CMD (OR: 2.2 (CI: 0.84-10.66) p-value 0.085). As expected, risk factors included having any adverse childhood events (OR: 4.8 CI: 1.225– 18.626), recent interpersonal conflict (OR: 3.1 CI: 1.49 – 6.12), and increasing age using p for trend across four categories (OR: 2.2 CI: 1.05 – 4.41). Strong protective factors included having high social capital (OR: 0.6 CI: 0.43 - 0.80), and thinking that people in the village get along (OR: 0.3 CI: 0.13 - 0.57). Increasing levels of education and positive attitudes about eve teasing had positive correlations. Our hypothesis that negative attitudes towards women's empowerment, measured as justifying wife beating, increase the risk of CMD was not supported (OR: 1.4 (CI0.49-4.29) p=0.489).

4.5.2.3 *Correlates of eve teasing and suicide ideation.* Most notably, eve teasing experiences correlated positively with suicide ideation, including ever eve teased (OR: 2.2 CI: 1.15 – 4.30) and ever eve teased in a bothersome way (OR: 5.0 CI: 1.70 - 14.46). As expected, additional risk factors included having current CMD (OR: 15.1 OR: 6.68 – 34.19), any adverse childhood events (OR: 4.7 CI: 3.31 – 9.48), recent interpersonal conflict (OR: 3.4 CI: 1.80 – 6.58), and poor physical health (OR: 3.0 CI: 1.47 – 6.18). Strong protective factors included thinking people in the village get along (OR: 0.3 CI: 0.1 - 0.67), thinking the community punishes eve teasers (OR: 0.3 CI: 0.13 - 0.63), and having high social capital (OR: 0.7 CI: 0.55-0.88).

An interesting difference between correlates of CMD and SI was school attendance, which was negatively associated with CMD (OR: 0.4 (CI 0.20-0.84) p=0.022), and dropping out of school in the past one year was negatively associated with

SI (OR: 0.2 (CI: 0.10-0.64) p=0.006), suggesting that being in school is associated with CMD while dropping out lowers SI. Additionally, being married was a significant risk factor for SI, but not for CMD.

4.5.3 Multivariate Analyses

4.5.3.1 *Determinants of eve teasing.* We explored a variety of multivariate models to predict occurrence of eve teasing, including the effect of mobility in public, the effect of witnessing violence, believing the community punishes eve teasers, and believing that women are also to blame. After controlling for household income, caste, and education level, regularly spending >1 hour in public daily was positively associated with reporting eve teasing victimization (OR: 3.1 (CI: 1.26-7.49) p=0.016).

4.5.3.2 *Effect of eve teasing on common mental disorders.* In the final model to assess the effect of eve teasing on screening positive for CMDs, a significant association was found when ACEs were also reported (OR: 4.5 (CI: 1.18-11.43) p=0.003), but not among participants who did not report ACEs (Figure 4.5).

4.5.3.3 *Effect of eve teasing on suicide ideation.* When modeling the direct effect of eve teasing on SI, including controlling for CMD, no significant or nearly significant association was found in either ACE group (not shown). In the multivariate model of the total effect of eve teasing on suicide ideation, including CMD, and stratified by ACE, we found that eve teasing was significantly associated with SI, but only among women who also reported any adverse childhood event (OR: 3.1 (CI: 1.12-8.47) p=0.032)(Table 4.6).

4.6 Discussion

To the best of our knowledge, this is the first study of the association between suicide ideation and eve teasing victimization. As a pilot study, it offers evidence that eve teasing is common and is a legitimate concern in relation to the mental health of young women. Given the new prominence of suicide as the leading cause of death among young women globally, the marked increased risk for women in south Asia compared to the rest of the world, and India's marked gender disadvantages, more effort is needed to understand the role of gender disadvantage on the mental health of young women.

Cumulative prevalence of eve teasing was 29.8%, which is much lower than seen in other studies that reported prevalence of 50 – 100%, although differences in methodologies make comparisons difficult.[23] It could also be due to lower mobility of this age group and higher stigma, resulting in real differences in exposure, as well as misclassification due to unwillingness to disclose eve teasing victimization. In relation to our previous pretest in a comparable population, point prevalence was lower in this study at 28.8% (N=198) compared to 48.3 (N=89). This underscores the importance of considering methodological differences between the two studies, including a community engaged approach in the former and use of electronic tablets in the latter.

Despite low power in our study, we still identified significant associations in bi-variate and multivariate models that suggest associations among eve teasing, CMD, and suicide ideation. A key factor associated with eve teasing was increased mobility in public, which was an indicator of time at risk.

Known risks factors for CMDs and suicide ideation were reconfirmed, including

adverse childhood events, recent interpersonal conflicts, low social capital, and lack of connectedness in the community. As expected, recent interpersonal conflict correlated highly with suicide ideation, but not with CMD. We also found that attitudes towards what probably matter, both in terms of reporting eve teasing and in coping. As expected, believing that the community supports women by protecting them from eve teasers, and by punishing perpetrators, correlated positively with better mental health outcomes. However, this also held true for strongly agreeing that girls are also to blame for eve teasing, which is considered a negative attitude towards women. Additionally, we were unable to reproduce a significant correlation between CMDs and negative attitudes towards women's empowerment, as seen in Patel's study.[35]

The finding that participants seemed to be more vulnerable to the negative mental health consequences of eve teasing victimization is an important finding. Over a third of participants (37%) reported at least one ACE, such as emotional or physical abuse, feeling unloved, unwanted, or unsupported, or sexual abuse, prior to the age of 15. This is a large percent of female youth who may also face problems coping with other psycho-social triggers. It is also interesting that the findings were so significant, even though m the majority of those reporting any ACE only reported one type and only a very small number reported sexual abuse. This suggests that while the cumulative 'ACE scores' were low to moderate, they still had a highly significant relationship with mental health outcomes and seemed to significantly increase vulnerability to the negative psycho-social consequences of eve teasing.

There are several limitations in our study. First is its cross-sectional design, which prevents the determination of causal relationships. The timing of eve teasing in

terms of occurring before or after the outcome variables is ambiguous. As a small pilot study, it also lacked sufficient power to confirm true associations with odds ratios less than 2. Our use of a questionnaire that relied on self-report likely introduced recall bias as answers may have been influenced by social norms. While not generalizable to India's entire female population, our results may be generalizable to female youth in India, and perhaps south Asia, that live in rural areas with strict patriarchal norms.

Research on suicide, mental health, and gender inequalities among Indian youth is limited. Youth are characterized by a period of significant life transitions and therefore can be difficult to study. They do not fit neatly into school-based adolescent or adult-focused studies. Despite the magnitude of the suicide burden among this age group, the research agenda has been focused on reproductive health and communicable diseases. Fortunately, such efforts have resulted in marked reductions in maternal and communicable disease deaths, allowing suicide to move to the first spot, without an actual rise in suicide rates. This decline in maternal deaths due to concerted prevention efforts offers hope that revising the health agenda to fully address suicide and its risk factors, including common mental disorders and gender disadvantage, could be of great benefit.

4.7 Conclusion

As hypothesized, correlates of eve teasing included higher mobility in public (time at risk), resulting in a 3 fold increased risk for women who usually spend more than an hour per day outside the home. We successfully reproduced correlations between known risk factors for CMD and suicide ideation, including adverse childhood events,

recent interpersonal conflict, and experience of violence. In our multivariate models, we found a significant association between eve teasing and CMD and eve teasing and SI among participants who also reported adverse childhood events.

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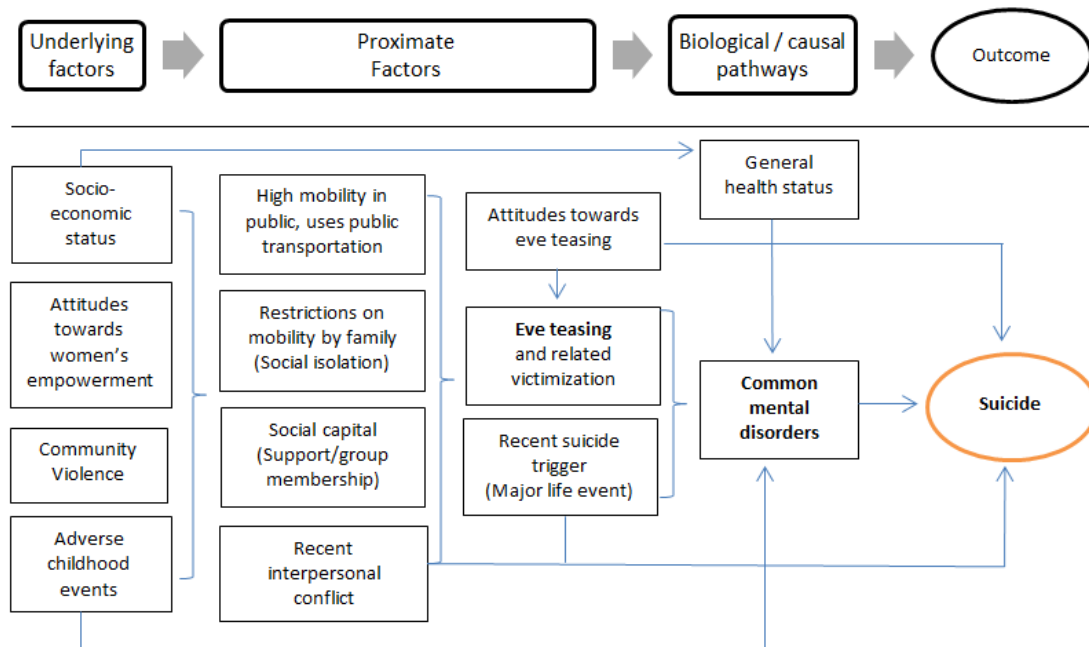
Figure 4.1: Preliminary Conceptual Model for Risk Factors for Eve Teasing
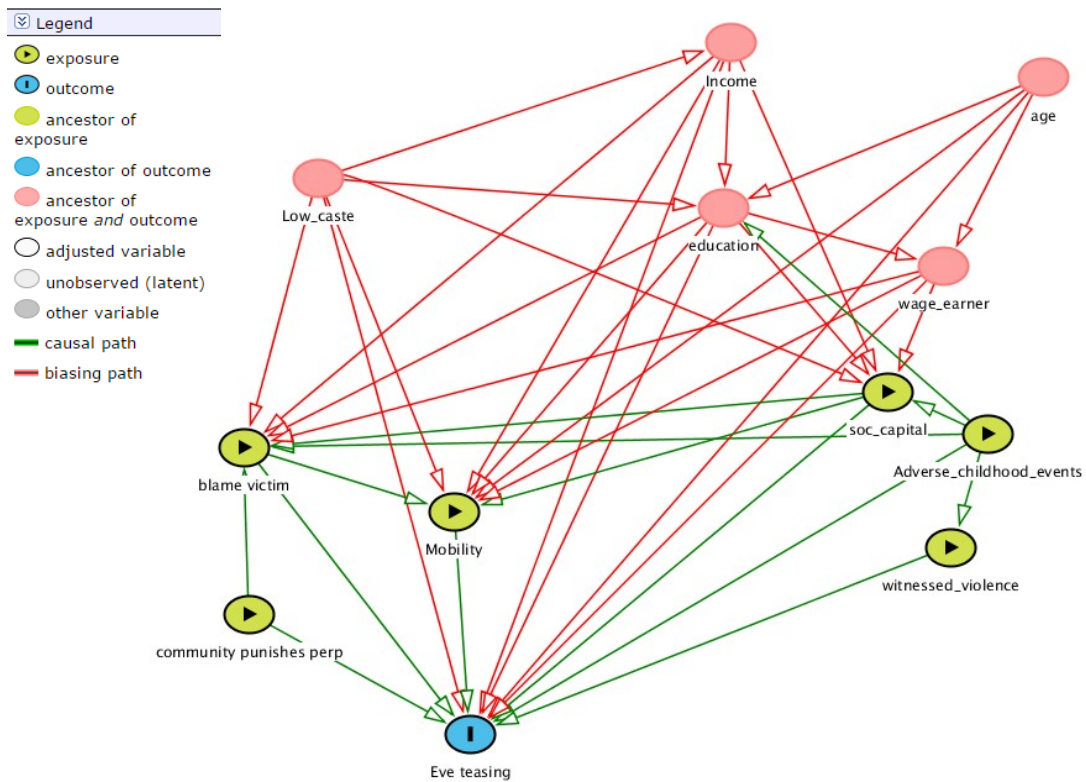Victimization and Suicide Among Young Women in Rural India

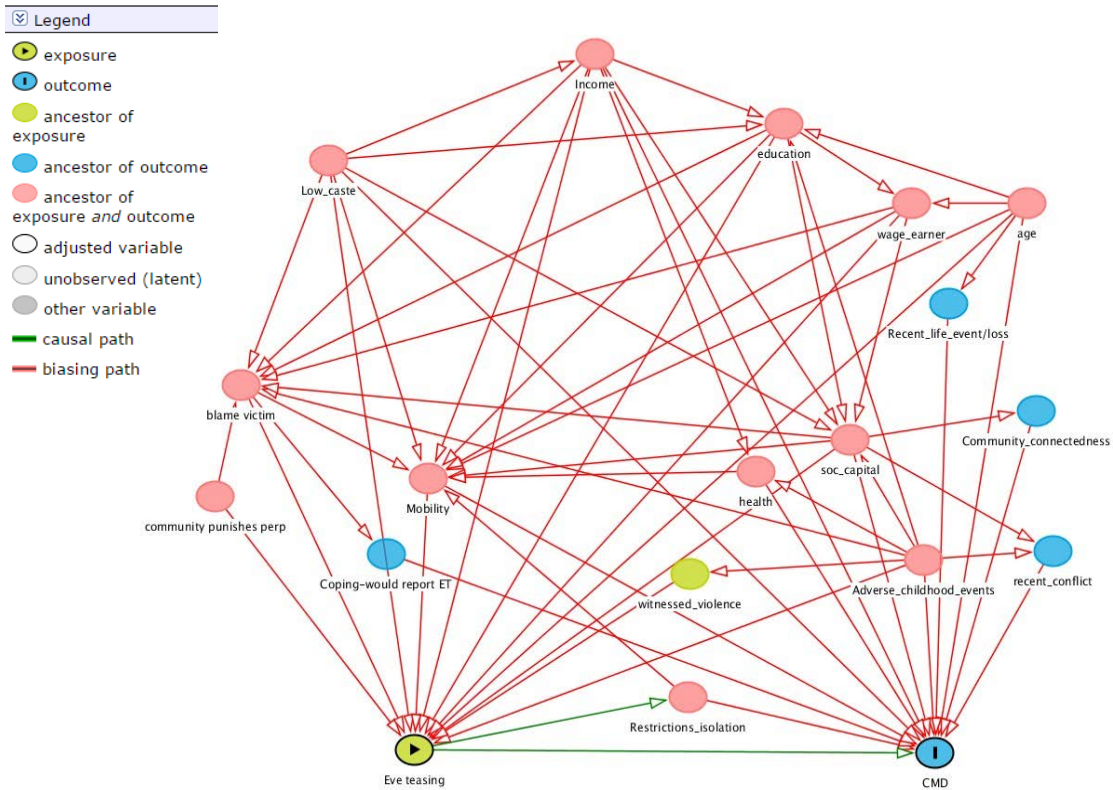Figure 4.2 Directed Acyclic Graph (DAG) of Eve Teasing Determinants

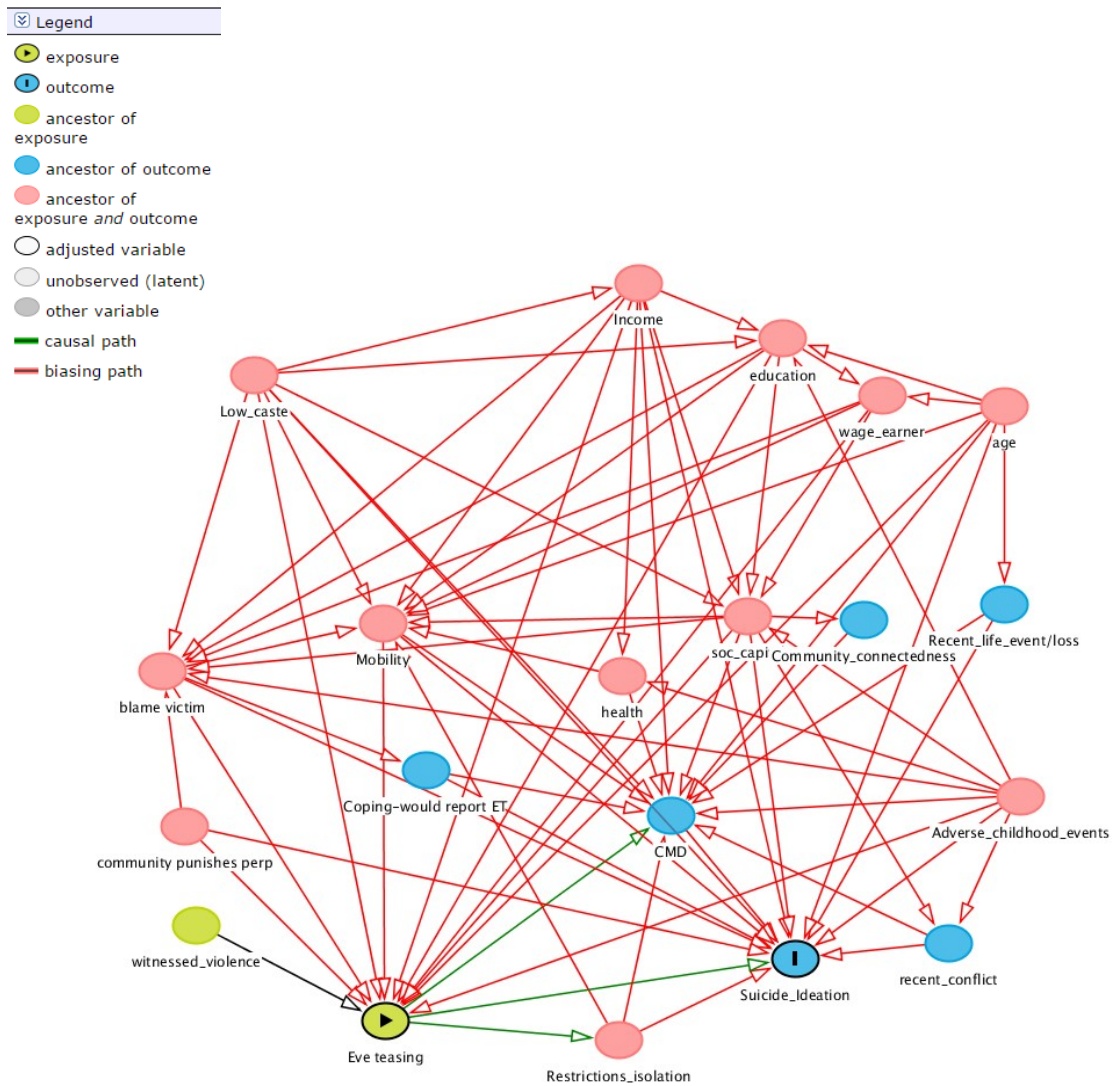Figure 4.3 Directed Acyclic Graph (DAG) of Eve Teasing Exposure and Common Mental Disorders (CMD)

Figure 4.4 Directed Acyclic Graph (DAG) of Eve Teasing Exposure and Suicide

Table 4.1

Sociodemographic Characteristics of the Study
Population in Comparison to Rural Punjab, India (N=198)

Variable	n	(%)
Age		
Age 15-16	23	11.6
Age 17 – 19	55	27.8
Age 20-22	53	26.8
Age 23 -24	67	33.8
Education		
< 8th grade	17	8.6
8-9th grade	31	15.7
10-11th grade	60	30.4
12th or higher	89	45.2
Low caste[3]	154	78.6
Joint family structure	82	41.6
Below poverty line	64	32.3
Village size (total pop)		
< 500	15	7.7
500 - 999	45	23.0
1000 - 1499	52	26.5
2000 - 4999	84	42.9

Table 4.2

Prevalence of Eve Teasing and Mental Health Outcomes (N=198)

Variable	n	Prevalence	Standard error	95% CI
Eve teasing experiences				
Ever eve teased (lifetime)	59	29.8	0.0380	(22.5 - 38.3)
Eve teased this year	57	28.8	0.0379	(21.5 - 37.3)
Type 1: (stare, stalk, gesture, comment)	53	26.8	0.0405	(19.2 - 36.1)
Type 2: (Verbal threat, touch, push)	12	6.1	0.0159	(3.5 - 10.4)
Perceives eve teasing as a problem	101	51.0	0.0413	(42.4 - 59.6)
Mental health				
Common mental disorder in past 30 days (SRQ-20 score >7)	41	20.7	0.0314	(14.9 - 28.1)
Suicide Behaviors				
Suicide ideation (SRQ-20 question 17)	54	27.3	0.0279	(21.8 - 33.5)
Ever seriously considered suicide (plan)	27	13.5	0.0292	(8.4 - 20.9)
Ever attempted suicide	6	4.0	0.0161	(1.7 - 9.1)

Table 4.3

Correlates of Eve Teasing (ET) Measures (N=198)

Variable	OR	Ever Eve Teased (95% CI)	p-value	OR	Perceives ET as a problem[1] (95% CI)	p-value
Individual factors						
Age (continuous)	1.3	(.97 - 1.81)	0.068†	1.0	(.77 - 1.32)	0.962
Age 15-16	1.0	-	-	1.0	-	-
Age 17 – 19	5.5	(1.17 - 26.20)	0.031*	1.5	(.54 - 3.86)	0.457
Age 20-22	3.4	(.70 - 16.56)	0.128	1.7	(.63 - 4.55)	0.294
Age 23 -24	6.3	(1.35 - 28.94)	0.019*	1.2	(.46 - 3.08)	0.723
Education (continuous)	1.2	(.89 - 1.73)	0.203†	0.9	(.70 - 1.25)	0.64
< 8th grade	1.0	-	-	-	-	-
8-9th grade	0.4	(.09 - 1.94)	0.139	0.3	(0.10 - 1.21)	0.096
10-11th grade	0.6	(.19 - 1.94)	0.403	0.3	(.11 - 1.09)	0.069
12th or higher	1.0	(.35 - 3.05)	0.958	0.5	(.15 - 1.43)	0.183
Low caste[2]	1.2	(.57 - 2.67)	0.586	1.3	(.66 - 2.60)	0.441
Below poverty line	0.4	(.18 - .78)	0.009**	0.5	(.27 - .90)	0.021*
Regularly in public > 1 hour	3.3	(1.33 - 8.13)	0.010**	1.8	(.71 - 4.48)	0.214
Uses public transportation	2.9	(1.56 - 5.50)	0.001**	2.1	(1.19 - 3.86)	0.011*
Strongly agrees she would report being eve teased	0.7	(.37 -1.43)	0.366	0.5	(.29 - 1.02)	0.061
Strongly agrees women are also to blame	1.2	(.63 - 2.20)	0.618	0.4	(.21 - .70)	0.002**
Interpersonal factors						
Major conflict within past 3 months	1.2	(.61 - 2.22)	0.636	3.3	(1.7 - 6.33)	<0.000***
Any Adverse Childhood Events	1.9	(1.02 - 3.51)	0.045*	7.9	(4.19 - 14.87)	<0.000***
Family restricts girls from going out of home	2.8	(1.45 - 5.74)	0.003**	1.9	(.99 - 3.92)	0.055
Social capitol score	1.0	(.73 - 1.31)	0.886	0.6	(.46 - .82)	0.001**

Table 4.3 (Continued)

Variable	Ever Eve Teased			Perceives ET as a problem[1]		
	OR	(95% CI)	p-value	OR	(95% CI)	p-value
Community level factors						
Ever witnessed a violent act in their community	2.1	(1.06 - 4.02)	0.032*	1.8	(1.02 - 3.26)	0.042*
Perceives eve teasing as a problem in the community	2.1	(1.16 - 4.09)	0.015*	1.0	-	-
Is concerned for her safety	2.2	(1.08 - 4.28)	0.030*	1.1	(.55 - 2.09)	0.849
Strongly believes community protects women	0.6	(.29 - 1.17)	0.128	0.5	(.28 - .89)	0.018*
Strongly agrees community punishes eve teasers	0.5	(.24 - .94)	0.031*	0.4	(.20 - .67)	0.001**

[1] Perceives eve teasing as a problem in her community

† p for trend

[2] low caste - scheduled caste, tribe, or OBC

* p < 0.05, ** p < 0.01 *** p < 0.001

Table 4.4.
Correlates of Common Mental Disorder (CMD) and Suicide Ideation (SI) (N=198)

Variable	n	%	CMD (past 30 days)			SI (past 30 days)		
			OR	(95% CI)	p-value	OR	(95% CI)	p-value
Individual factors								
Age (continuous)†	198	100	1.2	(.83 - 1.64)	0.39	1.1	(.84 - 1.55)	0.413
Age 15-16	23	11.6	1	-	-	1	-	-
Age 17 – 19	55	27.8	8.2	(1.02 – 66.70)	0.048	1.4	(.42 – 4.28)	0.611
Age 20-22	53	26.8	5.1	(.61 -42.58)	0.131	1.2	(.36 – 3.78)	0.793
Age 23 -24	67	33.8	6.3	(.78 – 51.04)	0.082	1.6	(.54 - 5.02)	0.383
Education (continuous)†	198	100	0.9	(.64 - 1.29)	0.588	0.9	(.62 - 1.18)	0.359
< 8th grade	17	8.6	1	-	-	1	-	-
8-9th grade	31	15.7	0.5	(.11 – 1.90)	0.248	1	(.29 – 3.47)	0.99
10-11th grade	60	30.4	0.7	(.22 – 2.43)	0.609	0.5	(.16 – 1.63)	0.255
12th or higher	89	45.2	0.7	(.18 – 1.82)	0.341	0.7	(.22 – 1.47)	0.487
Low caste[2]	154	78.6	3	(1.01 - 8.98)	0.049*	1.3	(.58 - 2.82)	0.541
Below poverty line	64	32.3	1.1	(.54 – 2.30)	0.779	0.6	(.28 – 1.18)	0.131
Health fair or poor (self-report)	41	20.7	2.1	(.98 – 4.64)	0.054	3	(1.47 – 6.18)	0.003**
Common Mental Disorder[3]	41	20.7	-	-	-	15.1	(6.68 - 34.19)	<0.001***
Suicide ideation	54	27.3	15.1	(6.68 - 34.19)	<0.001***	-	-	-
Attitudes towards eve teasing								
Strongly agrees she would report being eve teased	143	72.6	0.3	(.14 - .61)	0.001***	0.6	(.31 - 1.20)	0.156
Strongly agrees women are also to blame	72	36.4	0.4	(.19 - .94)	0.035*	0.5	(.23 - .93)	0.030*
Interpersonal factors								
2 or more major life events or loss in past year	51	25.8	0.9	(.37 – 2.23)	0.838	0.4	(.18 – 1.00)	0.051
Major conflict within past 3 months	65	33.1	3.1	(1.49 – 6.12)	0.002***	3.4	(1.80 – 6.58)	<0.001***
Any Adverse Childhood Events	99	50	4.8	(2.14 – 10.68)	<0.001***	4.7	(3.31 – 9.48)	<0.001***
Social capitol score	197	100	0.6	(.43 - .80)	0.001***	0.7	(.50 - .88)	0.004**

Table 4.4. (Continued)

Variable	n	%	CMD (past 30 days)			SI (past 30 days)		
			OR	(95% CI)	p-value	OR	(95% CI)	p-value
Eve teasing experiences								
Ever, any type	59	29.8	2.2	(1.09 - 4.51)	0.029*	2.2	(1.15 - 4.30)	0.017*
In past one year, any type	57	28.8	2.1	(1.01 - 4.25)	0.047*	2.1	(1.10 - 4.16)	0.024*
Ever, in a bothersome way	17	11.9	6.4	(2.20 - 18.58)	0.001***	5	(1.70 - 14.46)	0.003***
Type 1(stare, stalk, gesture, insult)	53	26.8	1.6	(.75 - 3.29)	0.233	2	(1.00 - 3.89)	0.048*
Type2 (verbally threat, touch)	12	6.1	3	(.89 - 9.92)	0.076	0.9	(.23 - 3.39)	0.855
Perceives eve teasing as problem	101	51	2.5	(1.20 - 5.14)	0.015*	2.4	(1.26 - 4.68)	0.008***
Community-level factors								
Ever witnessed a violent act in their community	121	61.4	1	(.48 - 1.98)	0.947	1.7	(.87 - 3.36)	0.115
Is concerned for her safety	44	22.2	1.4	(.63 - 3.04)	0.427	0.7	(.33 - 1.62)	0.444
People I village get along (5 pt scale)	198	100	0.3	(.13 - .57)	0.001***	0.3	(.17 - .67)	0.002**
Strongly agrees community punishes eve teasers	73	36.9	0.3	(.14 - .79)	0.012*	0.3	(.13 - .63)	0.002**

[1] Perceives eve teasing as a problem in her community

† p for trend

[2] low caste - scheduled caste, tribe, or OBC

* p < 0.05, ** p < 0.01 *** p < 0.001

[3] CMD = SRQ score >7

Table 4.5

Multivariate Logistic Regression Analysis of the Effect of Eve Teasing on Common
Mental Disorders, by Adverse Childhood Events (ACEs) (N=198)

Common mental disorders		ACEs not Reported 95% CI				ACEs Reported 95% CI		
Factor	OR	lower	upper	p-value	OR	lower	upper	p-value
Eve teasing (ever)	**0.7**	0.125	4.091	0.69	**4.5**	1.779	11.433	0.003
Underlying factors								
Low caste	**1.5**	0.341	6.909	0.557	**6.0**	0.967	37.603	0.054
Proximate factors								
Willing to report eve teasing	**0.3**	0.061	1.413	0.119	**0.1**	0.014	0.791	0.031
Low social capital (score <3)	**3.9**	0.823	18.565	0.083	**8.7**	2.643	28.752	0.001
Biological / causal factors								
Fair or poor health (self report)	**2.1**	0.444	10.306	0.323	**5.2**	0.724	37.000	0.096

Table 4.6

Multivariate Logistic Regression Analysis of the Effect of Eve Teasing on Suicide
Ideation (SI) (N=198)

| Suicide Ideation | ACEs not Reportd | | | | ACEs Reported | | | |
| | | 95% CI | | | | 95% CI | | |
Factor	OR	lower	upper	p-value	OR	lower	upper	p-value
Eve teasing (ever)	1.6	0.450	5.445	0.458	3.1	1.119	8.472	0.032
Underlying factors								
Low income	0.6	0.160	2.002	0.364	5.0	0.296	85.468	0.244
Proximate factors								
Willing to report eve teasing	1.1	0.291	4.476	0.838	0.3	0.065	1.315	0.102
Recently dropped out of school	0.6	0.122	3.209	0.519	0.0	0.001	0.433	0.017
Parents restrict from going out	4.3	1.155	16.045	0.018	1.4	0.287	7.010	0.648
Agree that girls are also to blame	0.3	0.092	0.996	0.065	1.2	0.504	2.747	0.689
Agrees eve teasers are punished	1.1	0.261	4.312	0.921	0.0	0.003	0.231	0.002
Interpersonal conflict in past 3 mo.	8.6	2.952	25.248	0.000	2.6	0.681	10.239	0.149

CHAPTER 5

CONCLUSION

This study assesses the association between reported eve teasing victimization and

mental health outcomes in a community setting, which represents a gap in the current

literature. Despite a host of reports[1-4] about the negative impacts of eve teasing, or sexual

harassment in public, and prevalence studies describe its ubiquity[5,6], this is the first direct

epidemiologic investigation of its relationship with women's mental health. In a region

where nearly half a billion women live in an environment where they are inhibited to

move about freely in public for fear of sexual violence or harm to their reputation, eve

teasing represents a major public health problem.

Similarly, evidence is mounting that other forms of gender disadvantage in south

Asia, such as negative attitudes towards women's empowerment, have a negative impact

on women's mental health and suicide rates.[7-9] Since suicide has recently eclipsed

maternal and motor vehicle deaths as the leading cause of death among women ages 15 –

24 in south Asia, this research is particularly salient.[10] In 2011, the World Health

Organization called for more research into neglected forms of violence against women,

including sexual harassment.[11] This study is a response to that call.

Reports of "ever" having been a target of eve teasing were common, ranging from

30 – 50% among young women in the two surveys. This is notably lower than the 50-

90% range reported in other studies.[3,5,6] At the same time, women in other studies, including commuters in urban areas and female students in university settings, may spend significantly more time at risk. It is notable that nearly half of our study population reported spending almost no time in public on a daily basis, identifying the related problem of social isolation.

Eve teasing was described as staring, passing comments, stalking, running into a girl seemingly on accident, and inappropriate physical touch. Due to strong taboos about dating and romance before marriage, consequences included tight restrictions on girls' mobility, inability to attend school or work, and victim blaming. Psychosocial responses included feelings of anger and shame, depression, and suicide. Among young women who reported any type of adverse childhood event, such as abuse, neglect, or feeling unloved or unwanted, eve teasing victimization was associated with a significantly increased risk for CMD and SI, (OR: 4.5 (CI: 1.18-11.43) p=0.003) and (OR: 3.1 (CI: 1.12-8.47) p=0.032), respectively. While a positive, but statistically insignificant, association was found among young women who did not report adverse childhood events, the small sample size does not rule out a true association. The significant association between CMD and SI among women who reported any adverse childhood event suggests that interpersonal relationships in childhood play a significant role with resilience or vulnerability to negative social stimuli and subsequent mental health outcomes later in life.

To date, methods to standardize how eve teasing is defined and measured are lacking. We developed the Eve Teasing Experiences and Mental Health Questionnaire (ETQ-MH) and are confident it will elicit reliable and valid results in similar populations.

The questionnaire could benefit from question reduction and a revised eve teasing instrument, the ETQ-12, may be an improvement over the existing eve teasing instrument, but requires further validation. Study participants may be more likely to disclose eve teasing victimization and mental health disorder symptoms if they are more familiar with the study team. As such, community-engaged approaches are recommended for future research on eve teasing, as well as violence against women and sensitive social issues such as gender disadvantage, and child abuse and neglect.

5.1 Summary Key Points

1. This is the first study of its kind to assess the association between eve teasing and mental health in a community setting and we provide a validated questionnaire and protocol for future research.

2. Strong associations were identified between eve teasing and CMDs and eve teasing and SI, but only among women with a history of any form of child abuse or neglect. This suggests that previous child abuse increases one's vulnerability to negative psychosocial impacts of eve teasing.

3. This is especially important when we consider that nearly a half a billion women in India are at frequent risk of this form of sexual harassment where women are at a disproportionate risk for suicide.

4. The threat of eve teasing creates a hostile environment, limiting women's full participation and contribution to society, essentially putting women in their "expected" place and limiting basic human rights.

5. Eve teasing is a common problem for young women in rural India. While it may be

less prevalent in rural compared to urban areas, it may come with greater stigma –
either as a function of age, rurality, or social class or caste.

6. Spending more time in public is associated with increased risk for eve teasing;
however, school attendance and labor-force participation were not associated with
victimization.

7. Attitudes about gender roles, social capital, and the perception that community
members support women likely influence coping and mental health. Such factors
could be modified through social and behavior change interventions to prevent eve
teasing itself and to mitigate negative psychosocial consequences.

5.2 Next Steps and Call to Action

This study served, in part, as a pilot study for a larger assessment of eve teasing
among male and female youth, including a randomized controlled trial of a social and
behavior change intervention. The questionnaire, including the revised ETQ-12, will be a
useful tool for this endeavor. Converting the existing version for females into a
questionnaire for males is particularly important. By enrolling a much larger number of
participants, more conclusive evidence of the true relationship between eve teasing and
mental health will be acquired. The questionnaire is designed to also shed light on other
important issues related to social capital, child abuse, interpersonal conflicts, and
attitudes towards women's empowerment. I am hopeful that an intervention based on
these new insights will allow for more effective social and behavior change interventions.

It is also my hope that this work will strengthen a call to action for south Asian
policy makers to address the unnecessarily hostile environment for women and girls

through policy and legal reforms and for interventionists to use this new understanding to help communities disentangle notions of family honor associated with eve teasing victimization and to foster new norms that deter perpetration and support victims.

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